



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2002

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File No. 000-31332

**LIQUIDMETAL TECHNOLOGIES**

*(Exact name of Registrant as specified in its charter)*

**California**  
*(State or other jurisdiction of incorporation or organization)*

**33-0264467**  
*(I.R.S. Employer Identification No.)*

**100 North Tampa St., Suite 3150**  
**Tampa, Florida 33602**  
*(address of principal executive office, zip code)*

Registrant's telephone number, including area code: **(813) 314-0280**

**Securities registered pursuant to Section 12(b) of the Act:** None

**Securities registered pursuant to Section 12(g) of the Act:**

**Title of each Class**  
Common Stock, no par value

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for at least the past 90 days. Yes  No

Indicated by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes  No

The aggregate market value of the voting stock held by non-affiliates of the registrant as of March 20, 2003, was approximately \$237,619,365, based on the closing sale price of the registrant's common stock on June 28, 2002. The number of shares of the registrant's common stock outstanding as of March 20, 2003, was 41,576,523.

**DOCUMENTS INCORPORATED BY REFERENCE**

**Portion's of the registrant's definitive Proxy Statement for its 2003 Annual Meeting of Shareholders are incorporated by reference in Part III of this Annual Report on Form 10-K to the extent stated herein.**

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**PART I**

**Item 1. Business.**

**Overview**

We are a materials technology company that develops, manufactures, and markets products made from amorphous alloys. Our Liquidmetal® family of alloys consists of a variety of coatings, powders, bulk alloys, and composites that utilize the advantages offered by amorphous alloy technology. We develop, manufacture, and sell products and components from bulk amorphous alloys that are incorporated into the finished goods of our customers, and we also market and sell amorphous alloy industrial coatings. We have the exclusive right to develop, manufacture, and sell what we believe are the only commercially viable bulk amorphous alloys.

Amorphous alloys are unique materials that are distinguished by their ability to retain a random atomic structure when they solidify, in contrast to the crystalline atomic structure that forms in ordinary metals and alloys when they solidify. Liquidmetal® alloys possess a combination of performance, processing, and cost advantages that we believe makes them preferable to other materials in a variety of applications. The amorphous atomic structure of our alloys enables them to overcome certain performance limitations caused by inherent weaknesses in crystalline atomic structures, thus facilitating performance and processing characteristics superior in many ways to those of their crystalline counterparts. For example, our zirconium-titanium Liquidmetal alloys are approximately 250% stronger than commonly used titanium alloys such as Ti-6Al-4V, but they have processing characteristics similar in many respects to plastics. We believe these advantages will result in Liquidmetal alloys supplanting plastics, high-performance alloys, and other incumbent materials in a wide variety of applications. Moreover, we believe these advantages will enable the introduction of entirely new products and applications that are not possible or commercially viable with other materials.

**General Corporate Information**

We were incorporated in California in 1987. Our principal executive officers are located at 100 North Tampa St., Suite 3150, Tampa, Florida 33602, and our telephone number at that address is (813) 314-0280. Our principal research and development officers are located at 25800 Commercentre Dr., Suite 100, Lake Forest, California 92630, and our telephone number at that address is (949) 206-8000. Our Internet website address is [www.liquidmetal.com](http://www.liquidmetal.com), and all of our filings with the Securities and Exchange Commission are available free of charge on our website.

**Our Technology**

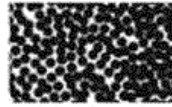
The performance, processing, and cost advantages of Liquidmetal alloys are a function of their unique atomic structure and their proprietary material composition.

***Unique Atomic Structure***

The atomic structure of Liquidmetal alloys is the fundamental feature that differentiates them from other alloys and metals. In a molten state, the atomic particles of all alloys and metals have an amorphous atomic structure, which means that the atomic particles appear in a completely random structure with no discernible patterns. However, when non-amorphous alloys and metals are cooled to a solid state, their atoms bond together in a repeating pattern of regular and predictable shapes, or crystalline grains. This process is analogous to the way ice forms when water freezes and crystallizes. In non-amorphous metals and alloys, the individual crystalline grains contain naturally occurring structural defects that limit the potential strength and performance characteristics of the material. These defects, known as dislocations, consist of discontinuities or inconsistencies in the patterned atomic structure of each grain. Unlike other alloys and metals, bulk Liquidmetal alloys retain their amorphous atomic structure throughout the solidification process and therefore do not develop crystalline grains and the associated dislocations. Consequently, bulk Liquidmetal alloys exhibit superior strength and other superior performance characteristics compared to their crystalline counterparts. Our Liquidmetal alloy coatings, in contrast to our bulk alloys, have a crystalline atomic structure when initially applied, but their atomic structure becomes amorphous as the coatings rub against surfaces under force, improving performance over time.



Depiction of crystalline atomic structure



Depiction of amorphous atomic structure

Prior to 1993, commercially viable amorphous alloys could be created only in thin forms, such as coatings, films, or ribbons. However, in 1993, researchers at the California Institute of Technology (Caltech) developed the first commercially viable amorphous alloy in a bulk form. Today, bulk Liquidmetal alloys can be formed into objects that are up to one inch thick, and we are not aware of any other commercially available amorphous alloys that can achieve this thickness. We have the exclusive right to commercialize bulk amorphous alloy technology through a license agreement with Caltech and other patents that we own.

**Proprietary Material Composition**

The constituent elements and percentage composition of Liquidmetal alloys are critical to their ability to solidify into an amorphous atomic structure. We have several different alloy compositions that have different constituent elements in varying percentages. These compositions are protected by various patents that we own or exclusively license from third parties, including Caltech. The raw materials that we use in Liquidmetal alloys are readily available and can be purchased from multiple suppliers.

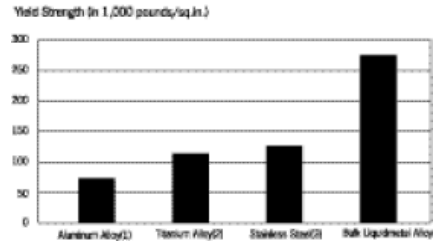
**Advantages of Liquidmetal Alloys**

Liquidmetal alloys possess a unique combination of performance, processing, and cost advantages that we believe makes them superior in many ways to other commercially available materials.

**Performance Advantages**

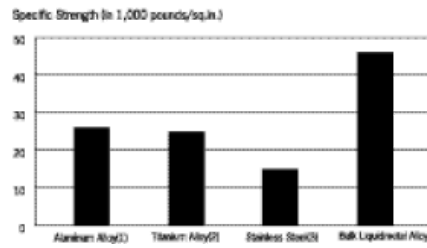
Liquidmetal alloys provide several distinct advantages over other materials in applications that require high strength, strength-to-weight ratio, elasticity, and hardness. The following graphs compare the strength, strength-to-weight ratio, elasticity, and hardness properties of our zirconium-titanium bulk alloy composition (as measured in laboratory tests) against those of several other alloys that are widely used today in commercial applications.

**Strength**



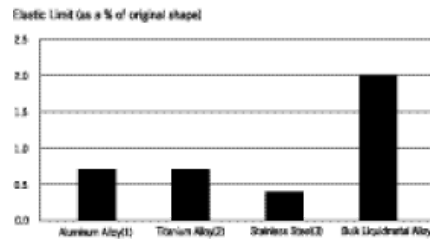
The strength of a material is frequently measured in terms of yield strength, which is the stress at which definite damage or deformation occurs to the material with little or no increase in load. Yield strength is an important performance measure in many structural applications where the potential cost of damage is high, such as orthopedic devices.

### Strength-to-Weight Ratio



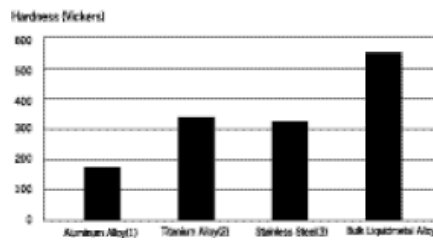
A material's strength-to-weight ratio, or specific strength, can be defined as its yield strength divided by its specific gravity. A high strength-to-weight ratio is particularly important in applications in which the damage costs are high and weight is a consideration, such as protective casings for electronic devices.

### Elasticity



Elasticity is a measure of a material's ability to return to its original shape after being stretched or forced out of shape. The elastic strain limit, or elastic limit, of a material is the point at which permanent damage or deformation starts. Elasticity is an important performance measurement in applications that need to resist permanent damage from impact to protect aesthetics or in applications where energy transfer is important, such as golf club heads.

### Hardness



Hardness measures a material's ability to resist penetration and wear by another material. In the widely-used Vickers hardness test, a diamond point is pressed slowly against the surface of the material with a prescribed force. The area of the dent is measured to yield the Vickers hardness number. Hardness is important in applications that are subjected to heavy wear or penetration and applications in which an ability to penetrate is important, such as munitions.

Data Source: <http://www.matweb.com> (other than data relating to bulk Liquidmetal alloys). This online database contains comprehensive information regarding the properties of various materials. Data relating to bulk Liquidmetal alloy comes from *Scripta Metallurgica*, Vol. 30, pp. 431 and 433, 1994, and *Applied Physics Letters*, Vol. 71, p. 476, 1997, both of which describe laboratory tests performed by the California Institute of Technology.

- (1) The aluminum alloy being compared here is 7075-T6, a widely used high-strength aluminum alloy. This alloy is used in aerospace, automotive, defense, and other applications.
- (2) The titanium alloy being compared here is a type of Ti-6Al-4V, a widely used titanium alloy particularly known for its high strength. This alloy is commonly used in structural, aircraft, biomedical, and other applications. The properties being shown here are the properties exhibited by the cast form of the material.
- (3) The alloy being compared here is a type of corrosion-resistant cast steel heat-treated to 5528 C, similar to the alloy known in the steel industry as 17-4 stainless, a widely used premium stainless steel. This alloy is utilized in industrial, aerospace, aircraft, and other applications.

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In addition, bulk Liquidmetal alloys have other performance features that may make them desirable in specific applications. For example, very low coefficients of friction have been measured in certain applications of bulk Liquidmetal alloys, such as applications in which bulk Liquidmetal alloys wear against themselves. Moreover, Liquidmetal alloys have demonstrated high resistance to erosion and corrosion in certain saline and caustic environments. For example, our Liquidmetal alloys showed no signs of corrosion in an industry standard saline corrosion test performed by an independent testing laboratory. These properties, combined with Liquidmetal alloys' high strength and hardness, could yield a material that demonstrates high resistance to wear in various applications.

The high yield strength of bulk Liquidmetal alloys means that a high amount of stress must be exerted to create permanent deformation. However, because the yield strength is so high, the yield strength of many of our bulk Liquidmetal alloy compositions is very near their ultimate strength, which is the measure of stress at which total breakage occurs. Therefore, very little additional stress may be required to break an object made of bulk Liquidmetal alloys once the yield strength is exceeded. Although we believe that the yield strength of many of our bulk alloys exceeds the ultimate strength of most other commonly used alloys and metals, our bulk alloys may not be suitable for certain applications, such as pressurized tanks, in which the ability of the material to yield significantly before it breaks is more important than its strength advantage. Additionally, although our bulk alloys show a high resistance to crack initiation because of their very high strength and hardness, certain of our bulk alloys are sensitive to crack propagation under certain long-term, cyclical loading conditions. Crack propagation is the tendency of a crack to grow after it forms. Nevertheless, independent research has shown that the fracture toughness, or ability to resist the formation of cracks, of our zirconium-titanium Liquidmetal alloy exceeds by 28% the fracture toughness of a crystalline titanium counterpart known as Ti-6Al-4V. We are currently developing new alloy compositions that have improved material properties to overcome these limitations.

### ***Processing Advantages***

The processing of a material generally refers to how a material is shaped, formed, or combined with other materials to create a finished product. Bulk Liquidmetal alloys possess processing characteristics that we believe make them preferable to other materials in a wide variety of applications. In particular, our alloys are amenable to processing options that are similar in many respects to those associated with plastics. For example, we believe that bulk Liquidmetal alloys have superior net-shape casting capabilities as compared to crystalline metals and alloys. "Net-shape casting" is a type of casting that permits the creation of highly finished products that do not require much costly post-finishing processing or machining. Additionally, unlike most metals and alloys, our bulk Liquidmetal alloys are capable of being thermoplastically molded in bulk form. Thermoplastic molding consists of heating a solid piece of material until it is transformed into a moldable, although not yet molten, state and then introducing it into a mold. Thermoplastic molding is beneficial and economical because it may require less energy than casting, resulting in lower direct energy costs and less shrinkage, and lends itself more readily to continuous processing.

Bulk Liquidmetal alloys also permit the creation of composite materials that cannot be created with most non-amorphous metals and alloys. A composite is a material that is made from two or more different types of materials. In general, the ability to create composites is beneficial because constituent materials can be combined with one another to optimize the composite's performance characteristics for different applications. In other metals and alloys, the high temperatures required for processing could damage some of the composite's constituent materials and therefore limit their utility. However, the relatively low melting temperatures of bulk Liquidmetal alloys allow mild processing conditions that eliminate or limit damage to the constituent materials when creating composites. In addition to composites, we believe that the processing advantages of Liquidmetal alloys will allow for a variety of other finished forms, including a coating or a spray. Most other metals and alloys cannot be processed into these forms.

Notwithstanding the foregoing advantages, our bulk Liquidmetal alloys possess certain limitations relative to processing. The beneficial processing features of our bulk alloys are made possible in part by the alloys' relatively low melting temperatures. Although a lower melting temperature is a beneficial characteristic for processing purposes, it renders certain bulk alloy compositions unsuitable for certain high-temperature applications, such as jet engine exhaust components. Additionally, the current one-inch thickness limitation for our zirconium-titanium bulk alloy renders our alloys currently unsuitable for use as structural materials in large-scale applications, such as load-bearing beams in building constructions (although we can join together multiple amorphous alloy objects to create a larger product in some cases). We are currently engaged in research and development with the goal of developing processing technology and new alloy compositions that will enable our bulk alloys to be formed into thicker objects.

### ***Cost Advantages***

Liquidmetal alloys have the potential to provide significant cost advantages over other metals and alloys in certain applications. Because bulk Liquidmetal alloys have processing characteristics similar in many respects to plastics, Liquidmetal alloys can in many cases be shaped efficiently into intricate, sophisticated, engineered products in a substantially finished form. This capability eliminates or reduces certain finishing steps, such as grinding, shaping or forming, and therefore has the potential to significantly reduce processing costs associated with making high-fidelity parts in high volume.



Additionally, because the processing of Liquidmetal alloys does not require capital-intensive heavy industrial equipment such as that found in foundry and forging operations, Liquidmetal alloys can be processed with a smaller machinery footprint, which allows for efficient development of facilities and reduced permitting and regulatory costs. We believe that these processing advantages and lower capital costs will enable production to scale up faster and more efficiently than foundry and forging operations. We also believe that these advantages may allow our customers an opportunity maintain or improve the performance of their products without a commensurate increase in cost.

## **Our Strategy**

Our goal is to use our leadership position in amorphous alloy technology to develop and commercialize a wide variety of product applications. The key elements of our strategy include:

- *Identifying and Developing New Applications for Our Liquidmetal Alloy Technology.* We intend to continue to identify and develop new applications that will benefit from the performance, processing, and cost advantages of Liquidmetal alloys.
- *Focusing Our Initial Commercialization Efforts on Major Industries Characterized by High Unit Volumes.* We are focusing our initial commercialization efforts on applications for bulk Liquidmetal alloy products with relatively high unit volumes that are sold in major industries. For example, we have targeted the electronic product casing market because of its potential for very high unit volumes. We believe that manufacturing Liquidmetal alloy products in high volumes should enable us to facilitate revenue growth and enable us to improve manufacturing and processing efficiencies associated with our alloys.
- *Further Developing Our Manufacturing Processes, Capabilities, and Efficiencies for Bulk Liquidmetal Alloys.* We intend to improve and enhance our internal manufacturing processes, capabilities, and efficiencies in order to maintain quality control over products made from bulk Liquidmetal alloys, to focus on improvements to the processing of our alloys, and to better protect our intellectual property. As our alloys become more pervasive, however, we may enter into strategic relationships that could involve the license of Liquidmetal technology to third parties for certain market segments.
- *Pursuing Acquisitions, Joint Ventures, and Other Strategic Transactions.* We are pursuing acquisitions, joint ventures, and other strategic transactions to gain access to new technologies, products, markets, and manufacturing capabilities. In particular, we may engage in acquisitions and other strategic transactions to gain access to technologies that will enhance or complement the composition, processing, and application of our alloys. Under certain circumstances, we may also enter into licensing relationships under which we would license some aspect of our technology to third parties for specific markets.
- *Establishing the Liquidmetal® Brand.* We believe that building our corporate brand will foster continued adoption of our technology. Our goal is to position Liquidmetal alloys as a superior substitute for materials currently used in a variety of products across a range of industries. Furthermore, we seek to establish Liquidmetal alloys as an enabling technology that will facilitate the creation of a broad range of commercially viable new products. To enhance industry awareness of our company and increase demand for Liquidmetal alloys, we are pursuing a brand development strategy through targeted advertising, conference and trade show appearances, promotions, public relations, and other means.
- *Enhancing Our Competitive Position by Aggressively Developing, Exploiting, and Protecting Both Existing and Future Advances in Amorphous Alloy Technology.* We are investing significant resources toward developing and acquiring new technologies that will enhance and expand our existing technology position. In particular, we are currently seeking to develop and acquire technologies that relate to the composition, processing, and application of amorphous alloy technologies. Our efforts will include intensive research and development activities aimed at decreasing the manufacturing cost and improving the performance characteristics and processing flexibility of Liquidmetal alloys.

## **Initial Applications**

We have identified the following initial market opportunities to allow us to execute our strategy. We believe that these opportunities are consistent with our strategy in terms of market size, building brand recognition, and providing an opportunity to develop and refine our processing capabilities.

### ***Casings for Electronic Products***

We produce casing components for electronic devices using our bulk Liquidmetal alloys. We targeted this market because of its high product volume and potential branding opportunities. Bulk Liquidmetal alloys can be used for each of the structural components of a cellular phone, including the shield, face plate, hinge, back plate, side plates, and the clam shell on so-called flip-phones. To date, we have shipped production quantities of cellular phone components to Samsung Electronics Company for inclusion in various cellular phone models. During the first quarter of 2003, we also began shipping cellular phone components to LG Electronics. We are currently working with other cellular phone manufacturers, including Motorola, to develop casing components for their phones and have received orders for limited quantities of prototype units.

In addition to cellular phones, bulk Liquidmetal alloys can be used as a casing material in a variety of other electronic devices. For example, in the third quarter of 2002, we shipped production quantities of Liquidmetal alloy casing components to J.S. Tech, a South Korean electronics manufacturer, for inclusion in a combination MP3/CD player. We are also working with Samsung and other electronics companies to develop components for products such as personal digital assistants (PDAs), laptop computers, and digital cameras.

We believe that aesthetics, the growing trend toward miniaturization, and the introduction of advanced features to electronic devices are the primary drivers of growth, market share, and profits in this industry, particularly with respect to cellular phones and PDAs. For example, the introduction of larger screens into smaller casings has been a significant challenge confronting electronics manufacturers attempting to take advantage of new wireless technology. In particular, normal usage of smaller and thinner devices may result in accidental damage to the display screens and internal electronic components. The high strength-to-weight ratio and elastic limit of bulk Liquidmetal alloys enable the production of thinner, but stronger, casings that protect the screens and miniature electronic circuits of electronic devices better than materials currently in use, such as plastic and magnesium. Additionally, we believe that the strength characteristics of our alloys could facilitate the creation of a new generation of electronic devices that may not be viable currently because of the strength limitations of incumbent materials. We also believe that our alloys offer style and design flexibility, such as shiny metallic finishes, to accommodate the changing tastes of the consumer.

### ***Sporting Goods and Leisure Products***

We are developing and marketing a variety of applications for bulk Liquidmetal alloys in the sporting goods and leisure products area. For example, we believe that the high strength, hardness, and elasticity of our alloys will enhance product performance in the sporting goods industry. Possible applications for our alloys in this industry include golf, skiing, tennis, hunting, and diving products. We have entered into product development agreements with HEAD Sport AG and Rawlings, Inc., two well-established sporting goods manufacturers, to test and develop components for use in their products.

Capitalizing on the experience, knowledge, and recognition that we gained through our discontinued retail golf club business, we have been working with established golf club companies to develop Liquidmetal alloy components for their golf clubs. Using our bulk Liquidmetal alloys, we have manufactured prototypes of various golf club components, including club head components for irons and woods. We are continuing to work with PING, Inc., a leading golf club manufacturer, for the development of golf club heads made from bulk Liquidmetal alloys, and we are also engaged in discussions and negotiations with other golf club manufacturers relating to the inclusion of our alloys in their clubs.

In the leisure products category, bulk Liquidmetal alloys can be used to efficiently produce premium watchcases and other similar intricately engineered designs with high-quality finishes. For example, the advantages of our bulk alloys enable us to reduce the number of separate operations required for the manufacture of a metal watchcase. We currently have a development agreement with TAG Heuer S.A., a high-quality Swiss watchmaker, to develop bulk Liquidmetal alloy watchcases for use in TAG Heuer watches, and we are currently delivering sample quantities to TAG Heuer under this

agreement. In the third quarter of 2002, we entered into an expanded product development agreement with TAG Heuer with the goal of extending our amorphous alloy technology to other products in the broad product portfolio of LVMH's Watches & Jewelry Division. LVMH is the parent company of TAG Heuer and is one of the world's largest luxury-brands product companies. We have also entered into an agreement with Casio Computer Co., Ltd. to develop bulk Liquidmetal alloy components for Casio watches. In addition to watches, Liquidmetal alloy technology can be used to make high-quality, high-strength jewelry from precious metals. For example, we have successfully produced prototype rings made from an amorphous Liquidmetal platinum that is three times harder (and hence more scratch resistant) than regular crystalline platinum.

#### **Medical Devices**

We are developing and manufacturing prototypes of various medical devices made from Liquidmetal alloys. We believe that Liquidmetal alloys are well-suited for medical devices because of their strength, hardness, biocompatibility, and corrosion resistance, together with the ability of our bulk Liquidmetal alloys to be formed into complex shapes with a high quality finish. We believe that these qualities can provide improved performance, longer life, and lower production costs than the materials currently being used in many medical device applications.

In the orthopedic device market, we believe that Liquidmetal alloys represent a superior alternative to the titanium, cobalt-chromium, and stainless steel alloys currently used in many orthopedic devices. Titanium alloys are strong, but they do not move well against other materials and are therefore not used in devices with parts that move against each other, such as ball-and-socket hip joints. Cobalt-chromium alloys wear well, but they are comparatively heavy and difficult to process. Stainless steel corrodes relatively quickly. In contrast, we believe that Liquidmetal alloy orthopedic devices will be stronger and produce less friction than titanium orthopedic devices, have a greater strength-to-weight ratio than cobalt chromium orthopedic devices, and have better corrosion resistance than stainless steel orthopedic devices. We have completed initial studies relating to the biological compatibility of our alloys for purposes of developing our orthopedic applications, and the results of these studies have been favorable.

Our primary strategy in the medical device market has been to strategically align ourselves with well-established companies that are best positioned to facilitate the introduction of Liquidmetal alloys into this market. For example, in the fourth quarter of 2002, we entered into an exclusive, multi-year agreement with DePuy Orthopaedics, Inc., a Johnson & Johnson company, to co-develop orthopedic implants and instruments for the knee replacement device market. This agreement gives DePuy Orthopaedics the exclusive worldwide right and license to market and sell knee replacement devices that incorporate Liquidmetal alloys. Under the terms of the agreement, we will receive scheduled cash payments upon completion of specific program milestones, culminating in obtaining and receiving FDA and CE marketing approval. Thereafter, all product components under this program will be manufactured by or for us and sold to DePuy Orthopaedics, with DePuy Orthopaedics providing full marketing and distribution services. The agreement further provides that we will receive royalty payments from net sales of knee replacement devices developed under the program and marketed by DePuy Orthopaedics. DePuy Orthopaedics' rights under the agreement will extend through 2020.

In the third quarter of 2002, we entered into an agreement with Surgical Specialties Corporation for the development and marketing of a line of ophthalmic scalpel blades made from Liquidmetal alloys. Under this agreement, we are currently working with Surgical Specialties to co-develop the blades, and upon completion of the development phase of the relationship, Surgical Specialties would sell the blades through its worldwide marketing and distribution network, which includes the world's leading ophthalmic surgical device companies. In addition, we are producing prototype phacoemulsification tips, which are instruments used to remove cataracts, in limited quantities for testing by Surgical Specialties.

We are also working with Ethicon Endosurgery, a Johnson & Johnson company, to develop components for surgical instruments. Additionally, we are working with Glidewell Laboratories, the largest dental laboratory company in the world and a producer of crowns, bridges, and dentures, to develop dental devices made from Liquidmetal alloys. We are also in discussion and negotiations with other producers and marketers of medical devices to develop Liquidmetal alloy products for this market.

### ***Industrial Coatings and Powders***

We market and sell amorphous alloy industrial coatings and powders. Liquidmetal alloy coatings are used primarily as a protective coating for industrial machinery and equipment. We believe that the high degree of hardness and low coefficient of friction of our coatings, combined with their strong adhesion properties, reduce the wear and consequent failure of the machinery and equipment on which they are used. We sell Liquidmetal coatings primarily in the form of a wire or powder feedstock that is melted and applied to machinery or equipment through a thermal spray process. The production of this feedstock is currently outsourced to a third party, and through our office and warehouse in Conroe, Texas, we sell and distribute the wire to third-party coatings applicators and other parties.

Our Liquidmetal coatings are widely used in the oil drilling industry as a protective coating on drill pipe and casings. Drilling often places tremendous stress on pipes and casings, especially whenever the drill changes direction. Both drill pipe and casing experience excessive wear, which leads to higher replacement costs and greater failure rates. Liquidmetal coatings are used to provide a protective coating, or hard band, around the outside of the drill pipe and the inside of casings to reduce wear and failure rates and accordingly reduce operating costs. We estimate that our coatings represent about 75-80% of annual worldwide sales of hard band coatings for new oil drill pipe.

Liquidmetal coatings are also sold for the purpose of coating boiler tubes in coal burning power plants in order to extend the lives of these tubes. Boiler tubes are subject to high heat, erosion, and corrosion and often require costly replacement, both in terms of replacement parts and length of downtime for installation. Additionally, residue build-up in boiler tubes of coal burning power plants creates operating inefficiencies. Tests on Liquidmetal coatings have indicated that our coatings extend the life of these boiler tubes by three to five times their current average life depending on the specific environment. In addition, tests on our coatings have indicated that our coatings reduce the build-up of residue on these tubes, helping to improve the efficiencies of the boilers. Based on the success of our coatings in this application, we have increased our marketing efforts in this product area.

Our coatings customers currently include Grant Prideco, Inc., Tafa, Inc., Smith International, Inc., and Foster Wheeler. In addition to our coatings, we develop and market Liquidmetal powders that can be used as a binding agent in industrial applications, such as cutting tools. Initial testing by third parties suggests that our powders offer high erosion resistance in these applications and could serve as a superior substitute for cobalt, which is the primary metal binding agent used in high-performance industrial drilling, milling, and cutting instruments.

### ***Defense Applications***

We are working with the U.S. Department of Defense, as well as a variety of defense-related research and development agencies and large defense contractors, to develop a number of defense-related applications for Liquidmetal alloys. For example, we are currently producing prototype kinetic energy penetrator rods for use in armor-piercing ammunition systems. Kinetic energy penetrators, or KEPs, are armor piercing munitions that are currently made primarily from depleted uranium or tungsten. In the first quarter of 2002, we were awarded a contract by the Defense Advanced Research Projects Agency (DARPA) for funding of up to \$2 million to test Liquidmetal alloy KEP rods in actual munitions, and in the third quarter of 2002, we were awarded a research and development contract by the U.S. Army to develop high performance KEP rods. The U.S. Army research and development program is funded at just under \$2 million for a 15-month period. Initial live-fire ballistic tests under the KEP programs have demonstrated that tungsten KEPs perform better whenever Liquidmetal alloy is combined with the tungsten to create a composite material.

We are also working with a number of defense-related research and development agencies and large defense companies to identify additional military applications that may benefit from using Liquidmetal alloys. We believe that our alloys are well-positioned to capitalize on the trend toward lighter but stronger weapon systems in the U.S. military, and our strategy is to align ourselves with the largest and most significant players in this industry. At the U.S. Army's request, we have recently produced prototype ceramic-encapsulated armor tiles made from Liquidmetal alloys for testing. In the fourth quarter of 2002, we entered into a development agreement with Lockheed Martin Corporation, the world's largest defense contractor, to test potential applications of Liquidmetal alloys in current and future armored weapon systems manufactured by Lockheed Martin. This agreement, which has an initial one-year term, will initially focus on the use of Liquidmetal alloys to enhance the survivability of future combat systems. We have also teamed with other defense contractors, including Raytheon

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Missile Systems and Applied Ordnance Technologies, to compete for recent solicitations by the U.S. Air Force and U.S. Navy.

We have also entered into discussions with other major defense companies to jointly fund internal research and development programs to pursue the application of Liquidmetal in the defense market.

### **Liquidmetal Golf**

From 1997 until September 2001, we engaged in the retail marketing and sale of golf clubs through a majority owned subsidiary, Liquidmetal Golf. The retail business of Liquidmetal Golf was discontinued in September 2001 and is now treated as a discontinued operation in our consolidated financial statements. Although the retail golf club business has been discontinued, Liquidmetal Golf will be engaged in the business of manufacturing and selling golf club components to golf original equipment manufacturers who will integrate these components into their own clubs and then sell them under their respective brand names. Liquidmetal Technologies owns 79.19% of the outstanding common equity in Liquidmetal Golf.

Our Liquidmetal Golf subsidiary has the exclusive right and license to utilize our Liquidmetal alloy technology for purposes of golf equipment applications. This right and license is set forth in an intercompany license agreement between Liquidmetal Technologies and Liquidmetal Golf. This license agreement provides that Liquidmetal Golf has a perpetual and exclusive license to use Liquidmetal alloy technology for the purpose of manufacturing, marketing, and selling golf club components and other products used in the sport of golf. In consideration of this license, Liquidmetal Golf has issued 4,500,000 shares of Liquidmetal Golf common stock to Liquidmetal Technologies. In addition, Liquidmetal Technologies and Liquidmetal Golf are parties to a services agreement under which Liquidmetal Technologies provides Liquidmetal Golf with various goods and services, including operating facilities, research and development, sales and marketing, manufacturing, management support, and other support services. Under the services agreement, Liquidmetal Golf pays Liquidmetal Technologies a service fee equal to Liquidmetal Golf's allocated share of Liquidmetal Technologies' operating costs based on actual time and resources expended in providing the services.

### **Our Intellectual Property**

Our intellectual property consists of patents, trade secrets, know-how, and trademarks. Protection of our intellectual property is a strategic priority for our business, and we intend to vigorously protect our patents and other intellectual property. Our intellectual property portfolio includes 22 owned or licensed U.S. patents and various patent applications relating to the composition, processing, and application of our alloys, as well as various foreign counterpart patents and patent applications.

Our initial bulk amorphous alloy technology was developed by researchers at Caltech. We have the exclusive right to commercialize this alloy and other amorphous alloy technology through a license agreement with Caltech. Under the Caltech license agreement, we have the exclusive worldwide right to make, use, and sell products from all of Caltech's inventions, proprietary information, know-how, and other technology relating to amorphous alloys and existing as of September 1, 2001. We also have an exclusive worldwide license to eight patents and six patent applications held by Caltech relating to amorphous alloy technology, as well as all related foreign counterpart patents and patent applications. Furthermore, the license agreement gives us the exclusive right to make, use, and sell products from substantially all related amorphous alloy technology that is developed in Professor William Johnson's Caltech laboratory during the period September 1, 2001 through August 31, 2005. All fees and other amounts payable by us for these rights and licenses have been paid in full, and no further royalties, license fees, or other amounts will be payable in the future under this license agreement.

Our rights under the license agreement are perpetual in duration. However, Caltech has the right to convert the license to a non-exclusive license if we fail to utilize the licensed technology for a period of 18 or more consecutive months, provided that Caltech must give us 180-days advance written notice of the conversion and we may cure the failure at any time during the 180-day notice period. If we cure the failure, then the license will not be converted into a non-exclusive license.

Under the license agreement, we have the right to sublicense any of the licensed technology or patents. The license agreement also provides that Caltech reserves the right to use the licensed technology and patents for noncommercial educational and research purposes. The patents and patent applications that we license from Caltech relate primarily to the

composition and processing of our alloys. The currently issued U.S. patents covered by the license agreement will expire between 2013 and 2017.

Under the Caltech license agreement, the parties are obligated to provide reasonable cooperation to each other in connection with any threatened or actual infringement of the licensed technology by third parties. We have the right to commence an action for infringement of any of the licensed technology, and although Caltech is not obligated to bring suit or take action against infringers, Caltech is obligated to join in any such lawsuit upon our request.

In addition to the patents and patent applications that we license from Caltech, we are building a portfolio of our own patents to expand and enhance our technology position. These patents and patent applications primarily relate to various applications of our bulk amorphous alloys, the composition of our coatings and powders, and the processing of our alloys. The patents relating to our coatings expire on various dates between 2004 and 2017, and the patents relating to our bulk amorphous alloys expire on various dates between 2013 and 2017. Our policy is to seek patent protection for all technology, inventions, and improvements that are of commercial importance to the development of our business, except to the extent that we believe it is advisable to maintain such technology or invention as a trade secret.

In order to protect the confidentiality of our technology, including trade secrets, know-how, and other proprietary technical and business information, we require that all of our employees, consultants, advisors and collaborators enter into confidentiality agreements that prohibit the use or disclosure of information that is deemed confidential. The agreements also obligate our employees, consultants, advisors and collaborators to assign to us developments, discoveries and inventions made by such persons in connection with their work with us.

## Research and Development

We are engaged in intensive and ongoing research and development programs that are driven by the following key objectives:

- *Enhance the Processing Efficiencies.* We plan to continue research and development of processes and compositions that will decrease our cost of making products from Liquidmetal alloys.
- *Improve Performance Characteristics.* We plan to continue research and development on new alloy compositions to generate a broader class of amorphous alloys with a wider range of specialized performance characteristics.
- *Develop New Applications.* We will continue research and development of new applications for Liquidmetal alloys. We believe the range of potential applications will broaden by expanding the forms, compositions, and methods of processing of our alloys.

We conduct our research and development programs internally and also through strategic relationships that we enter into with third parties. Our internal research and development efforts are currently focused on product and process development. Our internal research and development efforts are conducted by a team of 32 scientists, engineers, and researchers who are employed by us or engaged by us as consultants. Included among these employees is Professor William Johnson, who discovered our initial bulk amorphous alloy at Caltech in 1993, and his graduate student at the time, Atakan Peker, who is employed as our Vice President of Technology Management. Professor Johnson joined our company as an employee as of October 1, 2001 and is also a member of our board of directors and Technology Advisory Board. We intend to hire additional scientists and engineers to expand our internal research and development program.

In addition to our internal research and development efforts, we enter into cooperative research and development relationships with leading academic institutions. Professor Johnson continues to supervise a laboratory at Caltech, and through our license agreement with Caltech, we have a continuing relationship with the other researchers in Professor Johnson's Caltech laboratory. We have also entered into research relationships with several other academic institutions for the conduct of research relating to the properties and characteristics of our alloys.

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We also enter into development relationships with other companies for the purpose of identifying new applications for our alloys and establishing customer relationships with such companies. Some of our product development programs are partially funded by our customers. We are also engaged in negotiations with a number of other potential customers regarding possible product development relationships. Our research and development expenses for the years ended December 31, 2002, 2001, and 2000 were \$11.8 million, \$2.1 million, and \$0.5 million, respectively.

To assist us in our research and development efforts, we have also assembled a Technology Advisory Board composed of leading researchers and scientists in the field of materials science. The members of our Technology Advisory Board are from leading academic and research institutions in the field of materials science. Our Technology Advisory Board meets on a semi-annual basis to discuss issues related to the advancement and application of our technology and the progress of our research and development programs, although it may also be convened at other times on an as-needed basis. Additionally, we occasionally consult with individual members of our Technology Advisory Board on various issues relating to our technology.

### **Manufacturing**

We currently own and operate a 166,000 square foot manufacturing facility in Pyongtaek, South Korea, which became operational in the third quarter of 2002. This facility contains 25 machines that are or will be used to cast bulk Liquidmetal alloy parts, as well as various pieces of finishing equipment and other equipment. We believe that this facility will meet our anticipated manufacturing needs through at least the end of 2004, although these needs may change depending upon the actual and forecasted orders we receive for our products. We currently intend to develop or acquire additional manufacturing facilities and capabilities elsewhere, including the United States, for purposes of meeting our long-term manufacturing needs.

### **Raw Materials**

Liquidmetal alloy compositions are comprised of many elements, all of which are readily available commodity products. We believe that each of these raw materials is readily available in sufficient quantities from multiple sources on commercially acceptable terms. However, any substantial increase in the price or interruption in the supply of these materials could have an adverse effect on our profitability.

### **Customers**

During 2002, three customers accounted for 10% or more of our revenue from continuing operations. Revenue from Samsung represented 15%, Growell Metal, Inc. represented 12% and defense-related contracts with three departments of the United States of America represented 10% of revenue from continuing operations for the year ended December 31, 2002. During the years ended December 31, 2001 and 2000, revenue earned on contracts with the United States of America represented less than 1% of revenue.

For the two years ended December 31, 2001, three other customers accounted for 10% or more of our revenue from continuing operations. Revenue from Grant Prideco, Inc. represented approximately 22% and 19% of revenue from continuing operations for the years ended December 31, 2001 and 2000, respectively. Revenue from TAFE, Inc. represented approximately 14% and 13% of revenue from continuing operations for the years ended December 31, 2001 and 2000, respectively. Revenue from Smith International, Inc. represented approximately 16% of revenue from continuing operations for the year ended December 31, 2001. These three customers purchased solely industrial coatings from us. We expect that a significant portion of our revenue may continue to be concentrated in a limited number of customers, even as our bulk Liquidmetal alloy business grows.

### **Competition**

We are not aware of any other company or business that manufactures, markets, distributes, or sells bulk amorphous alloys or products made from bulk amorphous alloys. We believe it would be difficult to develop a competitive bulk amorphous alloy without infringing our patents. However, we expect that our bulk Liquidmetal alloys will face competition from other materials, including metals, alloys, and plastics, that are currently used in the commercial applications that we

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pursue. Our alloys could also face competition from new materials that may be developed in the future, including new materials that could render our alloys obsolete.

Our Liquidmetal alloy coatings face competition from industrial coatings currently manufactured or sold by other companies. At present, the primary competitors of our coatings business are Grant Prideco, Inc., Varco International, Inc., and Arnco Technology Trust, Limited. Although we believe, based on market data gathered by us, that our coatings compete favorably with these companies' products and that we continue to maintain the dominant market share with respect to protective coatings for oil drill pipe and casings, these competitors are larger well-established businesses that have substantially greater financial, marketing, and other resources than we do.

We will also experience indirect competition from the competitors of our customers. Because we will rely on our customers to market and sell finished goods that incorporate our components or products, our success will depend in part on the ability of our customers to effectively market and sell their own products and compete in their respective markets.

### **Backlog**

In our bulk alloy segment, because of the minimal lead time associated with orders of bulk alloy parts, we generally do not carry a significant backlog. In our coatings segment, we typically ship our coating products shortly after receipt of an order, and our coatings backlog is therefore also insignificant. In both our bulk alloy segment and coatings segment, the backlog as of any particular date gives no indication of actual sales for any succeeding period.

### **Sales and Marketing**

We direct our marketing efforts towards customers that will incorporate our components and products into their finished goods. To that end, we will continue to hire business development personnel who, in conjunction with engineers and scientists, will actively identify potential customers that may be able to benefit from the introduction of Liquidmetal alloys to their products. In some cases, we will develop applications in conjunction with existing or potential customers. By adopting this strategy, we intend to take advantage of the sales and marketing forces and distribution channels of our customers to facilitate the commercialization of our alloys.

### **Employees**

As of March 1, 2003, we had 272 full-time employees and 3 part-time employees. This does not include contract laborers who work for an independent South Korean labor pool that we utilize from time to time in our Pyongtaek, South Korea manufacturing facility. The number of independent laborers that we lease from the labor pool varies depending our needs and the production activities of the Pyongtaek facility. As of March 1, 2003, none of our employees was represented by labor unions (except for two specific individuals employed by our Korean operations) or covered by collective bargaining agreements. We have not experienced any work stoppages, and we consider our employee relations to be good.

### **Governmental Regulation**

Medical instruments incorporating our Liquidmetal alloys, such as scalpel blades and phacoemulsification tips, will be subject to regulation in the United States by the FDA and corresponding state and foreign regulatory agencies. Any orthopedic devices that we develop will be regulated in a similar manner. Medical device manufacturers to whom we intend to sell our products may need to obtain FDA approval before marketing their medical devices that incorporate our products. Medical device manufacturers may need to obtain similar approvals before marketing these medical device products in foreign countries.

Because we intend to sell our medical device products to medical device manufacturers, we do not believe that we will need to obtain FDA approval or similar foreign approvals before selling products to medical device manufacturers.



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Nonetheless, as a manufacturer of medical device components, we would be subject to quality control and record keeping requirements of FDA and other federal and state statutes and regulations, as well as similar regulations in foreign countries.

The process of obtaining and maintaining required FDA and foreign regulatory approvals for medical devices that incorporate our products could be lengthy, expensive, and uncertain for our customers. Additionally, regulatory agencies can delay or prevent product introductions. Generally, before a medical device manufacturer can market a product incorporating one of our products, our customer must obtain for their finished product marketing clearance through a 510(k) premarket notification or approval of a premarket approval application, or PMA. The FDA will typically grant a 510(k) clearance if the applicant can establish that the device is substantially equivalent to a predicate device. It generally takes a number of months from the date of a 510(k) submission to obtain clearance, but it may take longer, particularly if a clinical trial is required.

The FDA may find that a 510(k) is not appropriate for a medical device that incorporates our product or that substantial equivalence has not been shown and as a result will require a PMA. A PMA application must be submitted if a proposed medical device does not qualify for a 510(k) premarket clearance procedure. PMA applications must be supported by valid scientific evidence to demonstrate the safety and effectiveness of the device, typically including the results of clinical trials, bench tests, and laboratory and animal studies. The PMA process can be expensive, uncertain and lengthy, requires detailed and comprehensive data, and generally takes significantly longer than the 510(k) process. Additionally, the FDA may never approve the PMA.

Similar regulations in foreign countries vary significantly from country to country and with respect to the nature of the particular medical device. The time required to obtain these foreign approvals to market our products may be longer or shorter than that required in the United States, and requirements for such approval may differ from FDA requirements.

### **Factors Affecting Future Results**

This report contains forward-looking statements (within the meaning of the Private Securities Litigation Reform Act of 1995) that are based on current expectations, estimates, forecasts, and projections about the company and its business. In addition, other written or oral statements which constitute forward-looking statements may be made from time to time by or on behalf of Liquidmetal Technologies. Any statement in this report that is not a statement of historical fact is a forward-looking statement, and in some cases, words such as “believe,” “estimate,” “project,” “expect,” “intend,” “may,” “anticipate,” “plans,” “seeks,” and similar expressions identify forward-looking statements. Forward-looking statements involve risks and uncertainties that could cause actual outcomes and results to differ materially from the anticipated outcomes or result. These statements are not guarantees of future performance, and undue reliance should not be placed on these statements. Liquidmetal Technologies undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

Factors that could cause actual results to differ materially from what is expressed or forecasted in our forward-looking statements include, but are not limited to, the following:

#### **We have not sustained profitability and may incur losses in the future.**

We had an accumulated deficit of approximately \$76.9 million at December 31, 2002. Of this accumulated deficit, \$42.9 million was attributable to losses generated by our discontinued retail golf business through December 31, 2002. We realized a net loss of \$19.9 million for the year ended December 31, 2002 and \$5.2 million for the year ended December 31, 2001, excluding the results of our discontinued retail golf business. We may incur additional operating losses in the future. Moreover, we expect that our operating expenses will continue to increase as we continue to strengthen and expand our manufacturing capabilities and invest substantial resources for research and development activities. Consequently, it is possible that we may not achieve positive earnings and, if we do achieve positive earnings, we may not be able to achieve them on a sustainable basis.

**We have a limited history of developing, manufacturing, and selling products made from our bulk amorphous alloys.**

We have marketed and sold industrial coatings to distributors in the coatings industry since 1987. Prior to the third quarter of 2002, our experience selling products made from bulk amorphous alloys has been limited to our discontinued retail golf business, which had a different marketing strategy than the one we are currently employing. We only recently began producing bulk amorphous alloy components and products on a mass-production basis. Many of our relationships with potential customers for bulk alloy products are at an early stage, and there can be no assurance that these customers will enter into purchase commitments with us. Moreover, as we gain more experience and knowledge relating to the manufacturing process of our bulk alloys and the purchase and utilization of raw materials used in these alloys, we expect to be able to further decrease the cost of producing bulk alloy parts. We believe that decreasing manufacturing and raw material costs will enable our alloys to compete more effectively against plastics and other incumbent materials in certain markets, such as the cellular phone casing market.

**We rely on assumptions about the markets for our products and components that, if incorrect, may adversely affect our profitability.**

We only recently began producing bulk amorphous alloy components on a mass-production basis. We have made assumptions regarding the market size for, and the manufacturing requirements of, our products and components based in part on information we received from third parties. If these assumptions prove to be incorrect, we may not be able to achieve profitability.

**Our historical results of operations may not be indicative of our future results.**

Although our discontinued retail golf business did not contribute to our revenues in 2002, this business contributed approximately 46.2%, 61.5%, and 74.7% of our revenues for the years ended December 31, 2001, 2000, and 1999, respectively. As a result of our limited history of selling bulk amorphous alloy components and products that are incorporated into the finished goods of our customers, and because the revenues, costs and expenses, assets and liabilities, and cash flows in connection with our discontinued retail golf business have been segregated in our consolidated financial statements, our historical results of operations may not be indicative of our future results.

**If we cannot establish and maintain relationships with customers that incorporate our components and products into their finished goods, we will not be able to increase our revenue and commercialize our products.**

To increase our revenue, we must establish and maintain relationships with customers that will incorporate our components and products into their finished goods. We expect to rely on the marketing, distribution, and, in some cases, the manufacturing, research, and development abilities of our customers to assist us in developing, commercializing, and marketing our products in different markets. Our future growth and success will depend in large part on our ability to enter into these relationships and the subsequent success of these relationships. If our products are chosen to be incorporated into a customer's products, we still may not realize significant revenue from that customer if that customer's products are not commercially successful.

**It may take significant time and cost for us to develop new customer relationships, which may delay our ability to generate additional revenue or achieve profitability.**

Our ability to generate revenue from new customers will be affected by the amount of time it takes for us:

- to identify a potential customer and introduce the customer to Liquidmetal alloys;
- to work with the customer to select and design the parts to be fabricated from Liquidmetal alloys;
- to make the molds and tooling to be used to produce the selected part;
- to make prototypes and samples for customer testing;
- to work with our customers to test and analyze prototypes and samples; and

- with respect to some types of products, such as medical devices, to obtain regulatory approval.

We currently do not have a sufficient history of selling products made from our bulk amorphous alloys to predict accurately the length of our average sales cycle. We believe that our average sales cycle from the time we deliver an active proposal to a customer until the time our customer fully integrates our bulk amorphous alloys into its product could be a significant period of time. The sales cycle could extend longer than we anticipate. The time it takes to transition a customer from limited production to full-scale production runs will depend upon the nature of the processes and products into which our alloys are integrated.

**After we develop a customer relationship, it may take a significant amount of time for that customer to develop, manufacture, and sell finished goods that incorporate our components and products.**

We believe that many of our customers will perform numerous tests and extensively evaluate our components and products before incorporating them into their finished products. The time required for testing, evaluating, and designing our components and products into a customer's products, and in some cases, obtaining regulatory approval, can take a significant amount of time, with an additional period of time before a customer commences volume production of products incorporating our components and products, if ever. Moreover, because of this lengthy development cycle, we may experience a delay between the time we accrue expenses for research and development and sales and marketing efforts and the time when we generate revenue, if any. We may incur substantial costs in an attempt to transition a customer from initial testing to prototype and from prototype to final product. If we are unable to minimize these transition costs, or to recover the costs of these transitions from our customers, our operating results will be adversely affected.

**A limited number of our customers generate a significant portion of our revenue.**

For the near future, we expect that a significant portion of our revenue will be concentrated in a limited number of customers. For example, for the year ended December 31, 2002, revenue from three customers represented approximately 37% of total revenue from continuing operations. A reduction, delay, or cancellation of orders from one or more of our customers or the loss of one or more customer relationships could significantly reduce our revenue. Unless we establish long-term sales arrangements with these customers, they will have the ability to reduce or discontinue their purchases of our products on short notice.

**We expect to rely on our customers to market and sell finished goods that incorporate our products and components, a process over which we will have little control.**

Our future revenue growth and ultimate profitability will depend in part on the ability of our customers to successfully market and sell their finished goods that incorporate our products. We will have little control over our customers' marketing and sales efforts. These marketing and sales efforts may be unsuccessful for various reasons, any of which could hinder our ability to increase revenue or achieve profitability. For example, our customers may not have or devote sufficient resources to develop, market, and sell their finished goods that incorporate our products. Because we likely will not have exclusive sales arrangements with our customers, they will not be precluded from exploring and adopting competing technologies. Also, products incorporating competing technologies may be more successful for reasons unrelated to performance of our customers' products or the marketing efforts of our customers.

**Our growth depends on our ability to identify, develop, and commercialize new applications for our technology.**

Our future growth and success will depend in part on our ability to identify, develop, and commercialize, either alone or in conjunction with our customers, new applications and uses for Liquidmetal alloys. If we are unable to identify and develop new applications, we may be unable to develop new products or generate additional revenue. Successful development of new applications for our products may require additional investment, including costs associated with research and development and the identification of new customers. In addition, difficulties in developing and achieving market acceptance of new products would harm our business.

**We may not be able to effectively compete with current suppliers of incumbent materials or producers of competing products.**

The future growth and success of our bulk amorphous alloy business will depend in part on our ability to establish and retain a technological advantage over other materials for our targeted applications. For many of our targeted applications, we will compete with manufacturers of similar products that use different materials. For example, we have targeted the cellular phone casing market as an application for bulk Liquidmetal alloys. In this market, we believe we will compete with other manufacturers of cellular phone casings who use plastics or metal to construct their casings. In other markets, we will compete directly with suppliers of the incumbent material. For example, in the orthopedic device market, we compete with the suppliers of titanium alloy, stainless steel, and other materials currently used to make orthopedic devices. Manufacturers of competing products or suppliers of incumbent materials may have significantly greater financial resources than we do.

In addition, in each of our targeted markets, our success will depend in part on the ability of our customers to compete successfully in their respective markets. Thus, even if we are successful in replacing an incumbent material in a finished product, we will remain subject to the risk that our customer will not compete successfully in its own market.

**Future advances in materials science could render Liquidmetal alloys obsolete.**

Academic institutions and business enterprises frequently engage in the research and testing of new materials, including alloys and plastics. Advances in materials science could lead to new materials that have a more favorable combination of performance, processing, and cost characteristics than our alloys. The future development of any such new materials could render our alloys obsolete and unmarketable or may impair our ability to compete effectively.

**Our growth depends upon our ability to retain and attract a sufficient number of qualified employees.**

Our future growth and success will depend in part on our ability to retain key members of our management and scientific staff, particularly John Kang, our President and Chief Executive Officer, and Professor William Johnson, Vice Chairman of our board of directors. We do not have “key man” or similar insurance on either of these individuals. If we lose either of their services or the services of other key personnel, our financial results or business prospects may be harmed. Additionally, our future growth and success will depend in part on our ability to attract, train, and retain new scientific, manufacturing, sales, marketing, and management personnel. We cannot be certain that we will be able to attract and retain the personnel necessary to manage our operations effectively. Competition for experienced executives and scientists from numerous companies and academic and other research institutions may limit our ability to hire or retain personnel on acceptable terms. In addition, many of the companies with which we compete for experienced personnel have greater financial and other resources than we do. Moreover, the employment of non-citizens may be restricted by applicable immigration laws.

**We may not be able to effectively manage our anticipated growth.**

If we fail to effectively manage our internal growth in a manner that minimizes strains on our resources, we could experience disruption in our operations and ultimately be unable to achieve or sustain profitability. Managing our anticipated growth may be difficult because:

- our management team has worked together for a relatively short period of time;
- we have a limited history of manufacturing our own products, and we intend to continue the scale-up of production at our manufacturing facility in South Korea;
- we have a limited history of developing, manufacturing, and marketing products made from bulk Liquidmetal alloys, and we expect that our bulk alloy segment will continue to generate the majority of our revenue in the near future;
- we intend to rapidly expand our research and development programs; and

- we intend to pursue acquisitions, joint ventures, and other strategic transactions that will enhance or expand our technology and manufacturing base.

If we fail to effectively manage this growth, we may not be able to effectively implement our strategy, and our financial results and business prospects could be harmed.

**We may not be able to successfully identify, consummate, or integrate strategic transactions.**

We intend to pursue strategic transactions that provide access to new technologies, products, markets, and manufacturing capabilities. These transactions could include acquisitions, partnerships, joint ventures, business combinations, and investments. For example, we may pursue transactions that will give us access to new technologies that are useful in connection with the composition, processing, or application of Liquidmetal alloys. In particular, we intend to focus our acquisition efforts on companies that will expand or enhance our manufacturing capabilities. We may not be able to successfully identify any potential strategic transactions. Even if we do identify one or more potentially beneficial strategic transactions, we may not be able to consummate these transactions on favorable terms or obtain the benefits we anticipate from such a transaction. If we are able to consummate any strategic transactions, the transactions could pose significant integration challenges or management and business disruptions, especially while we are in the early stages of our growth.

**We may encounter manufacturing problems or delays or may be unable to produce high-quality products at acceptable costs.**

We have limited experience in manufacturing our products and may be required to manufacture a range of products in high volumes while ensuring high quality and consistency. Although we currently own and operate a 166,000 square foot manufacturing facility in South Korea, we cannot guarantee that this facility will be able to produce its intended products with the production yields, quality controls, and production costs that we currently assume. We may be required to incur additional capital expenditures if it is necessary to increase our manufacturing capacity, and we may not be able to finance any future capital expenditures on commercially reasonable terms or at all.

**We expect to derive a substantial portion of our revenue from sales outside the United States, and problems associated with international business operations could affect our ability to manufacture and sell our products.**

We expect that we will continue to manufacture substantially all of our initial bulk Liquidmetal alloy products in our South Korean facility. As a result, our manufacturing operations are subject to risks of political instability, including the risk of conflict between North Korea and South Korea and recently increased tensions between the United States and North Korea. In addition, we anticipate that sales to customers located outside of the United States will account for a significant portion of our revenue in future periods and that the trend of foreign customers accounting for an increasing portion of our total sales may continue. Specifically, we expect to derive a significant amount of revenue from sales to customers located in Asia. A downturn in the economies of Asian countries where our products will be sold, particularly South Korea's economy, could materially harm our business.

Consequently, our operations and revenue likely will be subject to a number of risks associated with foreign commerce, including:

- staffing and managing our manufacturing facility located in South Korea;
- product or material transportation delays or disruption, including the availability and costs of air and other transportation between our South Korean facilities and the United States;
- political and economic instability, including instability involving North Korea;

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- potentially adverse tax consequences;
- burden of complying with complex foreign laws and treaties; and
- trade protection laws, policies, and measures and other regulatory requirements affecting trade and investment, including loss or modification of exemptions for taxes and tariffs.

Moreover, customers may sell finished goods that incorporate our components and products outside of the United States, which exposes us indirectly to additional foreign commerce risks.

### **Our business is subject to the potential adverse consequences of exchange rate fluctuations.**

We expect to conduct business in various foreign currencies and will be exposed to market risk from changes in foreign currency exchange rates and interest rates. Fluctuations in exchange rates between the U.S. dollar and such foreign currencies may have a material adverse effect on our business, results of operations, and financial condition and could specifically result in foreign exchange gains and losses. The impact of future exchange rate fluctuations on our operations cannot be accurately predicted. To the extent that the percentage of our non-U.S. dollar revenue derived from international sales increases in the future, our exposure to risks associated with fluctuations in foreign exchange rates will increase further. Moreover, as a result of operating a manufacturing facility in South Korea, a substantial portion of our costs are and will continue to be denominated in the South Korean won. Adverse changes in the exchange rates of the South Korean won to the U.S. dollar will affect our costs of goods sold and operating margins and could result in exchange losses.

### **Our inability to protect our licenses, patents, and proprietary rights in the United States and foreign countries could harm our business because third parties may take advantage of our research and development efforts.**

We have an exclusive license from Caltech to several patents and patent applications relating to amorphous alloy technology, and we have obtained several of our own patents. We also have the exclusive right to Caltech's inventions, proprietary information, know-how, and other technology relating to bulk amorphous alloys existing as of September 1, 2001. Our success depends in part on our ability to obtain and maintain patent and other proprietary right protection for our technologies and products in the United States and other countries. If we are unable to obtain or maintain these protections, we may not be able to prevent third parties from using our proprietary rights. Specifically, we must:

- protect and enforce our license agreement with Caltech and our own patents and intellectual property;
- exploit our license of the patented technology under our license agreement with Caltech as well as our own patents; and
- operate our business without infringing on the intellectual property rights of third parties.

Caltech owns several issued United States patents covering the composition and method of manufacturing of the family of Liquidmetal alloys. We also hold several United States and corresponding foreign patents covering the manufacturing processes of Liquidmetal alloys and their use. The patents relating to our coatings expire on various dates between 2004 and 2017, and those relating to our bulk amorphous alloys between 2013 and 2017. If we are unable to protect our proprietary rights prior to the expiration of these patents, we may lose the advantage we have established as being the first to market bulk amorphous alloy products. In addition, the laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and we may encounter significant problems and costs in protecting our proprietary rights in these foreign countries.

Patent law is still evolving relative to the scope and enforceability of claims in the fields in which we operate. Our patent protection involves complex legal and technical questions. Our patents and those patents for which we have license rights may be challenged, narrowed, invalidated, or circumvented. We may be able to protect our proprietary rights from infringement by third parties only to the extent that our proprietary technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets. Furthermore, others may independently develop similar or alternative

technologies or design around our patented technologies. Litigation or other proceedings to defend or enforce our intellectual property rights could require us to spend significant time and money and could otherwise adversely affect our business.

**Other companies may claim that we infringe their intellectual property rights, which could cause us to incur significant expenses or prevent us from selling our products.**

Our success depends, in part, on our ability to operate without infringing valid, enforceable patents or proprietary rights of third parties and not breaching any licenses that may relate to our technology and products. Future patents issued to third parties may contain claims that conflict with our patents and that compete with our products and technologies, and third parties could assert infringement claims against us. Any litigation or interference proceedings, regardless of their outcome, may be costly and may require significant time and attention of our management and technical personnel. Litigation or interference proceedings could also force us to:

- stop or delay using our technology;
- stop or delay our customers from selling, manufacturing or using products that incorporate the challenged intellectual property;
- pay damages; or
- enter into licensing or royalty agreements that may be unavailable on acceptable terms.

**The time and cost associated with complying with government regulations to which we could become subject could have a material adverse effect on our business.**

Some of the applications that we have identified or may identify in the future may be subject to government regulations. For example, any medical devices such as precision ophthalmic instruments and orthopedic devices made from our alloys likely will be subject to extensive government regulation in the United States by the Food and Drug Administration, or FDA. Any medical device manufacturers to whom we sell Liquidmetal alloy products may need to comply with FDA requirements, including premarket approval or clearance under Section 510(k) of the Food Drug and Cosmetic Act before marketing in the United States Liquidmetal alloy medical device products. These medical device manufacturers may be required to obtain similar approvals before marketing these medical devices in foreign countries. Any medical device manufacturers with which we jointly develop and sell medical device products may not provide significant assistance to us in obtaining required regulatory approvals. The process of obtaining and maintaining required FDA and foreign regulatory approvals could be lengthy, expensive, and uncertain. Additionally, regulatory agencies can delay or prevent product introductions. The failure to comply with applicable regulatory requirements can result in substantial fines, civil and criminal penalties, stop sale orders, loss or denial of approvals, recalls of products, and product seizures.

In addition, the processing of beryllium, a minor constituent element of some of our alloys, can result in the release of beryllium into the workplace and the environment and in the creation of beryllium oxide as a by-product. Beryllium is classified as a hazardous air pollutant, a toxic substance, a hazardous substance, and a probable human carcinogen under environmental, safety, and health laws, and various acute and chronic health effects may result from exposure to beryllium. We are required to comply with certain regulatory requirements and to obtain a permit from the U.S. Environmental Protection Agency or other government agencies to process beryllium. Our failure to comply with present or future governmental regulations related to the processing of beryllium could result in suspension of manufacturing operations and substantial fines or criminal penalties.

To the extent that our products have the potential for dual use, such as military and non-military applications, they may be subject to import and export restrictions of the U.S. government, as well as other countries. The process of obtaining any required U.S. or foreign licenses or approvals could be time-consuming, costly, and uncertain. Failure to comply with import and export regulatory requirements can lead to substantial fines, civil and criminal penalties, and the loss of government contracting and export privileges.

**We may require additional funding, which may not be available on favorable terms or at all.**

Our future capital requirements will depend on the amount of cash generated by our operations. Our projections of cash flows from operations and, consequently, future cash needs are subject to substantial uncertainty. If our available funds and cash generated from operations are insufficient to satisfy our liquidity requirements, we may need additional funds in the future to support our working capital requirements, the expansion of manufacturing capabilities, and for other purposes, and we may seek to raise additional funds through public or private equity financing, bank debt financing, or from other sources. Adequate funds may not be available when needed or may not be available on favorable terms. If we raise additional funds by issuing equity securities, existing shareholders may be diluted. If funding is insufficient at any time in the future, we may not be able to develop or enhance our products or services, take advantage of business opportunities, or respond to competitive pressures, any of which could harm our business.

**Antitakeover provisions of our articles of incorporation and bylaws and provisions of applicable corporate law could delay or prevent a change of control that you may favor.**

Provisions in our articles of incorporation, our bylaws, and California law could make it more difficult for a third party to acquire us, even if doing so would be beneficial to you. These provisions could discourage potential takeover attempts and could adversely affect the market price of our shares. Because of these provisions, you might not be able to receive a premium on your investment. These provisions:

- authorize our board of directors, without shareholder approval, to issue up to 10,000,000 shares of “blank check” preferred stock that could be issued by our board of directors to increase the number of outstanding shares and prevent a takeover attempt;
- limit shareholders’ ability to call a special meeting of our shareholders;
- provide for a classified board of directors; and
- establish advance notice requirements to nominate directors for election to our board of directors or to propose matters that can be acted on by shareholders at shareholder meetings.

The provisions described above could delay or make more difficult transactions involving a change in control of us or our management. At our 2003 Annual Meeting of Shareholders to be held on May 20, 2003, the shareholders of Liquidmetal Technologies will vote upon a proposal to change the state of incorporation of the company from California to Delaware. If this proposal is approved by the shareholders, then the company will become subject to Delaware corporate law. Under Delaware corporate law, the company would become subject to many provisions that are similar to the provisions described above.

**Item 2. Properties**

Our principal executive office is located in Tampa, Florida and consists of approximately 14,000 square feet. This office is occupied pursuant to a lease agreement that expires in February 2006. Our principal research and development office is located in Lake Forest, California and consists of approximately 30,000 square feet. This office is occupied pursuant to a lease agreement that expires in June 2007. In Conroe, Texas, we lease an office and warehouse for our coatings business segment. This facility, which is approximately 10,000 square feet, is leased through September 2007.

We operate several manufacturing facilities in South Korea. Our primary manufacturing facility is in Pyongtaek, South Korea, and consists of approximately 166,000 square feet. We lease the land on which this facility is located, although we own the buildings, fixtures, and all personal property located on the land. The parcel of land consists of approximately four acres and is leased through 2022. We currently expect that this facility will meet our anticipated manufacturing needs through at least the end of 2004. We also operate a 13,497 square foot facility in AnSan, South Korea, where we produce some of the molds and tooling utilized in our Pyongtaek operations. This facility is leased through November 2003 and will automatically renew on a year-to-year basis unless six-months’ advance notice of termination is provided by the landlord or Liquidmetal Technologies. We intend to let this lease automatically renew through at least November 2004. We also lease a facility in Incheon, South Korea, where we assemble proprietary casting equipment used for



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the processing of Liquidmetal alloys. This facility is approximately 22,430 square feet, and its lease expires in February 2005. Our majority-owned Dongyang subsidiary leases a separate facility in Incheon, South Korea, where it manufactures the furnace equipment that it sells. This facility is approximately 4,617 square feet, and its lease expires in September 2003.

**Item 3. Legal Proceedings**

We are from time to time a party to certain legal proceedings arising in the ordinary course of business. Although outcomes cannot be predicted with certainty, we do not believe that any legal proceeding to which we are a party will have a material adverse effect on our financial position, results of operations, or cash flows.

**Item 4. Submission of Matters to a Vote of Security Holders**

No matters were submitted to a vote of our security holders during the fourth quarter of 2002.

**PART II****Item 5. Market For Registrant's Common Equity and Related Stockholder Matters.**

Our common stock trades on The Nasdaq National Market under the symbol "LQMT" since our initial public offering on May 21, 2002. The following table sets forth for the periods indicated the high and low sale prices for our common stock as reported by The Nasdaq National Market:

	Fiscal 2002	
	High	Low
First Quarter	\$ N/A	\$N/A
Second Quarter (May 21, 2002 to June 30, 2002)	22.50	8.26
Third Quarter	13.68	3.60
Fourth Quarter	11.28	5.31

The closing price of our common stock as reported on The Nasdaq National Market on March 20, 2003, was \$6.17 per share. As of March 20, 2003, there were 241 holders of record of our common stock.

We have never paid a cash dividend on our common stock. We do not anticipate paying any cash dividends on our common stock in the foreseeable future, and we plan to retain our earnings to finance future growth.

**Item 6. Selected Consolidated Financial Data**

The following selected consolidated financial data should be read in conjunction with Liquidmetal Technologies' consolidated financial statements and the related notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this annual report on Form 10-K. The selected consolidated financial data for the years ended December 31, 2002, 2001 and 2000 and as of December 31, 2002 and 2001, have been derived from our audited consolidated financial statements included elsewhere in this Form 10-K. The selected consolidated financial data for the years ended December 31, 1999 and 1998 and as of December 31, 2000, 1999 and 1998 have been derived from our audited consolidated financial statements not included in this Form 10-K.

	For the Years Ended December 31,				
	2002	2001	2000	1999	1998
(in thousands, except per share data)					
<b>Consolidated Statements of Operations Data:</b>					
Revenue	\$ 13,139	\$ 3,882	\$ 4,200	\$ 2,012	\$ 3,143
Cost of sales	8,679	1,924	1,983	805	1,388
Gross profit	4,460	1,958	2,217	1,207	1,755
Operating expense:					
Selling, general and administrative	12,767	3,970	1,449	847	2,123
Research and development	11,825	2,057	455	333	278
Total operating expenses	24,592	6,027	1,904	1,180	2,401
Income (loss) before interest, other income, income taxes, minority interest and discontinued operations					
Interest income (expense), net	(20,132)	(4,069)	313	27	(646)
Gain on sale of marketable securities held-for-sale	(603)	(1,095)	(188)	(190)	452
	832	—	—	—	—
Income (loss) before income taxes, minority interest and discontinued operations	(19,903)	(5,164)	125	(163)	(194)
Income taxes	(123)	—	—	—	—
Minority interest in loss of consolidated subsidiary	118	—	—	—	—
Income (loss) from continuing operations	(19,908)	(5,164)	125	(163)	(194)
Loss from operations of discontinued retail golf segment, net	—	(5,973)	(8,938)	(7,977)	(7,052)
Gain (loss) from disposal of discontinued retail golf segment, net	1,556	(11,949)	—	—	—
Net loss	\$(18,352)	\$(23,086)	\$ (8,813)	\$ (8,140)	\$ (7,246)
Income (loss) per share from continuing operations — basic	\$ (0.51)	\$ (0.15)	\$ 0.00	\$ (0.01)	\$ (0.01)
Income (loss) per share from continuing operations — diluted	\$ (0.51)	\$ (0.15)	\$ 0.00	\$ (0.01)	\$ (0.01)
Weighted average common shares use to compute income (loss) per share from continuing operations — basic					
	38,714	33,323	30,233	26,788	21,505
Weighted average common shares use to compute income (loss) per share from continuing operations — diluted					
	38,714	33,323	33,285	26,788	21,505
December 31,					
	2002	2001	2000	1999	1998
(in thousands, except per share data)					
<b>Consolidated Balance Sheet Data:</b>					
Cash and cash equivalents	\$26,003	\$ 2,230	\$ 124	\$ 314	\$ 33
Marketable securities held-for-sale	3,068	—	—	—	—
Working capital (deficiency)	26,385	(9,572)	(3,967)	117	2,928
Total assets	65,005	6,680	1,945	2,043	5,557
Long-term debt and capital leases, including current portion	93	2,988	2,506	2,106	1,596
Shareholders' equity (deficiency)	51,172	(7,503)	(3,680)	(1,461)	2,033

## Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

*This management's discussion and analysis should be read in the conjunction with the condensed consolidated financial statements and notes included elsewhere in this report on Form 10-K.*

*This management's discussion and analysis, as well as other sections of this report on Form 10-K, may contain "forward-looking statements" that involve risks and uncertainties, including statements regarding our plans, future events, objectives, expectations, forecasts, or assumptions. Any statement that is not a statement of historical fact is a forward-looking statement, and in some cases, words such as "believe," "estimate," "project," "expect," "intend," "may," "anticipate," "plans," "seeks," and similar expressions identify forward-looking statements. These statements involve risks and uncertainties that could cause actual outcomes and results to differ materially from the anticipated outcomes or results, and undue reliance should not be placed on these statements. These risks and uncertainties include, but are not limited to, the matters discussed under the caption "Factors Affecting Future Results" in Item 1 of this report and other risks and uncertainties discussed in filings made with the Securities and Exchange Commission (including risks described in subsequent reports on Form 10-Q, Form 10-K, Form 8-K, and other filings). Liquidmetal Technologies disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.*

### OVERVIEW

We are a materials technology company that develops, manufactures, and markets products made from amorphous alloys. Our Liquidmetal® family of alloys consists of a variety of coatings, powders, bulk alloys, and composites that utilize the advantages offered by amorphous alloy technology. We develop, manufacture, and sell products and components from bulk amorphous alloys that are incorporated into the finished goods of our customers, and we also market and sell amorphous alloy industrial coatings. We have the exclusive right to develop, manufacture, and sell what we believe are the only commercially viable bulk amorphous alloys.

Amorphous alloys are unique materials that are distinguished by their ability to retain a random atomic structure when they solidify, in contrast to the crystalline atomic structure that forms in ordinary metals and alloys when they solidify. Liquidmetal alloys possess a combination of performance, processing, and cost advantages that we believe makes them preferable to other materials in a variety of applications. The amorphous atomic structure of our alloys enables them to overcome certain performance limitations caused by inherent weaknesses in crystalline atomic structures, thus facilitating performance and processing characteristics superior in many ways to those of their crystalline counterparts. For example, our zirconium-titanium Liquidmetal alloys are approximately 250% stronger than commonly used titanium alloys, such as Ti-6Al-4V, but they have processing characteristics similar in many respects to plastics. We believe these advantages will result in Liquidmetal alloys supplanting plastics, high-performance alloys, and other incumbent materials in a wide variety of applications. Moreover, we believe these advantages will enable the introduction of entirely new products and applications that are not possible or commercially viable with other materials.

Our revenues are derived from two principal operating segments: Liquidmetal alloy coatings and bulk Liquidmetal alloy products. Liquidmetal alloy coatings are used primarily as a protective coating for industrial machinery and equipment, such as drill pipe used by the oil drilling industry and boiler tubes used in coal-burning power plants. The historical operating information for fiscal year 2001 and years prior to 2001 contained in this section is based substantially on sales of Liquidmetal alloy coatings; however, this is a diminishing percentage of our business. In the second half of 2002, we began producing bulk Liquidmetal alloy components and products for incorporation into our customers' finished goods. Bulk Liquidmetal alloy revenue includes sales of: parts or components of electronic devices, medical products, sports and leisure goods; tooling and prototype parts for customers with products in development; bulk alloy processing equipment; and research and development revenue relating primarily to defense and medical programs. We have been focusing our initial commercialization efforts for bulk Liquidmetal alloys primarily on applications for products with high unit volumes that are sold in major industries. We expect that these new sources of revenue will continue to significantly change the size and character of our revenue mix.

The cost of sales for our Liquidmetal coatings consists primarily of the costs of outsourcing our manufacturing to third parties. We expect that our cost of sales will increase significantly from historical results as we further develop our bulk Liquidmetal alloy business. Although we plan to continue outsourcing the manufacturing of our coatings, we will internally

manufacture many products derived from our bulk Liquidmetal alloys and expect to incur continued capital expenses as we expand our manufacturing capabilities.

Selling, general, and administrative expenses currently consist primarily of marketing and advertising, salaries and related benefits, stock-based compensation, professional fees, administrative expenses, and other expenses related to our operations. While many of these same expenses will continue, we expect that the amounts incurred for these expenses will increase in support of the expanding operations, facilities, and applications offered.

Research and development expenses represent salaries, related benefits expense, stock-based compensation, expenses incurred for the design and testing of new processing methods, and other expenses related to the research and development of Liquidmetal alloys. Costs associated with research and development activities are expensed as incurred. We plan to enhance our competitive position by improving our existing technologies and developing advances in amorphous alloy technologies. We believe that our research and development efforts will focus on the discovery of new alloy compositions, the development of improved processing technology, and the identification of new applications for our alloys. Our historical operations, prior to 2002, included our coatings business and our retail golf operation conducted through our majority owned Liquidmetal Golf subsidiary. On September 29, 2001, our board of directors and the board of directors of Liquidmetal Golf voted to discontinue the retail golf operations of Liquidmetal Golf in order to conform our operations to our business strategy. Pursuant to Accounting Principles Board Opinion No. 30, *Reporting the Results of Operations — Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions*, we reclassified our consolidated financial statements to reflect the discontinuation of Liquidmetal Golf's retail golf operations. The revenue, costs and expenses, assets and liabilities, and cash flows of the retail golf business were segregated in our Consolidated Balance Sheets, Consolidated Statements of Operations and Comprehensive Loss, and Consolidated Statements of Cash Flows. The net operating results, net assets, and net cash flows of the retail golf business were reported as discontinued operations in our annual consolidated financial statements and in the consolidated financial statements included in this report on Form 10-K. On April 30, 2002, management terminated the operations of the retail golf segment by means of completing the liquidation of the retail golf assets and liabilities.

The following discussion and analysis of our financial condition and results of operations focuses on the historical results of our continuing operations.

## **Results of Operations**

### **Comparison of the years ended December 31, 2002 and 2001**

**Revenue.** Revenue increased to \$13.1 million in the twelve months ended December 31, 2002 from \$3.9 million in the twelve months ended December 31, 2001. This increase was primarily due to increased sales related to our bulk Liquidmetal alloys. Included in sales related to our bulk Liquidmetal alloys were revenue derived from sales of parts and prototypes made from our alloys, furnace equipment sales, revenue recognized from research and development contracts with the U.S. Department of Defense related to our bulk Liquidmetal alloys, and revenue recognized from the delivery of our first production products manufactured from our bulk Liquidmetal alloys. Additionally, revenue was derived from sales of our Liquidmetal coatings. Revenue from the sales and prototyping of parts manufactured from our bulk Liquidmetal alloys increased by \$3.8 million over 2001. Revenue from the sales of Liquidmetal coatings products increased \$1.0 million. Additionally, revenue of furnace equipment increased \$1.8 million as a result of the purchase of a 51% interest in Dongyang Yudoro ("Dongyang"), a South Korean furnace equipment company, and revenue from our research and development contracts, including contracts with the Department of Defense, increased \$2.6 million.

**Cost of Sales.** Cost of sales increased to \$8.7 million, or 66% of revenue, in the twelve months ended December 31, 2002 from \$1.9 million, or 50% of revenue, in the twelve months ended December 31, 2001. This increase was primarily a result of costs to manufacture products made from our bulk Liquidmetal alloys and the cost of furnace equipment sold in the twelve months ended December 31, 2002. The increase in cost of sales as a percentage of revenue was also the result of increased costs required to manufacture products made from our bulk Liquidmetal alloys and costs to manufacture the furnace equipment sold in the twelve months ended December 31, 2002. Our Liquidmetal coatings products are produced by third parties and sold wholesale to various industries. The cost of sales for these coating products is generally fixed. However, the

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cost to manufacture parts from our bulk Liquidmetal alloys is variable and differs based on the part design. As expected, cost of sales as a percentage of revenue has continued to increase as our revenue mix has shifted more toward the bulk alloy business, although we believe that anticipated higher manufacturing volumes and an expected greater mix of high-margin products in the future will cause this measure to improve over time.

*Selling, General, and Administrative Expenses.* Selling, general, and administrative expenses increased to \$12.8 million, or 97% of revenue, in the twelve months ended December 31, 2002 from \$4.0 million, or 102% of revenue, in the twelve months ended December 31, 2001. This increase was primarily a result of increased wages of \$3.2 million, increased professional fees, consultant fees, and contract services of \$1.3 million, increased travel expenses of \$0.6 million, increased property rent of \$0.6 million, increased insurance expenses of \$0.5 million, increased product warranty expense of \$0.6 million, increased bad debt expense of \$0.4 million, and \$0.2 of stock compensation expense incurred in the twelve months ended December 31, 2002. These and other increases in selling, general and administrative expenses represent the continued additions to our corporate infrastructure required to prepare for and support the anticipated growth of our bulk Liquidmetal alloy business.

*Research and Development Expenses.* Research and development expenses increased to \$11.8 million, or 89% of revenue, in the twelve months ended December 31, 2002 from \$2.1 million, or 53% of revenue, in the twelve months ended December 31, 2001. This increase was partially a result of expenses related to the continued research and development of new Liquidmetal alloys and related processing capabilities, including the hiring of additional research employees, developing new manufacturing techniques, and contracting with consultants to advance the development of Liquidmetal alloys. Salaries and wages increased \$2.5 million, professional fees, consultant fees, and contract services increased \$2.0 million, laboratory and prototyping expenses increased \$2.6 million, and travel related expenses increased \$0.4 million. The increase in research and development expenses in the twelve months ended December 31, 2002 also included \$0.2 million in accelerated depreciation attributable to the acceleration of the estimated useful lives of certain capitalized research and development equipment and an increase in stock-based compensation expense of \$1.0 million primarily triggered by modifications made to accelerate the remaining vesting periods of stock options in connection with the hiring of certain consultants as employees in March 2002.

*Interest (Expense) Income, Net.* Interest expense, net was at (\$0.6) million, or 5.0% of revenue, in the twelve months ended December 31, 2002 and was (\$1.1) million, or 28% of revenue, in the twelve months ended December 31, 2001. The interest expense, net was primarily due to the amortization of the fair value of warrants granted in connection with subordinated promissory notes we issued in February 2001. In the twelve months ended December 31, 2002, these subordinated promissory notes were paid, requiring the unamortized fair value of the warrants granted in connection with these subordinated promissory notes to be expensed fully in the twelve months ended December 31, 2002 in an amount totaling \$0.5 million. Also in the twelve months ended December 31, 2002, we earned \$0.5 million in interest income from the investment of the net proceeds of our initial public offering.

*Gain from Sale of Investment.* In December of 2002 we sold 30% of the shares of Growell Metal, Inc. that were purchased in July 2002. We recognized an \$0.8 million gain on the sale of these shares.

### **Comparison of the years ended December 31, 2001 and 2000**

*Revenue.* Revenue decreased to \$3.9 million in 2001 from \$4.2 million in 2000. This decrease was primarily due to the absence in 2001 of some non-recurring sales that occurred in 2000. These non-recurring sales were the result of a recall of defective drill pipe that was manufactured overseas by third parties, and as a result of this recall, there was a need to coat the replacement pipe. This decrease in revenue was partially offset by a \$0.2 million increase in revenue during 2001 primarily resulting from increased drilling activities as a result of higher crude oil prices.

*Cost of Sales.* Cost of sales decreased to \$1.9 million, or 50% of revenue, in 2001 from \$2.0 million, or 47% of revenue, in 2000. The decrease in cost of sales reflects the corresponding decline in sales volume over the same period. The increase in cost of sales as a percentage of revenue was the result of a change in our sales mix that included greater sales to the oil drilling industry, which carries a slightly lower gross profit margin than sales to other industries.

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*Selling, General, and Administrative Expenses.* Selling, general, and administrative expenses increased to \$4.0 million, or 102% of revenue, in 2001 from \$1.4 million, or 35% of revenue, in 2000. This increase was primarily a result of increases in wages, stock-based compensation, professional fees, and travel expenses of \$1.2, \$0.1, \$0.6, and \$0.4 million, respectively. These expenses represented the continued additions to our corporate infrastructure required to prepare for and support the anticipated growth of our bulk Liquidmetal alloy business.

*Research and Development Expenses.* Research and development expenses increased to \$2.1 million, or 53% of revenue, in 2001 from \$0.5 million, or 11% of revenue, in 2000. This increase was partially a result of expenses related to the continued research and development of new Liquidmetal alloys and related processing capabilities. This included the hiring of additional research employees, developing new manufacturing techniques, and contracting with consultants to advance the development of our alloys. The increase in research and development expenses in the year ended December 31, 2001 also included \$0.3 million of stock-based compensation related to options granted to consultants who performed services for us during 2001.

*Other (Expense) Income, Net.* Other expense, net increased to (\$1.1) million, or 28% of revenue, in 2001 from (\$0.2) million, or 4% of revenue, in 2000. This increase was primarily due to the amortization of the fair value of warrants granted in connection with subordinated promissory notes we issued in February 2001.

**QUARTERLY RESULTS**

The following information presents our unaudited quarterly operating results for 2002 and 2001. The data has been prepared by Liquidmetal Technologies on a basis consistent with the Consolidated Financial Statements included elsewhere in this Form 10-K, and includes all adjustments, consisting of normal recurring accruals, that we consider necessary for a fair presentation thereof. These operating results are not necessarily indicative of our future performance.

	For the Three Months Ended			
	12/31/02	9/30/02	6/30/02	3/31/02
	(in thousands, except per share data)			
<b>Consolidated Statements of Operations Data:</b>				
Revenue	\$ 5,877	\$ 3,655	\$ 2,144	\$ 1,463
Cost of sales	4,286	2,524	1,187	682
Gross profit	1,591	1,131	957	781
Operating expense:				
Selling, general, and administrative	3,726	3,912	2,860	2,269
Research and development	4,817	2,652	1,660	2,696
Total operating expenses	8,543	6,564	4,520	4,965
Loss before interest, other income, income taxes, minority interest and discontinued operations	(6,952)	(5,433)	(3,563)	(4,184)
Interest income (expense), net	113	291	(695)	(312)
Gain on sale of marketable securities held-for-sale	832	—	—	—
Loss before income taxes, minority interest and discontinued operations	(6,007)	(5,142)	(4,258)	(4,496)
Income taxes	(123)	—	—	—
Minority interest in (loss) income of consolidated subsidiary	204	(76)	(10)	—
Income (loss) from continuing operations	(5,926)	(5,218)	(4,268)	(4,496)
Gain (loss) from disposal of discontinued retail golf segment, net	(418)	1,466	1,038	(530)
Net loss	\$ (6,344)	\$ (3,752)	\$ (3,230)	\$ (5,026)
Loss per share from continuing operations – basic and diluted	\$ (0.14)	\$ (0.13)	\$ (0.11)	\$ (0.13)
Weighted average common shares used to compute loss per share from continuing operations – basic and diluted	40,995	40,993	37,697	35,080

	For the Three Months Ended			
	12/31/01	9/30/01	6/30/01	3/31/01
(in thousands, except per share data)				
<b>Consolidated Statements of Operations Data:</b>				
Revenue	\$ 874	\$ 1,112	\$ 1,022	\$ 874
Cost of sales	402	549	531	442
Gross profit	472	563	491	432
Operating expense:				
Selling, general, and administrative	1,837	1,084	634	415
Research and development	1,171	364	270	252
Total operating expenses	3,008	1,448	904	667
Loss before interest and discontinued operations	(2,536)	(885)	(413)	(235)
Interest expense, net	(314)	(294)	(299)	(188)
Loss from continuing operations	(2,850)	(1,179)	(712)	(423)
Loss from operations of discontinued retail golf segment, net	—	(1,835)	(2,251)	(1,887)
Gain (Income loss) from disposal of discontinued retail golf segment, net	5,837	(17,786)	—	—
Net loss	\$ 2,987	\$(20,800)	\$(2,963)	\$(2,310)
Income (loss) per share from continuing operations – basic and diluted	\$ (0.08)	\$ (0.03)	\$ (0.02)	\$ (0.01)
Weighted average common shares used to compute loss per share from continuing operations – basic and diluted	34,994	34,055	33,047	31,193

## LIQUIDITY AND CAPITAL RESOURCES

Our operating activities, including our discontinued retail golf operations, used cash of \$19.3 million for the twelve months ended December 31, 2002 and \$12.1 million for the twelve months ended December 31, 2001. Cash used in operating activities for the twelve months ended December 31, 2002 resulted from net cash used by discontinued operations of \$2.5 million and net cash used by continuing operations of \$16.9 million. Cash used in operating activities for the twelve months ended December 31, 2001 resulted from net cash used by discontinued operations of \$8.9 million and net cash used by continuing operations of \$3.2 million. We had working capital of \$26.4 million as of December 31, 2002. Cash used by continuing operations in the twelve months ended December 31, 2002 resulted primarily from operating losses from continuing operations of \$19.9 million.

Our investing activities used cash of \$24.3 million for the twelve months ended December 31, 2002 primarily for the acquisition of machinery and equipment and for the construction and development of our South Korean manufacturing facility totaling \$21.8 million. The remaining \$2.5 million used for the purchase of property and equipment during the twelve months ended December 31, 2002 related primarily to the purchase of furniture and furnishings, computer equipment, and software. Included in the investing activities for the twelve months ended December 31, 2002 was the investment of \$2.0 million in the common stock of Growell Metal, Inc., a South Korean metals processing company. We intend to source a portion of the production of our Liquidmetal alloy ingots through Growell Metal, Inc. to increase the supply and availability of the Liquidmetal alloy ingots used in our manufacturing operations in Korea. We sold 30% of our investment in Growell Metal, Inc. as of December 31, 2002 for \$1.4 million. Also included in the investing activities for the twelve months ended December 31, 2002 was an investment of \$0.3 million, resulting in a \$0.1 million increase, net of cash received, in Dongyang, whereby we acquired 51% of the outstanding stock of Dongyang. Dongyang manufactures furnace equipment critical to the manufacturing of our bulk Liquidmetal alloys. The acquisition of a controlling interest in Dongyang allows us to better control the manufacturing equipment supply chain relating to the manufacture of our bulk Liquidmetal alloys. We also invested \$0.1 million in patents and trademarks related to our Liquidmetal alloys during the twelve months ended December 31, 2002.

Our financing activities provided \$67.3 million in cash for the twelve months ended December 31, 2002 and primarily included \$70.7 million, net of transaction costs paid, received from our initial public offering. Included in the financing activities is \$3.5 million of cash borrowed through the issuance of debt prior to the initial public offering and \$7.4 million used to repay all of our outstanding debt obligations. Also received in the twelve months ended December 31, 2002 was \$0.5 million from the exercise of stock options.



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We currently anticipate substantially lower capital expenditures for at least the next 12 months, given the completion of construction and purchase of manufacturing equipment for our plant in Pyongtaek, South Korea. We anticipate that our capital expenditures will be approximately \$7.0 to \$10.0 million in 2003 for any additional equipment requirements and for the acquisition of furniture, fixtures, and other business equipment. This amount is subject to change, however, depending upon the nature and the amount of the orders that we actually receive from customers.

Our capital requirements during the next 12 months will depend on numerous factors, including the success of our existing products, the development of new applications for Liquidmetal alloys, and the resources we devote to develop and support our Liquidmetal alloy products. During the next 12 months, we expect to devote substantial capital to expand our research and development activities, to further develop and strengthen our manufacturing capabilities, and for working capital and other general corporate purposes. These additional expenses and capital expenditures will consume a material amount of our cash resources, including a portion of the net proceeds of our initial public offering. Our liquidity is not dependent upon the use of off-balance sheet financing arrangements, such as securitization of receivables or obtaining access to assets through special purpose entities.

We intend to continue to develop our manufacturing resources and capabilities. Additionally, we anticipate growth in our working capital requirements from our expanding bulk Liquidmetal alloy business. However, the amount of these requirements will depend on the nature and amount of orders we receive for the purchase of our bulk Liquidmetal alloy products. We believe the net proceeds received from our initial public offering and proceeds from borrowings, together with anticipated cash flow from our operations, will be sufficient to fund our long-term liquidity requirements. In January 2003, we obtained approximately \$5.4 million in additional financing in the form of debt collateralized by our Pyongtaek plant and some equipment contained in the Pyongtaek plant from Kookmin Bank in Korea.

We believe that our current cash and cash equivalents, together with anticipated cash flow from our operations, will be sufficient to fund our working capital and capital expenditure requirements for at least the next 12 months. However, our future capital needs will be dependent to a significant extent on our ability to generate cash flow from operations. Our projections of cash flows from operations and, consequently, future cash needs are subject to uncertainty. If our available funds and cash generated from operations are insufficient to satisfy our liquidity requirements, we may need to raise additional capital to fund our working capital or capital expenditure requirements. We cannot be certain that additional capital, whether through selling additional debt or equity securities or obtaining a line of credit or other loan, will be available to us or, if available, will be on terms acceptable to us. If we issue additional securities to raise funds, these securities may have rights, preferences, or privileges senior to those of the rights of our common stock and our stockholders may experience additional dilution.

We are a party to a distribution agreement whereby we granted to a third party exclusive rights to market and sell golf products incorporating Liquidmetal technology to certain Japanese sporting equipment companies. The third party paid us a \$1.0 million distribution fee as part of this distribution agreement, of which a portion was refundable according to a formula based on the gross profit earned by the third party. None of the distribution fee has been refunded, and we do not believe the third party is entitled to a refund.

### **USE OF PROCEEDS**

Pursuant to our Registration Statement on Form S-1 (Registration No. 333-73716), as amended, initially filed with the Securities and Exchange Commission on November 20, 2001 and declared effective May 21, 2002, we closed an initial public offering of 5,000,000 shares of common stock on May 28, 2002, plus an additional 229,000 shares on June 10, 2002 pursuant to an overallotment option, at a price of \$15.00 per share (which sale is referred to herein as the "Offering"). The Offering generated aggregate cash proceeds during the second quarter 2002 of \$78.4 million. The net proceeds were \$70.7 million after deducting underwriting commissions of \$5.5 million and other transaction fees of \$2.2 million. The managing underwriters for the Offering were Merrill Lynch & Co., UBS Warburg, and Robert W. Baird & Co.

As of December 31, 2002, we had used approximately \$46.8 million of net proceeds from the Offering. We used approximately \$7.8 million of the net proceeds from the Offering to repay all outstanding promissory notes and accrued interest, \$9.9 million to partially fund the construction of our manufacturing facility in South Korea, \$8.1 million to purchase equipment used to manufacture Liquidmetal parts, and \$0.3 million to purchase the 51% interest in Dongyang. During the third quarter of 2002, we used \$2.0 million to invest in the common stock of Growell, which will supply a portion of the Liquidmetal alloy ingots used in our manufacturing operations in Korea. As of December 31, 2002, we used approximately \$17.6 million of the net proceeds for working capital, excluding \$1.1 million paid to Paul Azinger for amounts due under the terms of his endorsement agreement. We have invested the remaining net proceeds of this offering in short-term, investment grade, interest-bearing securities. We intend to use the remaining net proceeds of the offering for the purchase of additional equipment used to manufacture Liquidmetal parts and for working capital purposes. Additionally, management may determine to fund all or a portion of the costs of any acquisitions of complementary businesses we determine to pursue in the future with proceeds from the Offering, although there are no assurances that we will be able to successfully identify or consummate any such acquisitions.

**OFF-BALANCE SHEET ARRANGEMENTS**

	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
(in thousands, except per share data)					
<b>Contractual Obligations</b>					
Long-term debt	\$ —	\$ —	\$ —	\$ —	\$ —
Capital lease obligation	111	26	52	33	—
Operating leases and rents	4,752	1,337	1,984	1,267	164
Purchase obligations	3,488	—	—	—	—
Other long-term liabilities reflected on the Balance Sheet	—	—	—	—	—
<b>Total</b>	<b>\$8,351</b>	<b>\$1,363</b>	<b>\$2,036</b>	<b>\$1,300</b>	<b>\$164</b>

In January 2003, we obtained approximately \$5.5 million in additional financing from Kookmin Bank in South Korea. This additional financing is in the form of debt that is collateralized by our Pyongtaek plant and some equipment contained in the Pyongtaek plant.

**CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States requires us to make estimates and assumptions that affect reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. These estimates and assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results could differ materially from these estimates under different assumptions or conditions.

We believe that the following accounting policies are the most critical to our consolidated financial statements since these policies require significant judgment or involve complex estimates that are important to the portrayal of our financial condition and operating results:

- Our earnings and cash flows are subject to fluctuations due to changes in non-U.S. currency exchange rates. We are exposed to non-U.S. exchange rate fluctuations as the financial results of non-U.S. subsidiaries are translated into U.S. dollars. As exchange rates vary, those results, when translated, may vary from expectations and adversely impact overall expected profitability. The cumulative translation effects for subsidiaries using functional currencies other than the U.S. dollar are included in accumulated foreign exchange translation in shareholders' equity. Movements in non-U.S. currency exchange rates may affect our competitive position, as exchange rate changes may affect business practices and/or pricing strategies of non-U.S. based competitors.
- We record an accrual for potential product warranty costs. Due to the lack of historical information for warranty expense related to bulk alloy products, management estimates product warranties as a percentage of bulk alloy product sales earned during the period. In the event in future periods the actual product warranty costs consistently exceed the estimate for product warranty costs, an adjustment would be made and income would decrease in the period of such determination. Likewise, in the event we determine that actual product warranty costs would be consistently lower than the estimate for product warranty costs, an adjustment would be made and income would increase in the period of such determination.
- We record an allowance for doubtful accounts as a contra-asset to our trade receivables for potential uncollectible accounts. Management estimates the amount of potentially uncollectible accounts by reviewing significantly past due customer balances relative to historical information available for those customers. In the event, in future periods, actual uncollectible accounts exceed the estimate for uncollectible accounts, an adjustment would be made and income would decrease in the period of such determination. Likewise, in the event, in future periods, actual uncollectible accounts are lower than the estimate for uncollectible accounts, an adjustment would be made and income would increase in the period of such determination. At December 31, 2002, 42%, or \$2.7 million, of trade receivables was concentrated in two customers, of which \$0.7 million has been outstanding for more than 150 days. Should one or more of these customers be unable to pay the amounts to us, we would need to increase our allowance for doubtful accounts. As of March 27, 2003, \$1.7 million of the \$2.7 million has been collected.

- We record valuation allowances to reduce the deferred tax assets to the amounts estimated to be recognized. While we consider taxable income in assessing the need for a valuation allowance, in the event we determine we would be able to realize our deferred tax assets in the future in excess of the net recorded amount, an adjustment would be made and income increased in the period of such determination. Likewise, in the event we determine we would not be able to realize all or part of our deferred tax assets in the future, an adjustment would be made and charged to income in the period of such determination. At December 31, 2002, we recorded a deferred tax asset valuation of \$27.6 million, representing 100% of existing deferred tax assets.
- We have accounted for our retail golf business as a discontinued operation. In calculating the loss on disposal of our retail golf business, we made certain estimates with regard to the valuation of the assets and liabilities of the retail golf business. Estimates were made for the collectability of accounts receivables, the liquidation value of inventories, the liquidation of certain other operating assets, and the estimated future losses of the retail golf business through the estimated disposal date of April 30, 2002. Also included in the loss on disposal was our estimate of stock option compensation expense attributable to an endorsement contract. The estimated stock option expense was based in part on an estimated future common stock price. During the year ended December 31, 2002, we recorded a \$1.6 million reduction to the estimated loss on disposal of the discontinued retail golf segment primarily due to a change in estimated value of stock-based compensation. The change in estimated value of the stock-based compensation was a result of the cumulative decrease in the fair market value of the common shares underlying the options granted to Paul Azinger of \$2.1 million and a decrease of \$0.3 million in the estimate of fees related to the termination of the endorsement agreement. Additionally, there was a \$0.1 million gain due to the reversal of the accumulated foreign exchange gains after the liquidation of Liquidmetal Golf Europe Inc, and a decrease in the estimated warranty cost of \$0.1 million. These gains were partially offset by other changes in the estimated loss on disposal that included; \$0.5 million of additional operating expenses, a \$0.1 million increase in the allowance for doubtful accounts and \$0.5 million primarily for the reduction of the estimated disposal value of work-in-process inventory and equipment. In December 2001, we recorded a \$5.6 million reduction to the estimated loss on disposal of the discontinued retail golf segment due to a change in the estimated stock option value attributable to options granted pursuant to an endorsement agreement. The change in the estimate stock option value was due to a change in the estimated fair market value of the underlying common stock prior to the Offering. It is not expected that there will be any significant changes to the loss on disposal of the discontinued retail golf segment subsequent to December 31, 2002.

## NEW ACCOUNTING PRONOUNCEMENTS

In July 2001, the Financial Accounting Standards Board ("FASB") issued SFAS No. 141, *Business Combinations* and SFAS No. 142, *Goodwill and Other Intangible Assets*. SFAS No. 141 requires that all business combinations be accounted for under the purchase method only and that certain acquired intangible assets in a business combination be recognized as assets apart from goodwill. SFAS No. 142 requires that ratable amortization of goodwill be replaced with periodic tests of the goodwill's impairment and that limited-life intangible assets other than goodwill should be amortized over their useful lives. Implementation of SFAS No. 141 and SFAS No. 142 is required for fiscal year 2002. The adoption of SFAS No. 141 and 142 did not have a material impact on our financial statements.

In June 2001, the FASB issued SFAS No. 143, *Accounting for Asset Retirement Obligations*. SFAS No. 143 requires that the fair value of a liability for an asset retirement obligation be recognized in the period in which such liabilities are incurred if a reasonable estimate of fair value can be made. The associated asset retirement costs should be capitalized as part of the carrying amount of the long-lived asset. SFAS No. 143 is effective for financial statements issued for fiscal years beginning after June 15, 2002. Adoption of SFAS No. 143 is not expected to have a material impact on our financial statements.

Issued in October 2001, SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, replaces SFAS No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of*. The accounting model for long-lived assets to be disposed of by sale applies to all long-lived assets, including discontinued operations, and replaces the provisions of APB Opinion No. 30, *Reporting Results of Operations—Reporting the Effects of Disposal of a Segment of a Business*, for the disposal of segments of a business. SFAS No. 144 requires that those long-lived assets be measured at the lower of the carrying amount or fair value less cost to sell, whether reported in continuing operations or in discontinued operations. Therefore, discontinued operations will no longer be measured at net realizable value or include amounts for

operating losses that have not yet occurred. SFAS No. 144 also broadens the reporting of discontinued operations to include all components of an entity with operations that can be distinguished from the rest of the entity and that will be eliminated from the ongoing operations of the entity in a disposal transaction. The provisions of SFAS No. 144 are effective for financial statements issued for fiscal years beginning after December 15, 2001 and, generally, are to be applied prospectively. In 2002, we adopted SFAS No. 144, which did not result in a material impact to our financial statements.

In April 2002, the FASB issued SFAS No. 145, *Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections*. SFAS No. 145 rescinds SFAS No. 4, *Reporting Gains and Losses from Extinguishment of Debt*, and an amendment of that Statement, SFAS No. 64, *Extinguishments of Debt Made to Satisfy Sinking-Fund Requirements*. This Statement also rescinds SFAS No. 44, *Accounting for Intangible Assets of Motor Carriers*. SFAS No. 145 amends SFAS No. 13, *Accounting for Leases*, to eliminate an inconsistency between the required accounting for sale-leaseback transactions and the required accounting for certain lease modifications that have economic effects that are similar to sale-leaseback transactions. This Statement also amends other existing authoritative pronouncements to make various technical corrections, clarify meanings, or describe their applicability under changed conditions. The provisions of this Statement related to the rescission of Statement 4 are required to be applied in fiscal years beginning after May 15, 2002. The provisions in paragraphs 8 and 9(c) of this Statement related to Statement 13 are required to be applied to transactions occurring after May 15, 2002. Any gain or loss on extinguishment of debt that was classified as an extraordinary item in prior periods presented that does not meet the criteria in APB No. 30 for classification as an extraordinary item is required to be reclassified. All other provisions of this Statement are effective for financial statements issued on or after May 15, 2002. We elected to early adopt SFAS No. 145 during the second quarter of 2002. The effect of adopting SFAS No. 145 was to increase interest expense by \$0.5 million, increase net loss from continuing operations by \$0.5 million, and to increase basic and diluted loss from continuing operations per share by \$0.01.

In June 2002, the FASB issued SFAS No. 146, *Accounting for Costs Associated With Exit or Disposal Activities*. Statement 146 addresses financial accounting and reporting for costs associated with exit or disposal activities and nullifies Emerging Issues Task Force (EITF) Issue No. 94-3, *Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)*. SFAS No. 146 requires costs associated with exit or disposal activities to be recognized when the costs are incurred, rather than at a date of commitment to an exit or disposal plan. SFAS No. 146 is effective for exit or disposal activities that are initiated after December 31, 2002. The adoption of SFAS No. 146 is not expected to have a material impact on our financial statements.

In December 2002, SFAS No. 148, *Accounting for Stock-Based Compensation-Transition and Disclosure* was issued by the FASB. This standard amends SFAS No. 123 to provide alternative methods of transition for a voluntary change to the fair value method of accounting for stock-based employee compensation. In addition, this standard amends the disclosure requirements of SFAS No. 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. SFAS No. 148 is effective for financial statements for fiscal years ending after December 15, 2002. We will implement SFAS No. 148 effective January 1, 2003 regarding disclosure requirements for condensed financial statements for interim periods. We have not yet determined whether we will voluntarily change to the fair value based method of accounting for stock-based employee compensation.

**Item 7A. Quantitative and Qualitative Disclosures About Market Risks**

We are exposed to various market risks in conducting the business of the company, and we anticipate that this exposure will increase as a result of our planned growth. In an effort to mitigate losses associated with these risks, we may at times enter into derivative financial instruments, although we have not historically done so. These may take the form of forward sales contracts, option contracts, foreign currency exchange contracts, and interest rate swaps. We have not, and do not intend to, engage in the practice of trading derivative securities for profit.

*Interest Rates.* We are exposed to market risks relating to changes in interest rates. Some of the proceeds from our initial public offering have been invested in short-term, interest-bearing, investment grade securities. The value of these securities will be subject to interest rate risk and could fall in value if interest rates rise.

*Commodity Prices.* We are exposed to price risk related to anticipated purchases of certain commodities used as raw materials by our businesses, including titanium and zirconium. Although we do not currently enter into commodity future, forward, and option contracts to manage the fluctuations in prices of anticipated purchases, we may enter into such contacts in the future as our business grows and as our purchases of these raw materials increases.

*Foreign Exchange Rates.* As a result of our manufacturing presence in South Korea, a substantial portion of our costs will be denominated in South Korean won. Consequently, fluctuations in the exchange rates of the South Korean won to the U.S. dollar will affect our costs of goods sold and operating margins and could result in exchange losses. Although we do not currently enter into foreign exchange hedge transactions, we may do so in the future as our business grows.

**Item 8. Financial Statements and Supplementary Data**

The financial statements required by this item are located beginning on page 41 of this report. The supplementary financial information required by this item is located under the caption "QUARTERLY RESULTS" in Item 7 of this report.

**Item 9. Changes in and Disagreements with Accountants on Accounting and financial Disclosures**

None.

**PART III**

**Item 10. Directors and Executive Officers of the Registrant**

The information in response to this item is incorporated by reference from the sections captioned "PROPOSAL NO. 1: ELECTION OF DIRECTORS," "SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING REQUIREMENTS," and "EXECUTIVE OFFICERS" contained in the definitive Proxy Statement to be filed in connection with our 2003 Annual Meeting of Shareholders to be held on May 20, 2003 (the "2003 Proxy Statement").

**Item 11. Executive Compensation**

The information in response to this item is incorporated by reference from the section captioned "EXECUTIVE COMPENSATION" contained in the 2003 Proxy Statement.

**Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

The information in response to this item is incorporated by reference from the section captioned "PRINCIPAL SHAREHOLDERS" contained in the 2003 Proxy Statement.

**Item 13. Certain Relationships and Related Transactions**

The information in response to this item is incorporated by reference from the sections captioned "BOARD OF DIRECTORS" and "EQUITY COMPENSATION PLAN INFORMATION" contained in the 2003 Proxy Statement.

**Item 14. Controls and Procedures**

Within the 90 days prior to the date of this annual report on Form 10-K, Liquidmetal Technologies (the "Company") carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to Rule 13a-14 under the Securities Exchange Act of 1934, as amended. Based on that evaluation, the Chief Executive Officer and the Chief Financial Officer have concluded that these disclosure controls and procedures are effective in timely alerting them to material information relating to the Company, including its consolidated subsidiaries, required to be included in the material information relating to the Company's periodic filings with the Securities and Exchange Commission. There were no significant changes in our internal controls or in other factors that could significantly affect these controls subsequent to the date of our evaluation.

**PART IV**

**Item 15. Exhibits, Financial Statement Schedules and Reports on Form 8-K**

(a) The following documents are filed as a part of this report:

1. *Financial Statements*. The Index to our Consolidated Financial Statements is set forth on page 41 of this report.
2. *Financial Statement Schedules*. See the last page of Consolidated Financial Statements.
3. *Exhibits*. See Item 15(c) below.

(b) *Reports on Form 8-K*. There were no reports on Form 8-K filed during the fourth quarter of 2002.

(c) *Exhibits*. The exhibits listed on the Exhibit Index, which appears at the end of this Item 15, are filed as part of, or incorporated by reference into, this report.

(d) *Financial Statement Schedules*. See Item 15(a)(2) above.

## EXHIBIT INDEX

Exhibit Number	Description of Document
3.1	— Amended and Restated Articles of Incorporation (incorporated by reference to Exhibit 3.1 to the Registration Statement on Form S-1 (Amendment No. 2) filed by Liquidmetal Technologies on April 5, 2002 (Registration No. 333-73716)).
3.2	— Amended and Restated Bylaws (incorporated by reference to Exhibit 3.1 to the Registration Statement on Form S-1 (Amendment No. 2) filed by Liquidmetal Technologies on April 5, 2002 (Registration No. 333-73716)).
4.1	— Reference is made to Exhibits 3.1 and 3.2.
4.2	— Form of Common Stock Certificate (incorporated by reference to Exhibit 3.1 to the Registration Statement on Form S-1 (Amendment No. 3) filed by Liquidmetal Technologies on April 29, 2002 (Registration No. 333-73716)).
10.1	— Amended and Restated License Agreement, dated September 1, 2001, between Liquidmetal Technologies and California Institute of Technology (incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-1 filed by Liquidmetal Technologies on November 20, 2002 (Registration No. 333-73716)).
10.2	— Improved Property Commercial Lease, dated September 11, 2002, between Liquidmetal technologies and P & S Properties.
10.3	— Lease, dated October 4, 2001, between Plaza IV Associates, Ltd. and Liquidmetal Technologies (incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-1 filed by Liquidmetal Technologies on November 20, 2002 (Registration No. 333-73716)).
10.4	— Standard Lease, dated May 27, 2001, between Investors Equity Fund, Inc. and Amorphous Technologies International (now known as Liquidmetal Technologies) (incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-1 filed by Liquidmetal Technologies on November 20, 2002 (Registration No. 333-73716)).
10.5*	— 1996 Stock Option Plan, as amended, together with form of Stock Option Agreement (incorporated by reference to Exhibit 10.7 to the Registration Statement on Form S-1 filed by Liquidmetal Technologies on November 20, 2002 (Registration No. 333-73716)).
10.6*	— Employment Agreement, dated December 31, 2000, between Liquidmetal Technologies and John Kang, as amended by Amendment No. 1 to Employment Agreement, dated June 28, 2001 (incorporated by reference to Exhibit 10.8 to the Registration Statement on Form S-1 filed by Liquidmetal Technologies on November 20, 2002 (Registration No. 333-73716)).
10.7*	— Employment Agreement, dated May 1, 2001, between Liquidmetal Technologies and James Kang, as amended by Amendment No. 1 to Employment Agreement, dated June 28, 2001 (incorporated by reference to Exhibit 10.9 to the Registration Statement on Form S-1 (Amendment No. 2) filed by Liquidmetal Technologies on April 5, 2002 (Registration No. 333-73716)).
10.8*	— Employment Agreement, dated October 1, 2001, between Liquidmetal Technologies and William Johnson, Ph.D. (incorporated by reference to Exhibit 10.10 to the Registration Statement on Form S-1 filed by Liquidmetal Technologies on November 20, 2002 (Registration No. 333-73716)).
10.9*	— Employment Agreement, dated December 31, 2000, between Liquidmetal Technologies and T. Scott Wiggins (incorporated by reference to Exhibit 10.11 to the Registration Statement on Form S-1 filed by Liquidmetal Technologies on November 20, 2002 (Registration No. 333-73716)).
10.10*	— Employment Agreement, dated May 21, 2001, between Liquidmetal Technologies and Brian McDougall (incorporated by reference to Exhibit 10.12 to the Registration Statement on Form S-1 filed by Liquidmetal Technologies on November 20, 2002 (Registration No. 333-73716)).
10.11*	— Employment Agreement, dated September 1, 2002, between Liquidmetal Technologies and John Grant.

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10.12*	—	Separation and Consulting Agreement, dated November 15, 2001, between Liquidmetal Technologies and Shekhar Chitnis, together with Consulting Agreement attached as Exhibit A (incorporated by reference to Exhibit 10.14 to the Registration Statement on Form S-1 (Amendment No. 2) filed by Liquidmetal Technologies on April 5, 2002 (Registration No. 333-73716)).
10.13	—	Warrant for Purchase of Shares of Common Stock, dated February 21, 2001, granted by Liquidmetal Technologies to John Kang and Ricardo Salas (incorporated by reference to Exhibit 10.18 to the Registration Statement on Form S-1 filed by Liquidmetal Technologies on November 20, 2002 (Registration No. 333-73716)).
10.14	—	Warrant for Purchase of Shares of Common Stock, dated February 21, 2001, granted by Liquidmetal Technologies to Tjoa Thian Song (incorporated by reference to Exhibit 10.19 to the Registration Statement on Form S-1 filed by Liquidmetal Technologies on November 20, 2002 (Registration No. 333-73716)).
10.15	—	Non-Qualified Stock Option Agreement, dated January 1, 2001, between Liquidmetal Technologies and Paul Azinger (incorporated by reference to Exhibit 10.19 to the Registration Statement on Form S-1 filed by Liquidmetal Technologies on November 20, 2002 (Registration No. 333-73716)).
10.16	—	Foreign Corporation Lease Zone Occupancy (Lease) Agreement, dated March 5, 2002, between Kyonggi Local Corporation and Liquidmetal Korea Co., Ltd. (incorporated by reference to Exhibit 10.22 to the Registration Statement on Form S-1 (Amendment No. 2) filed by Liquidmetal Technologies on April 5, 2002 (Registration No. 333-73716)).
10.17*	—	2002 Equity Incentive Plan (incorporated by reference to Exhibit 10.23 to the Registration Statement on Form S-1 (Amendment No. 2) filed by Liquidmetal Technologies on April 5, 2002 (Registration No. 333-73716)).
10.18*	—	2002 Non-Employee Director Stock Option Plan (incorporated by reference to Exhibit 10.23 to the Registration Statement on Form S-1 (Amendment No. 2) filed by Liquidmetal Technologies on April 5, 2002 (Registration No. 333-73716)).
10.19*	—	Employment Agreement, dated March 29, 2002, between Liquidmetal Technologies and Neil Paton (incorporated by reference to Exhibit 10.29 to the Registration Statement on Form S-1 (Amendment No. 3) filed by Liquidmetal Technologies on April 29, 2002 (Registration No. 333-73716)).
10.20	—	Credit Service Agreement, dated February 2003, between Liquidmetal Technologies and Kookmin Bank.
10.21	—	Agreement for Rent, dated February, 2003, between Liquidmetal Technologies and Dong Myung Seo.
10.22	—	Agreement for Rent, dated November, 2003, between Liquidmetal Technologies and Chun Hwan Chu.
10.23	—	Contract for Monthly Rent, dated September 11, 2002, between Liquidmetal Technologies and Lee Ho-Joo.
21	—	Subsidiaries of the Registrant.
23.1	—	Consent of Deloitte & Touche LLP.
24.1	—	Power of Attorney relating to subsequent amendments (included on the signature page(s) of this report).
99.1	—	Certification of Chief Executive Officer pursuant to 18 U.S.C. 1350.
99.2	—	Certification of Chief Financial Officer pursuant to 18 U.S.C. 1350.

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\* Denotes a management contract or compensatory plan or arrangement required to be filed as an exhibit this Form 10-K.



**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Liquidmetal Technologies

By:           /s/ John Kang          

John Kang  
President and Chief Executive Officer

Date: March 28, 2003

**POWER OF ATTORNEY**

KNOW ALL THESE PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints John A. Kang and Brian McDougall and each of them, jointly and severally, his attorneys-in-fact, each with full power of substitution, for him in any and all capacities, to sign any and all amendments to this Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each said attorneys-in-fact or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ John Kang</u> John Kang	Chief Executive Officer President and Director (Principal Executive Officer)	March 28, 2003
<u>/s/ Brian McDougall</u> Brian McDougall	Chief Financial and Operating Officer (Principal Financial and Accounting Officer)	March 28, 2003
<u>/s/ James Kang</u> James Kang	Chairman of the Board of Directors	March 28, 2003
<u>/s/ William Johnson</u> William Johnson	Vice Chairman of the Board of Directors	March 28, 2003
<u>/s/ Shekhar Chitnis</u> Shekhar Chitnis	Director	March 28, 2003
<u>/s/Ricardo A. Salas</u> Ricardo A. Salas	Director	March 28, 2003
<u>/s/Jack Chitayat</u> Jack Chitayat	Director	March 28, 2003
<u>/s/Tjoa Thian Song</u> Tjoa Thian Song	Director	March 28, 2003

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<u>/s/ Jeffrey Oster</u>	Director	March 28, 2003
Jeffrey Oster		
<u>/s/Henri Tchen</u>	Director	March 28, 2003
Henri Tchen		
<u>/s/ Betsy Atkins</u>	Director	March 28, 2003
Betsy Atkins		
<u>/s/ David Browne</u>	Director	March 28, 2003
David Browne		

**CERTIFICATION**

I, John Kang, certify that:

1. I have reviewed this annual report on Form 10-K of Liquidmetal Technologies;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
  - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 28, 2003

/s/ John Kang

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John Kang  
President and Chief Executive Officer  
(Principal Executive Officer)

**CERTIFICATION**

I, Brian McDougall, certify that:

1. I have reviewed this annual report on Form 10-K of Liquidmetal Technologies;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
  - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 28, 2003

/s/ Brian McDougall

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Brian McDougall  
Executive Vice President & Chief Financial Officer  
(Principal Financial Officer)

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INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Shareholders of  
Liquidmetal Technologies  
Tampa, Florida

We have audited the accompanying consolidated balance sheets of Liquidmetal Technologies and subsidiaries (the "Company") as of December 31, 2002 and 2001, and the related consolidated statements of operations and comprehensive loss, of shareholders' equity (deficiency), and of cash flows for each of the three years in the period ended December 31, 2002. Our audits also included the financial statement schedule listed in the Index at Item 15(a)2. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on the financial statements and financial statement schedules based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Liquidmetal Technologies and subsidiaries at December 31, 2002 and 2001, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

/s/ Deloitte & Touche LLP

DELOITTE & TOUCHE LLP  
Certified Public Accountants

Tampa, Florida  
February 4, 2003

**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**  
(in thousands, except share data)

	December 31,	
	2002	2001
<b>ASSETS</b>		
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$ 26,003	\$ 2,230
Marketable securities held-for-sale	3,068	—
Trade receivables, net	6,404	911
Inventories	2,506	503
Prepaid expenses and other current assets	2,142	967
	40,123	4,611
PROPERTY, PLANT AND EQUIPMENT, NET	23,505	1,163
INTANGIBLE ASSETS, NET	785	723
GOODWILL	184	—
OTHER ASSETS	408	183
	\$ 65,005	\$ 6,680
<b>LIABILITIES AND SHAREHOLDERS' EQUITY (DEFICIENCY)</b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable and accrued expenses	\$ 11,174	\$ 2,706
Net liabilities of discontinued operations	1,148	7,492
Deferred revenue	1,397	830
Other liabilities, current portion	19	167
Current portion of notes payable to shareholders	—	2,988
	13,738	14,183
OTHER LONG-TERM LIABILITIES, NET OF CURRENT PORTION	74	—
	13,812	14,183
<b>COMMITMENTS AND CONTINGENCIES</b>		
MINORITY INTEREST	21	—
<b>SHAREHOLDERS' EQUITY (DEFICIENCY):</b>		
Preferred stock, no par value; 10,000,000 shares authorized and none outstanding at December 31, 2002 and 456,857 outstanding at December 31, 2001	—	5,577
Common stock, no par value; 200,000,000 shares authorized and 41,009,245 issued and outstanding at December 31, 2002 and 35,023,515 issued and outstanding at December 31, 2001	106,554	29,752
Paid in capital	20,326	22,401
Unamortized stock-based compensation	(480)	(6,717)
Accumulated deficit	(76,940)	(58,588)
Accumulated comprehensive income	1,712	72
	51,172	(7,503)
Total liabilities and shareholders' equity (deficiency)	\$ 65,005	\$ 6,680

See notes to consolidated financial statements.

**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS**

	Years Ended December 31,		
	2002	2001	2000
	(In thousands, except per share data)		
REVENUE	\$ 13,139	\$ 3,882	\$ 4,200
COST OF SALES	8,679	1,924	1,983
Gross profit	4,460	1,958	2,217
OPERATING EXPENSES:			
Selling, general and administrative	12,767	3,970	1,449
Research and development	11,825	2,057	455
Total expenses	24,592	6,027	1,904
INCOME (LOSS) BEFORE INTEREST, OTHER INCOME, INCOME TAXES MINORITY INTEREST AND DISCONTINUED OPERATIONS	(20,132)	(4,069)	313
Interest expense	(1,113)	(1,103)	(200)
Interest income	510	8	12
Gain on sale of marketable securities held-for-sale	832	—	—
INCOME (LOSS) BEFORE INCOME TAXES, MINORITY INTEREST AND DISCONTINUED OPERATIONS	(19,903)	(5,164)	125
Income taxes	(123)	—	—
INCOME (LOSS) BEFORE MINORITY INTEREST AND DISCONTINUED OPERATIONS	(20,026)	(5,164)	125
Minority interest in loss of consolidated subsidiary	118	—	—
INCOME (LOSS) FROM CONTINUING OPERATIONS	(19,908)	(5,164)	125
DISCONTINUED OPERATIONS:			
Loss from operations of discontinued retail golf segment, net	—	(5,973)	(8,938)
Gain (loss) from disposal of discontinued retail golf segment, net	1,556	(11,949)	—
NET LOSS	(18,352)	(23,086)	(8,813)
OTHER COMPREHENSIVE INCOME (LOSS):			
Foreign exchange translation (loss) gain during the period	(28)	(24)	96
Net unrealized gain on marketable securities held-for-sale	1,668	—	—
COMPREHENSIVE LOSS	\$(16,712)	\$(23,110)	\$(8,717)
PER COMMON SHARE BASIC:			
Income (loss) from continuing operations	\$ (0.51)	\$ (0.15)	\$ 0.00
Income (loss) from discontinued operations	\$ 0.04	\$ (0.54)	\$ (0.30)
Net loss	\$ (0.47)	\$ (0.69)	\$ (0.29)
PER COMMON SHARE DILUTED:			
Income (loss) from continuing operations	\$ (0.51)	\$ (0.15)	\$ 0.00
Income (loss) from discontinued operations	\$ 0.04	\$ (0.54)	\$ (0.27)
Net loss	\$ (0.47)	\$ (0.69)	\$ (0.26)

See notes to consolidated financial statements.



## LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (DEFICIENCY)

For the Years Ended December 31, 2002, 2001 and 2000

(in thousands, except share data)

	Preferred Shares	Preferred Stock	Common Shares	Common Stock	Paid in Capital	Unamortized Stock Option-Based Compensation	Accumulated Deficit	Accumulated Comprehensive Income (Loss)	Total
Balance, December 31, 1999	—	\$ —	29,456,265	\$ 15,227	\$ 9,994	\$ —	\$(26,682)	\$ —	\$ (1,461)
Common stock issued	—	—	1,358,422	3,970	—	—	—	—	3,970
Conversion of note payable	—	—	69,355	108	—	—	—	—	108
Stock-based compensation	—	—	—	—	852	—	—	—	852
Dilution gain on common stock issued by subsidiaries	—	—	—	—	500	—	—	—	500
Conversion of note payable of subsidiaries	—	—	—	—	1,075	—	—	—	1,075
Foreign exchange translation gain (loss)	—	—	—	—	—	—	—	96	96
Other	—	—	—	—	—	—	(7)	—	(7)
Net loss	—	—	—	—	—	—	(8,813)	—	(8,813)
Balance, December 31, 2000	—	—	30,884,042	19,305	12,421	—	(35,502)	96	(3,680)
Preferred stock issued	456,857	5,665	—	—	—	—	—	—	5,665
Commission expense on sale of preferred stock	—	(88)	—	—	—	—	—	—	(88)
Common stock issued	—	—	977,034	5,477	—	—	—	—	5,477
Stock options exercised	—	—	1,822,581	2,400	—	—	—	—	2,400
Conversion of notes payable	—	—	1,339,858	2,570	—	—	—	—	2,570
Discounts on notes payable	—	—	—	—	1,692	—	—	—	1,692
Stock-based compensation	—	—	—	—	8,301	—	—	—	8,301
Unamortized stock option-based compensation	—	—	—	—	—	(6,717)	—	—	(6,717)
Dilution gain on common stock issued by subsidiaries	—	—	—	—	37	—	—	—	37
Purchase of common stock of subsidiaries	—	—	—	—	(50)	—	—	—	(50)
Foreign exchange translation gain (loss)	—	—	—	—	—	—	—	(24)	(24)
Net loss	—	—	—	—	—	—	(23,086)	—	(23,086)
Balance, December 31, 2001	456,857	5,577	35,023,515	29,752	22,401	(6,717)	(58,588)	72	(7,503)
Common stock issued	—	—	5,229,000	78,435	—	—	—	—	78,435
Transaction expenses of initial public offering including commissions	—	—	—	(7,714)	—	—	—	—	(7,714)
Stock options exercised	—	—	299,873	504	—	—	—	—	504
Conversion of preferred stock to common stock	(456,857)	(5,577)	456,857	5,577	—	—	—	—	—
Stock-based compensation	—	—	—	—	(2,075)	2,075	—	—	—
Unamortized stock option-based compensation	—	—	—	—	—	4,162	—	—	4,162
Foreign exchange translation gain (loss)	—	—	—	—	—	—	—	(28)	(28)
Net unrealized gain on marketable securities	—	—	—	—	—	—	—	1,668	1,668
Net loss	—	—	—	—	—	—	(18,352)	—	(18,352)
Balance, December 31, 2002	—	\$ —	41,009,245	\$106,554	\$20,326	\$ (480)	\$(76,940)	\$1,712	\$ 51,172

See notes to consolidated financial statements.

**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES**
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

	Years Ended December 31,		
	2002	2001	2000
	(In thousands)		
<b>OPERATING ACTIVITIES:</b>			
Net loss	\$(18,352)	\$(23,086)	\$(8,813)
Add loss (gain) from operations and loss on disposition of discontinued operations	(1,556)	17,922	8,938
Income (loss) from continuing operations	(19,908)	(5,164)	125
Adjustments to reconcile net loss to net cash used by operating activities:			
Gain on sale of marketable securities held-for-sale	(832)	—	—
Gain on sale of property and equipment	(19)	—	—
Minority interest	(118)	—	—
Bad debt expense	366	—	—
Warranty expense	435	—	—
Depreciation and amortization	1,513	132	131
Amortization of debt discount	912	780	—
Stock-based compensation	1,670	393	—
Changes in operating assets and liabilities:			
Accounts receivable	(5,788)	(126)	(374)
Inventories	(1,803)	(311)	(57)
Prepaid expenses and other assets	(1,048)	(273)	(32)
Other assets	(217)	—	—
Accounts payable and accrued expenses	7,581	1,303	363
Unearned revenue	567	—	—
Other liabilities	(167)	80	(262)
Net cash used by continuing operations	(16,856)	(3,186)	(106)
Net cash used by discontinued operations	(2,456)	(8,866)	(4,752)
Net cash used by operating activities	(19,312)	(12,052)	(4,858)
<b>INVESTING ACTIVITIES:</b>			
Purchases of property and equipment	(23,787)	(1,070)	(62)
Proceeds from sale of property and equipment	129	—	—
Purchase of marketable securities held-for-sale	(2,000)	—	—
Proceeds from sale of marketable securities held-for-sale	1,432	—	—
Acquisition of subsidiary, net of cash received	74	—	—
Investment in patents and trademarks	(144)	(89)	(59)
Net cash used by investing activities	(24,296)	(1,159)	(121)
<b>FINANCING ACTIVITIES:</b>			
Proceeds from borrowings	3,500	4,000	1,250
Repayment of borrowings	(7,400)	(100)	(750)
Repayment of other liabilities	(14)	—	—
Proceeds from issuance of common stock, net of offering costs	70,721	3,477	3,700
Proceeds from issuance of preferred stock, net of offering costs	—	5,577	—
Stock options exercised	504	2,400	—
Dividends paid	—	—	(7)
Proceeds from issuance (repurchase) of common stock by subsidiaries, net	—	(13)	500
Net cash provided by financing activities	67,311	15,341	4,693
EFFECT OF FOREIGN EXCHANGE TRANSLATION	70	(24)	96
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	23,773	2,106	(190)
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	2,230	124	314
CASH AND CASH EQUIVALENTS AT END OF PERIOD	\$ 26,003	\$ 2,230	\$ 124
<b>SUPPLEMENTAL CASH FLOW INFORMATION</b>			
Interest paid	\$ 443	\$ 52	\$ 162
Taxes paid	\$ —	\$ —	\$ —

**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF CASH FLOWS — (Continued)**

In 2001 and 2000, respectively, \$2,570 and \$108 in notes payable and accrued interest were converted to the Company's common stock. In 2001, Liquidmetal Golf transferred and assigned to the Company two subordinated promissory notes in exchange for the Company's common stock in the amount of \$2,000.

In 2001, the Company recorded paid in capital of \$1,692 comprised of discounts on notes payable.

In 2001, the Company incurred \$792 of costs related to the initial public offering that had not been paid as of December 31, 2001.

In 2002, the Company entered into a lease agreement for \$107 of office furniture that was recorded as a capital lease obligation.

As of December 31, 2001, the Company accrued \$100 for payments to be made to Caltech in exchange for rights to certain patents (see Note 7). In 2000, the Company issued 96,774 shares of common stock in the amount of \$270 to Caltech in exchange for rights to certain patents (see Note 7).

In 2002, 2001, and 2000, respectively, the Company recorded a net addition to shareholders' deficiency of \$2,492, \$1,191, and \$852 comprised of stock compensation and discounts on convertible notes payable in the discontinued retail golf operations. In 2000, a subordinated convertible promissory note in the amount of \$1,075, issued by Liquidmetal Golf was converted to Liquidmetal Golf's common stock. Additionally, in 2002, there was a \$98 foreign exchange loss effect in the discontinued retail golf operations.

See notes to consolidated financial statements.

**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2002, 2001, and 2000**  
**(in thousands, except share data)**

**1. Description of Business**

Liquidmetal Technologies (“Liquidmetal Technologies”) and its subsidiaries (collectively “the Company”) are in the business of developing, manufacturing, and marketing products made from amorphous alloys. Liquidmetal Technologies markets and sells Liquidmetal® alloy industrial coatings and also manufactures, markets and sells products and components from bulk Liquidmetal alloys that can be incorporated into the finished goods of its customers across a variety of industries.

The Company classifies operations into two reportable segments: Liquidmetal alloy industrial coatings and bulk Liquidmetal alloys. Liquidmetal alloy industrial coatings are used primarily as a protective coating for industrial machinery and equipment, such as drill pipe used by the oil drilling industry and boiler tubes used by coal-burning power plants. Bulk Liquidmetal alloys include potential market opportunities to manufacture and sell casing components for electronic devices, medical devices, sporting goods, tooling and prototype sampling, and furnace equipment. In addition, such alloys are used to generate research and development services revenue for developing uses related primarily to defense and medical applications. In the twelve months ended December 31, 2001, the Company derived a majority of its revenue from the operation of its retail golf segment, which was discontinued on September 30, 2001 and is now accounted for as a discontinued operation. The retail golf segment marketed golf clubs made of the Company’s bulk Liquidmetal alloys. The Company outsourced the manufacturing of the golf clubs.

**2. Summary of Significant Accounting Policies**

*Principles of Consolidation.* The consolidated financial statements include the accounts of Liquidmetal Technologies and its wholly-owned subsidiaries, Liquidmetal Korea Co., Ltd. (“LMT Korea”), located in Korea, and Amorphous Technologies International (Asia) PTE LTD (“LMT Singapore”), located in Singapore and its majority-owned subsidiaries, Chusik Hoesa Dongyang Yudoro (“Dongyang”) and Liquidmetal Golf and its subsidiaries, which included the retail golf segment, now accounted for as a discontinued operation. The Company acquired its 51% interest in Dongyang in 2002; accordingly, the results of Dongyang’s operations have been included in the consolidated financial statements from the acquisition date (see Note 8). The aggregate purchase price was \$333 in cash. Effective in 2001, management closed the Singapore operations, which did not result in a significant impact on the financial statements for any of the periods presented. All intercompany balances and transactions have been eliminated. A minority interest in Liquidmetal Golf is included in the consolidated financial statement as a component of the loss from operations of the discontinued retail golf segment (see Note 14).

*Sales of Stock by Subsidiaries.* Gains on sales of stock by Liquidmetal Golf are recognized as components of the Company’s shareholders’ equity (deficiency).

*Revenue Recognition.* On December 3, 1999, the staff of the Securities and Exchange Commission issued Staff Accounting Bulletin No. 101, *Revenue Recognition in Financial Statements* (“SAB 101”) that summarizes the staff’s views in applying accounting principles generally accepted in the United States of America to revenue recognition in financial statements. The Company’s revenue recognition policy complies with the requirements of SAB 101. Revenue is recognized at the time the Company ships its products, as this is when title passes to the customer. Revenue is deferred and included in liabilities when the Company receives cash in advance for services not yet performed or goods not yet delivered. Revenue from research and development contracts is recognized under the percentage of completion method.

*Cash and Cash Equivalents.* The Company considers all highly liquid investments with maturity dates of three months or less when purchased to be cash equivalents. The Company limits the amount of credit exposure to each individual financial institution and places its temporary cash into investments of high credit quality. There are no significant concentrations of credit risk to the Company associated with cash and cash equivalents.

*Marketable Securities.* The Company has conformed its investment policies to be consistent with Statement of Financial Accounting Standards (“SFAS”) No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, and classifies all of its investment securities as held-for-sale. Held-for-sale securities are carried at fair value, with the unrealized gains and losses reported in Shareholders’ Equity (Deficiency) under the caption “Accumulated Comprehensive Income (Loss).”

**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Realized gains and losses on held-for-sale securities are included in other income. The cost of securities sold is based on the specific identification method.

*Trade Receivables.* The Company grants credit to its customers generally in the form of short-term trade accounts receivable. The creditworthiness of customers is evaluated prior to the sale of inventory. Two customers represent 42%, or \$2,703, of total outstanding trade receivables as of December 31, 2002.

*Inventories.* Inventories are accounted for on the first-in, first-out basis and reported at the lower of cost or market. Inventories consist of raw materials and finished goods. The Company records write-offs for inventory obsolescence when it is deemed that there is impairment of the value of the inventories on hand.

*Property, Plant and Equipment.* Property, plant and equipment are stated at cost less accumulated depreciation and amortization. Additions and major renewals are capitalized. Repairs and maintenance are charged to expense as incurred. Upon disposal, the related cost and accumulated depreciation are removed from the accounts, with the resulting gain or loss included in operating income. Depreciation is provided principally on the straight-line method over the estimated useful lives of the assets, which range from two to twenty years.

Lease property meeting certain criteria is capitalized and the present value of the related lease payments is recorded as a liability. Amortization of capitalized lease assets is provided on the straight-line method over the estimated useful lives of the assets, which is five years.

*Intangible Assets.* Intangible assets consist of the costs incurred to purchase patent rights and costs incurred to internally develop patents and trademarks. Intangible assets are reported net of accumulated amortization. Patents and trademarks are amortized using the straight-line method over a period based on their contractual lives ranging from eleven to seventeen years.

*Goodwill.* Beginning January 1, 2002, the Company adopted Statement of Financial Accounting Standards ("SFAS) No. 142, *Goodwill and Other Intangible Assets* (See "New Accounting Pronouncements"). According to this statement, goodwill and other intangible assets are no longer subject to amortization, but instead must be reviewed annually for impairment by applying a fair value-based test. The Company's goodwill arose in 2002 as a result of its acquisition of Dongyang (see Note 8). During 2002, the Company completed an impairment review and did not recognize any impairment of goodwill. The Company expects to receive future benefits from previously acquired goodwill over an indefinite period of time. Accordingly, for 2002, the Company has forgone all related goodwill amortization expense.

*Impairment of Long-lived Assets.* The Company reviews long-lived assets to be held and used in operations for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may be impaired. An impairment loss is recognized when the estimated fair value of the assets is less than the carrying value of the assets.

*Fair Value of Financial Instruments.* The estimated fair value of amounts reported in the consolidated financial statements have been determined using available market information and valuation methodologies, as applicable. The carrying amount of cash and cash equivalents, accounts receivable, accounts payable, and all other current assets and liabilities approximate their fair value because of their short term maturities at December 31, 2002 and 2001, unless otherwise stated. The fair values of non-current assets and liabilities approximate their carrying value unless otherwise stated.

*Research and Development Expenses.* Research and development expenses represent salaries, related benefits expense, expenses incurred for the design and testing of new processing methods and other expenses related to the research and development of Liquidmetal alloys. Development costs incurred in research and development activities are expensed as incurred.

*Advertising and Promotion Expenses.* Advertising and promotion expenses are expensed when incurred. Advertising and promotion expenses were \$127, \$62, and \$11 for the years ended December 31, 2002, 2001 and 2000, respectively.

*Debt Discount Amortization.* Debt discounts for notes payable are amortized to interest expense, using a method that approximates the interest method over the term of the related debt instruments.

**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

*Stock-Based Compensation.* As permitted under SFAS No. 123, *Accounting for Stock-Based Compensation*, the Company has elected to follow Accounting Principles Board (“APB”) Opinion No. 25, *Accounting for Stock Issued to Employees*, which prescribes the intrinsic value method in accounting for its stock options issued to employees and directors. Stock options issued to non-employees of the Company have been accounted for in accordance with SFAS No. 123, which prescribes the fair value accounting method.

*Income Taxes.* Income taxes are provided under the asset and liability method as required by SFAS No. 109, *Accounting for Income Taxes*. Under this method, deferred income taxes are recognized for the tax consequences of “temporary differences” by applying enacted statutory tax rates applicable to future years to differences between the financial statement carrying amounts and the tax basis of existing assets and liabilities. The effect of a tax rate change on deferred taxes is recognized in operations in the period that the change in the rate is enacted. Valuation allowances are established when necessary to reduce net deferred tax assets to the amount expected to be realized.

*Translation of Foreign Currency.* Upon consolidation of the Company’s foreign subsidiaries into the Company’s consolidated financial statements, any balances with the subsidiaries denominated in the foreign currency are translated at the exchange rate at year-end. The financial statements of LMT Singapore have been translated based upon Singapore Dollars as the functional currency. The financial statements of LMT Korea, which include the Company’s 51% owned subsidiary, Dongyang, have been translated based upon Korean Won as the functional currency. LMT Singapore’s and LMT Korea’s assets and liabilities were translated using the exchange rate at year end and income and expense items were translated at the average exchange rate for the year. The resulting translation adjustment was included in other comprehensive income (loss).

*Earnings Per Share.* Basic earnings per share (“EPS”) is computed by dividing earnings (losses) attributable to common shareholders by the weighted average number of common shares outstanding for the periods. Diluted EPS reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock.

*Use of Estimates.* The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reported periods. Actual results could differ from those estimates. These management estimates are primarily related to product warranty and the allowance for bad debt account balances.

*Reclassifications.* Certain amounts from prior years have been reclassified to conform to the current year’s presentation.

*New Accounting Pronouncements.* In July 2001, the Financial Accounting Standards Board (“FASB”) issued SFAS No. 141, *Business Combinations* and SFAS No. 142, *Goodwill and Other Intangible Assets*. SFAS No. 141 requires that all business combinations be accounted for under the purchase method only and that certain acquired intangible assets in a business combination be recognized as assets apart from goodwill. SFAS No. 142 requires that ratable amortization of goodwill be replaced with periodic tests of the goodwill’s impairment and that limited-life intangible assets other than goodwill should be amortized over their useful lives. Implementation of SFAS No. 141 and SFAS No. 142 is required for fiscal year 2002. The adoption of SFAS No. 141 and 142 did not have a material impact on the Company’s financial statements.

In June 2001, the FASB issued SFAS No. 143, *Accounting for Asset Retirement Obligations*. SFAS No. 143 requires that the fair value of a liability for an asset retirement obligation be recognized in the period in which such liabilities are incurred if a reasonable estimate of fair value can be made. The associated asset retirement costs should be capitalized as part of the carrying amount of the long-lived asset. SFAS No. 143 is effective for financial statements issued for fiscal years beginning after June 15, 2002. Adoption of SFAS No. 143 is not expected to have a material impact on the Company’s financial statements.

Issued in October 2001, SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, replaces SFAS No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of*. The accounting model for long-lived assets to be disposed of by sale applies to all long-lived assets, including discontinued operations, and replaces the provisions of APB Opinion No. 30, *Reporting Results of Operations—Reporting the Effects of Disposal of a Segment*

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of a Business, for the disposal of segments of a business. SFAS No. 144 requires that those long-lived assets be measured at the lower of the carrying amount or fair value less cost to sell, whether reported in continuing operations or in discontinued operations. Therefore, discontinued operations will no longer be measured at net realizable value or include amounts for operating losses that have not yet occurred. SFAS No. 144 also broadens the reporting of discontinued operations to include all components of an entity with operations that can be distinguished from the rest of the entity and that will be eliminated from the ongoing operations of the entity in a disposal transaction. The provisions of SFAS No. 144 are effective for financial statements issued for fiscal years beginning after December 15, 2001 and, generally, are to be applied prospectively. In 2002, the Company adopted SFAS No. 144 which did not result in a material impact to the Company's financial statements.

In April 2002, the FASB issued SFAS No. 145, *Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections*. SFAS No. 145 rescinds SFAS No. 4, *Reporting Gains and Losses from Extinguishment of Debt*, and an amendment of that Statement, SFAS No. 64, *Extinguishments of Debt Made to Satisfy Sinking-Fund Requirements*. This Statement also rescinds SFAS No. 44, *Accounting for Intangible Assets of Motor Carriers*. SFAS No. 145 amends SFAS No. 13, *Accounting for Leases*, to eliminate an inconsistency between the required accounting for sale-leaseback transactions and the required accounting for certain lease modifications that have economic effects that are similar to sale-leaseback transactions. This Statement also amends other existing authoritative pronouncements to make various technical corrections, clarify meanings, or describe their applicability under changed conditions. The provisions of this Statement related to the rescission of Statement 4 are required to be applied in fiscal years beginning after May 15, 2002. The provisions in paragraphs 8 and 9(c) of this Statement related to Statement 13 are required to be applied to transactions occurring after May 15, 2002. Any gain or loss on extinguishment of debt that was classified as an extraordinary item in prior periods presented that does not meet the criteria in APB No. 30 for classification as an extraordinary item is required to be reclassified. All other provisions of this Statement are effective for financial statements issued on or after May 15, 2002. The Company elected to early adopt SFAS No. 145 during the second quarter of 2002. The effect of adopting SFAS No. 145 was to increase interest expense by \$532, increase net loss from continuing operations by \$532, and to increase basic and diluted loss from continuing operations per share by \$0.01.

In June 2002, the FASB issued SFAS No. 146, *Accounting for Costs Associated With Exit or Disposal Activities*. Statement 146 addresses financial accounting and reporting for costs associated with exit or disposal activities and nullifies Emerging Issues Task Force (EITF) Issue No. 94-3, *Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)*. SFAS No. 146 requires costs associated with exit or disposal activities to be recognized when the costs are incurred, rather than at a date of commitment to an exit or disposal plan. SFAS No. 146 is effective for exit or disposal activities that are initiated after December 31, 2002. The adoption of SFAS No. 146 is not expected to have a material impact on the Company's financial statements.

In December 2002, SFAS No. 148, *Accounting for Stock-Based Compensation—Transition and Disclosure* was issued by the FASB. This standard amends SFAS No. 123 to provide alternative methods of transition for a voluntary change to the fair value method of accounting for stock-based employee compensation. In addition, this standard amends the disclosure requirements of SFAS No. 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. SFAS No. 148 is effective for financial statements for fiscal years ending after December 15, 2002. The Company will implement SFAS No. 148 effective January 1, 2003 regarding disclosure requirements for condensed financial statements for interim periods. The Company has not yet determined whether they will voluntarily change to the fair value based method of accounting for stock-based employee compensation.

In November 2002, the FASB issued Interpretation No. 45, *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others* ("Interpretation 45"). Interpretation 45 changes the accounting for and the disclosure of guarantees. Interpretation 45 requires that guarantees meeting the characteristics described in the Interpretation be initially recorded as fair value in contrast to FASB No. 5, which requires recording a liability when a loss is probable and reasonably estimable. The disclosure requirements of Interpretation 45 are effective for financial statements and annual periods ending after December 15, 2002. The initial recognition and initial measurement provisions of Interpretation 45 are effective on a prospective basis to guarantees issued or modified after December 31, 2002. The adoption of Interpretation 45 is not expected to have a material impact on the Company's financial statements.

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**3. Marketable Securities**

On July 29, 2002, the Company invested \$2,000 in Growell Metal, Inc. ("Growell Metal"), a metals processing company located in South Korea and publicly traded on South Korea's KOSDAQ stock market. The Company acquired 891,100 shares (or approximately 5%) of Growell Metal's outstanding common stock in this transaction. During the fourth quarter of 2002, Growell Metal's spin-off of its electronics division resulted in the creation of a new company named Growell Electronics, Inc. ("Growell Electronics"). As a result of the spin-off, 30% of the Company's 891,100 common shares of Growell Metal were exchanged for an equal number of shares in the common stock of Growell Electronics. During the year ended December 31, 2002, the Company sold its shares in Growell Electronics for approximately \$1,432, which was based on the market price of the stock on the KOSDAQ stock market on the date of sale. This sale resulted in a realized gain of \$832 (see Note 20). At December 31, 2002, the change in fair value of the remaining investment in Growell Metal resulted in an unrealized gain of \$1,668, which is reported as other comprehensive income in the accompanying consolidated financial statements.

**4. Trade receivables**

Trade receivables from continuing operations were comprised of the following:

	December 31,	
	2002	2001
Accounts receivable	\$6,681	\$941
Less: Allowance for doubtful accounts	(277)	(30)
Account receivable, net	<u>\$6,404</u>	<u>\$911</u>

During the year ended December 31, 2002, the Company recorded \$366 of bad debt expense and wrote off \$119 of customer account balances deemed to be uncollectible. During the years ended December 31, 2001 and 2000, the Company recorded \$25 and \$5 of bad debt expense, respectively.

**5. Inventories**

Inventories from continuing operations were comprised of the following:

	December 31,	
	2002	2001
Raw materials	\$1,585	\$186
Work in process	592	—
Finished goods	329	317
Total inventories	<u>\$2,506</u>	<u>\$503</u>



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**6. Property, Plant and Equipment**

Property, plant and equipment consisted of the following:

	December 31,	
	2002	2001
Machinery and equipment	\$11,002	\$ 234
Computer equipment	1,342	126
Office equipment, furnishings and improvements	1,123	253
Buildings	11,084	—
Construction in process of machinery and equipment and plant	403	808
	24,954	1,421
Total	24,954	1,421
Accumulated depreciation	(1,449)	(258)
	23,505	1,163
Total property, plant and equipment, net	\$23,505	\$1,163

Depreciation expense was classified as follows:

	For the years ended December 31,		
	2002	2001	2000
Cost of sales	\$ 403	\$—	\$—
Selling, general and administrative	229	69	74
Research and development	799	—	—
	1,431	69	74
Total depreciation expense	\$1,431	\$69	\$74

Additionally, during the year ended December 31, 2002, \$240 of the depreciation expense was as a result of accelerated depreciation expense due to a change in the estimated useful life of certain machinery and equipment.

**7. Intangible Assets**

	December 31,	
	2002	2001
Purchased and licensed patent rights	\$ 458	\$ 420
Internally developed patents	622	506
Trademarks	56	66
	1,136	992
Total	1,136	992
Accumulated amortization	(351)	(269)
	785	723
Total intangible assets, net	\$ 785	\$ 723

Amortization expense was \$82, \$63, and \$57 for the years ended December 31, 2002, 2001, and 2000, respectively.

Purchased patent rights represent the exclusive right to commercialize the bulk amorphous alloy and other amorphous alloy technology acquired from California Institute of Technology (“Caltech”), a shareholder, through a license agreement with Caltech (“License Agreement”). Under the License Agreement, the Company has the exclusive right to make, use, and sell products from all of Caltech’s inventions, proprietary information, know-how, and other technology relating to amorphous alloys in existence as of September 1, 2001. The Company also has an exclusive license to 8 patents and 5 patent applications held by Caltech relating to amorphous alloy technology, as well as all related foreign counterpart patents and patent applications. Of the patents currently issued to Caltech and licensed by the Company, the earliest expiration date is 2011 and the latest expiration date is 2017. Furthermore, the license agreement gives the Company the exclusive right to make, use, and sell products from substantially all amorphous alloy technology that is developed in Professor William

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Johnson's Caltech laboratory during the period September 1, 2001 through August 31, 2005. All fees and other amounts payable by the Company for these rights and licenses have been paid or accrued in full, and no further royalties, license fees or other amounts will be payable in the future under the License Agreements.

In addition to the patents and patent applications under the License Agreement with Caltech, the Company has internally developed patents. Internally developed patents include legal and registration costs incurred to obtain the respective patents. The Company currently holds various patents and numerous pending patent applications in the United States, as well as numerous foreign counterparts to these patents outside of the United States.

#### **8. Goodwill**

On June 28, 2002, the Company acquired a 51% interest in Chusik Hoesa Dongyang Yudoro ("Dongyang"). The results of Dongyang's operations have been included in the consolidated financial statements since that date. The aggregate purchase price was \$333 in cash.

The following table summarizes the estimated fair values of the net assets held by Dongyang as of June 28, 2002:

Cash	\$ 407
Accounts receivable	71
Inventories	200
Other current assets	126
Property, plant and equipment, net	34
Other long-term assets	9
	—
Total assets	847
Total liabilities	(554)
	—
Net assets acquired	\$ 293

The difference between the purchase price of \$333 and the Company's investment in 51% of the net assets of Dongyang was assigned to Goodwill in the amount of \$184. The results of Dongyang's operations prior to June 28, 2002 were not significant.

#### **9. Other Liabilities**

The other liabilities balance consists entirely of a single capital lease obligation for office furniture and furnishings. All leases with an initial term greater than one year are accounted for under SFAS No. 13 *Accounting for Leases*. These leases are classified as either capital leases or operating leases, as appropriate.

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Assets under capital leases are capitalized using interest rates appropriate at the inception of each lease. At December 31, 2002, the cost recorded for assets under capital leases was \$107 and the accumulated amortization was \$14. Future minimum lease payments for the above assets under capital leases during subsequent years are as follows.

December 31,	Minimum Payments
2003	\$ 26
2004	26
2005	26
2006	26
2007	7
Thereafter	—
Total	111
Imputed interest	(18)
Total	93
Less current portion	19
Other long-term liabilities, net of current portion	\$ 74

#### 10. Product Warranty

Due to the lack of historical information for warranty expense related to bulk alloy products, management estimates product warranties as a percentage of bulk alloy product sales earned during the period. During the year ended December 31, 2002, the Company's product warranty accrual balance had the following activity:

Balance, December 31, 2001	\$ —
Expense accrual	587
Warranty charges	(152)
Balance, December 31, 2002	\$ 435

The product warranty accrual balance was included in accounts payable and accrued expenses at December 31, 2002.

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**11. Notes Payable to Shareholders**

The notes payable as of December 31, 2002 and 2001 and the activity for the year ended December 31, 2002 is shown in the following table:

	December 31, 2001	Borrowings	Repayments	December 31, 2002
Kang/Salas 8.5%, principal \$1,500	\$ 1,400	\$ —	\$(1,400)	\$ —
Tjoa 8.5%, principal \$1,500	1,500	—	(1,500)	—
Kang 8.0%, principal \$2,000	—	2,000	(2,000)	—
Tjoa 8.0%, principal \$1,000	1,000	—	(1,000)	—
Kang 8.0%, principal \$750	—	750	(750)	—
Tjoa 8.0%, principal \$750	—	750	(750)	—
	3,900	\$3,500	\$(7,400)	\$ —
Less debt discount	(912)			
	2,988			
Less current portion	(2,988)			
Notes payable less current portion, net of discounts	\$ —			

*Kang 8.0%, principal \$2,000* - On March 12, 2002, the Company borrowed \$2,000 on an unsecured basis from Mr. John Kang that was due on the earlier of May 1, 2003 or the closing of an initial public offering. The Company elected to repay the note upon the closing of the Company's initial public offering.

*Kang 8.0%, principal \$750* - On April 3, 2002, the Company borrowed \$750 on an unsecured basis from Mr. John Kang that was due on the earlier of July 1, 2003 or the closing of the initial public offering. The Company elected to repay the note upon the closing of the Company's initial public offering.

*Kang/ Salas 8.5% and Tjoa 8.5%* — In conjunction with the issuance of these subordinated promissory notes, the Company issued detachable warrants for each of these notes for the purchase of 322,581 common stock shares of the Company at an exercise price of \$4.65 per share (the fair value at the date of grant), as adjusted for the stock split and reverse stock split (see Note 12). The warrants expire on December 31, 2005. As of December 31, 2001, none of the detachable warrants had been exercised. The warrants are detachable from the note and therefore each warrant was allocated a portion of the proceeds, debt discount, in the amount of approximately \$846, based on their estimated relative fair values at the time they were issued. The Company elected to repay the note upon the closing of the Company's initial public offering. Upon the early repayment, the amortization of the remaining unamortized debt discount of \$532 was accelerated.

*Tjoa 8.0%* - On April 3, 2002, the Company borrowed \$750 on an unsecured basis from Mr. Tjoa that was due on the earlier of July 1, 2003 or the closing of an initial public offering. The Company elected to repay the note upon the closing of the Company's initial public offering.

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Total interest expense, including the debt discount amortization on the notes payable to shareholders, was \$1,113, \$1,103 and \$200 for the three years ended December 31, 2002, 2001 and 2000, respectively. Included in the total interest expense is \$532 of accelerated amortization of the remaining unamortized debt discount upon the early repayment of the Kang/Salas 8.5% and the Tjoa 8.5% promissory notes in May of 2002.

**12. Shareholders' Equity (Deficiency)**

*Initial Public Offering.* Pursuant to the Company's Registration Statement (Registration No. 333-73716) on Form S-1, as amended, initially filed with the Securities and Exchange Commission on November 20, 2001 and declared effective May 21, 2002, the Company closed an initial public offering of 5,000,000 registered shares of common stock on May 28, 2002, plus an additional 229,000 shares on June 10, 2002 pursuant to an over-allotment option, at a price of \$15.00 per share (which sale is referred to herein as the "Offering"). The Offering generated net cash proceeds for the Company during the second quarter 2002 of approximately \$70,721, net of underwriting commissions of \$5,490 and other transaction fees of approximately \$2,224.

*Stock Split.* On June 29, 2001 the Company declared a ten-for-one stock split to its common shareholders of record on June 29, 2001. This stock split was effected in the form of a stock dividend. On April 4, 2002, the Company declared a one-for-3.1 reverse stock split to its common shareholders of record on April 4, 2002. The consolidated financial statements and accompanying notes have been retroactively adjusted to reflect the effects of the split and reverse split.

*Preferred Stock.* As of December 31, 2001, the Company received net proceeds of \$5,577 from the sale of the preferred stock at a per share price of \$12.40, as adjusted for the revised stock split. Upon the completion of the Offering, each share of preferred stock was converted automatically into one share of Class A common stock pursuant to the terms of the preferred stock issued.

**13. Stock Compensation Plan**

Under the Company's 1996 Stock Option Plan ("1996 Company Plan") the Company could grant to employees, directors or consultants options to purchase up to 12,903,226 shares of common stock as adjusted for the reverse stock split. The stock options are exercisable over a period determined by the Board of Directors or the Compensation Committee, but no longer than 10 years.

On April 4, 2002, our shareholders and board of directors adopted the 2002 Incentive Equity Plan ("2002 Equity Plan"). The 2002 Equity Plan provides for the grant of stock options to officers, employees, consultants and directors of the Company and its subsidiaries. In addition, the plan permits the granting of stock appreciation rights, with, or independently of, options, as well as stock bonuses and rights to purchase restricted stock. A total of 10,000,000 shares of our common stock may be granted under the 2002 Equity Plan. As of December 31, 2002, there are 354,487 options outstanding under the 2002 Equity Plan.

Prior to the approval of the 2002 Equity Plan, options were primarily granted under the Company's 1996 Stock Option Plan ("1996 Company Plan"). On April 4, 2002, our board of directors terminated the 1996 Company Plan. The termination will not affect any outstanding options under the 1996 Company Plan and all such options will continue to remain outstanding and be governed by the Plan. No additional options may be granted under the 1996 Company Plan. As of December 31, 2002, there were 4,761,191 options outstanding under the 1996 Company Plan.

On April 4, 2002, our shareholders and board of directors adopted the 2002 Non-employee Director Stock Option Plan ("2002 Director Plan"). Only non-employee directors are eligible for grants under the 2002 Director Plan. A total of 1,000,000 shares of the Company's Common Stock may be granted under the 2002 Director Plan. There are 200,000 options outstanding under the 2002 Equity Plan as of December 31, 2002.

Additionally, the Company has 2,866,670 options outstanding at December 31, 2002 which were granted outside the 1996 Company Plan, 2002 Equity Plan and 2002 Director Plan. Included in these options are options granted during the

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period ended December 31, 2001 of 1,021,507 to Paul Azinger who was contracted to perform services for the retail golf segment. The expense pertaining to these options was recorded in the discontinued retail golf segment (see Note 14).

The Company applies APB Opinion No. 25 for options when the exercise price of options granted to employees is less than the fair value of the underlying stock on the date of grant. The Company applies SFAS No. 123 for options granted to non-employees who perform services for the Company. Stock-based compensation expense was recognized as follows for the year ended December 31, 2002:

	In accordance with		
	APB Opinion No. 25	SFAS No. 123	Total
General and administrative	\$172	\$ —	\$ 172
Research and development	49	1,449	1,498
Total	\$221	\$1,449	\$1,670

Stock-based compensation expense was recognized as follows for the year ended December 31, 2001:

	In accordance with		
	APB Opinion No. 25	SFAS No. 123	Total
General and administrative	\$61	\$ —	\$ 61
Research and development	—	332	332
Total	\$61	\$332	\$393

Had the Company determined compensation cost based on the fair value at the grant date for stock options consistent with the method of SFAS No. 123, the Company's income (loss) from continuing operations and basic and diluted income (loss) per share from continuing operations would have been as follows (in thousands, except loss per share information):

	Years Ended December 31,		
	2002	2001	2000
Income (loss) from continuing operations:			
As reported	\$(19,908)	\$ (5,164)	\$ 125
Pro forma	(26,280)	(11,411)	(7,056)
Basic and diluted income (loss) per share from continuing operations:			
As reported	(0.51)	(0.15)	0.00
Pro forma	(0.68)	(0.34)	(0.23)

The fair value of each option grant is estimated on the date of the grant using the Black-Scholes option-pricing model with the following weighted-average assumptions used for grants for the years ended December 31, 2002, 2001, and 2000, respectively: expected volatility of 100% for all periods; dividend yield of 0.0% for all periods; expected option life of approximately 5 years; and a risk-free interest rate ranging from 1.8% to 6.2%.

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The following table summarizes the Company's stock option transactions for the three years ended December 31, 2002:

	Number of Shares	Weighted Average Price
Options outstanding at December 31, 1999	3,112,915	\$ 1.49
Granted	2,648,397	4.26
Exercised	—	—
Forfeited	—	—
Options outstanding at December 31, 2000	5,761,312	2.77
Granted	4,308,623	5.46
Exercised	(1,822,586)	1.32
Forfeited	(80,646)	1.55
Options outstanding at December 31, 2001	8,166,703	4.53
Granted	643,202	13.71
Exercised	(299,873)	1.68
Forfeited	(327,684)	4.04
Options outstanding at December 31, 2002	8,182,348	\$ 5.37

The weighted average fair value of options granted during the years ended December 31, 2002, 2001, and 2000, was \$10.41, \$3.30, and \$5.02, respectively. There were 4,345,933 options with a weighted average exercise price of \$4.37 exercisable at December 31, 2002, 3,165,171 options with a weighted average exercise price of \$3.83 exercisable at December 31, 2001, and 4,017,215 options with a weighted average exercise price of \$2.77 exercisable at December 31, 2000.

Included in the above tables are certain options granted where their exercise prices were below the fair market value of the common stock at the measurement date ("in-the-money"). In-the-money options of 1,198,927 with a weighted average fair value of \$4.27 were outstanding at December 31, 2002. In-the-money options of 1,214,411 with a weighted average fair value of \$4.35 were outstanding at December 31, 2001. There were no in-the-money options at December 31, 2000.

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The following table summarizes the Company's stock options outstanding and exercisable by ranges of option prices as of December 31, 2002:

Range of Option Price	Options Outstanding			Options Exercisable	
	Number of options Outstanding	Weighted Average Remaining Contract Life (Years)	Weighted Average Option Price	Number of Options Exercisable	Weighted Average Option Price
\$0.00 - \$1.55	1,650,543	6.4	\$ 1.31	790,434	\$ 1.47
1.56 - 3.10	571,098	6.3	2.55	554,968	2.54
3.11 - 4.65	2,261,299	8.0	4.65	1,956,131	4.65
4.66 - 6.20	2,711,294	8.4	6.20	906,346	6.20
6.21 - 7.75	10,444	9.7	7.10	—	—
7.76 - 9.30	31,574	9.2	8.94	3,226	9.30
9.31 - 10.85	150,000	9.9	10.58	—	—
10.86 - 12.40	344,912	8.5	12.40	134,828	12.40
12.41 - 13.95	—	—	—	—	—
13.96 - 15.50	451,184	9.3	15.04	—	—

#### 14. Discontinued Operations

On April 30, 2002, management terminated the operations of the retail golf segment by means of liquidating substantially all of the retail golf assets and liabilities. The disposition of the retail golf operations represents the disposal of a business segment. Accordingly, the accompanying consolidated financial statements reflect the retail golf segment as a discontinued operation for all periods presented.

In connection with the discontinuance of the retail golf operations, the Company incurred an estimated loss on disposal of \$11,949 for the year ended December 31, 2001. The estimated loss on disposal was comprised of an accrual for estimated operating losses of \$1,688 during the phase-out period, \$1,847 related to inventory adjustments, \$4,947 of accrued stock compensation costs, \$2,438 in fees to be paid to Paul Azinger prior to the termination of the endorsement agreement, \$930 due to other asset write-downs and \$100 in severance and other disposal expenses. As of December 31, 2002, \$1,000 remained payable to Paul Azinger, representing the early termination fee on the endorsement agreement. This amount was paid in full in January 2003.

For the year ended December 31, 2002, the Company had a net gain change in estimate of \$1,556 on the disposal of the discontinued retail golf segment that was primarily due to a change in estimated value of stock-based compensation. The change in estimated value of the stock-based compensation was a result of the cumulative decrease in the fair market value of the common shares underlying the options granted to Paul Azinger of \$2,129 and a decrease of \$250 in the estimate of fees related to the termination of the endorsement agreement. Additionally, there was a \$98 gain due to the reversal of the accumulated foreign exchange gains after the liquidation of Liquidmetal Golf Europe Inc, and a decrease in the estimated warranty cost of \$128. These gains were partially offset by other changes in the estimated loss on disposal that included \$530 of additional operating expenses, a \$57 increase in the allowance for doubtful accounts and \$462 primarily for the reduction of the estimated disposal value of work-in-process inventory and equipment.



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Net liabilities of the discontinued retail golf segment have been segregated on the balance sheets presented, the components of which are as follows:

	December 31,	
	2002	2001
<b>Assets:</b>		
Cash	\$ —	\$ 317
Accounts receivable, net	—	321
Inventories	—	1,468
Property and equipment, net	—	78
	—	2,184
Total assets	—	2,184
<b>Liabilities:</b>		
Current liabilities	1,148	9,676
	1,148	9,676
Total liabilities	1,148	9,676
Net liabilities of discontinued operations	\$(1,148)	\$(7,492)

The results of operations for all periods presented have been restated for discontinued operations. The operating results of the discontinued operations are as follows:

	Years Ended December 31,		
	2002	2001	2000
Net sales	\$ —	\$ 3,333	\$ 6,707
Cost of sales	—	2,185	4,683
	—	1,148	2,024
Gross profit	—	1,148	2,024
Operating expenses	—	7,121	10,962
	—	(5,973)	(8,938)
Loss from operations	—	(5,973)	(8,938)
Gain (loss) on disposal	1,556	(11,949)	—
	1,556	(17,922)	(8,938)
Net gain (loss)	1,556	(17,922)	(8,938)
Foreign exchange translation gain (loss) during the period	(98)	2	96
	\$1,458	\$(17,920)	\$(8,842)
Comprehensive gain (loss)	\$1,458	\$(17,920)	\$(8,842)

*Accounts Receivable.* Liquidmetal Golf had a factoring agreement that provided for the sale and transfer of a substantial portion of the accounts receivable of the retail golf operations. Liquidmetal Golf accounted for a portion of the factored receivable balances as a sale when the factor assumed the risk of collection for certain approved accounts. For certain accounts that the factor did not assume the risk of collection, Liquidmetal Golf accounted for these factored receivables as a financing arrangement and recorded a liability for this portion of the factored receivable balances. At December 31, 2002 and 2001, Liquidmetal Golf had a payable to the factor of \$48 and \$79, respectively. At December 31, 2001, Liquidmetal Golf had an allowance for doubtful accounts of \$1,401. At December 31, 2002, the accounts receivable balance had been written-off entirely.

*Stock Compensation Plan.* Historically, Liquidmetal Golf granted its own options to employees, directors and consultants under a stock option plan (“1997 Golf Plan”) approved by Liquidmetal Golf’s Board of Directors pursuant to which Liquidmetal Golf could have granted stock options exercisable over a period determined by the Board of Directors to purchase up to 500,000 shares of common stock of Liquidmetal Golf. In connection with the Company’s plan to discontinue the retail golf operations, the Company does not intend to issue additional options under the 1997 Golf Plan.

**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES**  
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Liquidmetal Golf applies APB Opinion No. 25 and related interpretations in accounting for its plans. Accordingly, Liquidmetal Golf recognized compensation when the exercise price of the options was less than the fair value of the underlying stock on the date of grant. Liquidmetal Golf recognized stock compensation expense for options granted to employees of \$81 and \$852 for the years ended December 31, 2001 and 2000, respectively. The compensation expense for these options had been fully charged to operations as of December 31, 2001. There was no compensation expense recorded during the year ended December 31, 2002.

Additionally, Liquidmetal Technologies recorded stock option-based compensation and a cumulative addition to paid-in capital of \$3,604 related to options issued in 2001 to Paul Azinger for shares of common stock of Liquidmetal Technologies. As the endorsement services related to this option grant provided a benefit to Liquidmetal Golf, the stock compensation expense was recorded by Liquidmetal Golf. Prior to the discontinuance of the retail golf operations, Liquidmetal Golf had recorded stock compensation expense of \$786 for services received during 2001. Additionally, the loss on disposal during the year ended December 31, 2001 includes \$4,947 of estimated stock compensation expense to be incurred prior to the planned termination of the endorsement agreement. During the year ended December 31, 2002, a \$2,129 decrease in the estimated stock compensation was recorded due to the cumulative decrease in the fair market value of the common shares underlying the options granted to Paul Azinger. At December 31, 2002, the unamortized stock compensation (a contra-equity account) balance had been fully amortized.

Had compensation cost been determined based on the fair value at the grant dates for awards under those plans consistent with the method of SFAS No. 123, Liquidmetal Golf's net gain (loss) would have been as follows:

	Years Ended December 31,		
	2002	2001	2000
As reported	\$1,556	\$(17,922)	\$(8,938)
Pro forma	1,522	(18,154)	(9,346)

The fair value of each option grant is estimated on the date of the grant using the Black-Scholes option-pricing model with the following weighted-average assumptions used for grants for the fiscal years ended December 31, 2002, 2001, and 2000: expected volatility of 100% for all periods; dividend yield of 0.0% for all periods; expected option life of approximately 5 years; and a risk-free interest rate ranging from 5.2% to 6.2%, as appropriate.

The following table summarizes Liquidmetal Golf's stock option transactions for the three years ended December 31, 2002:

	Number of Shares	Weighted Average Price
Options outstanding at December 31, 1999	391,250	\$4.55
Granted	75,755	0.01
Exercised	—	—
Forfeited	(8,500)	8.00
Options outstanding at December 31, 2000	458,505	3.74
Granted	—	—
Exercised	(148,255)	0.25
Forfeited	—	—
Options outstanding at December 31, 2001	310,250	5.41
Granted	—	—
Exercised	—	—
Forfeited	(65,000)	7.50
Options outstanding at December 31, 2002	245,250	\$4.87

**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES**  
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The weighted average fair value of options granted during the year ended December 31, 2000 was \$7.99. There were 222,875 options with a weighted average exercise price of \$4.55 exercisable at December 31, 2002; 235,625 options with a weighted average exercise price of \$4.04 exercisable at December 31, 2001; and 213,688 options with a weighted average exercise price of \$2.93 exercisable at December 31, 2000.

Included in the above tables are certain options granted where their exercise prices were below the fair market value of the common stock at the grant date (“in-the-money”). In-the-money options of 131,250, 146,250, and 294,505 with weighted average fair values of \$5.74, \$5.74, and \$6.32 were outstanding at December 31, 2002, 2001, and 2000, respectively.

The following table summarizes Liquidmetal Golf’s stock options outstanding and exercisable by the different exercise prices at December 31, 2002:

Exercise Price	Number of Options Outstanding at December 31, 2002	Weighted Average Remaining Contract Life (Years)	Number of Options Exercisable at December 31, 2002
\$ 0.50	131,250	4.33	131,250
\$ 8.00	89,500	6.50	67,125
\$16.00	22,000	5.33	22,000
\$24.00	2,500	5.58	2,500
	<u>245,250</u>		<u>222,875</u>

*Endorsement Agreements.* The Company has entered into various endorsement agreements with professional golfers to promote Liquidmetal Golf’s line of golf equipment products, whereby the Company pays the professional golfers annual compensation and win incentives based on specific performance criteria in each agreement. The expense associated with these contracts is recorded as a selling expense. The compensation incurred under these agreements was \$1,137 and \$60 during the years ended December 31, 2001 and 2000, excluding the stock option-based compensation expense associated with the Paul Azinger contract of \$3,604 and additional fees to be paid under this contract prior to termination of \$2,188 which are included in the loss from disposal of the discontinued retail golf segment. The majority of these agreements expired on December 31, 2001. The Paul Azinger agreement was due to expire on December 31, 2005; however, the Company terminated the contract on January 1, 2003.

**15. Income Taxes**

For all the financial statement periods presented, there was no provision for domestic income taxes. However, there was approximately \$123 of tax expense related to foreign taxes incurred by Dongyang, a 51% owned subsidiary.

The significant components of deferred assets were as follows:

	Years Ended December 31,		
	2002	2001	2000
Non-employee stock compensation	\$ 2,412	\$ 2,642	\$ 240
Inventory reserves	—	941	340
Allowance for bad debt	663	565	136
Loss from discontinued operations	410	1,077	—
Loss carry forwards	23,749	15,300	11,369
Other	404	233	40
	<u>27,638</u>	<u>20,758</u>	<u>12,125</u>
Valuation allowance	(27,638)	(20,758)	(12,125)
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

The following table accounts for the differences between the actual tax provision and the amounts obtained by applying the statutory U.S. Federal income tax rate of 34% to income (loss) before income taxes:

**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES**  
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	Years Ended December 31,		
	2002	2001	2000
Federal tax expense	(34.00)%	(34.00)%	(34.00)%
State tax expense, net	(3.36)%	(5.56)%	(5.37)%
Foreign income not subject to income tax	13.73%	—	—
Other	1.34%	0.28%	1.84%
Increase in valuation allowance	22.96%	39.28%	37.53%
Total tax provision	0.67%	0.00%	0.00%

As of December 31, 2002, the Company had approximately \$62,800 of net operating loss (“NOL”) carry forwards for U.S. federal income tax purposes. In addition, the Company has state NOL carry forwards of approximately \$41,200 expiring in 2007 through 2011. The Company and Liquidmetal Golf filed on a separate company basis for both federal and state income tax purposes. Accordingly, the NOL carry forwards of one legal entity are not available to offset income of the other. At December 31, 2002, Liquidmetal Technologies, Inc. had approximately \$28,300 in federal NOL carry forwards, expiring in 2004 through 2022 and approximately \$17,200 in state NOL carry forwards, expiring in 2005 through 2012. Liquidmetal Golf, Inc. had approximately \$34,500 of federal NOL carry forwards, expiring in 2005 through 2012 and state NOL carry forwards of \$24,000 expiring in 2005 through 2012. Additionally, as of December 31, 2002, the Company also has foreign NOL carry forwards in Singapore of approximately \$280, which carry forward indefinitely.

Section 382 of the Internal Revenue Code (the “IRC”) imposes limitations on the use of NOL’s and credits following changes in ownership as defined in the IRC. The limitation could reduce the amount of benefits that would be available to offset future taxable income each year, starting with the year of an ownership change. The Company has not completed the complex analysis required by the IRC to determine if an ownership change has occurred.

The ability to realize the tax benefits associated with deferred tax assets, which includes benefits related to NOL’s, is principally dependent upon the Company’s ability to generate future taxable income from operations and/or to effectuate successful tax planning strategies. The Company has provided a full valuation allowance for its net deferred tax assets due to the Company’s net operating losses.

#### **16. Segment Reporting and Geographic Information**

SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information*, requires companies to provide certain information about their operating segments. In April 2002, the Company began classifying operations into two reportable segments: Liquidmetal alloy industrial coatings and bulk Liquidmetal alloys. The Liquidmetal alloy industrial coatings are used primarily as a protective coating for industrial machinery and equipment, such as drill pipe used by the oil drilling industry and boiler tubes used by coal burning power plants. Bulk Liquidmetal alloys include potential market opportunities to manufacture and sell casing components for electronic devices, medical devices, sporting goods, tooling and prototyping, and furnace equipment. In addition, such alloys are used to generate research and development revenue for developing uses related primarily to defense and medical applications. Primarily, the expenses incurred by the bulk Liquidmetal alloy segment are research and development costs and selling expenses associated with identifying and developing potential market opportunities. Bulk Liquidmetal alloy products can be distinguished from Liquidmetal alloy coatings in that the bulk Liquidmetal alloys can have significant thickness, up to approximately one inch, which allows for their use in a wider variety of applications other than a thin protective coating applied to machinery and equipment.

**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES**  
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Summarized financial information concerning the Company's reportable segments is shown in the following tables:

	Coatings	Bulk Alloy	Segment Totals
<b>Year ended December 31, 2002:</b>			
Revenue to external customers	\$4,587	\$ 8,552	\$ 13,139
Gross profit (loss)	2,171	2,289	4,460
Income (loss) before minority interest, interest expense and discontinued operations	1,425	(12,294)	(10,869)
Total identifiable assets at end of period	1,615	32,853	34,468
<b>Year ended December 31, 2001:</b>			
Revenue to external customers	\$3,593	\$ 289	\$ 3,882
Gross profit (loss)	1,714	244	1,958
Income (loss) before minority interest, interest expense and discontinued operations	915	(1,841)	(926)
Total identifiable assets at end of period	1,300	733	2,033
<b>Year ended December 31, 2000:</b>			
Revenue to external customers	\$3,901	\$ 299	\$ 4,200
Gross profit (loss)	1,926	291	2,217
Income (loss) before minority interest, interest expense and discontinued operations	1,373	(137)	1,236

Reconciling information for the statements of operations between reportable segments and the Company's consolidated totals is shown in the following table:

	For the Years ended December 31,		
	2002	2001	2000
Total segment income (loss) before minority interest, interest expense and discontinued operations	\$(10,869)	\$ (926)	\$ 1,236
General and administrative expenses, excluded	(9,263)	(3,143)	(923)
Consolidated loss before interest expense, minority interest and discontinued operations	(20,132)	(4,069)	313
Interest expense	(1,113)	(1,095)	(200)
Interest income	510	—	12
Gain on sale of marketable securities held-for-sale	832	—	—
Minority interest in income of consolidated subsidiary	118	—	—
Income taxes	(123)	—	—
Loss from operations of the discontinued retail golf segment, net	—	(5,973)	(8,938)
Gain (loss) from disposal of discontinued retail golf segment, net	1,556	(11,949)	—
<b>CONSOLIDATED NET LOSS</b>	<b>\$(18,352)</b>	<b>\$(23,086)</b>	<b>\$(8,813)</b>

Excluded general and administrative expenses are attributable to the Company's corporate headquarters. These expenses primarily include corporate salaries, consulting, professional fees and facility costs. Research and development expenses are included in the operating costs of the segment that performed the research and development.

**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES**  
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Reconciling information for the balance sheets between reportable segments and the Company's consolidated totals is shown in the following table:

	December 31,	
	2002	2001
Total segment assets	\$34,468	\$2,033
Cash and cash equivalents	24,597	1,918
Marketable securities held-for-sale	3,068	—
Prepaid expenses and other current assets	493	967
Other property, plant and equipment	1,517	870
Intangibles, net	785	723
Other assets	77	169
<b>TOTAL CONSOLIDATED ASSETS</b>	<b>\$65,005</b>	<b>\$6,680</b>

Assets excluded from segments include assets attributable to the Company's corporate headquarters. The largest asset represents the Company's cash balances, primarily generated from the Company's stock offering.

Certain customers accounted for more than 10% of revenues from continuing operations as follows:

	Year Ended December 31,		
	2002	2001	2000
Samsung	15%	—	—
Growell Metal, Inc.	12%	—	—
United States of America	10%	—	—
Grant Prideco	7%	22%	19%
Praxair/Tata	4%	14%	13%
Smith International	3%	16%	—

The revenue related to the United States of America was earned under three defense-related research and development contracts. During the years ended December 31, 2001 and 2000, revenue earned on contracts with the United States of America represented less than 1% of revenue.

During the year ended December 31, 2002, the Company had revenue on sales to companies outside of the United States of \$5,700, of which \$4,959 represented sales to companies located in South Korea. During the years ended December 31, 2001, and 2000, the Company did not generate significant sales to companies located outside of the United States.

Long-lived assets include net property, plant, and equipment, net intangible assets and goodwill. The Company had long-lived assets of \$2,321 and \$759 located in the United States at December 31, 2002 and 2001, respectively. The Company had long-lived assets of \$22,154 and \$808 located in Korea at December 31, 2002 and December 31, 2001, respectively.

**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES**  
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**17. Income (Loss) Per Common Share**

Basic EPS is computed by dividing earnings (loss) attributable to common shareholders by the weighted average number of common shares outstanding for the periods. Diluted EPS reflects the potential dilution of securities that could share in the earnings. A reconciliation of the number of common shares used in calculation of basic and diluted EPS is presented below:

	Years Ended December 31,		
	2002	2001	2000
Weighted average basic shares	38,713,878	33,323,217	30,233,065
Effect of dilutive securities:			
Stock options	—	—	1,752,197
Conversion of notes payable	—	—	1,299,298
Weighted average diluted shares	38,713,878	33,323,217	33,284,560

The conversion of preferred stock to common stock was not included in the computation of diluted EPS for the year ended December 31, 2001 as the inclusion would be antidilutive. Options to purchase approximately 8,182,607 shares of common stock at prices ranging from \$0.78 to \$15.50 per share were outstanding at December 31, 2002, but were not included in the computation of diluted EPS for the same period because the inclusion would have been antidilutive. Options to purchase approximately 8,166,667 shares of common stock at prices ranging from \$0.78 to \$12.40 per share were outstanding at December 31, 2001, but were not included in the computation of diluted EPS for the same period because the inclusion would have been antidilutive. Options to purchase approximately 3,112,903 shares of common stock at prices ranging from \$0.78 to 2.33 per share were outstanding at December 31, 1999, but were not included in the computation of diluted EPS for the same period because the inclusion would have been antidilutive.

Warrants to purchase 645,162 shares of common stock at \$4.65 per share were outstanding at December 31, 2002 and December 31, 2001 but were not included in the computation of diluted EPS for the same period because the inclusion would have been antidilutive.

**18. Commitments and Contingencies**

In 1996, Liquidmetal Technologies entered into a distribution agreement (the "Distribution Agreement") whereby Liquidmetal Technologies granted a third party company exclusive rights to market and sell golf products incorporating Liquidmetal technology to Japanese sporting equipment companies.

The Company is not restricted to selling the Liquidmetal Golf clubs or other brand-name Liquidmetal Golf products to other companies under this agreement. If the Company begins to market its golf club components into Japan to finished goods manufacturers, the Company is obligated to sell its Liquidmetal inserts under this distribution agreement. The third party company paid Liquidmetal Technologies a \$1,000 distribution fee as part of the Distribution Agreement. A portion of this fee is subject to refund according to a formula based on the gross profit earned by the third party under the agreement. In the twelve months ended December 31, 1999, Liquidmetal Technologies recognized \$170 of the distribution fee upon the shipment of product to the third party company, which is the amount no longer subject to refund as a result of these shipments. At December 31, 2002 and 2001, \$830 was unearned and recorded as deferred revenue, as the distribution agreement does not terminate until March 2006. The Company believes this deferred revenue is no longer refundable and will be considered earned upon future shipment of products or the termination of the Distribution Agreement.

The Company has employment agreements with certain key officers and employees that provide for annual salaries and bonus compensation aggregating approximately \$3,988. Additionally, the agreements provide for various severance payments to these key officers if the Company terminates any of the key officers and employees without cause, or if certain of the key officers or employees terminate their own employment upon a change of control of the Company or for other good reason, as defined in the agreements.

**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES**  
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On December 20, 2002, the Company entered into an agreement with a third-party supplier to purchase raw materials for a total of \$3,488 during 2003.

The Company is from time to time a party to certain legal proceedings arising in the ordinary course of business. Although outcomes cannot be predicted with certainty, the Company does not believe that any legal proceeding to which it is a party will have a material adverse effect on the Company's financial position, results of operations, and cash flows.

#### **Operating Leases**

The Company leases its offices and warehouse facilities under various lease agreements, certain of which are subject to escalations based upon increases in specified operating expenses or increases in the Consumer Price Index. Future minimum lease payments under non-cancelable operating leases during subsequent years are as follows:

December 31,	Minimum Payments
2003	\$1,337
2004	1,091
2005	893
2006	874
2007	393
Thereafter	164
Total	\$4,752

Rent expense was \$955, \$322, and \$128 for the years ended December 31, 2002, 2001, and 2000, respectively.

#### **19. 401(k) Savings Plan**

The Company has a tax-qualified employee savings and retirement plan, or 401(k) plan, which covers all of its employees. Pursuant to the 401(k) plan, participants may elect to reduce their current compensation, on a pre-tax basis, by up to 15% of their taxable compensation or of the statutorily prescribed annual limit, whichever is lower, and have the amount of the reduction contributed to the 401(k) plan. The 401(k) plan permits the Company, in its sole discretion, to make additional employer contributions to the 401(k) plan. However, the Company did not make employer contributions to the 401(k) plan during any of the periods presented in the accompanying consolidated financial statements.

#### **20. Related Party Transactions**

On July 29, 2002, the Company invested \$2,000 in Growell Metal, Inc. ("Growell Metal"), a metals processing company located in South Korea and publicly traded on South Korea's KOSDAQ stock market. The Company acquired 891,100 shares (or approximately 5%) of Growell Metal's outstanding common stock in this transaction. During the fourth quarter of 2002, Growell Metal's spin-off of its electronics division resulted in the creation of a new company named Growell Electronics Inc ("Growell Electronics"). As a result of the spin-off, 30% of the Company's 891,100 common shares of Growell Metal were exchanged for an equal number of shares in the common stock of Growell Electronics. During the year ended December 31, 2002, the Company sold its shares in Growell Electronics for approximately \$1,432, resulting in a realized gain of \$832 (See Note 3). At December 31, 2002, the change in fair value of the investment in Growell Metal resulted in an unrealized gain of \$1,668, which is reported in comprehensive income in the accompanying consolidated financial statements. Currently, Growell Metal owns 92,167 shares (or approximately 0.002%) of the Company's outstanding common stock.



**LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES  
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Under the terms of a technology transfer agreement, the Company has engaged Growell Metal to produce Liquidmetal alloy ingots (“ingots”) for the Company to purchase and use as a raw material in the manufacturing of products and components made of Liquidmetal alloys. The agreement is for a two-year period beginning in February 2002. Under the terms of this cost-plus arrangement, Growell Metal is paid a processing fee plus the cost of the raw materials used to produce the ingots. During the year ended December 31, 2002, Growell Metal purchased \$3,270 of raw materials from the Company’s own raw material stock to use in the production of the ingots. The Company purchased \$3,669 of ingots from Growell Metal during the year ended December 31, 2002. The net profit on the sale of the raw materials sold to Growell Metal is netted against the cost of the ingots purchased from Growell Metal. At December 31, 2002, the Company had a payable to Growell Metal of \$90.

During the second quarter of 2002, the Company sold a machine to Growell Metal for \$269 to be used in the production of ingots to be purchased by the Company. Additionally, during the year ended December 31, 2002, the Company sold \$1,569 of furnace equipment to Growell Metal to produce ingots for the Company. The accumulated profit on these sales, \$80, was deferred and will be amortized against cost of sales over the remaining term of the technology transfer agreement between Growell Metal and the Company. During the year ended December 31, 2002, \$24 of the deferred profit was amortized into cost of sales. At December 31, 2002, the remaining deferred profit balance was \$56 and the related trade receivable balance due from Growell Metal was \$160.

While the Company was privately held, the Company’s chairman exercised a portion of his nonqualified stock options. The Company inadvertently did not collect the federal and state income taxes at the time of the exercise. The chairman has informed the Company that he has since paid all the necessary taxes. Management believes the exposure to the Company for penalties and interest, if any, is insignificant.

Other related party transactions include subordinated promissory notes issued to certain shareholders, the related interest incurred on the notes and the repayment of such notes (see Note 11). Additionally, two of the holders of the shareholder promissory notes are directors and one such note holder is an officer of the Company.

A company managed and partially owned by one of our directors provides technical support services and computer equipment to the Company. During the year ended December 31, 2002, the Company incurred \$122 of expenses and equipment purchases related to this arrangement. At December 31, 2002, the Company had an outstanding payable related to these transactions of \$7.

A company partially owned and managed by an employee of the Company leases this same employee from the Company for an amount equal to the employee’s salary. At December 31, 2002, a receivable of \$51 was due to the Company related to this arrangement.

During 2001, certain shareholders and officers provided a total of \$250 in short-term advances to Liquidmetal Korea that were fully repaid by December 31, 2001.

## **21. Subsequent Events**

On February 4, 2003, Liquidmetal Korea received 6,500,000 in South Korean Won, or \$5,488, in proceeds related to a note payable. The principal and interest is payable in equal month installments beginning eighteen months from the origination date until the maturity date on December 30, 2007. The note payable bears interest at an annual rate of 7.1%. In the event of delayed repayment, the interest rate increases to a maximum of 21%, depending on the length of time the repayment is delayed. Since this note payable is denominated in South Korean Won, the balance will fluctuate with the exchange rate between the U.S. Dollar and South Korea Won, resulting in the recognition in foreign exchange gains or losses which are included in other comprehensive income.

**Schedule II — Valuation and Qualifying Accounts**  
**Years Ended December 31, 2002, 2001 and 2000**  
(in thousands)

	Balance at Beginning of Period	Additions Charged to Expenses	Write-offs and Payments	Balance at End of Period
Allowance for doubtful accounts				
Year ended December 31, 2002	\$ 30	\$ 366	\$(119)	\$ 277
Year ended December 31, 2001	5	25	—	30
Year ended December 31, 2000	—	5	—	5
Product warranty accrual				
Year ended December 31, 2002	—	587	(152)	435
Year ended December 31, 2001	—	—	—	—
Year ended December 31, 2000	—	—	—	—
Deferred tax asset valuation allowance *				
Year ended December 31, 2002	20,758	6,880	—	27,638
Year ended December 31, 2001	12,125	8,633	—	20,758
Year ended December 31, 2000	9,086	3,039	—	12,125

\* The deferred tax asset valuation allowance represents a 100% reserve against the deferred tax asset accounts at December 31, 2002, 2001 and 2000, respectively.

## IMPROVED PROPERTY COMMERCIAL LEASE

1. PARTIES: The parties to this lease are the owner of the Property, Paul and Sherry Vick dba P&S Properties (Landlord) and the tenant, Liquidmetal Coatings, a division of Liquidmetal Technologies (Tenant).

2. LEASED PREMISES: Landlord leases to Tenant the following described real property, known as the "leased premises," along with all its improvements:

Number Bldg. "C" containing approximately 10,000 square feet of rentable area, located with the FM 3083 Industrial Park on the land known as 12070 FM 3083 Conroe, Texas 77301, which is legally described as [left blank] or as described on attached exhibit. "Property" means the building or complex in which the leased premises are located, inclusive of any common areas, drives, parking areas, and walks. The parties agree that the rentable area of the leased premises may not equal the actual or useable area within the leased premises and may include an allocation of common areas in the Property.

3. TERM:

A. Term: The term of this lease is 60 months, commencing on October 1st, 2002 (Commencement Date) and ending on September 30th, 2007 (Expiration Date).

B. Delay of Occupancy: If Tenant is unable to occupy the leased premises on the Commencement Date because of construction on the leased premises to be completed by Landlord that is not substantially complete or a prior tenant's holding over of the leased premises, Landlord will not be liable to Tenant for such delay and this lease will remain enforceable. In the event of such a delay, the Commencement Date will automatically be extended to the date Tenant is able to occupy the Property and the Expiration Date will also be extended by a like number of days, so that the term of this lease remains unchanged. If Tenant is unable to occupy the leased premises after the 30th day after the Commencement Date because of construction on the leased premises to be completed by Landlord that is not substantially complete or a prior tenant's holding over of the leased premises, Tenant may terminate this lease by giving written notice to Landlord before the leased premises becomes available to be occupied by tenant and Landlord will refund to Tenant any amounts paid to Landlord by Tenant. This Paragraph 3B does not apply to any delay in occupancy caused by cleaning or repairs.

4. RENT AND EXPENSES:

- A. Base Monthly Rent: On or before the first day of each month during this lease, Tenant will pay Landlord base monthly rent in the amount of \$4,850.00. The first full base monthly rent is due on or before October 1st, 2002 (NOTE: Upon signing of this lease agreement, tenant is to pay landlord the 1st and last months rent \$9,700.00)
- B. Prorated Rent: If the Commencement Date is on a day other than the first day of a month, Tenant will pay Landlord as prorated rent, an amount equal to the base monthly rent multiplied by the following fraction: the number of days from the Commencement Date to the first day of the following month divided by the number of days in the month in which this lease commences. The prorated rent is due on or before the Commencement Date.
- C. Additional Rent: In addition to any base monthly rent or prorated rent, Tenant will pay Landlord all other amounts as provided by the attached:

- (1) Net Addendum
- (2) Percentage Rent Addendum
- (3) Expense reimbursement Addendum
- (4) Expense Addendum for Single-Tenant Property
- (5) Parking Addendum
- (6) -----

- D. Place of Payment: Tenant will remit all amounts due Landlord under this lease to P & S Properties at 11449 Outpost Cove Dr., Willis, TX 77318, or to such other person or at such other place as Landlord may designate in writing.
- E. Method of Payment: Tenant must pay all rent timely without demand, deduction, or offset, except as permitted by law or this lease. Time is of the essence for the payment of rent. If Tenant fails to timely pay any amounts due under this lease or if any check of Tenant is returned to Landlord by the institution on which it was drawn, landlord may require Tenant to pay, in addition to any other available remedy, all amounts due under this lease by certified funds by providing written notice to Tenant.
- F. Late Charges: If Landlord does not actually receive a rent payment at the designated place of payment within 5 days after the date the rent is due, Tenant will pay Landlord a late charge equal to 5% of the base monthly rent. The mailbox is not the agent for receipt for Landlord. The late charge is a cost associated with the collection of rent and Landlord's

acceptance of a late charge does not waive Landlord's rights to exercise remedies under Paragraph 20.

G. Returned Checks: Tenant will pay \$25.00 (not to exceed \$25) for each check Tenant tenders to Landlord which is returned by the institution on which it is drawn for any reason, plus any late charges until Landlord receives payment.

5. SECURITY DEPOSIT: Upon execution of this lease, Tenant will pay a security deposit to landlord in the amount of \$4,850.00. Landlord may apply the security deposit to any amounts owed by Tenant under this lease. If Landlord applies any part of the security deposit during any time this lease is in effect to amounts owed by Tenant, Tenant must, within 120 days after receipt of notice from Landlord, restore the security deposit to the amount stated. Within a reasonable time after this lease ends, Landlord will refund the security deposit to Tenant less any amounts applied toward amounts owed by Tenant.

6. TAXES: Unless otherwise agreed by the parties, Landlord will pay all real property ad valorem taxes assessed against the leased premises.

7. UTILITIES: Tenant will pay all charges for the use of all utility services to the leased premises and any connection charges except the following which will be paid by Landlord: Water.

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NOTICE: Tenant should determine if any and all necessary utilities (e.g., water, gas, electricity, telephone, sewer, etc.) are available to the leased premises, are adequate for Tenant's intended use, and the cost to provide the necessary utilities.

8. TENANT'S INSURANCE:

A. During all times this lease is in effect, Tenant must maintain in full force and effect:

(1) public liability insurance from an insurer acceptable to Landlord in an amount not less than \$1,000,000.00 on an occurrence basis naming Landlord as an additional insured; and

(2) personal property damage insurance for Tenant's business operations on the leased premises from an insurer acceptable to Landlord in an amount not less than \$1,000,000.00, on an occurrence basis.

B. Before the Commencement Date, Tenant must provide landlord with a copy of the insurance certificates evidencing the required coverage. If the insurance coverage changes in any manner or degree at any time this lease is in effect, Tenant must provide Landlord a copy of an insurance certificate evidencing such change within 10 days of the change.

- C. If Tenant fails to maintain the required insurance in full force and effect at all times this lease is in full effect, Landlord may (1) purchase such insurance<sup>3</sup> on behalf of Tenant and Tenant must immediately reimburse Landlord for such expense; or (2) exercise Landlord's remedies under Paragraph 20.
- D. If there is an increase in Landlord's insurance premiums for the leased premises or Property or its contents that is caused by Tenant, Tenant's use of the leased premises, or any improvements made by or for Tenant, Tenant will, for each year this lease is in effect, pay Landlord the increase immediately after Landlord notifies Tenant of the increase.

9. USE AND HOURS: Tenant may use the leased premises for the following purpose and no other: (1) To warehouse welding wire; (2) Use of thermal research cell, (3) Production of thermal parts; (4) Normal office use pertaining to this business.

- A. Tenant's Normal Business Hours: Tenant's normal business hours are 7:00 a.m. to 5:00 p.m., Monday thru Saturday.
- B. Building Operating Hours: The building in which the leased premises are located maintains operating hours of 7:00 a.m. to 5:00 p.m., Monday thru Saturday. If Landlord is to provide HVAC services to the leased premises under this lease, Landlord is obligated to provide the HVAC services only during the specified building operating hours.

10. LEGAL COMPLIANCE:

- A. Tenant may not use or permit any part of the leased premises to be used for:
  - (1) any activity which is a nuisance or is offensive, noisy, or dangerous;
  - (2) any activity that interferes with any other tenant's normal business operations or Landlord's management of the Property;
  - (3) any activity that violates any applicable law, regulation, zoning ordinance, restrictive covenant, governmental order, owners' association rules, tenants' association rules, Landlord's rules or regulations, or this lease;
  - (4) any hazardous activity that would require any insurance premium on the Property or leased premises to increase or that would void any such insurance;
  - (5) any activity that violates any applicable federal, state, or local law, including but not limited to those laws related to air quality, water quality, hazardous materials, wastewater, waste disposal, air emissions, or other environmental matters;
  - (6) the permanent or temporary storage of any hazardous material; or

(7) Landlord recognizes and approves tenant installing the thermal spray research cell. Plans to be approved by Landlord.

- B. "Hazardous Material" means any pollutant, toxic substance, hazardous waste, hazardous material, hazardous substance, solvent, or oil as defined by any federal, state, or local environmental law, regulation, ordinance, or rule existing as of the date of this lease or later enacted.
- C. Landlord does not represent or warrant that the leased premises or Property conform to applicable restrictions, zoning ordinances, setback lines, parking requirements, impervious ground cover ratio requirements, and other matters that may relate to Tenant's intended use. Tenant must satisfy itself that the leased premises may be used as Tenant intends by independently investigating all matters related to the use of the leased premises or Property. Tenant agrees that it is not relying on any warranty or representation made by Landlord, Landlord's agent, or any broker concerning the use of the leased premises or Property.

11. SIGNS:

- A. Tenant may not post or paint any signs at, on, or about the leased premises or Property without Landlord's written consent. Landlord may remove any unauthorized sign, and tenant will promptly reimburse Landlord for any expense related to the removal of any unauthorized sign. Any authorized sign must comply with all laws, restrictions, zoning ordinances, and any governmental order relating to signs on the leased premises or Property. Landlord may temporarily remove any authorized sign to complete repairs or alterations to the leased premises or the Property.
- B. By providing written notice to Tenant before this lease ends, Landlord may require Tenant, upon move-out and at Tenant's expense, to remove without damage to the Property or leased premises, any or all signs that were placed on the Property or leased premises by or at the request of Tenant. Any signs that Landlord does not require Tenant to remove and that are fixtures become the property of the Landlord and must be surrendered to Landlord at the time this lease ends.

12. ACCESS BY LANDLORD:

- A. During Tenant's normal business hours Landlord may enter the leased premises for any reasonable purpose, including but not limited to purposes for repairs, maintenance, alterations, and showing the leased premises to prospective tenants or purchasers. Landlord may access the leased premises after Tenant's normal business hours with tenant's permission or to complete emergency repairs. Landlord will not unreasonably interfere with Tenant's business operations when accessing the leased premises.

- B. During the last 90 days of this lease, Landlord may place a "For Lease" or similarly worded sign in the leased premises.

13. MOVE-IN CONDITION: Tenant has inspected the leased premises and accepts it in its present (as-is) condition unless expressly noted otherwise in this lease. Landlord and any agent have made no express or implied warranties as to the condition or permitted use of the leased premises or Property.

14. MOVE-OUT CONDITION AND FORFEITURE OF TENANT'S PERSONAL PROPERTY:

- A. At the time this lease ends, Tenant will surrender the leased premises in the same condition as when received, normal wear and tear excepted. Tenant will leave the leased premises in a clean condition free of all trash, debris, personal property, hazardous materials, and environmental contaminants. Before this lease ends, Tenant will not provide Landlord with a report, by an environmental engineer or assessor acceptable to Landlord, dated not earlier than 20 days before the date this lease ends that indicates that no hazardous material or other environmental hazard is on or affects the leased premises.
- B. If Tenant leaves any personal property in the leased premises after Tenant surrenders possession of the leased premises, Landlord may: (1) require Tenant, at tenant's expense, to remove the personal property by providing written notice to Tenant; or (2) retain such personal property as forfeited property to Landlord.
- C. "Surrender" means vacating the leased premises and returning all keys and access devices to Landlord. "Normal wear and tear" means deterioration that occurs without negligence, carelessness, accident, or abuse.
- D. By providing written notice to Tenant before this lease ends, Landlord may require Tenant, upon move-out and at tenant's expense, to remove, without damage to the Property or leased premises, any or all fixtures that were placed on the Property or leased premises by or at the request of Tenant. Any fixtures that Landlord does not require Tenant to remove become the property of the Landlord and must be surrendered to Landlord at the time this lease ends.

15. MAINTENANCE AND REPAIRS:

- A. Cleaning: Tenant must keep the leased premises clean and sanitary and promptly dispose of all garbage in appropriate receptacles. Tenant will provide, at its expense, reasonable janitorial services to the leased



premises. Landlord will do all yard mowing and related maintenance to surrounding areas.

- B. Repairs of Conditions Caused by a Party: Each party must promptly repair a condition caused, either intentionally or negligently, by that party or that party's guests, patrons, invitees, contractors or permitted subtenants.
- C. Repair and Maintenance Responsibility: Except as provided by Paragraph 15B, the party designated below, at its expense, is responsible to maintain and repair the following specified items in the leased premises. The specified items must be maintained in: (i) clean condition; (ii) good repair; and (iii) operable condition. If a modification to any of the specified items is required by law or governmental regulation or order, the party designated to maintain the item must complete and pay the expense of the modification. The specified items include and relate only to real property in the leased premises. Tenant is responsible for the repair and maintenance of its personal property. Tenant to keep trash and debris picked up within 50 feet of the building. Landlord to maintain all grass and tree areas.

	N/A	LANDLORD	TENANT
(1) Foundation, exterior walls, roof, and other structural components.		X	
(2) Glass and windows			X
(3) Fire protection equipment and fire sprinkler systems			X
(4) Exterior & overhead doors, including closure devices, molding, locks and hardware			X
(5) Grounds maintenance, including landscaping and ground sprinklers			X
(6) Interior doors, including closure devices, frames, molding, locks, and hardware			X
(7) Parking areas and walks			X
(8) Plumbing systems, drainage systems, electrical systems *(including ballast and lamp replacement) & mechanical systems, except those specifically designated otherwise			X
(9) Heating Ventilation and Air Conditioning (HVAC) systems			X
(10) Signs			X
(11) Extermination and pest control, excluding wood-destroying insects			X
(12) Storage yards and storage buildings			X
(13) Wood-destroying insect treatment and repairs			X
(14) Cranes and related systems			X
(15) [Left Blank]			
(16) [Left Blank]			
(17) All other items and systems.			

- D. Repair Persons: Repairs must be completed by trained, qualified, and insured repair persons.

- E. HVAC Service Contract: If Tenant is responsible to maintain the HVAC system, Tenant is not required to maintain, at its expense, a regularly scheduled maintenance and service contract for the HVAC system. The maintenance and service contract must be purchased from a HVAC maintenance company that regularly provides such contracts to similar properties. If Tenant fails to maintain a required HVAC maintenance and service contract in effect at all times during this lease, Landlord may do so and charge Tenant the expense of such a maintenance and service contract or exercise Landlord's remedies under Paragraph 20.
- F. Common Areas: Landlord will maintain any common areas in the Property in a manner as Landlord determines to be in the best interest of the Property. Landlord will maintain any elevator and signs in the common area. Landlord may change the size, dimension, and location of any common areas, provided that such change does not materially impair Tenant's use and access to the leased premises. If a modification to the common areas is required by law or governmental regulation or order, Landlord will modify the item. Tenant has the non-exclusive license to use the common areas in compliance with Landlord's rules and restrictions. Tenant may not solicit any business in the common areas or interfere with any other person's right to use the common areas.
- G. Notice of Repairs: Tenant must promptly notify Landlord of any item that is in need of repair and that is Landlord's responsibility to repair. All requests for repairs to Landlord must be in writing.
- H. Failure to Repair: Landlord must make a repair for which Landlord is responsible within a reasonable period of time after tenant provides Landlord written notice of the needed repair. If tenant fails to repair or maintain an item for which Tenant is responsible within 10 days after Landlord provides Tenant written notice of the needed repair or maintenance, Landlord may: (1) repair or maintain the item, without liability for any damage or loss to Tenant, and Tenant must immediately reimburse Landlord for the cost to repair or maintain; or (2) exercise Landlord's remedies under Paragraph 20.

16. ALTERATIONS:

- A. Tenant may not alter, improve, or add to the Property or the leased premises without Landlord's written consent. Landlord will not unreasonably withhold consent for the tenant to make reasonable alterations, modifications, or improvements to the leased premises.
- B. Tenant may not alter any locks or any security devices on the Property or the leased premises without Landlord's consent. If Landlord authorizes the

changing, addition, or rekeying of any locks or other security devices, Tenant must immediately deliver the new keys and access devices to Landlord.

- C. If a governmental order requires alteration or modification to the leased premises, the party obligated to maintain and repair the item to be modified or altered as designated in Paragraph 15 will, at its expense, modify or alter the item in compliance with the order.
- D. Any alterations, improvements, fixtures or additions to the Property or leased premises installed by either party during the term of this lease will become Landlord's property and must be surrendered to Landlord at the time this lease ends, except for those fixtures Landlord requires Tenant to remove under Paragraph 14 or if the parties agree otherwise in writing.

17. LIENS: Tenant may not do anything that will cause the title of the Property or leased premises to be encumbered in any way. If Tenant causes a lien to be filed against the Property or leased premises, Tenant will within 60 days after Landlord demands Tenant to take action to remove the lien, pay the lien or take whatever action is necessary to cause the lien to be released of record. Tenant will provide Landlord a copy of any release Tenant obtains pursuant to this paragraph.

18. LIABILITY: To the extent permitted by law, Landlord is NOT responsible to Tenant or Tenant's employees, patrons, guests, or invitees for any damages, injuries, or losses to person or property caused by:

- A. an act, omission, or neglect of: Tenant, Tenant's agent, Tenant's guest, Tenant's employees, Tenant's patrons or Tenant's invitees;
- B. fire, flood, water leaks, ice, snow, hail, winds, explosion, smoke, riot, strike, interruption of utilities, theft, burglary, robbery, assault, vandalism, other persons, environmental contaminants, or other occurrences or casualty losses.

19. INDEMNITY: Tenant will indemnify and hold Landlord harmless from any property damage, personal injury, suits, actions, liabilities, damages, cost of repairs or service to the leased premises or Property, or any other loss caused, negligently or otherwise, by Tenant or tenant's employees, patrons, guests, or invitees.

20. DEFAULT:

- A. If Landlord fails to comply with this lease within 30 days after Tenant notifies Landlord of Landlord's failure to comply, Landlord will be in default and Tenant may seek any remedy provided by law. If, however, Landlord's non-

compliance reasonably requires more than 30 days to cure, Landlord will not be in default if the cure is commenced within the 30 day period and is diligently pursued.

- B. If landlord does not actually receive at the place designated for payment any rent due under this lease within 5 days after it is due, Tenant will be in default. If tenant fails to comply with this lease for any other reason within 14 days after landlord notifies Tenant of its failure to comply, Tenant will be in default.
- C. If Tenant is in default, Landlord may terminate Tenant's right to occupy the leased premises by providing tenant with at least 14 days written notice; Landlord will attempt to mitigate any damage or loss caused by Tenant's breach. If Tenant is in default, Tenant will be liable for:
  - (1) any lost rent;
  - (2) Landlord's cost of reletting the leased premises, including brokerage fees, advertising fees, and other fees necessary to relet the leased premises;
  - (3) repairs to the leased premises for use beyond normal wear and tear;
  - (4) all Landlord's costs associated with eviction of Tenant, such as attorney's fees, court costs, and prejudgment interest;
  - (5) all landlord's costs associated with collection of rent, such as collection fees, late charges, and returned check charges;
  - (6) cost of removing any equipment and trade-fixtures left on the leased premises by Tenant;
  - (7) cost to remove any trash, debris, personal property, hazardous materials, or environmental contaminants left by Tenant or Tenant's employees, patrons, guests, or invitees in the leased premises or Property; and
  - (8) any other recovery to which Landlord may be entitled by law.

21. ABANDONMENT, INTERRUPTION OF UTILITIES, REMOVAL OF TENANT'S PROPERTY, AND LOCKOUT: Chapter 93 of the Texas Property Code governs the rights and obligations of the parties with regard to: (a) abandonment of the leased premises; (b) interruption of utilities; (c) removal of Tenant's personal property; and (d) "lock-out" of Tenant.

22. HOLDOVER: If Tenant fails to vacate the leased premises at the time this lease ends, Tenant will become a tenant-at-will and must vacate the leased premises immediately upon receipt of demand from Landlord. No holding over by Tenant, with or without the consent of Landlord, will extend this lease. Tenant will indemnify Landlord and any prospective tenants for any and all damages caused by the holdover. Rent for any holdover period will be 2 times the base monthly rent plus any additional rent calculated on a daily basis and will be immediately due and payable daily without notice or demand.

23. LANDLORD'S LIEN AND SECURITY INTEREST: To secure tenant's performance under this lease, Tenant grants to Landlord a lien and security interest against all of Tenant's nonexempt personal property that is in the leased premises or Property. This lease is a security agreement for the purposes of the Uniform Commercial Code. Landlord may file a copy of this lease as a financing statement.
24. ASSIGNMENT AND SUBLETTING: Tenant may not assign this lease or sublet any part of the leased premises without Landlord's written consent. An assignment of this lease or subletting of the leased premises without Landlord's written consent is voidable by Landlord. If Tenant assigns this lease or sublets any part of the leased premises, Tenant will remain liable for all of Tenant's obligations under this lease regardless if the assignment or sublease is made with or without the consent of Landlord.
25. RELOCATION: [Left Blank]
26. SUBORDINATION:
- A. This lease and Tenant's leasehold interest are and will be subject, subordinate, and inferior to:
- (1) any lien, encumbrance, or ground lease not or hereafter placed on the leased premises or the Property by Landlord;
  - (2) all advances made under any such lien, encumbrance, or ground lease;
  - (3) the interest payable on any such lien or encumbrance;
  - (4) any and all renewals and extensions of any such lien, encumbrance, or ground lease;
  - (5) any restrictive covenant affecting the leased premises or the Property; and
  - (6) the rights of any owners' association affecting the leased premises or Property.
- B. Tenant must, on demand, execute any instrument subordinating this lease as Landlord may request, provided that such subordination is made on the condition that this lease and Tenant's rights under this lease are recognized and not disturbed by the lien-holder.
27. ESTOPPEL CERTIFICATES: Within 10 days after receipt of a written request from Landlord, Tenant will execute and deliver to Landlord an estoppel certificate that identifies: (a) when this lease commences and ends; (b) any amendments to this lease; (c) any rights that Tenant may have to extend this lease to purchase the Property or leased premises; (d) any default by Landlord; and (e) any other information reasonably requested in the certificate.

28. CASUALTY LOSS:

- A. Tenant must immediately notify Landlord of any casualty loss in the leased premises. Within 20 days after receipt of Tenant's notice of a casualty loss, Landlord will notify Tenant if the leased premises are less than or more than 50% unusable, on a per square foot basis, and if Landlord can substantially restore the leased premises within 120 days after Tenant notifies Landlord of the casualty loss.
- B. If the leased premises are less than 50% unusable and Landlord can substantially restore the leased premises within 120 days after Tenant notifies Landlord of the casualty, Landlord will restore the leased premises to substantially the same condition as before the casualty. If Landlord fails to substantially restore within the time required, Tenant may terminate this lease.
- C. If the leased premises are more than 50% unusable and Landlord can substantially restore the leased premises within 120 days after Tenant notifies Landlord of the casualty, Landlord may: (1) terminate this lease; or (2) restore the leased premises to substantially the same condition as before the casualty. If Landlord chooses to restore and does not substantially restore the leased premises within the time required, Tenant may terminate this lease.
- D. If Landlord notifies Tenant that Landlord cannot substantially restore the leased premises within 120 days after Tenant notifies Landlord of the casualty loss, Landlord may: (1) choose not to restore and terminate this lease; or (2) choose to restore, notify Tenant of the estimated time to restore, and give Tenant the option to terminate this lease by notifying Landlord within 10 days.
- E. If this lease does not terminate because of a casualty loss, rent will be reduced from the date Tenant notifies Landlord of the casualty loss to the date the leased premises are substantially restored by an amount proportionate to the extent the leased premises are unusable.

29. CONDEMNATION: If after a condemnation or purchase in lieu of condemnation the leased premises are totally unusable for the purposes stated in this lease, this lease will terminate. If after a condemnation or purchase in lieu of condemnation the leased premises are partially unusable for the purposes stated in this lease, this lease will continue and rent will be reduced in an amount proportionate to the extent the leased premises are unusable, but if a material portion of the premises is unusable, the Tenant shall have the right to terminate this lease. Any condemnation award or proceeds in lieu of condemnation are the property of Landlord and Tenant has

no claim to such proceeds or award. Tenant may seek compensation from the condemning authority for its moving expenses and damages to tenant's personal property.

30. ATTORNEY'S FEES: Any person who is a prevailing party in any legal proceeding brought under or related to the transaction described in this lease is entitled to recover prejudgment interest, reasonable attorney's fees, and all other costs of litigation from the non-prevailing party.

31. REPRESENTATIONS: Tenant's statements in this lease and application for rental are material representations relied upon by Landlord. Each party signing this lease represents that he or she is of legal age to enter into a binding contract and is authorized to sign the lease. If Tenant makes any misrepresentation in this lease or in any application for rental, Tenant is in default. Landlord is not aware of any material defect on the Property that would affect the health and safety of an ordinary person or any environmental hazard on or affecting the Property that would affect the health or safety of an ordinary person, except .  
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32. BROKERS FEES:

- A. N/A (Broker A) represents  
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 Landlord  Tenant. Broker A's fees will be paid pursuant to (choose 1 or 2)  
 (1) a separate written agreement between Broker A and  Landlord  Tenant  
 Broker \_\_\_\_  
 (2) the attached Addendum for Broker's Fee.
  
- B. N/A (Broker B) represents  
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 Landlord  Tenant. Broker B's fees will be paid pursuant to (choose 1 or 2)  
 (1) a separate written agreement between Broker B and  Landlord  Tenant  
 Broker \_\_\_\_  
 (2) the attached Addendum for Broker's Fee.
  
- C. N/A (Broker C) represents  
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 Landlord  Tenant. Broker C's fees will be paid pursuant to (choose 1 or 2)  
 (1) a separate written agreement between Broker C and  Landlord  Tenant  
 Broker \_\_\_\_  
 (2) the attached Addendum for Broker's Fee.

33. ADDENDA: Incorporated into this lease are the addenda, exhibits and other information marked in the Addenda and Exhibit section of the Table of Contents. If Landlord's Rules and regulations are made part of this lease, Tenant agrees to comply with the Rules and Regulations as Landlord may, at its discretion, amend from time to time.

34. AGREEMENT OF PARTIES:

- A. Entire Agreement: This lease contains the entire agreement between Landlord and Tenant and may not be changed except by written agreement.
- B. Binding Effect: This lease is binding upon and inures to the benefit of the parties and their respective heirs, executors, administrators, successors, and permitted assigns.
- C. Joint and Several: All Tenants are jointly and severally liable for all provisions of this lease. Any act or notice to, or refund to, or signature of, any one or more of the Tenants regarding any term of this lease, its renewal, or its termination is binding on all Tenants.
- D. Controlling Law: The laws of the State of Texas govern the interpretation, performance, and enforcement of this lease.
- E. Severable Clauses: If any clause in this lease is found invalid or unenforceable by a court of law, the remainder of this lease will not be affected and all other provisions of this lease will remain valid and enforceable.
- F. Waiver: Landlord's delay, waiver, or non-enforcement of acceleration, contractual or statutory lien, rental due date, or any other right will not be deemed a waiver of any other or subsequent breach by Tenant or any other term in this lease.
- G. Quiet Enjoyment: Provided that tenant is not in default of this lease, Landlord covenants that tenant will enjoy possession and use of the leased premises free from serious interference.
- H. Force Majeure: If Landlord's performance of a term in this lease is delayed by strike, lock-out, shortage of material, governmental restriction, riot, flood, or any cause outside Landlord's control, the time for Landlord's performance will be abated until after the delay.

35. NOTICES: All notices under this lease must be in writing and are effective when hand-delivered, sent by mail, or sent by facsimile transmission to:

Tenant  
At the address of the leased premises.

Landlord: P&S Properties  
At 11449 Outpost Cove  
Willis, TX 77318  
Fax: (936) 756-1755

with a copy to: \_\_\_\_\_  
at \_\_\_\_\_  
\_\_\_\_\_

with a copy to \_\_\_\_\_  
at \_\_\_\_\_  
\_\_\_\_\_





SUPPLEMENTAL ADDENDUM  
TO  
IMPROVED PROPERTY COMMERCIAL LEASE

THIS SUPPLEMENTAL ADDENDUM, dated September 11, 2002, is incorporated into and made a part of that certain Improved Property Commercial lease of even date herewith (the "Lease") by and between PAUL AND SHERRY VICK dba P&S PROPERTIES ("Landlord") and LIQUIDMETAL TECHNOLOGIES, a California Corporation ("Tenant").

WITNESSETH:

WHEREAS, Landlord and Tenant desire to hereby set forth certain terms and conditions as a supplement to the Lease, and the terms and conditions set forth in this Supplemental Addendum shall be incorporated into and made a part of the Lease.

NOW THEREFORE, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. In connection with Section 3(A) of the Lease, tenant shall have the right to defined in the Lease), provided that tenant delivers to Landlord written notice of renewal at least three (3) months prior to the Expiration Date. In the event of such a renewal, the base monthly rent for the renewal term shall be equal to the market rate for the premises (to be determined on the basis of other premises of a comparable size, type, and location). Tenant and Landlord shall work together in good faith to determine what such market rate shall be, but if they cannot come to agreement on such market rate, then the market rate shall be deemed to be equal to the average of (i) the market rate as determined by a real estate appraiser selected by Tenant, and (ii) the market rate as determined by a real estate appraiser selected by Landlord.
2. Landlord, at its own cost and expense, shall cause to be maintained on the leased premises fire insurance and other casualty insurance in appropriate amounts for buildings of such type, size, nature, and use.
3. In connection with Section 8 and 10 and of the lease, Landlord and Tenant agree that Tenant shall be permitted to bring only that quantity of hazardous materials onto the leased premises necessary to accomplish its own business and Tenant may utilize such materials thereon, if and only if, Tenant secures all permits, licenses, and approvals of any Federal, State, or local governmental agency necessary for such activities (including any permits from OSHA or the EPA) and complies with all applicable laws, rules and regulations in connection with such activities and disposal of such chemicals, if applicable. In connection with its responsibilities under Sections 8 and 10

respectively, tenant shall provide Landlord and Tenant's Insurer with all material data safety sheets for each such hazardous chemical intended to be brought on the premises and Tenant agrees to update Landlord and Insurer as such chemicals change from time to time. Tenant shall include in the insurance it purchases in compliance with Paragraph No. 10 insurance sufficient to cover Landlord from hazards typically associated with the use or storage of such hazardous chemicals.

4. Landlord acknowledges that Tenant will be keeping proprietary and/or confidential information and/or materials on the leased premises, and Landlord agrees that if Landlord becomes aware of any nonpublic information as a result of Landlord's access to the leased premises (whether pursuant to Section 12 of the Lease or otherwise), then Landlord agrees that Landlord will not disclose such information to any third party without Tenant's prior written consent.
5. Notwithstanding Section 15(C) of the Lease, Landlord will repair any items listed in Section 15(C) if and to the extent that such items are covered by a warranty held by Landlord.
6. In addition to Section 19 of the Lease, Landlord will indemnify and hold Tenant harmless from any property damage, personal injury, suits, actions, liabilities, damages, cost of repairs or service, or any other loss caused, negligently or otherwise, by Landlord or Landlord's employees, patrons, guests, or invitees.
7. Notwithstanding the provisions of Section 22 of the Lease, at the time that the Lease ends, Tenant may extend the term of the Lease for a period of up to six (6) additional months at a monthly rental rate period equal to 1.25 times the base monthly rent then in effect, provided that tenant gives Landlord notice of Tenant's intent to extend no later than three (3) months prior to the originally scheduled Expiration Date for the Lease. This extension shall not constitute a "holdover" and will not be deemed to be a breach of the Lease. In the event of such a six-month extension, Tenant shall have the right, upon expiration of such six-month extension, to renew the Lease pursuant to paragraph 1 of this Supplemental Addendum.
8. Landlord acknowledges that all improvements and other work items reflected on the Leasehold Construction Addendum (as attached to the Lease) shall be at the sole cost and expense of Landlord.
9. Whenever the Lease requires Tenant to obtain the consent of Landlord for a particular action or inaction, Landlord agrees that such consent shall not be unreasonably withheld, conditioned, or delayed. This paragraph 9 shall apply to the entire Lease and all appendices, attachments, addenda, and exhibits thereto.

IN WITNESS WHEREOF, the parties have executed this Supplemental Addendum on the day and year first written above.

LANDLORD:

TENANT:

By: /s/ Paul Vick  
-----  
Paul Vick

LIQUIDMETAL TECHNOLOGIES

By: /s/ Sherry Vick  
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Sherry Vick

By: /s/ David G. Binnie  
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David G. Binnie

## EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT (this "Agreement") is made and entered into effective as of September 1, 2002 (the "Effective Date"), by and between LIQUIDMETAL TECHNOLOGIES, a California corporation (the "Company"), and John A. Grant, Jr. (the "Employee").

## RECITALS

WHEREAS, the Employee desires to be employed by the Company upon the terms and conditions set forth in this Agreement; and

WHEREAS, the Company desires to assure itself of the Employee's continued employment in the capacities set forth herein.

NOW, THEREFORE, in consideration of the foregoing recitals and for other good and valuable consideration, the parties hereto covenant and agree as follows:

1. **EMPLOYMENT.** The Company hereby employs Employee, and the Employee hereby accepts such employment, upon the terms and conditions set forth in this Agreement.

2. **TERM.** Subject to the terms and conditions of this Agreement, including, but not limited to, the provisions for termination set forth in Section 5 hereof, the employment of the Employee under this Agreement shall commence on the Effective Date and shall continue through the close of business on July 31, 2006, (the "Initial Term"). Upon the expiration of the Initial Term, the Employee's employment with the Company will continue on an "at-will" basis and may be terminated by Employee or the Company for any reason and at any time, provided that the terminating party shall provide at least thirty (30) days prior written notice of the termination to the other party (unless the termination is pursuant to clause (2), (3), or (4) of Section 5(d), in which case the Employee's employment may be terminated immediately).

3. **DUTIES.** Employee will serve as the Director, Governmental Relations of the Company. In this capacity, Employee shall perform such reasonable government-related responsibilities and duties as may be assigned to the Employee from time to time by the Board of Directors, Chairman of the Board, President, or Chief Executive Officer of the Company, or their designee. The Employee will devote such time, attention, skill, and energy to the business of the Company as shall be necessary to perform the duties assigned to him under this Agreement, and will use the Employee's best efforts to promote the success of the Company's business, and will cooperate fully with the Board of Directors in the advancement of the best interests of the Company. Furthermore, the Employee shall assume and competently perform such reasonable responsibilities and duties as may be assigned to the Employee from time to time by the Board of Directors, Chairman of the Board, President, or Chief Executive Officer of the Company. To the extent that the Company shall have any parent company, subsidiaries, affiliated corporations, partnerships, or joint ventures (collectively "Related Entities"), the Employee shall perform such duties to promote these entities and their respective interests to the same extent as the interests of the Company without additional compensation. The Employee may engage in other business activities, provided that in doing so he does not violate any of the provisions of this Agreement

(including Sections 6 and 7 hereof); and provided further that such other business activities do not interfere with the performance of his duties and obligations to the Company under this Agreement. At all times, the Employee agrees that the Employee has read and will abide by, and prospectively will read and abide by, any employee handbook, policy, or practice that the Company or Related Entities has or hereafter adopts with respect to its employees generally. Employee may perform his duties of employment from any location he selects that is mutually agreed to by the Company.

#### 4. COMPENSATION.

(a) Annual Base Salary. As compensation for Employee's services and in consideration for the Employee's covenants contained in this Agreement, the Company shall pay the Employee an annual base salary rate of One Hundred Seventy Five Thousand and No/100 Dollars (\$175,000.00) from September 1 through December 31, 2002. Effective January 1, 2003, the Company shall pay the Employee an annual base salary rate of Eighty Seven Thousand Five Hundred and No/100 Dollars (\$87,500.00) Such annual base salary shall be payable in equal installments in accordance with the policy then prevailing for the Company's salaried employees generally, and the annual base salary shall be subject to any tax and other withholdings or deductions required by applicable laws and regulations. The Employee's annual base salary will be reviewed by the Board of Directors or Chief Executive Officer of the Company not less frequently than annually, and the annual base salary may be adjusted upward or downward, but not to an amount less than Eighty Seven Thousand Five Hundred and No/100 Dollars (\$87,500.00), in the sole discretion of the Board of Directors or Chief Executive Officer.

(b) Bonuses. In addition to the Employee's annual base salary, during the term of the Employee's employment hereunder, the Employee shall be entitled to only such bonuses as may be granted to the Employee by the Board of Directors or Chief Executive Officer of the Company, in their sole discretion. For purposes of clarification, Employee will not be a participant in the Company's 2002 Annual Performance Bonus Program.

(c) Other Benefits. During the term of the Employee's employment hereunder, the Employee shall be eligible to participate in such pension, life insurance, health insurance, disability insurance and other benefits plans, if any, which the Company may from time to time make available to similar-level employees.

(d) Reimbursement of Expenses. The Employee shall be reimbursed for all reasonable and customary travel and other business expenses incurred by Employee in the performance of Employee's duties hereunder, provided that such reimbursement shall be subject to, and in accordance with, any expense reimbursement policies and/or expense documentation requirements of the Company that may be in effect from time to time, and further provided that all travel and entertainment expenses shall be pre-approved by the Company.

(e). Stock Options. The Employee shall retain the employee stock options that he was granted prior to the Effective Date of this Agreement under the Company's 1996 Stock Option Plan (the "Plan"), and Employee acknowledges that such options shall continue to be governed by and subject to the terms and conditions of the Plan, including the termination provisions set forth in Sections 6(f), (g), and (h) of the Plan, and that such options shall also be subject to the terms and conditions of that certain Stock Option Agreement, dated August 1, 2001, by and between the Company and Employee.

5. TERMINATION.

(a) Death. The Employee's employment under this Agreement shall terminate immediately upon Employee's death. In the event of a termination pursuant to this Section 5(a), the Employee's estate shall be entitled to receive any unpaid base salary owing to Employee up through and including the date of the Employee's death.

(b) Disability. If, during the term of the Employee's employment hereunder, the Employee becomes physically or mentally disabled in accordance with the terms and conditions of any disability policy covering the Employee or, if due to any physical or mental condition, the Employee becomes unable for a period of more than sixty (60) days during any six-month period to perform Employee's duties hereunder on substantially a full-time basis as determined by the Company in its sole discretion, the Company may, at its option, terminate the Employee's employment upon not less than thirty (30) days written notice. In the event of a termination pursuant to this Section 5(b), the Employee shall be entitled to receive any unpaid base salary owing to Employee up through and including the effective date of Termination. The benefits of short-term and long-term disability insurance, as may be arranged for through the Company, would continue in accordance with the provisions of said insurance plan.

(c) Termination By Company Without Cause. In addition to the other termination provisions of this Agreement, the Company may terminate the Employee's employment at any time without cause (a "Termination Without Cause"). In the event of a Termination Without Cause, the Employee shall be entitled to receive severance compensation in an aggregate total amount equal to the total base salary paid to Employee during the 24-month period immediately preceding the effective date of the Termination Without Cause (the "Severance Amount"). The Severance Amount shall be paid in equal installments (in accordance with the policy then prevailing for the Company's salaried employees generally) during the 24-month period beginning on the effective date of the Termination Without Cause. In addition, the Company shall reimburse Employee for premiums paid for the continuation of group health care coverage under the Consolidated Omnibus Budget Reconciliation Act of 1986 (COBRA) for a period of up to eighteen (18) months following the effective date of a Termination Without Cause. Employee agrees and acknowledges, however, that Employee will forfeit the right to receive payments of the Severance Amount and COBRA reimbursement payments during the Severance Period immediately upon the Employee's breach of any covenant set forth in Section 6 of this Agreement.

(d) Termination By Company With Cause. The Company may terminate the Employee's employment at any time with Cause. As used in this Agreement, "Cause" shall include the following: (1) the Employee's failure or inability to perform Employee's duties under this Agreement; (2) dishonesty, misconduct, or unlawful acts that adversely affect the Company; (3) a material violation of the Company's policies or practices which reasonably justifies immediate termination; (4) pleading guilty or no contest to, or conviction of, a felony or any crime involving moral turpitude, fraud, dishonesty, or misrepresentation; (5) the commission by the Employee of any act which could reasonably be expected to materially injure the reputation, business, or business relationships of the Company or Related Entities; (6) the Employee's inability to perform an essential function of Employee's position; or (7) any material breach by Employee of this Agreement. The Company may

terminate this Agreement for Cause, as defined in clauses (1), (5), (6) and (7) above, upon thirty days prior written notice (the "Cause Notification Period") to Employee, but such termination shall only become effective in the event of Employee's failure to cure the applicable breach or violation, to the reasonable satisfaction of Company, prior to the end of the Cause Notification Period. The Company may terminate this Agreement for Cause, as defined in clauses (2), (3), and (4) above, at any time with no notice. In the event of a termination for Cause, the Company shall be relieved of all its obligations to the Employee provided for by this Agreement as of the effective date of termination, and all payments to the Employee hereunder shall immediately cease and terminate as of such date, except that Employee shall be entitled to the annual base salary hereunder up to and including the effective date of termination. Termination for cause or not for cause shall not, however, invalidate any stock option grants which are fully vested as of the date of termination.

6. NONCOMPETITION, NONSOLICITATION, AND NONDISCLOSURE COVENANTS.

(a) Rationale for Restrictions. Employee acknowledges that Employee's services hereunder are of a special, unique, and extraordinary character, and Employee's position with the Company places Employee in a position of confidence and trust with customers, suppliers, and other persons and entities with whom the Company and its Related Entities have a business relationship. The Employee further acknowledges that the rendering of services under this Agreement will likely require the disclosure to Employee of Confidential Information (as defined below) relating to the Company and/or Related Entities. As a consequence, the Employee agrees that it is reasonable and necessary for the protection of the goodwill and legitimate business interests of the Company and Related Entities that the Employee make the covenants contained in this Section 6, that such covenants are a material inducement for the Company to employ the Employee and to enter into this Agreement, and that the covenants are given as an integral part of and incident to this Agreement.

(b) Noncompetition and Nonsolicitation Covenants. As used herein, the term "Restrictive Period" means the time period commencing on the Effective Date of this Agreement and ending on the second (2nd) anniversary of the date on which the Employee's employment by the Company (or any Related Entity) expires or is terminated. The Employee agrees that, during the Restrictive Period, the Employee will not utilize his or her knowledge of the business of the Company or his or her relationships with investors, suppliers, customers, clients, or financial institutions to compete with the Company or any of the Related Entities in any business which is the same as, or similar to, any business conducted by the Company or any of the Related Entities at any time during the Restrictive Period (a "Covered Business"). Additionally, the Employee agrees that the Employee will not engage in any of the following acts anywhere in the world during the Restrictive Period:

- (i) directly or indirectly engage or invest in; own, manage, operate, finance, control, or participate in the ownership, management, operation, financing, or control of; be employed by, associated with, or in any manner connected with; lend the Employee's name or any similar name to; lend Employee's credit to; or render services or advice to, any business which competes with, is engaged in, or carries on any aspect of a Covered Business;
- (ii) directly or indirectly assist, promote or encourage any existing or potential employees, customers, clients, or vendors of the Company or any Related Entity, as well as any other parties which have a business relationship with the



Company or a Related Entity, to terminate, discontinue, or reduce the extent of their relationship with the Company or a Related Entity;

- (iii) directly or indirectly solicit business of the same or similar type as a Covered Business, from any person or entity known by the Employee to be a customer or client of the Company, whether or not the Employee had contact with such person or entity during the Employee's employment with the Company;
- (iv) disparage the Company, any Related Entities, and/or any shareholder, director, officer, employee, or agent of the Company or any Related Entity; and/or
- (v) engage in any practice the purpose of which is to evade the provisions of this Section 6 or commit any act which adversely affects the Company, any Related Entity, or their respective businesses.

The Employee acknowledges and agrees that, in light of the unique nature of the Company's business, the Company will market its products on a worldwide basis and will compete with various companies and businesses across and world. Accordingly, the Employee agrees that the geographic scope of the above covenants is a reasonable means of protecting the Company's (and the Related Entities') legitimate business interests. Notwithstanding the foregoing covenants, nothing set forth in this Agreement shall prohibit the Employee from owning the securities of (i) corporations which are listed on a national securities exchange or traded in the national over-the-counter market in an amount which shall not exceed 5% of the outstanding shares of any such corporation or (ii) any corporation, partnership, firm or other form of business organization which does not compete with, is not engaged in, and does not carry on any aspect of, either directly or indirectly through a subsidiary or otherwise, any Covered Business.

(c) Disclosure of Confidential Information. The Employee acknowledges that the inventions, innovations, software, trade secrets, business plans, financial strategies, finances, and all other confidential or proprietary information with respect to the business and operations of the Company and Related Entities are valuable, special, and unique assets of the Company. Accordingly, the Employee agrees not to, at any time whatsoever either during or after the Employee's term of employment with the Company, disclose, directly or indirectly, to any person or entity, or use or authorize any person or entity to use, any confidential or proprietary information with respect to the Company or Related Entities without the prior written consent of the Company, including, without limitation, information as to the financial condition, results of operations, identities of clients or prospective clients, products under development, acquisition strategies or acquisitions under consideration, pricing or cost information, marketing strategies or any other information relating to the Company or any of the Related Entities which could be reasonably regarded as confidential (collectively referred to as "Confidential Information"). However, the term "Confidential Information" does not include any information which is or shall become generally available to the public other than as a result of disclosure by the Employee or by any person or entity which the Employee knows (or which the Employee reasonably should know) has a duty of confidentiality to the Company or a Related Entity with respect to such information. In addition to the foregoing, Company will be fully entitled to all of the protections and benefits afforded by the Florida Uniform Trade Secrets Act and other applicable law.

(d) Prevention of Premature Disclosure of Information. The Employee agrees and acknowledges that, because the success of the Company is heavily dependent upon maintaining the secrecy of the Company's Confidential Information and preventing the premature public disclosure of the Company's proprietary information and technology, the Employee agrees to use the Employee's best efforts and his or her highest degree of care, diligence, and prudence to ensure that no Confidential Information prematurely leaks or otherwise prematurely makes its way into the public domain or any public forum, including, without limitation, into any trade publications, internet chat rooms, or other similar forums. In the event that the Employee becomes aware of any premature leak of Confidential Information or becomes aware of any circumstances creating a risk of such a leak, the Employee shall immediately inform the Board of Directors, the Chief Executive Officer, or the Employee's supervisor of such leak or of such circumstances.

(e) Removal and Return of Proprietary Items. The Employee will not remove from the Company's premises or any other mutually agreed upon work location (except to the extent such removal is for purposes of the performance of the Employee's duties at home or while traveling, or except as otherwise specifically authorized by the Company) any document, record, notebook, plan, model, component, device, or computer software or code, whether embodied in a disk or in any other form (collectively, the "Proprietary Items"). The Employee recognizes that, as between the Company and the Employee, all of the Proprietary Items, whether or not developed by the Employee, are the exclusive property of the Company. Upon termination of Employee's employment with the Company by either party (regardless of the reason for termination), or upon the request of the Company during the term of employment, the Employee will return to the Company all of the Proprietary Items in the Employee's possession or subject to the Employee's control, and the Employee shall not retain any copies, abstracts, sketches, or other physical embodiment of any of the Proprietary Items.

(f) Enforcement and Remedies. In the event of any breach of any of the covenants set forth in this Section 6, the Employee recognizes that the remedies at law will be inadequate and that in addition to any relief at law which may be available to the Company for such violation or breach and regardless of any other provision contained in this Agreement, the Company shall be entitled to equitable remedies (including an injunction) and such other relief as a court may grant after considering the intent of this Section 6. Additionally, the period of time applicable to any covenant set forth in this Section 6 will be extended by the duration of any violation by Employee of such covenant. In the event a court of competent jurisdiction determines that any of the covenants set forth in this Section 6 are excessively broad as to duration, geographic scope, prohibited activities or otherwise, the parties agree that this covenant shall be reduced or curtailed to the extent, but only to the extent, necessary to render it enforceable.

7. EMPLOYEE INVENTIONS.

(a) Definition. For purposes of this Agreement, "Employee Invention" means any idea, invention, technique, modification, process, or improvement (whether patentable or not), any industrial design (whether registerable or not), any mask work, however fixed or encoded, that is suitable to be fixed, embedded or programmed in a semiconductor product (whether recordable or not), and any work of authorship (whether or not copyright protection may be obtained for it) created, conceived, or developed by the Employee, either solely or in conjunction with others, during the Employee's employment with the Company or during the twenty four (24) month period following such employment, that relates in any way to, or is useful in any manner in, the businesses then being conducted or proposed to be conducted by the Company or any Related Entity.

(b) Ownership of Employee Inventions. Employee agrees and acknowledges that all Employee Inventions will belong exclusively to the Company and that all Employee Inventions are works made for hire and the property of the Company, including any copyrights, patents, semiconductor mask protection, or other intellectual property rights pertaining thereto. If it is determined that any such works are not works made for hire, the Employee hereby assigns to the Company all of the Company's right, title, and interest, including all rights of copyright, patent, semiconductor mask protection, and other intellectual property rights, to or in such Employee Inventions. The Employee covenants that the Employee will promptly:

- (i) disclose to the Company in writing any Employee Invention;
- (ii) assign to the Company or to a party designated by the Company, at the Company's request and without additional compensation, all of the Employee's right to the Employee Invention for the United States and all foreign jurisdictions;
- (iii) execute and deliver to the Company such applications, assignments, and other documents as the Company may request in order to apply for and obtain patents or other registrations with respect to any Employee Invention in the United States and any foreign jurisdictions;
- (iv) sign all other papers necessary to carry out the above obligations; and
- (v) give testimony and render any other assistance in support of the Company's rights to any Employee Invention.

8. ESSENTIAL AND INDEPENDENT COVENANTS. The Employee's covenants in Sections 6 and 7 of this Agreement are independent covenants, and the existence of any claim by the Employee against the Company under this Agreement or otherwise will not excuse the Employee's breach of any covenant in Section 6 or 7.

9. REPRESENTATIONS AND WARRANTIES BY THE EMPLOYEE. The Employee represents and warrants to the Company that the execution and delivery by the Employee of this Agreement do not, and the performance by the Employee of the Employee's obligations hereunder will not, with or without the giving of notice or the passage of time, or both: (a) violate any judgment, writ, injunction, or order of any court, arbitrator, or governmental agency applicable to the Employee, or (b) conflict

with, result in the breach of any provisions of or the termination of, or constitute a default under, any agreement to which the Employee is a party or by which the Employee is or may be bound, including, without limitation, any noncompetition agreement or similar agreement.

10. NOTICES. For purposes of this Agreement, notices and all other communications provided for herein shall be in writing and shall be deemed to have been duly given when hand-delivered, sent by facsimile transmission (as long as receipt is acknowledged), or mailed by United States certified or registered mail, return receipt requested, postage prepaid, addressed to the address or facsimile number for each party set forth on the signature page hereto, or to such other address or facsimile number as either party may have furnished to the other in writing in accordance herewith, except that a notice of change of address shall be effective only upon receipt.

11. MISCELLANEOUS. No provision of this Agreement may be modified or waived unless such waiver or modification is agreed to in writing signed by both of the parties hereto. No waiver by any party hereto of any breach by any other party hereto shall be deemed a waiver of any similar or dissimilar term or condition at the same or at any prior or subsequent time. This Agreement is the entire agreement between the parties hereto with respect to the Employee's employment by the Company, and there are no agreements or representations, oral or otherwise, expressed or implied, with respect to or related to the employment of the Employee which are not set forth in this Agreement. This Agreement shall be binding upon, and inure to the benefit of, the Company, its respective successors and assigns, and the Employee and Employee's heirs, executors, administrators and legal representatives. The duties and covenants of the Employee under this Agreement, being personal, may not be delegated or assigned by the Employee without the prior written consent of the Company, and any attempted delegation or assignment without such prior written consent shall be null and void and without legal effect. The parties agree that if any provision of this Agreement shall under any circumstances be deemed invalid or inoperative, the Agreement shall be construed with the invalid or inoperative provision deleted and the rights and obligations of the parties shall be construed and enforced accordingly.

12. GOVERNING LAW; RESOLUTION OF DISPUTES. The validity, interpretation, construction, and performance of this Agreement shall be governed by the laws of the State of Florida without regard to principles of choice of law or conflicts of law thereunder. Any action or proceeding seeking to enforce any provision of, or based on any right arising out of, this Agreement may be brought against either of the parties in the courts of the State of Florida, County of Hillsborough, or, if it has or can acquire jurisdiction, in the United States District Court located in Hillsborough County, Florida, and each of the parties consents to the jurisdiction of such courts (and of the appropriate appellate courts) in any such action or proceeding and waives any objection to venue laid therein. Process in any action or proceeding referred to in the preceding sentence may be served on either party anywhere in the world. THE PARTIES HEREBY WAIVE A JURY TRIAL IN ANY LITIGATION ARISING UNDER OR RELATING TO THIS AGREEMENT.

13. COUNTERPARTS; FACSIMILE SIGNATURES. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Agreement may be effective upon the execution and delivery by any party hereto of facsimile copies of signature pages hereto duly executed by such party; provided, however, that any party delivering a facsimile signature page covenants and agrees to deliver promptly after the date hereof two (2) original copies to the other party hereto.

14. TERMINATION OF PRIOR EMPLOYMENT AGREEMENT. The Employee and the Company agree and acknowledge that this Employment Agreement supercedes and replaces that certain Employment Agreement, dated August 1, 2001, between the Employee and the Company (the "Prior Employment Agreement"). Accordingly, the Employee and the Company agree and acknowledge that the Prior Employment Agreement is terminated as of the Effective Date and that neither Employee neither the Company shall have any further rights, obligations, or duties thereunder as of the Effective Date. Employee further agrees and acknowledges that he has received all salary, bonus, and other amounts or compensation due or payable to Employee under the Prior Employment Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

LIQUIDMETAL TECHNOLOGIES

By: /s/ John Kang

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John Kang, President and CEO

Liquidmetal Technologies  
100 N. Tampa Street Suite 3150  
Tampa, FL 33602  
Facsimile Number: [813-314-0720]

EMPLOYEE

By: /s/ John A. Grant, Jr.

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Printed Name: John A. Grant, Jr.

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Address and Facsimile Number:  
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\* To be filled in by the bank

Responsible Associate	Assistant Manager/ Manager	Associate General Manager	Associate Branch Manager
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Bank Account

Name of the Borrower

Contact Info

CREDIT SERVICE AGREEMENT  
(For Corporate Clients)

To: KOOKMIN BANK

[\*\*\*\*\*], 20

Liquidmetal Korea Co., Ltd.  
Representative Director  
Hong, Sung Taek

[Borrower] Name (seal)

Address:

Confirmed by the above-named  
( (MM), (DD), 20xx)

Position:  
Name:

In obtaining a credit loan from Kookmin Bank, Ltd., I acknowledge that this transaction is subject to the "Bank Credit Service Master Agreement (including the Deposit Agreement and the Trust Service Agreement in the cases of the automated loans based on overall bank accounts and the loans tied to bank deposits)" in accordance with the following conditions and hereby ascertain and definitely agree to each of the following provisions:

SECTION 1 TERMS AND CONDITIONS OF THE TRANSACTION

The terms and conditions of the transaction are as follows (In case there are multiple types of transactions, the borrower will tick the square box " " below after listening to the explanations of a bank representative.

Credit Classification (Type of Credit)	Corporate financing for general facility ( )	Types of Transaction	Line of credit transaction [X] Individual transaction
Amount of Credit (Limit)	Six and a Half Billion (Legal Tender of (Country Name)		Won )
Credit Origination Date	February [*], 2003	Last date of the credit extension period (Final Repayment Date)	February [*], 2008 (1 revolving cycle: month(s))
Interest Rate	7.1% per annum	Rate of Delay Penalty	% per annum Subject to the additional Agreement Relating to Delay Penalty

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How to calculate interest and delay      Interest shall be calculated ([-] a monthly basis; [ ] on a daily basis), and delay penalties shall be calculated on a daily basis. One year is deemed to have 365 days penalty for the purpose of calculation on a daily basis. However, customary international and commercial practices shall be applicable to the transactions denominated in foreign currencies.  
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Credit provision method      [-] To be provided in full on the loan origination day.  
[ ] To be provided as per request by the loan applicant who meets certain requirements.  
[ ] Bank will verify the purpose of financing and the required amounts based on documentary evidence or the target achievement ratio based on work-in-progress, facilities and equipment, and in-kind materials of substantiation, and then provide loan in several installments. (In this case, the period of deferment, the ending date of the credit extension period, and the agreed due date of repayment shall be determined on the basis of the date when the first installment of the loan is provided.)  
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Repayment method      [ ] To be repaid in full on the ending date of the credit extension period.  
[ ] To be repaid at discretion, insofar as it is paid in full in lump-sum before the ending date of each loan payment cycle, with the entire loan to be paid off in full on the ending date of the credit extension period.  
[ ] Repayment shall be made in installments on the (    ) day of each month in equal payments of ([ ] principal and interests, [ ] principal).  
[-] It shall be deferred for ( 1 ) year and (6) months from the loan origination date, and principal shall be repaid in equal installments every ( 1 ) month thereafter.  
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When and how to pay pay interest      [-] The initial payment of interest shall be paid within ( 1 ) month from the loan interest origination date, and thereafter, interest shall be paid within ( 1 ) month from the date following the last day of the immediately prior interest payment cycle.  
[ ] The initial payment of interest shall be made on the loan origination date, and thereafter, interest shall be paid in advance on the last day of the immediately prior interest payment cycle.  
[ ] To be paid in advance by the day before the date of the note.  
[ ] To be paid each month, on the monthly closing day set by the bank.  
[ ] To be paid on the (    ) day of every month.  
[ ] To be paid on the repayment date of the principal installment repayment date or on the monthly contribution payment date.  
[ ] To be paid on the (    ) day of every (    ) month(s) from the loan origination date during the period of deferment, and on the principal installment repayment date of the principal thereafter.  
[ ] To be paid on the interest payment date set separately.  
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SECTION 2 DELAY PENALTY

1. In the event of failure to make interest payment, installment-based repayment, and principal and interest to be paid in installments, a delay penalty shall be paid for the amount due.
2. In the event of default on the ending date of the credit extension period, or in the event of loss of time benefit under Section 7 (including Section 8 Failure to Perform Repurchase Claim) of the Bank Credit Service Master Agreement, the delay penalty shall be paid for the balance of the loan thereafter.
3. In case of Section 10 Paragraphs 4 and 5, delay penalty shall be paid immediately for the loan balance after offset or proxy drawback repayment.
4. In case of automated loans based on overall bank accounts and the loans tied to bank deposits, the delay penalty shall be paid immediately for the amounts in excess of the credit limit incurred by deposit-based loans, interest, and others.

### SECTION 3 FINALIZATION OF LOAN AMOUNT AND NOTIFICATION OF PAYMENT SCHEDULE

1. In case of credit extended in installment, the total loan amount shall be finalized after the final installment of credit has been extended and, it shall be finalized based on the repayment plan schedule, receipts, and other documentary evidence.
2. In case credit is extended in installment, excluding automated loans based on overall bank accounts and rewards, the bank shall prepare a repayment schedule for the finalized total loan amount and notify it to the borrower.

### SECTION 4. DECREASE OR SUSPENSION OF CREDIT

In the event of a line of credit loan or an installment credit, the bank may decrease the credit (line) limit of Section 1 or temporarily suspend provision of loan no matter how long (the customer) has been with the bank if changes in the financial service environment have occurred or if found necessary to maintain integrity of the loan. In case the credit limit is lowered, the borrower shall immediately pay the amount in excess of the new credit limit.

### SECTION 5. ADDITIONAL AGREEMENT ON AUTOMATED LOANS BASED ON OVERALL BANK ACCOUNTS AND THE LOANS TIED TO BANK DEPOSITS

1. In case of automated loans based on overall bank accounts and the loans tied to bank deposits, the money (amounts in securities and the like shall be excluded until processed for payment, and the deposited securities shall be deemed to have been assigned to the bank as security collateral for the loan under this Agreement) deposited in the base account of automated loans based on overall bank accounts and the bank deposits (hereinafter "Base Accounts") shall be automatically debited for repayment of the loan.
2. In case of automated loans based on overall bank accounts and the loans tied to bank deposits, if a withdrawal in excess of the balance of the Base Accounts is made, or recurrent payments or direct payment of bills are made through the Account, the repayment of the loan shall be made through or automatically withdrawn from the Account.
3. In case of automated loans based on overall bank accounts and the loans tied to bank deposits, the bank may, at its own discretion, extend a loan in excess of the credit limit specified in the Section 1, in which case the excess amount shall be paid promptly.
4. In case of automated loans based on overall bank accounts and the loans tied to bank deposits, interest and delay penalty shall be debited against the Base Accounts or added to the loan amount notwithstanding the clause on loan amounts in excess of credit limit of Section 1, in which case the excess amount shall be repaid promptly.
5. In case a borrower of the loan tied to bank deposits incurs compensation liability as a result of the bank's honoring of the notes and checks issued by the borrower, that amount shall be considered as a part of the loan and the borrower shall make repayment in accordance with this Agreement.
6. Borrower of the loans tied to bank deposits agrees to make no complaints in cases where notes or checks s/he issued, prior to the decrease or suspension of credit under Section 6, bounce due to the foregoing reasons.
7. In the case of the loans tied to bank deposits, the bank may, at its own discretion, pay for the notes and checks issued prior to the ending date of the credit extension period, even after the ending date of the credit extension period, and the Terms and Agreement shall be applicable to the resulting loan amount.

### SECTION 6 FEE FOR UNUSED CREDIT LIMIT UNDER STIPULATION

In case of a line of credit loan or a loan denominated in a foreign currency, the borrower shall pay a fee set by the bank for the available balance of the stipulated credit (line) limit provided in Section 1.

### SECTION 7 OBLIGATION TO PROVIDE PROMISSORY NOTE AND GRANT OF THE RIGHT TO THE NOTE

1. In case of a note-based loan or a loan with a stipulated amount (excluding automated loans based on overall bank accounts and the loans tied to bank deposits), the borrower shall issue and provide the bank a promissory note to the bank with the blank amount and the blank date.
2. The bank may exercise the right to be indemnified with the blank check as specified in Section 7.1 as supplementary remedies, in the event that the borrower fails to repay by the ending date of the credit extension period or loses the time benefit under Section 7 (including Section 8 Cause for Repurchase Claim) of the Bank Credit Service Master Agreement).
3. In the event of exercising the supplementary remedy right to the promissory note, the amount of the note shall be the sum or less of the aggregated sum of the principal, interest, delay penalties, and incidentals.

### SECTION 8 REPAYMENT CURRENCY AND EXCHANGE RATE

The principal of a loan denominated in foreign currency may be repaid in the currency of the loan or Korean Won, and in the event of repaying in Won, the bank's EFT [electronic fund transfer] selling rate for customers shall be applied.



SECTION 9 SECURITY COLLATERAL - INSURANCE

1. Unless otherwise instructed by the bank, the borrower shall provide to the bank as security collateral, the facilities and buildings, which are constructed or purchased with the credit provided by this Agreement, and other facilities and, shall, at the request of the bank, purchase an insurance policy of the type and the insured amount agreed upon by the bank, and shall establish the bank as the pledge-holder of the right to claim the insurance benefits.

2. The borrower shall not, without consent of the bank impose any rights - including an act of title transfer, security rights, superficies, lease rights, provisional registration, or rent rights- on the facilities and the buildings of the preceding paragraph either during or after the completion of construction, and shall protect the rights of the bank from any third party.

**SECTION 10 PLACEMENT OF SECURITY RIGHTS**

1. In order to have the debt secured under the Agreement, a pledge has been placed on the bank accounts noted below and the transfer of the certificate (bank checkbook) has been completed.
2. The right of pledge in the preceding paragraph shall have effect on the principal, beneficiary certificates (including amounts to be deposited after this Agreement), and the resulting interest, beneficiary rights to income, special incentives, legal grants, and others.
3. The borrower agrees that the rights of pledge be effective even in cases where the bank deposits are extended, opened, renewed, split, merged, increased or decreased in amount, or interests are added to the principal, and also agrees that the rights of pledge shall have effect on the beneficiary of certificate in case the trust, which is the objective of the deposits, is extended or automatically extended due to delinquent payment.
4. In lieu of exercising the pledge rights of Paragraph 1, the bank may use the deposits below to cover the loan provided by the bank by using a method of offset or proxy drawback repayment.
5. In the event of loans relating to time-deposit installment savings, the bank may, with notice, offset the collateral deposits with the loan amount or may defray it to cover proxy drawback repayment even before the ending date of the credit extension period, in the event that the monthly installment deposit for the related accounts, which is supposed to serve as the target of the pledge of Paragraph 1 of this section, is delayed for six (6) months (four (4) times in the case of a trust loan tied to installment deposits or a loan secured by beneficiary certificates) or longer.

Bank Deposits - The Target of the Pledge Rights:

Type	Certificate - Number	Account Holder or Trust Provider	Amount (Contract Amount)	Until , , 20( ) Cumulative Total Deposits	Date of Certificate	Payment Date
	Account Number	Beneficiary				
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Section 11. Other Special Agreements

Undersigned:  
Liquidmetal Korea Co., Ltd.  
Representative Director  
Hong, Sung Taek (Seal)

(Seal)

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The application of Sections 5, 6, 7, and 10, which are not relevant to this loan transaction, are hereby excluded.  
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\* Please read the following and respond truthfully in your own handwriting based on your own experience. (Example: 1. Received, 2. Informed)

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1. Did you definitely receive a copy of the Bank Credit Service Master Agreement and this Agreement? Received

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2. Were you verbally informed about the important points of the Bank Credit Service Master Agreement and this Agreement? Yes  
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Revenue Stamp				
* To be filled by the bank	Responsible Associate	Assistant Manager	Associate General Manager	Associate Branch Manager
Bank Account				
Name of the Borrower				
Contact Info				

ADDITIONAL AGREEMENT RELATING TO DELAY PENALTY

To: KOOKMIN BANK (Month) (Date), 20xx (Year)  
 Liquidmetal Korea Co., Ltd.  
 Representative Director  
 Hong, Sung Taek

[Borrower] Name: (seal)  
 Address:

In addition to the Credit Service Agreement, I ascertain and definitively agree to the following:

SECTION 1 DELAY PENALTY

The interest rate on any delinquent payment (hereinafter "delay penalty") shall be the rate [interest rate on the loan (interest rate agreed upon) + the additional interest rate on the delinquent payment] set by the bank. However, if the interest rate agreed upon in Section 2.1 exceeds the maximum rate, the rate on the delay penalty shall be the rate of the interest rate agreed upon plus 2.0%.

SECTION 2 MINIMUM AND MAXIMUM RATES OF THE DELAY PENALTY

1. Minimum and maximum rates of the delay penalty under this Agreement shall be 14.0% and 21.0% per annum respectively.
2. The minimum rate shall be applicable in case the rate of the delay penalty calculated in accordance with the Section 1 of this additional agreement is lower than the minimum rate under the preceding paragraph, and, in case the rate exceeds the maximum rate, the rate in excess of the maximum rate shall not be applicable. However, provision in Paragraph 1 shall be used in the event that the interest rate agreed upon is 21.0% or higher per annum.

SECTION 3 DIFFERENTIAL APPLICATION OF THE ADDITIONAL INTEREST RATE ON DELINQUENT PAYMENTS AND THE START DATE OF DELINQUENT PAYMENTS

1. The interest rate on any delinquent payment of Section 1 shall be 8.0% per annum in case the principal and associated interests of the delinquent payment is settled within three (3) months from the start date of delinquency, 9.0% if settled within six (6) months, and 10% if settled after six (6) months.
2. In case partial repayment on the delay penalty has been made, the start date (the start date of delinquency) for differential application of the additional interest rate under the provisions of Section 1 shall be the payment due date initially agreed upon (or [illegible]), and shall be based on the changed due date in case the date (or [illegible]) agreed upon has been changed.
3. As for the application of the differentiated additional interest rates depending on the length of delinquent period under Paragraph 1, a uniform rate shall be applicable for the entire duration of the delinquent payment as of the settlement date of the delinquent payment, not differential rates for each period.  
 e.g. In case the principal and associated interests are fully paid for a loan delinquent for five (5) months, a single and uniform interest rate of 9.0% per annum shall be applicable on the delinquent payment for the entire period of five (5) months, in addition to the interest rate agreed upon, as opposed to application of additional interest rate of 8.0% per annum on the delinquent period of the first three (3) months and 9.0% per annum for the last two (2) months.
4. In case the principal of the delinquent payment has been partially settled and a balance remains on the day of payment, the additional interest rate for the entire delinquent period shall be continuously applicable from the date of delinquency, before the partial payment of the delinquent amount, and the delinquent date shall not change.

#### SECTION 4 CHANGE OF DELAY PENALTY RATES

The bank may change the additional interest rates in the provisions of Section 1, the delay penalty set forth in Section 2 Paragraph 1, and the differential additional interest rates set forth in Section 3 Paragraph 1 to the rate set by the bank in case the initial agreement cannot be maintained due to changes in the financial service environment or changes in the national economy.

\* To be filled by the bank

Bank Account

Name of the Borrower

Contact Info

Section Responsible	Assistant Manager - Manager	Associate General Manager	Associate Branch Manager
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ADDITIONAL AGREEMENT RELATING TO EARLY PAY-OFF FEES

To: KOOKMIN BANK Co., Ltd. (Month) (Date), 20xx (Year)  
[Borrower] Name: (seal)  
Address:

In addition to the Credit Service Agreement of MM DD YY, I ascertain and definitively agree to the following:

SECTION 1 PAYMENT OF EARLY PAY-OFF FEES

In case Obligor repays the loan obtained from Bank (this means extension of credit financing set forth in Section 2 Paragraph 1 Sub-Paragraph 7 of the Bank Law) before the date of initially stipulated due date, Obligor shall pay Bank early pay-off fees in accordance with the calculating method set forth in Section 2.

SECTION 2 CALCULATION OF EARLY PAY-OFF FEES

(1) Early pay-off fees relate to "basic fees" and "reference interest rate difference," and shall be applicable as indicated below. However, for loans linked to the Prime Rate, only the "basic fees" will be collected.

- A. Basic fees = Early pay-off fees x basic fee rate (0.5%) x number of residual days/365  
However, in case the number of residual days exceeds 365, it shall be deemed to be 365 days.
- B. Reference interest rate difference = early pay-off principal x difference in interest rates (currently applied MOR - the MOR at the time of repayment/365  
However, in the event that the rate difference is in the negative (-), this will not be applied. "Residual days" means the number of days from the date of early pay-off to the due date. As to re-priced loans, this means the number of days from the early pay-off date to the time of re-pricing.

(2) Definition of Related Terminology

- A. Reference rate (MOR): Of the financial instruments under circulation in the market, Bank looks at the market circulation margins of the representative instruments which have the same date of rate expiration [as the concerned loan], and then determine the MOR based on that.
- B. Fixed interest rate loan: This is the rate determined at implementation of credit, which will be applied unchanged during the stipulated term barring any special circumstances.
- C. Re-priced loan: Pursuant to predetermined stipulation between client and Bank, the rate will be recalculated and applied for specific cycle of time period (such as every 3 months, 6 months, or 12 months). Hence the reference interest rate will be changed as of the date of stipulated cycle.

SECTION 3 WAIVER OF EARLY PAY-OFF FEES

Notwithstanding the provisions of Section 1, early pay-off fees may be waived under any one of the following cases:

1. in case the residual loan period is less than one (1) month
2. in case the loan is collected before the due date to meet the needs of Bank, for reasons such as disappearance of benefit of time
3. in case the loan is collected before the due date through consultation with Bank as a result of agreement on corporate financial structure improvement
4. otherwise separately decided by Bank

AGREEMENT FOR RENT

Tenee : Dong Myung Seo

Tenant : Liquidmetal Korea Ltd.  
President Sung Taek Hong

This Lease Agreement for Rent ("Agreement") is made and entered into by and between Mr. Dong Myung Seo ("Lessor") and Liquidmetal Korea, Ltd. a company duly organized and existing under the laws of Republic of Korea ("Lessee").

NOW, THEREFORE the parties hereby agree as follows;

ARTICLE 1 (PURPOSE)

The purpose of this Agreement is for Lessee to rent the Factory and Land from Lessor for its operation.

Location : 1Block 2Lot, JuMul Industrial Complex, KyungSeo-Dong, Incheon-Si, Kyunggi-Do, Korea

Space : 2,083.87 Square meter (22,430.78 Square foot, 631.47Pyung)  
Lease for only 630Pyung after negotiation

ARTICLE 2 ( KEY MONEY DEPOSIT )

Lessee shall make payment Key money deposit of 120,000,000won upon the agreement.

ARTICLE 3 (RENT)

Lessee shall make payment at the end of every month for 12,000,000won.

ARTICLE 4 (PERIOD OF RENT)

Lease term shall be commenced March 1st 2003 to the End of Feb 2005 and also if there is any no conflict between both parties regarding lease term, then lease shall extend 1 year automatically.

If Lessee does not want to extend to rent for Land and Building, Lessee must

inform to Lesser before 6 month from the lease final termination date.

ARTICLE 5 (TERMINATION)

In the case where any of the parties hereto breaches this Agreement, the non-defaulting party shall notify the defaulting party to remedy the breach within a reasonable period. If the defaulting party does not remedy within the period, the non-defaulting party may terminate this Agreement.

ARTICLE 6 (APPLICATION OF LAW AND JURISDICTION)

- 6.1 Any matters not specifically stipulated herein shall be determined in accordance with the general commercial practices and relevant laws and regulations.
- 6.2 The court having jurisdiction over the place where the principal office of Lessee is located shall be the competent court for matters related to this Agreement.

February 2003

Tenee : Dong Myung Seo(411224-1046913)  
Address : 1337-160, GreenTown, Jung2-Dong, WonMi-Gu,BuCheon-Si,  
Gyunggi-Do, Korea

Tenant : Liquidmetal Korea Ltd.  
President Sung Taek Hong

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TRANSLATION CERTIFICATE

The undersigned hereby certifies that the foregoing is a fair and accurate English translation of the original Agreement for Rent, which is in the Korean language.

By: /s/ YM Lee

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YM Lee, Chief Financial Officer of  
Liquidmetal Korea Co., Ltd.



## LEASE AGREEMENT

Lessor: Choo Chun-Hwan, / Hanjin Precision Co., Ltd. 613-10 Bukokdong  
Ansan-city, Kyonggido

Lesser: Liquidmetal Co., Ltd.  
Hong Seung-Taek, Representative director

Referring to the lessor as "A" and the lesser as "B", the land and building  
lease agreement is temporarily entered into as follows:

**ARTICLE 1 OBJECT GOODS- INDICATION OF THE LAND AND BUILDING**

It shall be the land and the building (hereinafter referred to as "real  
estate") and as indicated in the following, which are owned by A.

Location: 4Ba No. 505, 1012 Seongkokdong Ansan-city, Kyonggido  
Area: Approximately 380 pyong

**ARTICLE 2 KEY MONEY**

The deposit shall be paid within 10 days after the agreement, which is  
equivalent to 10% of the key money. (7,600,000 won)

Key money: 68,400,000 won shall be paid within 15 days after moving in  
(finishing the completion inspection).

**ARTICLE 3 PAYMENT OF THE RENT**

Rent: Monthly rent of 9,500,000 won (excluding VAT) shall be paid on  
the 4th of the next month.

3-1 The general management fee and public electricity fee shall be  
calculated and paid in proportion to the area.

**ARTICLE 4 LEASE PERIOD**

The lease period shall be from Nov. 4, 2002 to Nov. 3, 2003. Also, it  
shall be automatically extended for one year if there is no defect on  
the agreement or additional cause to terminate it among both parties.  
The general commercial practice shall apply to other issues.

**ARTICLE 5 CANCELLATION OF THE AGREEMENT**

A shall guarantee the lease agreement period to B and if not performing  
the agreement, A shall meet the demand of B entirely.

**ARTICLE 6 TERMINATION OF THE AGREEMENT**

In case of termination of the agreement, both parties shall give the  
minimum period notice 6 days or more in advance in principle.

ARTICLE 7 SUPPLEMENTARY RULES

If there is any lawsuit related to the lease of this agreement between A and B, Seoul Civil District Court shall be the competent court for it.

ARTICLE 8 ENFORCEMENT DATE

This agreement shall be enforced from the execution date.

A and B shall keep one copy of this agreement respectively to prove and to comply with the aforementioned promises.

October, 2002

Lessor: Choo Chun-Hwan  
Hanjin Precision Co., Ltd.  
613-10 Bukokdong Ansan city, Kyonggido

Lesser: Hong Seung-Taek  
Representative director  
Liquidmetal Co., Ltd.

Lease deposit	76,000,000 won (380 pyong x 200,000 won/pyong)
Rent	9,500,000 won (380 pyong x 25,000 won/pyong)
Rent VAT	950,000 won
Paid amount of the agreement amount	-5,600,000 won
Amount to be paid	80,850,000 won

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TRANSLATION CERTIFICATE

The undersigned hereby certifies that the foregoing is a fair and accurate English translation of the original Lease Agreement, which is in the Korean language.

By: /s/ YM Lee

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YM Lee, Chief Financial Officer of  
Liquidmetal Korea Co., Ltd.

## CONTRACT FOR MONTHLY RENT OF HOUSE

The Contract has been entered between the Lessor and Lessee in terms and conditions set forth in the following.

## 1. INDICATION OF THE REAL ESTATE

Location: 681-9 Jakjeon-dong Gaeyang-gu Incheon-city  
Usage: site for factory  
Structure & Use: Reinforced steel concrete factory  
Area: 1,712 m2 (518 pyeong)  
Rental Area: partial of 1st story (about 130 pyeong)

## 2. CONTRACTUAL MATTERS

Article 1 The Contract has been entered between the Lessor and Lessee in terms and conditions set forth in the following.

Key money: Thirty Three Million Won Only (33,000,000 won)  
Advance payment: 6,000,000 won at the time of this contract is signed. The partial payment in \_\_\_\_\_ shall be payable on \_\_\_\_\_. Final payment: 27,000,000 won by September 16, 2002  
Monthly pay: 3,400,000 won (16th day of every month)

Article 2 The term of lease shall be Twelve (12) months to September 16, 2002.

Article 3 The Lessee shall not use the said real estate as indicated hereinabove for any other purpose than the usage or change in the structure, re-lease, assign and provide for security without prior consent by the Lessor.

Article 4 If the Lessee fails to pay the monthly rent for two (2) months or more, the Lessor may terminate this lease contract without urge and require for return of the leased premises.

Article 5 The Lessee may renovate or alter the house under approval by the Lessor however, it shall be restored to the original condition at its own expense prior to expiration of this contract.

Article 6 Before payment of the balance left over to the Lessor by the Lessee this contract may be terminated however, if the Lessor terminates it shall reimburse two times of the contract key money to the Lessee and if the Lessee terminates it shall waive the contract key money.

Article 7            The brokerage shall respectively be paid by the both parties  
hereto at the time of this contract is made.

Special condition:

VAT is charged additionally and the maintenance fee is 1,000 won per pyeong  
leased (or 130,000 won in total).

Upon the termination of the Rent Agreement facilities shall be recovered in the  
same condition as leased.

The leased factory shall be vacated if the lessee fails to pay monthly rents for  
two months in successions.

Co-arbitration with the Dashin Real Estate Agency.

In witness whereof this contract is in duplicate, affixed seals by the  
respective hands and retain a copy by each party.

Date: September 11, 2002

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TRANSLATION CERTIFICATE

The undersigned hereby certifies that the foregoing is a fair and accurate  
English translation of the original Contract for Monthly Rent, which is in the  
Korean language.

By:     /s/ YM Lee

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YM Lee, Chief Financial Officer of  
Liquidmetal Korea Co., Ltd.

Liquidmetal Technologies has three material direct subsidiaries and no material indirect subsidiaries, as follows:

(a) Liquidmetal Golf: Liquidmetal Technologies holds 79.19% of the issued and outstanding common stock of Liquidmetal Golf, a California corporation.

(b) Liquidmetal Korea Co., Ltd.: Liquidmetal Technologies holds 99.97% of the issued and outstanding equity securities of Liquidmetal Korea Co., Ltd., a South Korean limited liability company.

(c) Dongyang Yudoro: Liquidmetal Technologies holds 51% of the issued and outstanding equity securities of Dongyang Yudoru, a South Korean joint stock company.

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in Registration Statement No. 333-101447 of Liquidmetal Technologies on Form S-8 of our report dated February 4, 2003, appearing in this Annual Report on Form 10-K of Liquidmetal Technologies for the year ended December 31, 2002.

/s/ Deloitte & Touche LLP

Tampa, Florida  
March 28, 2003

WRITTEN STATEMENT OF THE CHIEF EXECUTIVE OFFICER  
PURSUANT TO 18 U.S.C. 1350

Solely for the purposes of complying with 18 U.S.C. 1350, I, the undersigned Chief Executive Officer of Liquidmetal Technologies (the "Company"), hereby certifies, based on my knowledge, that the Annual Report on Form 10-K of the Company for the fiscal year ended December 31, 2002, (the "Report") fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and that information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 28, 2003

/s/ John Kang

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John Kang, Chief Executive Officer

WRITTEN STATEMENT OF THE CHIEF FINANCIAL OFFICER  
PURSUANT TO 18 U.S.C. 1350

Solely for the purposes of complying with 18 U.S.C. 1350, I, the undersigned Chief Financial Officer of Liquidmetal Technologies (the "Company"), hereby certifies, based on my knowledge, that the Annual Report on Form 10-Q of the Company for the fiscal year ended December 31, 2002, (the "Report") fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and that information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 28, 2003

/s/ Brian McDougall

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Brian McDougall, Chief Financial Officer



