LIQUIDMETAL TECHNOLOGIES INC Form 10-K April 15, 2009 <u>Table of Contents</u>

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## **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, 2008

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

to

For the transition period from

Commission File No. 000-31332

## LIQUIDMETAL TECHNOLOGIES, INC.

(Exact name of Registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) **33-0264467** (I.R.S. Employer Identification No.)

30452 Esperanza

### Rancho Santa Margarita, CA 92688

(address of principal executive office, zip code)

Registrant s telephone number, including area code: (949) 635-2100

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, \$0.001 par value

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No x

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No x

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 x No o

Indicate 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 o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer (as defined in Rule 12b-2 of the Act). See the definitions of large accelerated filer, accelerated filer, and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o

Accelerated filer o

Non-accelerated filer o

Smaller reporting company x

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No x

The aggregate market value of the registrant s Common Stock held by non-affiliates of the registrant as of June 30, 2008 was approximately \$20,105,556. For purposes of this calculation only, (i) shares of Common Stock are deemed to have a market value of \$0.55 per share, the

closing price of the Common Stock as reported on the OTC Bulletin Board on June 30, 2008, and (ii) each of the executive officers, directors and persons holding more than 10% of the outstanding Common Stock as of June 30, 2008 is deemed to be an affiliate.

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### PART I

#### **Forward-Looking Statements**

This annual report on Form 10-K of Liquidmetal Technologies, Inc. contains forward-looking statements that may state our management s current expectations, estimates, forecasts, and projections about the company and its business. 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, anticipalans, 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. It is important to note that Liquidmetal Technologies, Inc. s actual results could differ materially from what is expressed in our forward-looking statements due to the risk factors described in the section of this report entitled Risk Factors in Item 1A of this report as well as the following risks and uncertainties:

- Our history of operating losses and uncertainty surrounding our ability to achieve or sustain profitability;
- Our limited history of developing, manufacturing, and selling products made from our bulk amorphous alloys;
- Lengthy customer adoption cycles and unpredictable customer adoption practices;
- Our ability to identify, develop, and commercialize new product applications for our technology;
- Competition from current suppliers of incumbent materials or producers of competing products;
- Our ability to identify, consummate, and/or integrate strategic partnerships;
- The potential for manufacturing problems or delays; and
- Potential difficulties associated with protecting or expanding our intellectual property position.

Liquidmetal Technologies, Inc. undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

### Item 1. Business

In this annual report on Form 10-K, unless the context indicates otherwise, references to the Company , Liquidmetal Technologies , our Company , we , us , and similar references refer to Liquidmetal Technologies, Inc. and its subsidiaries.

#### Overview

We are a materials technology company that develops and commercializes products made from amorphous alloys. Our Liquidmetal® family of alloys consists of a variety of proprietary 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 to customers in various industries, and we also partner with third-party licensees and distributors to develop and commercialize bulk Liquidmetal alloy products. We believe that our proprietary bulk alloys are the only commercially viable bulk amorphous alloys currently available in the marketplace. In addition to our bulk alloys, we market and sell a line of proprietary amorphous alloy-based industrial coatings under the Liquidmetal Armacor Coatings brand.

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 other metals and alloys when they solidify. Liquidmetal alloys possess a combination of performance, processing, and potential cost advantages that we believe will make 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 also have some of the beneficial processing characteristics more commonly associated with plastics. We believe these advantages could result in Liquidmetal alloys supplanting high-performance alloys, such as titanium and stainless steel, and other incumbent materials in a wide variety of applications. Moreover, we believe these advantages could enable the introduction of entirely new products and applications that are not possible or commercially viable with other materials.

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**General Corporate Information** 

We were originally incorporated in California in 1987, and we reincorporated in Delaware in May 2003. Our principal executive offices are located at 30452 Esperanza, Rancho Santa Margarita, California 92688. Our telephone number at that address is (949) 635-2100. Our Internet website address is www.liquidmetal.com and all of our filings with the Securities and Exchange Commission are available free of charge on our website.

Subsidiaries and Other Locations

We currently own and operate a manufacturing facility in Pyongtaek, South Korea, which became operational in the third quarter of 2002. This Korean subsidiary handles our Bulk Liquidmetal alloy business which includes market opportunities to manufacture and sell components made out our bulk alloys. We operate a distribution warehouse division in Huntsville, Texas to handle our Liquidmetal alloy industrial coatings which are used primarily as protective coatings for industrial machinery and equipment, such as drill pipe used by the oil drilling industry and boiler tubes used by coal burning power plants. Lastly, we operate a coatings application business based in Dothan, Alabama used to support our industrial coatings business.

### Segments

In April 2002, we 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 market opportunities to manufacture and sell components made out of our bulk alloys. The expenses incurred by the bulk Liquidmetal alloy segment are manufacturing, research and development costs, and selling expenses associated with identifying and developing market opportunities. Bulk Liquidmetal alloy products can be distinguished from Liquidmetal alloy coatings in that the bulk Liquidmetal alloy 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. Revenue and expenses associated with research and development services are included in the bulk Liquidmetal alloy segment.

Results of segment operations and assets are included in Note 17 to the Consolidated Financial Statements contained in this Form 10-K.

#### **Our Technology**

The performance, processing, and potential 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 the 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 can 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, thus improving their performance over time.

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

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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 for a variety of existing and potential future product applications.

#### Performance Advantages

Our bulk Liquidmetal alloys provide several distinct performance advantages over other materials, and we believe that these advantages make the alloys desirable in applications that require high yield strength, strength-to-weight ratio, elasticity and hardness.

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. 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 high-strength crystalline metals

and alloys. Net-shape casting is a type of casting that permits the creation of near-to-net shaped products that reduce costly post-cast 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 state, although at temperatures much lower than the melting temperature, and then introducing it into a mold to form near-to-net shaped products. Accordingly, thermoplastic molding can be beneficial and economical for net shape fabrication of high-strength products.

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 ultimately allow for a variety of other finished forms, including sheets and extrusions.

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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 of 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 construction. 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 cost advantages over other high-strength metals and alloys in certain applications. Because bulk Liquidmetal alloy has processing characteristics similar in some respects to plastics, which lends itself to near-to-net shape casting and molding, Liquidmetal alloys can in many cases be shaped efficiently into intricate, engineered products. This capability can eliminate or reduce certain post-casting steps, such as machining and re-forming, and therefore has the potential to significantly reduce processing costs associated with making parts in high volume.

Additionally, because the near-to-net shape processing of Liquidmetal alloys reduces the need for 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 more efficient development of facilities and reduced permitting and regulatory costs. We believe that these advantages may allow our customers an opportunity to maintain or improve the performance of their products without a commensurate increase in cost.

### **Our Strategy**

As a result of the experience and knowledge that we have gained through our activities to date, and recognizing that developing and commercializing a revolutionary new technology is an evolutionary process, we are continually modifying our business strategy to enable us to better capitalize on our evolving core strengths and more effectively pursue revenue growth and profitability. 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 Marketing and Internal Manufacturing Activities on Select Products with Expected Higher Gross-Margins. We intend to focus our marketing and internal manufacturing activities on select products with anticipated higher gross margins. This strategy is designed to align our product development initiatives with our manufacturing processes and manufacturing cost structure, and to reduce our exposure to more commodity-type product applications that are prone to unpredictable demand and fluctuating pricing. Our focus is primarily on higher-margin products that possess design features that take optimal advantage of our existing and developing manufacturing technology and that command a price commensurate with the performance advantages of our alloys. In addition to our focus on products with higher gross margins, we will continue to engage in prototype manufacturing, both for internally manufactured products and for products that will ultimately be licensed to or manufactured by third parties.

- *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 protect our intellectual property. As our alloys become more pervasive, however, we expect to enter into additional strategic relationships that would involve the licensing of Liquidmetal technology to third parties for certain market segments.
- *Pursuing Strategic Partnerships In Order to More Rapidly Develop and Commercialize Products.* We intend to actively pursue and support strategic partnerships that will enable us to leverage the resources, strength, and technologies of other companies in order to more rapidly develop and commercialize products. These partnerships may include licensing transactions in which we license full commercial rights to our technology in a specific application area, or they may include transactions of a more limited scope in which, for example, we outsource manufacturing activities or grant distribution rights. We believe that utilizing such a partnering strategy will enable us to reduce our working capital burden, better fund product development efforts, better understand customer adoption practices, leverage the technical and financial resources of our partners, and more

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effectively handle product design and process challenges. As this partnering strategy evolves, a growing portion of our revenue mix may be comprised of revenue from the provision of product development services, technical support, and engineering services, as well as revenues from royalties on the sale of Liquidmetal alloy products by our partners.

• Advancing 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 reviewing various brand development strategies that could include collaborative advertising and promotional campaigns with select customers, industry conference and trade show appearances, public relations, and other means.

### **Applications for Liquidmetal Alloys**

We have focused our commercialization efforts for Liquidmetal alloys on five identified product areas. We believe that these areas are consistent with our strategy in terms of market size, building brand recognition, and providing an opportunity to develop and refine our processing capabilities. Although we believe that strategic partnering transactions could create valuable opportunities beyond the parameters of these target markets, we anticipate continuing to pursue these markets both internally and in conjunction with partners.

#### **Components for Electronic Products**

We produce components for electronic devices using our bulk Liquidmetal alloys and believe that our alloys offer enhanced performance and design benefits for these components in certain applications. Bulk Liquidmetal alloys can be used for various structural components of a cellular phone, including the shield, faceplate, hinge, hinge housings, back plate, side plates, brackets, and the cover on the phones. We initially targeted the electronic casings market because of its potential for high product volumes and branding opportunities; however, unpredictable customer adoption practices, short product model lives, processing limitations, and intense pricing pressures make it very challenging to compete in this high-volume market. Accordingly, we are currently limiting our focus in this market to higher-margin applications that have the potential to benefit from the unique performance characteristics of bulk Liquidmetal alloys. We continue to believe that the high strength-to-weight ratio and elastic limit of bulk Liquidmetal alloys enable the production of stronger and thinner electronic devices as compared to plastic, zinc, and magnesium, and we intend to focus on products that require these design and performance benefits.

#### Sporting Goods and Leisure Products

We are developing a variety of applications for Liquidmetal alloys in the sporting goods and leisure products area.

In the sporting goods industry, we believe that the high strength, hardness, and elasticity of our bulk alloys have the potential to enhance performance in a variety of products, and we further believe that many sporting goods products are conducive to our internal manufacturing strategy of focusing on high-margin products that meet our design criteria. Substantial opportunities also exist for our amorphous alloy coatings, powders and composites. In 2003, Rawlings Sporting Goods Company launched a new line of baseball and softball bats that utilize a Liquidmetal alloy coating, and HEAD NV Sport launched a new line of HEAD® Liquidmetal® tennis racquets that incorporates Liquidmetal alloy in composite form in their racquet design. In 2005, we have also launched goods that utilize Liquidmetal alloy including skis. Other

potential applications for our alloys in this industry include golf clubs, eyewear, fishing, hunting, and other sport products.

In the leisure products category, we believe that bulk Liquidmetal alloys can be used to efficiently produce intricately engineered designs with high-quality finishes, such as premium watchcases, and we further believe that Liquidmetal alloy technology can be used to make high-quality, high-strength jewelry from precious metals. We have successfully produced prototype rings made from an amorphous Liquidmetal platinum alloy that is harder (and hence more scratch resistant) than conventional platinum jewelry.

In order to accelerate the commercialization of Liquidmetal alloys in the jewelry and high-end luxury products market, in June 2003, we entered into an exclusive, ten-year license agreement with LLPG, Inc. (LLPG). Under the terms of the agreement, LLPG has the right to commercialize Liquidmetal alloys, particularly precious-metal based compositions, in jewelry and high-end luxury product markets.

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#### **Medical Devices**

We are engaged in product development efforts relating to various medical devices that could be made from Liquidmetal alloys. We believe that the unique properties of bulk Liquidmetal alloys provide a combination of performance and cost benefits that could make them a desirable replacement to incumbent materials, such as stainless steel and titanium, currently used in various medical device applications. Our ongoing emphasis in 2006 and 2007 has been on surgical instrument applications for Liquidmetal alloys. These include, but are not limited to, specialized blades, orthopedic instruments utilized for implant surgery procedures, dental devices, and general surgery devices. The potential value offered by our alloys is high performance in some cases and cost reduction in others, the latter stemming from the ability of Liquidmetal alloys to be net shape cast into components, thus reducing costs of secondary processing. The status of most components in the prototyping phase is subject to non-disclosure agreements with our customers.

We believe that our future success in the medical device market will be driven largely by strategically aligning ourselves with well-established companies that are uniquely positioned to facilitate the introduction of Liquidmetal alloys into this market, especially as it relates to the unique processing challenges and stringent material qualification requirements that are prevalent in this industry. We also believe that our prospects for success in this market will be enhanced through our focus on optimizing existing alloy compositions and developing new alloy compositions to satisfy the industry s rigorous material qualification standards.

#### Industrial Coatings and Powders

We continue to market and sell amorphous alloy industrial coatings and powders under the Liquidmetal Armacor Coatings brand name. Liquidmetal alloy coatings are used primarily as a protective coating for industrial machinery and equipment. Since the inception of this business in the late 1980s, our proprietary coatings have demonstrated a high degree of hardness and low coefficient of friction which, when combined with their strong adhesion properties, reduce the wear and consequent failure of the machinery and equipment on which they are used. In contrast to our bulk alloys, we sell Liquidmetal coatings primarily in the form of a wire or powder feedstock that is melted and applied to machinery or equipment through welding or thermal spray processes.

Our Liquidmetal coatings are widely used in the oil drilling industry as a protective coating on drill pipe and casings, and we estimate that our coatings represent a dominant share of annual worldwide sales of hard band coatings for new oil drill pipe. Drilling often places tremendous stress on pipes and casings, especially whenever the drill changes direction. Both the 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.

Liquidmetal coatings have also been sold into the power generation industry specifically for the purpose of coating boiler tubes in coal-burning power plants in order to extend the lives of these boilers. 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. Historic performance and testing of Liquidmetal coatings have demonstrated that our coatings extend the life of these boiler tubes meaningfully beyond their current average life depending on the specific environment. In addition, our coatings have demonstrated the ability to reduce build-up of residue on boiler tubes, helping to improve the efficiencies of the boilers. Historically, we have not concentrated sales efforts on the boiler tube market in a substantial way. However, given the size of the market and potential opportunities for our coatings, we have recently dedicated greater effort to this area.

### **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 various defense-related applications for Liquidmetal alloys. For example, we have successfully developed 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 (DU) or tungsten heavy alloys (WHA). From inception of our KEP research program in 2002 through 2008, the KEP program has expended approximately \$14 million to replicate the terminal ballistic performance on depleted uranium in medium caliber ammunition.

We have also received Office of Naval Research (ONR) funding totaling approximately \$2 million for the development of ductile dendritic composite material as a replacement of Ti or Ti-6A-4V material in marine fasteners. In collaboration with the California Institute of Technology, new series of ductile amorphous alloys were designed and successfully produced by a novel semi-solid forging process. Currently, we are manufacturing samples for the

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mechanical properties testing and are developing material database for the application of this composite material in the military and commercial sectors.

In another application of Liquidmetal amorphous alloys and composites, we are currently working under the SBIR II contract with the Naval Surface Warfare Center, Dahlgren Division on the development of reactive material for the inert warheads. In this application, the goal is to replace various warheads inert steel casing with the Liquidmetal s reactive material which, while inert during handling, transportation and storage, releases additional energy upon impact on the target. This would allow a munitions designer to either scale-down the size of a warhead for the same amount of destructive force, or increase the destructive force while maintaining the original warhead size.

We also continue to work 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 can present opportunities that we can 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. Product development programs for defense applications are currently underway with several leading defense contractors, including Alliant Techsystems, General Dynamics, and Lockheed Martin Missiles and Fire Control.

Going Concern /Liquidity

We have experienced significant operating losses since our inception. Our net loss for the fiscal years ended December 31, 2008, 2007 and 2006 was \$6.6 million, \$5.6 million, and \$14.5 million, respectively. In the audit report on our financial statements for our fiscal years ended December 31, 2008 and 2007, our auditors included a going-concern qualification indicating that our significant operating losses and working capital deficit cause substantial doubt about our ability to continue as a going concern. By issuing an opinion stating that there is substantial doubt about our ability to continue as a going concern, our auditors have indicated that they are uncertain as to whether we have the capability to continue our operations without additional funding.

We anticipate that we will not have sufficient funds to pursue our current operating plan beyond the first quarter of 2009 and we will therefore require additional funding. We are actively seeking additional sources of capital and seeking to restructure and/or modify existing indebtedness. The amount of funding that we seek and the timing of such fundraising efforts will depend on the extent to which we are able to increase revenues through obtaining additional purchase orders for our products and/or the extent to which we can restructure or modify our debt. Because we cannot be certain that we will be able to obtain adequate funding from debt, equity, or other traditional financing sources, we are also actively exploring several strategic financing options, including the possible sale of our manufacturing plant in South Korea (which would then be replaced with a smaller facility) and additional licensing and outsourcing of our manufacturing operations.

We cannot guarantee that adequate funds will be available when needed, and if we do not receive sufficient capital, we may be required to alter or reduce the scope of our operations.

Additionally, we have approximately \$1.2 million of principal and accrued interest outstanding as of December 31, 2008, under the 8% unsecured subordinated notes (the Bridge Notes ), which were due August 17, 2007. We intend to fully repay the amounts due under the Bridge Notes. However, as of the filing of this report we do not have sufficient funds to repay the Bridge Notes. As a result, we are currently in default under the Bridge Notes. Such a default may have material adverse effect on our operations, financial condition, and results of operations. We have not received a formal notice of default and we are currently working to resolve this matter with investors holding our Bridge Notes.

We were required under our amended Security Purchase Agreement, dated April 23, 2007, between our company and holders of our 8% convertible subordinated notes due January 2010 (the January 2010 Notes), to repay outstanding debt under previously issued promissory notes, including the Bridge Notes (Debt Satisfaction Covenant) by October 1, 2007. As we have not yet fully repaid our Bridge Notes, we are in default under the January 2010 Notes under the Debt Satisfaction Covenant. Further, we were required, beginning September 30, 2008 and at the end of each month thereafter, to redeem 1/32nd of the principal amount of the January 2010 Notes. An aggregate payment equal to \$0.6 million was due September 30, 2008. However, we did not have sufficient funds to make this payment, and, accordingly, we are in default under the January 2010 Notes.

The holders of the January 2010 Notes are entitled to accelerate all principal and interest under the January 2010 Notes. As of the filing of this report, we have received a formal notice of default and we are currently working to resolve this matter. As a result, the outstanding principal due under the January 2010 Notes of \$19.1 million is included in current portion of long-term debt and accrued interest and fees of \$1.0 million is included in accounts payable and accrued expenses as of December 31, 2008. Such defaults may have material adverse effect on our operations, financial

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condition, and results of operations. We are currently working to resolve this matter with investors holding our January 2010 Notes.

Approximately \$0.2 million of principal and accrued interest became due from our Korean subsidiary under a loan from Kookmin Bank of South Korea in August 2008. However, as of the filing of this report we did not have sufficient funds to repay the loan and we have received a formal notice of default. Kookmin Bank has initiated foreclosure proceedings on the loan collateral, which consists of our manufacturing plant facility and certain equipment in South Korea. The foreclosure of our manufacturing plant facility and equipment in South Korea would have material adverse effect on our operations, financial condition, and results of operations. We are currently working to resolve this matter with Kookmin Bank by seeking a forbearance until we are able to obtain funding to repay this loan, although there is no assurance that we will be able to obtain any such funding.

We have outstanding liens and judgments on our assets by various creditors for past-due trade payables totaling \$1.4 million, of which \$1.2 million is held by creditors in South Korea, as of December 31, 2008. We are currently working to resolve the matter with each creditor by seeking a forbearance until we are able to obtain funding to repay the amounts due, although there is no assurance that we will be able to obtain any such funding. If we cannot repay the amounts due or obtain forbearance, the creditors may seek to foreclose on the Company's assets. Such a foreclosure would have material adverse effect on our operations, financial condition, and results of operations.

### Liquidmetal Golf

From 1997 until September 2001, we were 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. Although the retail golf club business has been discontinued, Liquidmetal Golf is engaged in the development of golf club components for golf original equipment manufacturers that will integrate these components into their own clubs and then sell them under their respective brand names. Liquidmetal Technologies owns 79% of the outstanding common stock 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.

#### **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 40 owned or licensed U.S. patents and numerous 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 the California Institute of Technology (Caltech). We have purchased patent rights that provide us with the exclusive right to commercialize the amorphous alloy and other amorphous alloy technology acquired from Caltech through a license agreement (Caltech License Agreement) with Caltech. 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 until 2022 and the patents relating to our bulk amorphous alloys expire on various dates between 2013 and 2025. 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.

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### **Research and Development**

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

- Enhance Material Processing and Manufacturing Efficiencies. We plan to continue research and development of processes and compositions that will decrease our cost of making products from Liquidmetal alloys.
- Optimize Existing Alloys and Develop New Compositions. We believe that the primary technology driver of our business will continue to be our proprietary alloy compositions. 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. Since 2003, we have successfully expanded our portfolio of bulk amorphous alloys to include additional zirconium-titanium alloys, as well as alloys based on other metals, such as gold and platinum. Although these various compositions are at different stages of development and only a few are currently suitable for commercial use, we believe that a larger alloy portfolio will enable us to increase the attractiveness of our alloys as an alternative to incumbent materials and, in certain cases, drive down product costs. We also believe that our ability to optimize our existing alloy compositions will enable us to better tailor our alloys to our customers specific application requirements.
- *Develop New Applications.* We will continue the 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 conducted by a team of 11 scientists and engineers whom we either employ directly or engage as consultants. Included among this team are Professor William Johnson, who discovered our initial bulk amorphous alloy at Caltech in 1993. Professor Johnson was an employee of our company from October 2001 through December 2003 and then became a consultant to our company.

In addition to our internal research and development efforts, we enter into cooperative research and development relationships with leading academic institutions. We have entered 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 other potential customers regarding possible product development relationships. Our research and development expenses for the years ended December 31, 2008, 2007 and 2006, were \$1.0 million, \$1.1 million, and \$1.0 million, respectively.

### 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. We believe that the facility will meet our anticipated manufacturing needs for the foreseeable future, although these needs may change depending upon the actual and forecasted orders we receive for our products. We currently intend to develop supplemental research and development, prototyping and manufacturing capabilities elsewhere, including the United States, for purposes of meeting our long-term manufacturing needs and our customers requirements.

In June 2006, we entered into a joint venture agreement with SAGA, SpA in Padova, Italy, (SAGA) a specialist precision parts manufacturer. The joint venture is named Liquidmetal SAGA Italy, Srl (LSI), under which LSI is currently acting as a contract manufacturer to our company for the purpose of producing prototypes and certain products in Europe. In June 2007, we entered into a licensing agreement with Liquidmetal Korea Co. Ltd, a South Korean company, a 10-year exclusive license to manufacture Liquidmetal alloys for customers whose principal headquarters or major operations are based in South Korea.

### **Raw Materials**

Liquidmetal alloy compositions are comprised of many elements, all of which are 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.

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#### Customers

During 2008, two customers, Grant Prideco and Liquidmetal Korea, accounted for 10% or more of our revenues from continuing operations. During 2007, two customers, Grant Prideco and Liquidmetal Korea, accounted for 10% or more of our revenue from continuing operations. During 2006, one customer, Flextronics Manufacturing LTD, who is a direct supplier to SanDisk, accounted for 10% or more of our revenue from continuing operations. 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, our bulk Liquidmetal alloys face competition from other materials, including metals, alloys, plastics and composites, which are currently used in the commercial applications that we pursue. For example, we face significant competition from plastics and zinc in our electronics components business, and titanium and composites will continue to be used widely in medical devices and sporting goods. Based on our experience with developing products for a variety of customers, we believe that the selection of materials by potential customers will continue to be product-specific in nature, with the decision for each product being driven primarily by the performance needs of the application and secondarily by cost considerations and design flexibility. Because of the relatively high strength of our alloys and the design flexibility of our process, we are most competitive when the customer is seeking a higher strength as well as greater design flexibility than currently available with other materials. However, if currently available materials, such as plastics, are strong enough for the application, our alloys are often not competitive those applications with respect to price. We also believe that our alloys are generally not competitive with the cost of some of the basic metals, such as steel, aluminum or copper, when such basic metals can be used in specific applications, but our alloys are generally more competitive with price on more exotic metals, such as titanium. 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 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. We also direct business development efforts toward companies who we believe could be viable candidates for potential partnering transactions, such as licensing relationships, distribution arrangements, joint ventures, and the like.

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#### Employees

As of December 31, 2008, we had 52 full-time and 21 part-time employees. As of that date, none of our employees were represented by a labor union. We have not experienced any work stoppages and we consider our employee relations to be favorable.

#### **Governmental Regulation**

Medical instruments incorporating our Liquidmetal alloys 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. 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 pre-market 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) pre-market 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.

Our manufacturing operations are subject to national, state, and local environmental laws in each of South Korea and the United States. We believe that we are in material compliance with all applicable environmental regulations. While we continue to incur costs to comply with environmental regulations, we do not believe that such costs will have a material effect on our capital expenditures, earnings, or competitive position.

### Item 1A. Risk Factors

This report contains forward-looking statements (within the meaning of the Private Securities Litigation Reform Act of 1995) that are based on management s 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, Inc. 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, project, estimate, expect, intend, may, anticipate, plans, seeks, and similar expressions identify forward-looking statements. Forwar 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, Inc. undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

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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 incurred significant operating losses in the past and may not be able to achieve or sustain profitability in the future.

We have experienced significant operating losses since our inception. Our net loss for the fiscal years ended December 31, 2008, 2007 and 2006, was \$6.6 million, \$5.6 million, and \$14.5 million, respectively. We had an accumulated deficit of approximately \$162.3 million at December 31, 2008. Of this accumulated deficit, \$44.5 million was attributable to losses generated by our discontinued equipment manufacturing and retail golf operations. We anticipate that we may continue to incur operating losses for the foreseeable future. Consequently, it is possible that we may never achieve positive earnings and, if we do achieve positive earnings, we may not be able to achieve them on a sustainable basis.

#### 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. In addition, in our audit report on our financial statements for our fiscal years ended December 31, 2008 and 2007, our auditors included a going-concern qualification indicating that our significant operating losses and working capital deficit cause substantial doubt about our ability to continue as a going concern. By issuing an opinion stating that there is substantial doubt about our ability to continue as a going concern, our auditors have indicated that they are uncertain as to whether we have the capability to continue our operations without additional funding.

We anticipate that we will not have sufficient funds to pursue our current operating plan beyond the first quarter of 2009 and we will therefore require additional funding. We are actively seeking additional sources of capital and seeking to restructure and/or modify existing indebtedness. The amount of funding that we seek and the timing of such fundraising efforts will depend on the extent to which we are able to increase revenues through obtaining additional purchase orders for our products and/or the extent to which we can restructure or modify our debt. Because we cannot be certain that we will be able to obtain adequate funding from debt, equity, or other traditional financing sources, we are also actively exploring several strategic financing options, including the possible sale of our manufacturing plant in South Korea (which would then be replaced with a smaller facility) and additional licensing and outsourcing of our manufacturing operations. We cannot guarantee that adequate funds will be available when needed, and if we do not receive sufficient capital, we may be required to alter or reduce the scope of our operations. If we raise additional funds by issuing equity securities, existing stockholders may be diluted. In addition, if shares of our common stock or securities convertible into or exercisable for our common stock are issued in consideration of such funds at an effective per share price lower than the conversion and exercise prices of our currently outstanding convertible notes and warrants, then anti-dilution provisions in such convertible notes and warrants are exercised. See RISK FACTORS Our convertible notes and warrants contain anti-dilution provisions that, if triggered, could cause substantial dilution to our then-existing stockholders.

#### 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. Therefore, we have a relatively limited history of producing bulk amorphous alloy components and products on a mass-production basis. Furthermore, our ability to produce our products in desired quantities and at commercially reasonable prices is uncertain and is dependent on a variety of factors that are outside of our control, including the nature and design of the component, the customer s specifications, and required delivery timelines.

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

We have a relatively short history 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 and also from our limited history. If these assumptions prove to be incorrect, we may not achieve anticipated revenue targets or profitability.

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## 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.

Our business is based upon the commercialization of a new and unique materials technology. Our ability to increase our revenues will depend on our ability to successfully maintain and establish relationships with customers who are willing to incorporate our proprietary alloys and technology into their finished products. However, we believe that the size of our company and the newness of our technology and manufacturing process may continue to make it challenging to maintain and establish such relationships. In addition, we rely and will continue to rely to a large extent on the manufacturing, research, and development capabilities, as well as the marketing and distribution capabilities, of our customers in order to commercialize our products. 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 selected for use in 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 is generally affected by the amount of time it takes for us to, among other things:

- identify a potential customer and introduce the customer to Liquidmetal alloys;
- work with the customer to select and design the parts to be fabricated from Liquidmetal alloys;
- make the molds and tooling to be used to produce the selected part;
- make prototypes and samples for customer testing;
- 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. Our history to date has demonstrated that the sales cycle could extend significantly 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. Moreover, we have found that customers often proceed very cautiously and slowly before incorporating a fundamentally new and unique type of material into their products.

## 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.

Our experience has shown that 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.

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#### 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, 2008, revenues from two customers, Grant Prideco and Liquidmetal Korea, represented approximately 19% of total revenues from continuing operations, for the year ended December 31, 2007, revenues from two customers, Grant Prideco and Liquidmetal Korea, represented approximately 22% of total revenues from continuing operations, and for the year ended December 31, 2006, revenues from one customer, Flextronics Manufacturing LTD, represented approximately 13% of total revenues from continuing operations. Revenues from direct suppliers to SanDisk were approximately 6% and 22% of total revenues for the years ended December 31, 2007 and 2006, respectively. Revenues from direct suppliers to Samsung represented approximately 0%, 12% and 15% of total revenues from continuing operations for the years ended December 31, 2008, 2007 and 2006, respectively. A reduction, delay, or cancellation of orders from one or more of these 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 typically 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 the 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. These different materials may include plastics, titanium alloys, or stainless steel, among others. For example, we have targeted the cellular phone component market as an application for bulk Liquidmetal alloys. In this market, we believe we will compete with other manufacturers of cellular phone components who use plastics or metal to construct their components. These other

manufacturers may be able to manufacture their cellular phone components, particularly those made from plastics, at significantly less cost than our alloys. In other markets, we will compete directly with suppliers of the incumbent material. 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.

### Our bulk amorphous alloy technology is still at an early stage of commercialization relative to many other materials.

Our bulk amorphous alloy technology is a relatively new technology as compared to many other material technologies, such as plastics and widely-used high-performance crystalline alloys. Historically, the successful commercialization of a new materials technology has required the persistent improvement and refining of the technology over a sometimes lengthy period of time. Accordingly, we believe that our company s future success will be dependent on our ability to

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continue expanding and improving our technology platform by, among other things, constantly refining and improving our manufacturing processes, optimizing our existing amorphous alloy compositions for various applications, and developing and improving new bulk amorphous alloy compositions. Our failure to further expand our technology base could limit our growth opportunities and hamper our commercialization efforts.

#### 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 business is based upon the commercialization of a new and unique materials technology. Our future growth and success will depend in part on our ability to retain key members of our management and scientific staff, who are familiar with this technology and the potential applications and markets for it. For example, as a result of their experience and knowledge of our alloy technology, we believe that our future growth and success will depend in large part on the efforts of Larry Buffington, our President and Chief Executive Officer. We do not have key man or similar insurance on any of these individuals. If we lose 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 scientific engineering, 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 successfully identify, consummate, or integrate strategic partnerships.

As a part of our business strategy, we intend to pursue strategic partnering transactions that provide access to new technologies, products, markets, and manufacturing capabilities. These transactions could include licensing agreements, joint ventures, or even business combinations. We believe that these transactions will be particularly important to our future growth and success due to the size and resources of our company and the newness of our technology. For example, we may determine that we may need to license our technology to a larger manufacturer in order to penetrate a particular market. In addition, 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. We may not be able to successfully identify any potential strategic partnerships. Even if we do identify one or more potentially beneficial strategic partnering, we may not be able to consummate these transactions on favorable terms or obtain the benefits we anticipate from such a transaction.

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

We have relatively 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 feet manufacturing facility in South Korea, we cannot guarantee that the facility will be able to produce the intended products with production yields, quality controls, and production costs that provide us with acceptable margins or profitability or satisfy the requirements of our customers.

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 a substantial portion of our initial bulk Liquidmetal alloy products in our South Korean facility and derive a material portion of our revenues from customers in South Korea and revenues from products manufactured by our licensing partner in China. For our fiscal years ended December 31, 2008, 2007 and 2006, approximately 5%, 27% and 12%, of our revenues came from customers located in South Korea, respectively. As a result, our manufacturing operations and financial results are subject to risks of political instability,

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including the risk of conflict between North Korea and South Korea and tensions between the United States and North Korea. In addition, we anticipate that the trend of foreign customers accounting for a significant portion of our total revenues may continue. Specifically, we expect to continue 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 facility and the United States;
- political and economic instability, including instability involving China and North Korea that may disrupt our operations in South Korea;
- potentially adverse tax consequences, which may reduce the profitability of products manufactured overseas or sold to overseas customers;
- burden of complying with complex foreign laws and treaties, which could limit our ability to conduct our business as contemplated in South Korea; and
- trade protection laws, policies, and measures and other regulatory requirements affecting trade and investment that could adversely affect the profitability of our South Korean Operations, 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.

# A substantial increase in the price or interruption in the supply of raw materials for our alloys could have an adverse effect on our profitability.

Our proprietary alloy compositions are comprised of many elements, all of which are available commodity products. Although we believe that each of these raw materials is currently readily available in sufficient quantities from multiple sources on commercially acceptable terms, if the prices of these materials substantially increase or there is an interruption in the supply of these materials, such increase or interruption could adversely affect our profitability. For example, if the price of one of the elements included in our alloys substantially increases, we may not be able to pass the price increase on to our customers.

#### We rely on our suppliers for mold making and manufacture of our bulk amorphous alloy parts.

We have outsourced much of our mold making and manufacturing of our bulk amorphous alloy parts. Therefore, our revenue growth is dependent on our ability to obtain sufficient manufacturing capacity. Our suppliers may allocate their limited capacity to fulfill the production requirements of other customers. In the event of a disruption of the operations of our suppliers, we may not have a secondary manufacturing source immediately available. Such an event could cause significant delays in shipments and may adversely affect our cost of goods sold and our results of operations.

#### 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

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and could result in exchange losses. The average foreign exchange rates for the years ended December 31, 2008, 2007 and 2006 were 1,103, 935 and 967 South Korean Won to the U.S. dollar, respectively. The fluctuations in the exchange rates resulted in foreign currency translation (loss) gains of (\$1.8) million, \$0.2 million and \$0.3 million for the years ended December 31, 2008, 2007 and 2006, respectively.

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 the California Institute of Technology, or Caltech, to several patents and patent applications relating to amorphous alloy technology, and we have obtained several of our own patents. 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 owned and licensed patents and intellectual property;
- exploit our patented technology (owned and licensed); and
- operate our business without infringing on the intellectual property rights of third parties.

Our licensed technology comprises 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 have various expiration dates until 2022, and those relating to our bulk amorphous alloys have expiration dates between 2013 and 2025. We continue to hold other coatings related patents; however, 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 on 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.

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#### Our level of indebtedness reduces our financial flexibility and could impede our ability to operate.

As of December 31, 2008, our long-term debt was \$22.7 million, net of debt discount of \$7.1 million, including the current portion of such debt. Our long-term debt (including the current portion) includes the following:

• \$0.2 million in principal outstanding under our Korean subsidiary s loan from Kookmin Bank of South Korea;

• \$19.1 million in principal outstanding under the 8% Convertible Subordinated Notes due January 2010 (the January 2010 Notes ) issued in our January 3, 2007 private placement, as amended;

• \$1.0 million in principal outstanding under the 8% Unsecured Subordinated Notes issued in May 2006, September 2006, and December 2006 private placements;

• \$2.7 million in principal outstanding under the Bank Midwest term loan issued in July 2007;

• \$0.1 million in principal outstanding under the Bank Midwest capital loans issued in August 2007 and October 2008; and

• \$6.7 million in principal outstanding under the C3 Capital Partners Subordinated Promissory Notes due July 2012 issued in July 2007.

As of December 31, 2008, our short-term debt was \$1.2 million. Our short-term debt included the following:

• \$0.6 million in outstanding advances received under a factoring, loan, and security agreement executed in April 2005, as amended, with a financing company; and

\$0.6 million in outstanding advances received under a revolving loan from Bank Midwest issued in July 2007.

Under our loan from Kookmin Bank, we are obligated to make equal monthly payments of principal and interest of \$0.1 million each through the period ending in February 2008. As of December 31, 2008 and as of the filing of this report, we have approximately \$0.2 million of principal and accrued interest outstanding. Under our January 2010 Notes we are required to make cash interest payments to the noteholders of \$0.6 million per quarter until such notes are converted or paid.

The \$1.0 million in aggregate principal amount under the 8% Unsecured Subordinated Notes became due in August 2007, and \$19.1 million in aggregate principal amount under our January 2010 Notes became due beginning September 30, 2008 through January 3, 2010.

Our level of debt affects our operations in several important ways, including the following:

• a significant portion of our cash flow from operations is likely to be dedicated to the payment of the principal of and interest on our indebtedness;

• we may be unable to refinance our indebtedness on terms acceptable to us or at all;

• our cash flow may be insufficient to meet our required principal and interest payments; and

• we may be unable to obtain additional loans as a result of covenants and agreements with existing debt holders.

In addition, our convertible notes and related documents contain restrictive covenants pursuant to which we generally may not incur any indebtedness that would be senior to, or on the same rank as, the convertible notes with respect to payment or security. These covenants may curtail our ability to raise capital in the future or otherwise restrict our ability to enter into a transaction that we believe would be in the best interest of our stockholders.

#### We are in default under various debt obligations.

We have approximately \$1.2 million of principal and accrued interest outstanding as of December 31, 2008, under the 8% unsecured subordinated notes (Bridge Notes), which were due August 17, 2007. We intend to fully repay the amounts due under Bridge Notes. However, as of the filing of this report we do not have sufficient funds to repay the Bridge Notes. As a result, we are currently in default under the Bridge Notes. Such defaults may have material adverse effect on our operations, financial condition, and results of operations. We are currently working to resolve this matter with investors holding our Bridge Notes by seeking a forbearance until we are able to obtain funding to repay the Bridge Notes, although there is no assurance that we will be able to obtain any such funding.

We were required under our amended Security Purchase Agreement, dated April 23, 2007, between our company and holders of our 8% convertible subordinated notes due January 2010 (the January 2010 Notes), to repay outstanding debt under previously issued promissory notes, including the Bridge Notes (Debt Satisfaction Covenant) by October 1, 2007. As we have not yet fully repaid our Bridge Notes, we are in default under the January 2010 Notes under the Debt Satisfaction Covenant. Further, we were required, beginning September 30, 2008 and at the end of each month thereafter, to redeem 1/32nd of the principal amount of the January 2010 Notes. An aggregate payment equal to \$0.6 million was due September 30, 2008. However, we did not have sufficient funds to make this payment, and, accordingly, we are in default under the January 2010 Notes.

The holders of the January 2010 Notes are entitled to accelerate all principal and interest under the January 2010 Notes. As of the filing of this report, we have received a formal notice of default and we are currently working to resolve this matter. The outstanding principal due under the January 2010 Notes of \$19.1 million is included in current portion of long-term debt and accrued interest and fees of \$1.0 million is included in accounts payable and accrued expenses as of December 31, 2008. Such defaults may have material adverse effect on our operations, financial condition, and results of operations. We are currently working to resolve this matter with investors holding our January 2010 Notes by a combination of seeking to amend the terms of certain January 2010 Notes held by persons indicating a willingness to do so and seeking to sell certain assets of our company in order to fund payments under the January 2010 Notes. However, there is no assurance that we will be able to sell sufficient assets or complete such amendments as may be necessary to bring the company out of default.

Additionally, approximately \$0.2 million of principal and accrued interest became due from our Korean subsidiary under a loan from Kookmin Bank of South Korea in August 2008. However, as of the filing of this report we did not have sufficient funds to repay the loan and we have received a formal notice of default. Kookmin Bank has initiated foreclosure proceedings on the loan collateral, which consists of our manufacturing plant facility and certain equipment in South Korea. The foreclosure of our manufacturing plant facility and equipment in South Korea would have material adverse effect on our operations, financial condition, and results of operations. We are currently working to resolve this matter with Kookmin Bank by seeking a forbearance until we are able to obtain funding to repay this loan, although there is no assurance that we will be able to obtain any such funding.

#### Evolving regulation of corporate governance and public disclosure may result in additional expenses and continuing uncertainty.

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002 and new SEC regulations, are creating uncertainty for public companies. As a result of these new rules and the size and limited resources of our company, we will incur additional costs associated with our public company reporting requirements, and we may not be able to comply with some of these new rules. For example, we were not able to comply with Section 404 of the Sarbanes-Oxley Act of 2002 for our 2005 and 2004 fiscal years. In addition, these new rules could make it more difficult or more costly for us to obtain certain types of insurance, including director and officer liability insurance, and this could make it difficult for us to attract and retain qualified persons to serve on our board of directors.

We are presently evaluating and monitoring developments with respect to new and proposed rules and cannot predict or estimate the amount of the additional costs we may incur or the timing of such costs. These new or changed laws, regulations, and standards are subject to varying interpretations, in many cases due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

We are committed to maintaining high standards of corporate governance and public disclosure. As a result, we intend to invest resources to comply with evolving laws, regulations, and standards, and this investment may result in increased general and administrative expenses and a diversion of management time and attention from

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revenue-generating activities to compliance activities. If our efforts to comply with new or changed laws, regulations, and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us and we may be harmed.

# 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.

# The existence of minority stockholders in our Liquidmetal Coatings and Liquidmetal Golf subsidiaries creates potential for conflicts of interest.

We directly own 69.25% of outstanding common membership units of Liquidmetal Coatings, LLC, our subsidiary that has exclusive right over industrial coatings market and 79% of the outstanding capital stock of Liquidmetal Golf, our subsidiary that has the exclusive right to commercialize our technology in the golf market. The remaining 30.75% of Liquidmetal Coatings, LLC common membership units are owned by 4 members and the remaining 21% of Liquidmetal Golf stock is owned by approximately 95 stockholders of record. As a result, conflicts of interest may develop between us and the minority members of Liquidmetal Coatings and stockholders of Liquidmetal Golf. To the extent that our officers are also officers or directors of Liquidmetal Coatings and Liquidmetal Golf, matters may arise that place the fiduciary duties of these individuals in conflicting positions. John Kang, our Chairman, is also a member of the Board of Liquidmetal Coatings and of

Liquidmetal Golf.

### Our stock price has experienced volatility and may continue to experience volatility.

During 2008, the highest bid price for our common stock was \$0.75 per share, while the lowest bid price during that period was \$0.06 per share. The trading price of our common stock could continue to fluctuate widely due to:

- quarter-to-quarter variations in results of operations;
- loss of a major customer;
- announcements of technological innovations by us or our potential competitors;

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- changes in, or our failure to meet, the expectations of securities analysts;
- new products offered by us or our competitors;
- announcements of strategic relationships or strategic partnerships; or
- other events or factors that may be beyond our control.

In addition, the securities markets in general have experienced extreme price and trading volume volatility in the past. The trading prices of securities of many companies at our stage of growth have fluctuated broadly, often for reasons unrelated to the operating performance of the specific companies. These general market and industry factors may adversely affect the trading price of our common stock, regardless of our actual operating performance. If our stock price is volatile, we could face securities class action litigation, which could result in substantial costs and a diversion of management s attention and resources and could cause our stock price to fall.

# Our convertible notes and warrants contain anti-dilution provisions that, if triggered, could cause substantial dilution to our then-existing stockholders.

The convertible notes and warrants issued in our January 2007 private placement contain full-ratchet anti-dilution rights. As a result of these anti-dilution rights, under our January 2010 Notes, if we issue or grant in the future any rights to purchase any of our common stock, or other security convertible into our common stock, for an effective per share price less than the conversion price then in effect, the conversion price of all unconverted January 2010 Notes will be decreased to equal such lower price. With regard to the warrants issued in connection with the January 2010 Notes, if we, in the future, issue or grant any rights to purchase any of our common stock, or other security convertible into our common stock, for a per share price less than the conversion price of the January 2010 Notes then in effect, the exercise price of the warrants will be reduced to equal such lower price and the number of shares of our common stock for which the warrants may be exercised will be increased so that the total aggregate exercise price remains constant. The foregoing adjustments to the conversion price of the notes and the exercise price of the warrants will not apply to certain exempt issuances, including issuances pursuant to employee stock option plans and strategic transactions

In addition to the above-described full-ratchet anti-dilution rights, certain other notes and warrants previously issued by us contain weighted-average anti-dilution provisions. As of December 31, 2006, we had warrants to purchase 973,064 shares at an exercise price of \$2.58 per share, and warrants to purchase 3,777,714 shares at an exercise price of \$2.00 per share, each of which notes and warrants contain weighted-average anti-dilution provisions. Under these provisions, if we issue shares in the future for consideration below the conversion or exercise prices then in effect, then (with certain exceptions, including the issuance of stock options) the conversion price for our convertible notes would automatically be reduced (allowing the holders of the notes to receive additional shares of common stock upon conversion) and the exercise price of the warrants would automatically be reduced (with a corresponding increase in the number of shares issuable pursuant to such warrants). To illustrate the impact of these weighted-average anti-dilution provisions, because of the issuance of the January 2010 Notes in January 2007 and the reduction of the conversion price of certain previously issued convertible notes in February 2007, the above-described warrants outstanding as of December 31, 2006 have been adjusted to represent warrants to purchase 860,521 shares at an exercise price of \$2.07

per share, and warrants to purchase 4,845,600 shares at an exercise price of \$1.72 per share as of December 31, 2007. Thus, an aggregate of 955,343 additional shares of our common stock have become issuable pursuant to such previously granted warrants as a result of the operation of these weighted-average anti-dilution provisions. It is also possible that a future triggering of the full-ratchet anti-dilution rights in our January 2010 Notes could result in a corresponding triggering of the above-described weighted-average anti-dilution provisions in the other notes and warrants.

If our available funds and cash generated from operations are insufficient to satisfy our liquidity requirements in the future, then we may need to raise substantial additional funds in the future to support our working capital requirements and for other purposes. If shares of our common stock or securities convertible into or exercisable for our common stock are issued in consideration of such funds at an effective per share price lower than the conversion and exercise prices of our convertible notes and warrants, then these anti-dilution provisions would be triggered, thus possibly causing substantial dilution to our then-existing stockholders if the notes are converted or the warrants are exercised. Further, subsequent sales of the shares in the public market could depress the market price of our stock by creating an excess in supply of shares for sale.

#### We have never paid dividends on our common stock, and we do not anticipate paying any cash dividends in the foreseeable future.

We have paid no cash dividends on our common stock to date. We currently intend to retain our future earnings, if any, to fund the development and growth of our businesses, and upon the completion of this offering, we do not anticipate paying any cash dividends on our capital stock for the foreseeable future. In addition, the terms of existing or any future debts may preclude us from paying dividends on our stock. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

# Antitakeover provisions of our certificate 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 certificate of incorporation, our bylaws, and Delaware law could make it more difficult for a third party to acquire us, even if doing so would be beneficial to our stockholders. 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 stockholder 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 stockholders ability to call a special meeting of our stockholders;

• 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 stockholders at stockholder meetings.

The provisions described above could delay or make more difficult transactions involving a change in control of us or our management.

#### Item 1B. Unresolved Staff Comments

#### None

#### **Item 2. Properties**

Our principal executive offices and principal research and development offices are located in Rancho Santa Margarita, California and consist of approximately 15,000 square feet. This facility is occupied pursuant to a lease agreement that expires in April 20, 2012.

In Kingwood, Texas, we lease an office for our coatings business segment. This facility, which is approximately 432 square feet, is leased through August 1, 2012.

In Huntsville, Texas, we lease a warehouse for our coatings business segment. This facility, which is approximately 4,500 square feet, is leased through August 1, 2012.

In Dothan, Alabama, we lease an application facility for our coatings business segment. This facility, which is approximately 5,000 square feet, is leased through June 30, 2010.

Our principal prototyping and 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 the foregoing facilities will meet our anticipated internal manufacturing, research, warehousing, and administrative needs for the foreseeable future.

## Item 3. Material Legal Proceedings

None

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

None

#### PART II

#### Item 5. Market For Registrant s Common Equity and Related Stockholder Matters

Our common stock is currently quoted on the OTC Bulletin Board under the symbol LQMT. On April 3, 2009, the last reported sales price of our common stock was \$0.27 per share. As of April 3, 2009, we had 248 record holders of our common stock.

The following table sets forth, on a per share basis, the range of high and low bid information for the shares of our common stock for each full quarterly period within the two most recent fiscal years and any subsequent interim period for which financial statements are included. These quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

Low
0.06
0.20
0.50
0.53
Low
0.68
0.76
0.84
0.96

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 table shows our selected consolidated financial data as of and for the years ended December 31, 2004 through 2008.

		For the Years Ended December 31, 2008 2007 2006 2005							2004		
		2000		2007		2000		(Restated)		(Restated)	
				(in thou	isands	s, except per shar	e dat	a)			
<b>Consolidated Statement of Operations</b>											
Data:											
Revenue	\$	22,083	\$	29,022	\$	27,669	\$	16,365	\$	17,429	
Cost of sales		17,131		26,459		22,418		15,129		12,168	
Gross profit		4,952		2,563		5,251		1,236		5,261	
Operating expenses:											
Selling, general and administrative											
expenses		6,529		8,921		9,962		8,534		11,591	
Research and development expenses		1,022		1,123		950		1,120		1,467	
Impairment of long-lived assets		132						4,487			
Total operating expenses		7,683		10,044		10,912		14,141		13,058	
Loss before interest, other income,											
income taxes, minority interest and											
discontinued operations		(2,731)		(7,481)		(5,661)		(12,905)		(7,797)	
Loss from extinguishments of debt		(2,751)		(648)		(5,001)		(1,247)		(2,941)	
Change in value of warrants, gain		1,890		4,923		279		3,985		747	
Change in value of conversion feature,		1,000		1,725		217		5,705		, , ,	
gain (loss)		1,987		6,965		(226)		9,118		2,093	
Other expense		(17)		0,705		(220)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		2,095	
Other income		429		226		572				302	
Interest expense		(7,712)		(9,364)		(9,509)		(6,021)		(6,577)	
Interest income		3		123		23		17		37	
		U		120		20		1,		0,	
Loss before income taxes, minority											
interest and discontinued operations		(6,151)		(5,256)		(14,522)		(7,053)		(14,136)	
Income taxes											
Minority interests		(421)		(384)							
T C / · · /·		(( 570)		(5 ( 40)		(14,500)		(7.052)		(14.126)	
Loss from continuing operations		(6,572)		(5,640)		(14,522)		(7,053)		(14,136)	
Loss from operations of discontinued										(7.40)	
operations, net										(749)	
Net loss	\$	(6,572)	\$	(5,640)	\$	(14,522)	\$	(7,053)	\$	(14,885)	
	Ψ	(0,072)	Ŷ	(8,610)	Ŷ	(11,022)	Ŷ	(1,000)	Ŷ	(1,000)	
Loss per share from continuing											
operations - basic and diluted	\$	(0.15)	\$	(0.13)	\$	(0.33)	\$	(0.17)	\$	(0.34)	
Loss per share from discontinued											
operations	\$						\$		\$	(0.02)	
Net loss per share	\$	(0.15)	\$	(0.13)	\$	(0.33)	\$	(0.17)	\$	(0.36)	
		44,735		44,730		43,809		41,833		41,610	

Weighted average common shares - basic and diluted

	2008	2007		As of December 31, 2006 (in thousands)		, 2005 (Restated)		2004 (Restated)	
Consolidated Balance Sheet Data:									
Cash and cash equivalents	\$ 157	\$ 1,180	\$	144	\$	1,392	\$	742	
Working capital (deficiency)	(20,755)	(12,324)		(23,157)		(10,993)		(14,910)	
Total assets	13,240	22,513		22,244		21,563		28,508	
Long-term debt, including current portion,									
net of discount	22,693	20,724		14,705		6,776		6,628	
Shareholders equity (deficiency)	(21,031)	(14,580)		(10,363)		(1,320)		4,191	

#### 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 discussed under the caption Risk Factors in Item 1A 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, Inc. 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 and commercializes products made from amorphous alloys. Our Liquidmetal® family of alloys consists of a variety of proprietary 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 to customers in various industries, and we also partner with third-party licensees to develop and commercialize bulk Liquidmetal alloy products. We believe that our proprietary bulk alloys are the only commercially viable bulk amorphous alloys currently available in the marketplace. In addition to our bulk alloys, we market and sell a line of proprietary amorphous alloy-based industrial coatings under the Liquidmetal ArmacorTM coatings brand.

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 other metals and alloys when they solidify. Liquidmetal alloys possess a combination of performance, processing, and potential cost advantages that we believe can make 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 also have some of the beneficial processing characteristics more commonly associated with plastics. We believe these advantages could result in Liquidmetal alloys supplanting high-performance alloys, such as titanium and stainless steel, and other incumbent materials in a wide variety of applications. Moreover, we believe these advantages could 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 industrial coatings and bulk Liquidmetal alloy products. 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 in coal-burning power plants. Bulk Liquidmetal alloy segment revenue includes sales of parts or components of electronic devices, medical products, and sports and leisure goods; tooling and prototype parts (including demonstration parts and test samples) for customers with products in development, product licensing and arrangements, and research and development revenue relating primarily to defense and medical applications. We expect that these sources of revenue will continue to significantly change the character of our

## **OVERVIEW**

revenue mix.

The cost of sales for our Liquidmetal coatings segment consists primarily of the costs of outsourcing our manufacturing to third parties. Consistent with our expectations, our cost of sales has been increasing over historical results as we further build 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.

Selling, general, and administrative expenses currently consist primarily of salaries and related benefits, severance costs, travel, consulting and professional fees, depreciation and amortization, insurance, office and administrative expenses, and other expenses related to our operations.

Research and development expenses represent salaries, related benefits expense, stock-based compensation, depreciation of research equipment, consulting and contract services, expenses incurred for the design and testing of new processing methods, expenses for the development of sample and prototype products, and other expenses related to

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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.

Impairment of Long-Lived Assets consists of a write-down of \$0.1 million of idle equipment held by our South Korean subsidiary, Liquidmetal Technologies Co., Ltd. While we have actively marketed the idle equipment for ultimate sale since early 2004, we were unable to sell this equipment and determined that the carrying value of the idle equipment exceeded its fair value in the amount of \$0.1 million during the fourth quarter of fiscal year 2008.

Change in Value of Warrants consists of changes to the fair value of warrants outstanding at each period. The warrants have been accounted for as a liability in accordance with Emerging Issues Task Force Issue No. 00-19, Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company s Own Stock, with the change in fair values reported in earnings. The fair values are determined using a Black-Scholes pricing model and fluctuations in our stock price have had the greatest impact on the valuation of outstanding warrants.

Change in Value of Conversion Feature consists of changes to the fair value of the embedded conversion feature of our senior convertible notes. The embedded conversion feature has been accounted for as a separate derivative instrument in accordance with SFAS 133 with a change in fair values reported in earnings. The change in fair values is determined using a Black-Scholes pricing model and fluctuations in our stock price have had the greatest impact on the valuation of outstanding conversion features.

On May 21, 2003, we completed a reincorporation by transitioning from a California corporation to a Delaware corporation. The reincorporation was effected through the merger of the former California entity into a newly created wholly owned Delaware subsidiary. The reincorporation changed the legal domicile of our company but did not result in any change to our business, management, employees, fiscal year, assets or liabilities, or location of facilities. As part of the reincorporation, each share of the California corporation was automatically converted into one share of the Delaware corporation. In addition, total authorized shares decreased from 200,000,000 shares to 100,000,000 shares.

On June 26, 2006, we entered into a joint venture agreement with SAGA, SpA in Padova, Italy, (SAGA) a specialist precision parts manufacturer. The joint venture is named Liquidmetal SAGA Italy, SrI (LSI). We also entered into an exclusive manufacturing license agreement for the eyewear industry with LSI. Under the joint venture agreement, we have the option to buy ownership interest in LSI, initially, of 19.9% to up to 50%. In December 2006, we have purchased 19.9% interest in the joint venture. In January 2007 and June 2007, we contributed additional \$0.2 million and \$0.1 million, respectively, into LSI as additional investment. The contribution did not change the Company s 19.9% interest in LSI. Under the licensing agreement, at any time following 18 months after the effective date of the agreement, LSI may exercise its option to sell to the Company certain business assets including manufacturing equipment acquired under the joint venture. During the years ended December 31, 2008, 2007 and 2006, the Company recognized revenues of \$0, \$0.1 million and \$0.7 million, respectively, of Liquidmetal alloys sold to SAGA for use in the joint venture.

In a connection to an equipment purchase agreement entered into with Grace Metal, currently Liquidmetal Korea Co., Ltd. (LMK), a South Korean corporation, effective June 1, 2007, we discontinued our post-processing operation in Weihai, China and transferred our manufacturing staff and equipment in Weihai to LMK under an amendment to the equipment purchase agreement with LMK. Further, we transferred certain of our manufacturing staff from our South Korean plant to LMK. LMK was formed by an investor group that includes the former director and officer of our company, James Kang, who is also the brother of John Kang, Chairman of the Board of our company.

On July 24, 2007, we transferred substantially all of the assets of our Liquidmetal alloy industrial coatings business to a newly formed, newly capitalized subsidiary named Liquidmetal Coatings, LLC, a Delaware limited liability company (LMC), and LMC assumed substantially all of the liabilities of the coatings business. The transfer included the thermal spray coatings assets and liabilities acquired under a purchase agreement with Foster Wheeler Energy Services in June 2007. We hold a 69.25% ownership interest in LMC. The results of operation of LMC are consolidated and comprise our Liquidmetal alloy industrial coatings segment for financial reporting purposes.

#### **Results of Operations**

Comparison of the years ended December 31, 2008 and 2007

*Revenue*. Revenue decreased \$6.9 million to \$22.1 million for the twelve months ended December 31, 2008 from \$29.0 million for the twelve months ended December 31, 2007. The decrease included \$5.0 million decrease in sales and

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prototyping of parts manufactured from bulk Liquidmetal alloys to consumer electronics customers as a result of increased reliance on licensees to manufacture and sell bulk Liquidmetal alloy parts and a decrease of \$1.9 million from sales of our coating products as a result of decrease in demand from oil drilling applications.

*Cost of Sales.* Cost of sales decreased to \$17.1 million, or 78% of revenue, for the twelve months ended December 31, 2008 from \$26.5 million, or 91% of revenue, for the twelve months ended December 31, 2007. The decreases were a result of a change in revenue mix during the twelve months ended December 31, 2008 primarily from increased royalty revenues. We also believe that higher manufacturing volumes and greater mix of higher-margin products in the future will cause the gross profit to improve over time. The cost to manufacture parts from our bulk Liquidmetal alloys is variable and differs based on the unique design of each product. However, the cost of sales for the products sold by the coatings business segment is generally consistent because the Liquidmetal coatings products are produced by third parties and sold wholesale to various industries.

*Selling, General, and Administrative Expenses.* Selling, general, and administrative expenses decreased to \$6.5 million, or 30% of revenue, for the twelve months ended December 31, 2008 from \$8.9 million, or 31% of revenue, for the twelve months ended December 31, 2007. The decrease was primarily a result of decrease in wages and expenses of \$0.4 million, decrease in professional and consulting fees of \$1.3 million, decrease in bad debt expense of \$0.3 million, decrease in depreciation and amortization expense of \$0.1 million, and decrease in office and equipment rent expense of \$0.1 million.

*Research and Development Expenses*. Research and development expenses decreased to \$1.0 million, or 5% of revenue, for the twelve months ended December 31, 2008 from \$1.1 million, or 4% of revenue, for the twelve months ended December 31, 2007. The decrease was primarily due to decrease in wages and related expenses. We continue to perform research and development of new Liquidmetal alloys and related processing capabilities, develop new manufacturing techniques, and contract with consultants to advance the development of Liquidmetal alloys.

*Impairment of Long-Lived Assets.* Impairment of long-lived assets was \$0.1 million, or 1% of revenue, for the twelve months ended December 31, 2008 from of a write-down of idle equipment held by our South Korean subsidiary, Liquidmetal Technologies Co., Ltd. While we have actively marketed the idle equipment for ultimate sale since early 2004, we were unable to sell this equipment and determined that the carrying value of the idle equipment exceeded its fair value in the amount of \$0.1 million during the fourth quarter of fiscal year 2008. There was no impairment of long-lived assets recognized during the twelve months ended December 31, 2007.

*Loss from Extinguishments of Debts.* Loss from extinguishments of debt decreased to \$0 for the twelve months ended December 31, 2007 from \$0.6 million, or 2% of revenue, for the twelve months ended December 31, 2007. The \$0.6 million loss was recognized from the extinguishment of certain of our convertible and subordinated notes in 2007.

*Change in Value of Warrants.* Change in value of warrants decreased to a gain of \$1.9 million, or 9% of revenue, during the twelve months ended December 31, 2008 from a gain of \$4.9 million, or 17% of revenue, during the twelve months ended December 31, 2007. The change in value of warrants consisted of warrants issued from convertible notes and subordinated notes funded between 2004 and 2007 primarily as a result of fluctuations in our stock price.

*Change in Value of Conversion Feature.* Change in the value of our conversion feature liability from our convertible notes funded between 2004 and 2007 resulted in gain of \$2.0 million, or 9% of revenue, during the twelve months ended December 31, 2008 from a gain of \$7.0 million, or 24% of revenue, during the twelve months ended December 31, 2007 primarily as a result of fluctuation in our stock prices.

*Other Expense.* Other expense was \$17 thousand for the twelve months ended December 31, 2008, primarily from loss on disposal of assets. There was no other expense recognized for the twelve months ended December 31, 2007.

*Other Income.* Other income was \$0.4 million, or 2% of revenue, for the twelve months ended December 31, 2008, primarily from gain \$0.2 million recognized from deferred gain on sale of equipment from 2007 and \$0.2 million from write off accounts payables. Other income was \$0.2 million, or 1% of revenue, for the twelve months ended December 31, 2007, primarily from gain recognized from sale of equipment.

*Interest Expense*. Interest expense was \$7.7 million, or 35% of revenue, for the twelve months ended December 31, 2008 and was \$9.4 million, or 32% of revenue, for the twelve months ended December 31, 2007. Interest expense consists primarily of debt amortization and interest accrued on outstanding convertible and subordinated notes, borrowings under the April 2005 factoring, loan, and security agreement, the Kookmin loan, the Bank Midwest loans, and late registration and late filing fee penalties.

*Interest Income.* Interest income was \$3 thousand for the twelve months ended December 31, 2008 and \$0.1 million for the twelve months ended December 31, 2007, from interest earned on cash deposits.

#### Comparison of the years ended December 31, 2007 and 2006

*Revenue*. Revenue increased \$1.4 million to \$29.0 million for the twelve months ended December 31, 2007 from \$27.7 million for the twelve months ended December 31, 2006. The increase included \$3.6 million decrease in sales and prototyping of parts manufactured from bulk Liquidmetal alloys to consumer electronics customers as a result of increased reliance on licensees to manufacture and sell bulk Liquidmetal alloy parts to customers based in South Korea, offset by an increase of \$5.0 million from sales of our coating products as a result of increase in demand from oil drilling applications.

*Cost of Sales.* Cost of sales increased to \$26.5 million, or 91% of revenue, for the twelve months ended December 31, 2007 from \$22.4 million, or 81% of revenue, for the twelve months ended December 31, 2006. The increases were a result of higher manufacturing costs of new production items in our Liquidmetal bulk alloy business during the first three quarters of 2007. We believe that higher manufacturing volumes and greater mix of higher-margin products in the future will cause the gross profit to improve over time. The cost to manufacture parts from our bulk Liquidmetal alloys is variable and differs based on the unique design of each product. However, the cost of sales for the products sold by the coatings business segment is generally consistent because the Liquidmetal coatings products are produced by third parties and sold wholesale to various industries.

*Selling, General, and Administrative Expenses.* Selling, general, and administrative expenses decreased to \$8.9 million, or 31% of revenue, for the twelve months ended December 31, 2007 from \$10.0 million, or 36% of revenue, for the twelve months ended December 31, 2006. This decrease was primarily a result of decreases in wages and expenses of \$1.2 million and decreases in travel expenses of \$0.2 million, offset by increases in professional and consulting fees of \$0.3 million.

*Research and Development Expenses*. Research and development expenses increased to \$1.1 million, or 4% of revenue, for the twelve months ended December 31, 2007 from \$1 million, or 3% of revenue, for the twelve months ended December 31, 2006. The increase was primarily due to increase in professional fees. We continue to perform research and development of new Liquidmetal alloys and related processing capabilities, develop new manufacturing techniques, and contract with consultants to advance the development of Liquidmetal alloys.

*Loss from Extinguishments of Debts.* Loss from extinguishments of debt increased to \$0.6 million, or 2% of revenue, for the twelve months ended December 31, 2007 from \$0 for the twelve months ended December 31, 2006. The \$0.6 million loss was recognized from the extinguishment of certain of our convertible and subordinated notes in 2007.

*Change in Value of Warrants.* Change in value of warrants increased to a gain of \$4.9 million, or 17% of revenue, during the twelve months ended December 31, 2007 from a gain of \$0.3 million, or 1% of revenue, during the twelve months ended December 31, 2006. The change in value of warrants consisted of warrants issued from convertible notes and subordinated notes funded between 2004 and 2007 primarily as a result of fluctuations in our stock price.

*Change in Value of Conversion Feature.* Change in the value of our conversion feature liability from our convertible notes funded between 2004 and 2007 resulted in gain of \$7.0 million, or 24% of revenue, during the twelve months ended December 31, 2007 from a loss of \$0.2 million, or 1% of revenue, during the twelve months ended December 31, 2006 primarily as a result of fluctuation in our stock prices.

*Other Income*. Other income was \$0.2 million, or 1% of revenue, for the twelve months ended December 31, 2007, primarily from gain recognized from sale of equipment. Other income for the twelve months ended December 31, 2006 was \$0.6 million, or 2% of revenue, as result of \$0.1 million gain recognized from disposal of idle equipment and \$0.5 million gain recognized from termination of a distribution agreement with a Japanese sporting goods distributor originally entered into in March 1996.

*Interest Expense*. Interest expense was \$9.4 million, or 32% of revenue, for the twelve months ended December 31, 2007 and was \$9.5 million, or 34% of revenue, for the twelve months ended December 31, 2006. Interest expense consists primarily of debt amortization and interest accrued on outstanding convertible and subordinated notes, borrowings under the April 2005 factoring, loan, and security agreement, the Kookmin loan and late registration and late filing fee penalties.

*Interest Income.* Interest income was \$0.1 million for the twelve months ended December 31, 2007 and \$23 thousand for the twelve months ended December 31, 2006, from interest earned on cash deposits.

### QUARTERLY RESULTS

The following information presents our unaudited quarterly operating results for 2008 and 2007. The data has been prepared by Liquidmetal Technologies, Inc. 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 Mor 12/31/08 09/30/08 (In thousands, except ) (Unaudite			( pt per	06/30/08		03/31/08	
Consolidated Statements of Operations Data:								
Revenue	\$	4,605	\$	5,041	\$	5,669	\$	6,768
Cost of sales		3,806		3,791		4,633		4,901
Gross profit		799		1,250		1,036		1,867
Operating expenses								
Selling, general, and administrative		1,912		1,417		1,326		1,874
Research and development		207		279		278		258
Impairment of long-lived assets		132						
Total operating expenses		2,251		1,696		1,604		2,132
Loss from operations		(1,452)		(446)		(568)		(265)
Change in value of warrants, (loss) gain		(495)		989		1,290		106
Change in value of conversion feature, (loss) gain		(117)		642		1,240		222
Other expense								(17)
Other income		182				247		
Interest expense		(2,432)		(1,860)		(1,717)		(1,703)
Interest income						1		2
(Loss) income before minority interests		(4,314)		(675)		493		(1,655)
Minority interests		(80)		(115)		(65)		(161)
		(1.20.1)		(= 2 0)		100		(1.01.0)
(Loss) income from operations before income taxes		(4,394)		(790)		428		(1,816)
Income taxes								
		(1.20.4)		(700)		120		(1.016)
Net (loss) income		(4,394)		(790)		428		(1,816)
Net (loss) income per share from continuing operations - basic								
and diluted	\$	(0.10)	\$	(0.02)	\$	0.01	\$	(0.04)
	φ	(0.10)	φ	(0.02)	¢	0.01	φ	(0.04)
Weighted average common shares used to compute (loss)								
income per share from continuing operations - basic and diluted		44.759		44.726		44,726		44,726
income per share nom continuing operations - suste und diruted		. 1,759		11,720		11,720		11,720

	12/31/07	For the Three Months Ended 1/07 09/30/07 06/30/07 (In thousands, except per share data) (Unaudited)			03/31/07		
<b>Consolidated Statements of Operations Data:</b>							
Revenue	\$ 8,518	\$	7,106	\$	8,331	\$	5,067
Cost of sales	7,138		5,194		7,686		6,441
Gross profit (loss)	1,380		1,912		645		(1,374)
Operating expenses							
Selling, general, and administrative	2,041		1,853		2,495		2,532
Research and development	236		331		293		263
Total operating expenses	2,277		2,184		2,788		2,795
Loss from operations	(897)		(272)		(2,143)		(4,169)
Loss from extinguishments of debt							(648)
Change in value of warrants, gain	447		220		564		3,692
Change in value of conversion feature, gain	828		625		1,168		4,344
Other income	177				49		
Interest expense	(1,910)		(1,991)		(2,700)		(2,763)
Interest income	2		14		46		61
(Loss) income before minority interests	(1,353)		(1,404)		(3,016)		517
Minority interests	(318)		(66)				
(Loss) income from operations before income taxes Income taxes	(1,671)		(1,470)		(3,016)		517
Net (loss) income	(1,671)		(1,470)		(3,016)		517
Net (loss) income per share from continuing operations - basic and diluted	\$ (0.04)	\$	(0.03)	\$	(0.07)	\$	0.01
Weighted average common shares used to compute (loss) income per share from continuing operations - basic and diluted	44,711		44,652		44,632		44,925

#### LIQUIDITY AND CAPITAL RESOURCES

Since our inception, we have funded our operations through the sale of equity securities in private placements and our initial public offering, the sale of convertible notes and warrants in private placements, debt financing, and cash generated from operations.

Our cash provided by (used for) operating activities was \$0.4 million and (\$10.2) million for the years ended December 31, 2008 and 2007, respectively. Our working capital deficit increased from \$12.3 million at December 31, 2007 to \$20.8 million at December 31, 2008. Our working capital deficit increase of \$8.5 million was primarily attributable to a decrease in cash and cash equivalents of \$1.0 million, decrease in trade accounts receivables of \$2.9 million, decrease in inventories of \$1.5 million, an increase in accounts payable and accrued expenses of \$0.5 million, increase in current portion of long-term debt of \$8.0 million, offset by decrease in deferred revenue of \$0.3 million, decrease in short-term debt of \$1.0 million, decrease in warrant liabilities of \$1.9 million, decrease in conversion feature liabilities of \$1.9 million, and decrease of current portion of other liabilities of \$0.3 million.

Our cash used for investing activities was \$1.2 million for the year ended December 31, 2008 primarily from purchase of property and equipment.

Our cash used for financing activities was \$1.2 million for the year ended December 31, 2008 primarily from repayment of borrowings and distributions made to minority interest holders of our subsidiary, Liquidmetal Coatings, LLC. As of December 31, 2008, we had cash of \$0.2 million.

Our capital requirements during the next twelve months will depend on numerous factors, including the success of existing products either in manufacturing or development, the development of new applications for Liquidmetal alloys, the resources we devote to develop and support our Liquidmetal alloy products, the success of pursuing strategic licensing and funded product development relationships with external partners.

We have experienced significant operating losses since our inception. Our net loss for the fiscal years ended December 31, 2008, 2007 and 2006 was \$6.6 million, \$5.6 million, and \$14.5 million, respectively. In the audit report on our financial statements for our fiscal years ended December 31, 2008 and 2007, our auditors included a going-concern qualification indicating that our significant operating losses and working capital deficit cause substantial doubt about our ability to continue as a going concern. By issuing an opinion stating that there is substantial doubt about our ability to continue as a going concern, our auditors have indicated that they are uncertain as to whether we have the capability to continue our operations without additional funding.

We anticipate that we will not have sufficient funds to pursue our current operating plan beyond the first quarter of 2009 and we will therefore require additional funding. We are actively seeking additional sources of capital and seeking to restructure and/or modify existing indebtedness. The amount of funding that we seek and the timing of such fundraising efforts will depend on the extent to which we are able to increase revenues through obtaining additional purchase orders for our products and/or the extent to which we can restructure or modify our debt. Because we cannot be certain that we will be able to obtain adequate funding from debt, equity, or other traditional financing sources, we are also actively exploring several strategic financing options, including the possible sale of our manufacturing plant in South Korea (which would then be replaced with a smaller facility) and additional licensing and outsourcing of our manufacturing operations.

We cannot guarantee that adequate funds will be available when needed, and if we do not receive sufficient capital, we may be required to alter or reduce the scope of our operations.

Additionally, we have approximately \$1.2 million of principal and accrued interest outstanding as of December 31, 2008, under the 8% unsecured subordinated notes (the Bridge Notes), which were due August 17, 2007. We intend to fully repay the amounts due under the Bridge Notes. However, as of the filing of this report we do not have sufficient funds to repay the Bridge Notes. As a result, we are currently in default under the Bridge Notes. Such a default may have material adverse effect on our operations, financial condition, and results of operations. We have not received a formal notice of default and we are currently working to resolve this matter with investors holding our Bridge Notes.

We were required under our amended Security Purchase Agreement, dated April 23, 2007, between our company and holders of our 8% convertible subordinated notes due January 2010 (the January 2010 Notes), to repay outstanding debt under previously issued promissory notes, including the Bridge Notes (Debt Satisfaction Covenant) by October 1, 2007. As we have not yet fully repaid our Bridge Notes, we are in default under the January 2010 Notes under the Debt Satisfaction Covenant. Further, we were required, beginning September 30, 2008 and at the end of each month thereafter, to redeem 1/32nd of the principal amount of the January 2010 Notes. An aggregate payment equal to \$0.6 million was due September 30, 2008. However, we did not have sufficient funds to make this payment, and, accordingly, we are in default under the January 2010 Notes.

The holders of the January 2010 Notes are entitled to accelerate all principal and interest under the January 2010 Notes. As of the filing of this report, we have received a formal notice of default and we are currently working to resolve this matter. As a result,

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the outstanding principal due under the January 2010 Notes of \$19.1 million is included in current portion of long-term debt and accrued interest and fees of \$1.0 million is included in accounts payable and accrued expenses as of December 31, 2008. Such defaults may have material adverse effect on our operations, financial condition, and results of operations. We are currently working to resolve this matter with investors holding our January 2010 Notes.

Approximately \$0.2 million of principal and accrued interest became due from our Korean subsidiary under a loan from Kookmin Bank of South Korea in August 2008. However, as of the filing of this report we did not have sufficient funds to repay the loan and we have received a formal notice of default. Kookmin Bank has initiated foreclosure proceedings on the loan collateral, which consists of our manufacturing plant facility and certain equipment in South Korea. The foreclosure of our manufacturing plant facility and equipment in South Korea would have material adverse effect on our operations, financial condition, and results of operations. We are currently working to resolve this matter with Kookmin Bank by seeking a forbearance until we are able to obtain funding to repay this loan, although there is no assurance that we will be able to obtain any such funding.

We have outstanding liens and judgments on our assets by various creditors for past-due trade payables totaling \$1.4 million, of which \$1.2 million is held by creditors in South Korea, as of December 31, 2008. We are currently working to resolve the matter with each creditor by seeking forbearance until we are able to obtain funding to repay the amounts due, although there is no assurance that we will be able to obtain any such funding. If we cannot repay the amounts due or obtain forbearance, the creditors may seek to foreclose on the Company's assets. Such a foreclosure would have material adverse effect on our operations, financial condition, and results of operations.

#### **Initial Public Offering 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 over allotment 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. As of December 31, 2003, we used \$70.7 million of net proceeds from the Offering.

Private Placements of Convertible Notes and Bridge Notes

The following private placement of convertible notes and bridge notes are outstanding as of December 31, 2008.

On May 17, 2006, September 21, 2006, and December 1, 2006, we completed a private placement of 8% Unsecured Subordinated Notes in the aggregate principal amount of \$4.6 million (the Bridge Notes ), together with warrants to purchase up to an aggregate of 973,064 shares of our common stock. The Bridge Notes were unsecured and were scheduled to become due on the earlier of August 17, 2007 or the consummation of a follow-on equity or debt offering pursuant to which we receive gross proceeds of at least \$6.0 million, but in no event will the Bridge Notes become due any earlier than the payment in full of the previously issued promissory notes, including 7% Senior Secured Notes Due August 2007 (the August 2007 Notes ) and 6% Senior Secured Notes Due July 2007 (the July 2007 Notes ). As a part of the private placement of the Bridge Notes, we issued warrants to the purchasers of the Bridge Notes giving them the right to purchase up to an aggregate of 890,990 shares of our common stock, and warrants to purchase 82,074 shares of our common stock were issued to the placement agent in the transaction. The warrants have an exercise price of \$2.58 per share and will expire on May 17, 2011.

On January 3, 2007, we completed a private placement of new 8% Convertible Subordinated Notes due January 2010 (the January 2010 Notes). As a result of an April 2007 amendment to this transaction, we ultimately issued \$16.3 million in principal amount of January 2010 Notes, which supersedes the aggregate note amount indicated in our prior announcements regarding the private placement. Under the amended transaction, the January 2010 Notes were issued for aggregate cash in the amount of \$12.9 million and in payment of a total of \$3.4 million in principal and accrued but unpaid interest under the August 2007 Notes and Bridge Notes. The January 2010 Notes have a maturity date of January 3, 2010.

The January 2010 Notes were issued pursuant to a Securities Purchase Agreement, dated January 3, 2007, between our company and the purchasers of the January 2010 Notes (the January Purchase Agreement ). Under the terms of the original January Purchase Agreement, we agreed to repay or otherwise satisfy, within 5 days after the closing of the private placement, approximately \$15.5 million of our outstanding debt under previously issued promissory notes, including the August 2007 Notes, 10% Subordinated Promissory Note due October 2006 (the

October 2006 Note ), and Bridge Notes (the Debt Satisfaction Covenant ). We originally agreed to this covenant based on assurances that a substantial number of holders of the August 2007 Notes would elect to convert their August 2007 Notes at a reduced conversion price following the private placement under a note conversion agreement proposed by us, but most of such holders ultimately elected not to proceed with such conversion. Accordingly, in an effort to preserve funds, we have not yet repaid the indebtedness as required by the original January Purchase Agreement, and in April 2007, we entered into an amendment to the January Purchase Agreement providing that we will have until October 1, 2007 (or such earlier date on which the indebtedness to be repaid is due) to comply with the Debt Satisfaction

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Covenant. In addition, the April 2007 amendment provides that the purchasers of the January 2010 Notes have the right to require us to redeem such notes prior to maturity in the event that we sell our Liquidmetal Coatings business unit, sell our manufacturing facility in South Korea, and/or engage in any debt or equity financing, provided that the foregoing transactions result in aggregate cumulative proceeds of \$25,000, and it also provides that we will be obligated to grant to the purchasers of such notes a *par passu* security interest in any collateral (if any) that is used to secure our next private placement of convertible notes. As required by the January Purchase Agreement, the April 2007 amendment was executed by the holders of more than fifty percent (50%) of the outstanding principal amount of the Notes.

The January 2010 Notes, as amended by the April 2007 amendment, are convertible at any time at the option of the holder into shares of our common stock at a conversion price of \$1.10 per share (compared to an original conversion price of \$1.55 per share), subject to adjustment for anti-dilution. The January 2010 Notes bear interest at 8% per annum with interest payable quarterly in arrears in cash, or, at our option, in the form of additional January 2010 Notes (in which case the interest rate will be 10% per annum). Our ability to pay interest with additional January 2010 Notes is subject to specified conditions, including the existence of an effective registration statement covering the resale of the shares issued in payment of interest and certain minimum trading volumes in the stock to be issued. From and after an event of default under the January 2010 Notes and for so long as the event of default is continuing, the January 2010 Notes will bear default interest at a rate of 12% per annum (or 15% per annum if we elect to pay interest with additional January 2010 Notes).

Beginning July 31, 2008 and at the end of each month thereafter, we were required to redeem 1/36th of the principal amount of the January 2010 Notes in cash or, at our election, with shares of our common stock. On July 31, 2008, we obtained an agreement with the majority of the January 2010 Note holders to defer the amortization date of the principal to September 30, 2008 and to amend the redemption amount at each amortization date to be 1/32nd of the principal amount. Our ability to pay the redemption amounts with shares of our common stock will be subject to specified conditions, including the existence of an effective registration statement covering the resale of the shares issued in payment of the redemption amount and certain minimum trading volumes in the stock to be issued. Any unconverted January 2010 Notes will become due on January 3, 2010, although we will have the right at any time after 18 months following the issuance of the January 2010 Notes to redeem the January 2010 Notes in whole or in part for a cash redemption price of 105% of the portion of the principal amount being redeemed plus all accrued and unpaid interest thereon. The January 2010 Notes are unsecured and are subordinate to our July 2007 Notes and to certain secured financing from commercial lenders incurred by us in the future. The terms of the 2010 Notes also provide that we will be required to maintain a sufficient bank balance to provide for the timely repayment of our July 2007 Notes.

As a part of the January 2007 private placement, we issued warrants to the purchasers of the January 2010 Notes giving them the right following the April 2007 amendment to purchase up to an aggregate of 7,408,881 shares of our common stock at an exercise price of \$1.55 per share. In connection with the private placement, we also issued to the placement agent for the transaction warrants to purchase an aggregate of 248,710 shares of our common stock at an exercise price of \$1.55 per share. All of the warrants (including the warrants granted to the placement agent in the transaction) are immediately exercisable and will expire in January 2012.

In connection with the January 2007 private placement, we entered into a Registration Rights Agreement with the purchasers of the January 2010 Notes under which we are required, on or before 45 days after the closing of the private placement, to use our commercially reasonable efforts to file a registration statement with the SEC covering the resale of the shares of our common stock issuable pursuant to the January 2010 Notes and warrants and to use our commercially reasonable efforts to have the registration declared effective at the earliest date (but in no event later than 90 days after filing if there is no SEC review of the registration statement, or 120 days if there is an SEC review). We will be subject to certain monetary penalties, as set forth in the Registration Rights Agreement, up to a maximum amount of 18% of the aggregate amount of Notes sold in the Private Placement if the registration statement is not filed or does not become effective on a timely basis. The monetary penalties will accrue at the rate of 1% per month of the then-outstanding principal amount of the January 2010 Notes and warrants, then we will be required to file up to two additional registration statements to register the resale of any shares excluded from the originally filed registration statement and to pay the foregoing monetary penalties on the January 2010 Notes convertible into the excluded shares until the resale of such excluded shares is covered by an effective registration statement or until such shares can be sold under SEC Rule 144. As of December 31, 2008, an aggregate of \$0.7 million in monetary penalties under the Registration Rights Agreement had already

been paid to investors, while an additional \$0.3 million in such penalties were accrued but unpaid.

On October 1, 2007, we issued \$1.0 million of additional January 2010 Notes for accrued interest and late registration fees.

On December 28, 2007, we issued \$1.0 million of January 2010 Notes, together with warrants to purchase up to an aggregate of 681,818 and 200,000 of the Company s common stock to purchasers of the notes and placement agents. The warrants will expire on December 28, 2012 and are exercisable at \$1.55 per share.

During 2008, we issued \$0.4 million, \$0.5 million, and \$0.5 million of additional January 2010 Notes, dated April 1, 2008, July 1, 2008, and October 1, 2008, respectively, for accrued interest due under the notes in lieu of cash payments.

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As of December 31, 2008, \$19.1 million in aggregate principal amount of January 2010 Notes were still outstanding with accrued but unpaid interest and late registration fees in the amount of approximately \$1.0 million, and \$1.0 million in aggregate principal amount of Bridge Notes were also outstanding with accrued but unpaid interest in the amount of approximately \$0.2 million.

### Loan from Kookmin Bank

Our Liquidmetal Technologies Co., Ltd. subsidiary has an outstanding loan from Kookmin Bank in the Republic of Korea. As of December 31, 2008, the outstanding balance under this loan was \$0.2 million. The loan was payable in monthly installments of \$0.11 million per month through February 2008.

#### **OFF-BALANCE SHEET ARRANGEMENTS**

An off-balance sheet arrangement is any transaction, agreement or other contractual arrangement involving an unconsolidated entity under which a company has (1) made guarantees, (2) a retained or a contingent interest in transferred assets, (3) an obligation under derivative instruments classified as equity, or (4) any obligation arising out of a material variable interest in an unconsolidated entity that provides financing, liquidity, market risk or credit risk support to our company, or that engages in leasing, hedging, or research and development arrangements with our company.

On June 26, 2006, we entered into a joint venture agreement with SAGA, SpA in Padova, Italy, (SAGA) a specialist precision parts manufacturer. The joint venture is named Liquidmetal SAGA Italy, Srl (LSI). We also entered into an exclusive manufacturing license agreement for the eyewear industry with LSI. Under the joint venture agreement, we have the option to buy ownership interest in LSI, initially, of 19.9% to up to 50%. In December 2006, we have purchased 19.9% interest in the joint venture. Under the licensing agreement, at any time following 18 months after the effective date of the agreement, LSI may exercise its option to sell us certain business assets including manufacturing equipment acquired under the joint venture. During the years ended December 31, 2008, 2007 and 2006, we recognized revenues of \$0, \$0.1 million and \$0.7 million, respectively, of Liquidmetal alloys sold to SAGA for use in the joint venture. We anticipate the alloys to be fully utilized by the joint venture prior to the 18 month period.

### CONTRACTUAL OBLIGATIONS

The following table summarizes our company s obligations and commitments as of December 31, 2008:

Contractual Cash Obligations	Total		1 Year		1-3 Years		3-5 Years		After 5 Years	
Long-term debt (2)	\$	20,273	\$	20,273	\$		\$		\$	
Long-term debt of consolidated subsidiary										
(2)		9,549		1,028		1,792		6,729		
Short-term debt (3)		580		580						
Short-term debt of consolidated subsidiary		597		597						
Interest payments (4)		7,536		1,740		4,824		972		
Operating leases and rents		1,059		324		617		118		
Consulting services payable		126		126						
Foster Wheeler		150		150						
Dongyang		9		9						
Nichimen		315		315						
Totals (1)	\$	40,194	\$	25,142	\$	7,233	\$	7,819	\$	

#### Payments Due by Period (in thousands) Less Than

(1) Contractual cash obligations include Long-term debt comprised of \$1,009 of Unsecured Subordinated Notes issued in 2006, \$19,113 of Convertible Unsecured Notes originally issued in 2007, and \$151 of Kookmin Bank Loan; Long-term debt of consolidated subsidiary comprised of \$2,729 of Bank Midwest Term Loan, \$6,690 of C3 Capital Partners Subordinated Notes, and \$129 of Bank Midwest Promissory Notes; Short-term debt comprised of \$580 outstanding advances received under factoring, loan, and security agreement; Short-term debt of consolidated subsidiary comprised of \$597 of Bank Midwest revolving loan; future minimum lease payments under capital and operating leases; purchase commitments from consultants; payments due from assets purchased from Foster Wheeler thermal spray coatings business;

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payments due from our discontinued equipment manufacturing business; and minimum payments due under a distribution agreement.

(2) Does not include accrued and scheduled interest payments of \$7,536; and un-amortized cash discount and discounts for conversion feature and warrants of \$7,128 of our convertible notes.

(3) Does not include minimum interest and fee payments of \$30.

(4) Interest payments include accrued and scheduled payments due on long-term debt and long-term debt of consolidated subsidiary with annual interest rates between 8% to 14%. Interest payments also include estimated interest on short-term debt and short-term debt of majority owned subsidiary with annual interest rates between 6.5% to 8.48% with expected maturity of approximately 1 year.

#### 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. subsidiary in Korea 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 stockholders 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 are 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 estimated 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.

• We value inventories at lower of cost or net realizable value. Management has determined net realizable value to be equal to the selling price of the products to be produced and sold less the cost of disposal. In the event, in future periods, the actual selling prices exceed the estimate for selling prices less cost to sell, an adjustment would be made and income would increase in the period of such determination. Likewise, in the event, in future periods, actual selling prices are lower than the estimate for selling prices, an adjustment would be made and income would decrease in the period of such determination.

• We value our assets at lower of cost or fair market value. Management has determined fair market to be equal to the selling price of the assets to be sold less the cost of disposal. In the event, in future periods, actual selling prices are lower than the estimate for selling prices, an adjustment would be made and income would decrease in the period of such determination.

• We record valuation allowances to reduce the deferred tax assets to the amounts estimated to be realized. 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

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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.

• We account for the warrants and the embedded conversion feature of our senior convertible notes as derivatives in accordance with Statement of Financial Accounting Standards No. 133, Accounting for Derivative Instruments and Hedging Activities, and Emerging Issues Task Force Issue No. 00-19, Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company s Own Stock. Fair values of warrants and embedded conversion features are measured at each period end using Black-Scholes pricing models and changes in fair value during the period are reported in our earnings

• We adopted Statement of Financial Accounting Standards No. 123, Share-Based Payment (SFAS 123R), on January 1, 2006. This new standard requires companies to expense the fair value of employee stock options and similar awards. We adopted SFAS 123R using the modified prospective transition method. Therefore, stock based compensation expense measured in accordance with SFAS 123R was recorded starting with the first quarter of 2006, but the prior year consolidated statement of income was not restated. The adoption of SFAS 123R resulted in incremental expense of \$0.6 million, \$0.6 million and \$1.1 million for the years ended December 31, 2008, 2007 and 2006.

#### **RECENT ACCOUNTING PRONOUNCEMENTS**

In December 2007, the FASB issued SFAS No. 141R, Business Combinations (SFAS 141R). SFAS 141R amends the requirements for accounting for business combinations. SFAS 141R will be effective after the beginning of the first annual reporting period beginning on or after December 15, 2008. We are currently evaluating the potential impact of the adoption of SFAS 141R on our company s consolidated financial statements.

In December 2007, the FASB issued SFAS No. 160, Noncontrolling Interests in Consolidated Financial Statements, an amendment of ARB No. 51 (SFAS 160). This statement establishes accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. Minority interests will be recharacterized as noncontrolling interests and classified as a component of shareholders equity separate from the parent s equity. In addition, SFAS 160 establishes reporting requirements that provide sufficient disclosures that clearly identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. This statement is effective prospectively, except for certain retrospective disclosure requirements, for fiscal years beginning after December 15, 2008. Accordingly, we will adopt SFAS 160 in 2009. The presentation and disclosure requirements of this standard must be applied retrospectively for all periods presented and will impact how we present and disclose noncontrolling interests and income from noncontrolling interests in our company s consolidated financial statements.

In March 2008, the FASB issued SFAS No. 161, Disclosures about Derivative Instruments and Hedging Activities An Amendment of SFAS No. 133 (SFAS 161). SFAS 161 seeks to improve financial reporting for derivative instruments and hedging activities by requiring enhanced disclosures regarding the impact on financial position, financial performance, and cash flows. SFAS 161 will be effective for financial statements issued for fiscal years beginning after November 15, 2008. We are currently evaluating the potential impact of the adoption of SFAS 161 on our company s consolidated financial statements.

In April 2008, the FASB issued FASB Staff Position No. 142-3, Determination of the Useful Life of Intangible Assets (FSP 142-3). FSP 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS No. 142, Goodwill and Other Intangible Assets. The intent of FSP 142-3 is to improve the consistency between the useful life of a recognized intangible asset under SFAS 142 and the period of expected cash flows used to measure the fair value of an asset under SFAS 141(R) and other U.S. generally accepted accounting principles FSP 142-3 applies to intangible assets that are acquired individually or with a group of other assets acquired in business combinations and asset acquisitions. FSP 142-3 also requires expanded disclosure related to the determination of intangible asset useful lives. FSP 142-3 is effective for fiscal years beginning after December 15, 2008. We are currently evaluating the potential impact of FSP 142-3 on our company s consolidated financial statements.

In May 2008, the FASB issued FASB Staff Position No. APB 14-1, Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement) (FSP APB 14-1) which clarifies that convertible debt instruments that may be settled in cash or other assets upon conversion are not addressed by APB No. 14, Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants. Additionally, FSP APB 14-1 requires an entity to separately account for the liability and equity components of a convertible instrument to reflect an entity s nonconvertible debt borrowing rate when interest cost is recognized in subsequent periods. FSP APB 14-1 also expands the disclosure requirements regarding convertible debt instrument terms and how the instrument is reflected in an entity s financial statements. FSP APB 14-1 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. We are currently evaluating the potential impact of FSP APB14-1 on our company s consolidated financial statements.

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In May 2008, the FASB issued SFAS No. 162, The Hierarchy of Generally Accepted Accounting Principles (SFAS 162). SFAS 162 is intended to improve financial reporting by identifying a consistent framework, or hierarchy, for selecting accounting principles to be used in preparing financial statements that are presented in conformity with U.S. generally accepted accounting principles for nongovernmental entities. SFAS 162 will become effective 60 days following the SEC s approval of the Public Company Accounting Oversight Board Auditing amendments to AU Section 411, The Meaning of Present Fairly in Conformity with Generally Accepted Accounting Principles. We are currently evaluating the impact of SFAS 162.

Other recent accounting pronouncements issued by the FASB (including its Emerging Issues Task Force), the AICPA and the SEC did not or are not believed by management to have a material impact on our company s present or future consolidated financial statements.

### 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. Although we do not currently have any borrowings with variable interest rates, fluctuations in interest rates may have a negative impact to any future borrowings.

*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. Fluctuations in exchange rates resulted in foreign currency translation (loss) gains of (\$1.8) million, \$0.2 million and \$0.3 million for the years ended December 31, 2008, 2007 and 2006, respectively.

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

The financial statements required by this item are located in Consolidated Financial Statements in Item 15 of this report. The supplementary financial information required by this item is located under the caption QUARTERLY RESULTS in Item 7 of this report.

### RECENT ACCOUNTING PRONOUNCEMENTS

### Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosures

None

### Item 9A. Controls and Procedures

<u>Evaluation of Disclosure Controls and Procedures.</u> Based on an evaluation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of December 31, 2008, the end of the period covered by this report, our Chief Executive Officer and Chief Financial Officer have concluded that the disclosure controls and procedures were effective.

<u>Changes in Internal Controls.</u> During the quarter ended December 31, 2008, there was no change in our internal controls over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

<u>Management</u> s Report on Internal Control over Financial Reporting. The company s management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles and includes those policies and procedures that (1) pertain to the

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maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the company s assets, (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that the company s receipts and expenditures are being made only in accordance with authorizations of the company s management and directors, and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company s assets that could have a material effect on the financial statements.

As required by Section 404 of the Sarbanes-Oxley Act of 2002 and the related rule of the SEC, management assessed the effectiveness of the company s internal control over financial reporting using the Internal Control-Integrated Framework developed by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on this assessment, management concluded that the company s internal control over financial reporting was effective as of December 31, 2008. Management has not identified any material weaknesses in the company s internal control over financial reporting as of December 31, 2008.

This annual report does not include an attestation report of the Company s registered public accounting firm regarding internal control over financial reporting. Management s report was not subject to attestation by the Company s registered public accounting firm pursuant to temporary rules of the Securities and Exchange Commission that permit the Company to provide only management s report in this annual report.

#### Item 9B. Other Information

On November 28, 2008, we issued \$0.5 million of new 8% Convertible Subordinated Notes Due January 2010 (the New Notes ). The New Notes were dated October 1, 2008 and were issued in satisfaction of accrued interest due under (i) the original 8% Convertible Subordinated Notes issued by the Company in January 2007 (the Original Notes ) and (ii) 8% Convertible Subordinated Notes that were subsequently issued by the Company in satisfaction of interest due under the Original Notes through July 1, 2008 (the Interest Notes ). The New Notes become due in January 2010 with monthly payments of 1/36th of the principal amount beginning on October 31, 2008. The New Notes and the Interest Notes (but not the Original Notes) are subject to accelerated repayment in the event of any sale of company assets exceeding \$5.0 million (excluding sales of inventory in the ordinary course). In addition, the New Notes and the Interest Notes (but not the Original Notes), may be redeemed by the holder if the Company receives financing involving an amount of \$25.0 million or more in net proceeds at any time. The New Notes bear interest at 8% per annum with interest payable quarterly in arrears in cash and are subordinate to certain secured financing from commercial lenders incurred by us in the future.

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### PART III

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

Set forth below is a table identifying our directors and executive officers as of April 3, 2009:

Name	Age Position
Larry Buffington 62	President and Chief Executive Officer
Tony Chung39	Chief Financial Officer
John Kang 45	Chairman of the Board
Dean Tanella 47	Director
Robert Biehl63	Director
CK Cho 52	Director

*Larry Buffington* was elected by our Board of Directors to serve as the President and Chief Executive Officer in October 2006. Mr. Buffington has been serving as full-time consultant to the Company since July 2006. He is also the president of Buffington Consulting, a consulting firm that Mr. Buffington started in 1997 focusing on the assessment and turnaround of manufacturing operations. Prior to starting Buffington Consulting, Mr. Buffington was the General Manager of the Communications Products Business Unit of Augat, Inc., a public company with worldwide manufacturing operations in communication, automotive and electronic products. Mr. Buffington received a bachelor s degree in Industrial Engineering from Pennsylvania State University in 1969.

*Tony Chung* was elected by our Board of Directors to serve as the Chief Financial Officer in December 2008. Mr. Chung previously served the Company in various capacities between May of 2004 and January of 2007 including as the Company s Vice President of Finance, Vice President of Legal and Administration and Director of Finance. Between November of 2004 and April of 2005, Mr. Chung was the Company s principal financial officer. Mr. Chung most recently served as Chief Financial Officer at BETEK Corporation, a real estate and investment subsidiary of SK Engineering and Construction, and as Chief Financial Officer of Solar City, a company providing advanced solar technology and installation services. From September 1992 to May 2004, Mr. Chung served in a variety of senior finance capacities at various companies including Everdream Corporation, a startup venture specializing in IT outsourcing, and MAI Systems Corporation, a publicly traded company that developed and licensed hotel management software. Mr. Chung is a Certified Public Accountant and served eight years at KPMG as an Audit and Consulting Manager for several large multinational companies. He received his B.S. degree in Business Administration from University of California at Berkeley, Haas School of Business in 1992. Mr. Chung also holds a J.D. degree from Pacific Coast University School of Law which he received in June of 2006.

*John Kang* was re-elected as Chairman of our Board of Directors in November 2007. Mr. Kang has served as a director of our company since 1994. From December 1994 to June 2001, he served as Chairman of our Board of Directors in various capacities. From June 2001 until December 30, 2005, Mr. Kang had served variously as our Chief Executive Officer and President. From July 1996 to September 2000, Mr. Kang served variously as Chief Executive Officer, President, and a director of Medical Manager Corporation, a public company traded on

### RECENT ACCOUNTING PRONOUNCEMENTS

the Nasdaq National Market until its sale in September 2000 to WebMD Corporation. From 1988 to 1995, he was Chairman of the board of directors of Clayton Group, Inc., a private company engaged in the distribution of waterworks equipment. Mr. Kang received a B.A. degree in Economics from Harvard College in 1985. On December 15, 2005, an indictment naming as defendants ten former officers and directs of Medical Manager Corporation, including Mr. Kang, was filed in the United States District Court for the District of South Carolina (Beaufort Division). The indictment includes counts for conspiracy, conspiracy to launder money instruments, and money laundering relating to a series of acquisitions that were made by Medical Manager during the years the years 1996 through 2003, the accounting practices of Medical Manager during that time frame, and the filing of various financial statements during that time frame. The indictment is unrelated to Mr. Kang service as a director and officer of our company. Mr. Kang resigned as our President and Chief Executive Officer on December 30, 2005, although he continues to serves as Chairman of the Board of our company and continues to work for our company on a full-time basis.

*Dean Tanella* was re-elected as a director in November 2007. Mr. Tanella has served as a director of our company since 2004. Mr. Tanella is a 20-year veteran of the institutional investment business and has worked for such leading firms as Raymond James & Associates, CS First Boston Corp., Adams Harkness & Hill, Drexel Burnham Lanbert, Inc., Kidder Peabody & Co. and

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the Vanguard Group. Since 1999, Mr. Tanella has served as President of Safe Harbor Capital, LLC and, since 2003, as President of HarborLight Capital, LLC, both of which are private investment firms. Mr. Tanella received his bachelors degree from Princeton University and his MBA from the Harvard Graduate School of Business Administration. In December 2004, Mr. Tanella was also named Executive Vice President Capital Markets Group and a member of the Board of Directors at GunnAllen Financial Inc., a leading independent brokerage firm headquartered in Tampa, Florida.

*Robert Biehl* was re-elected as a director in November 2007. Mr. Biehl has served as a director since 2005. Mr. Biehl founded the Masterplanning Group International and as President, personally consulted over 400 clients and mentored over 2,500 executives and world leaders. Prior to starting Masterplanning Group, Mr. Biehl was an executive staff of World Vision International where he designed and developed the Love Loaf Program, which has raised millions of dollars worldwide. He has also published many books in the area of personal and organizational development. Mr. Biehl received his B.A. degree in Psychology and a Masters Degree in Counseling from Michigan State University.

*CK Cho* was re-elected as a director in November 2007. Mr. Cho has served as a director since 2005. Mr. Cho has over 18 years of experience with Samsung Electronics and managed over \$700 million annual procurement budget responsible for semi-conductor and telecommunication equipment and other electronic components. He also served as CEO and President of Winvest Venture Partners Inc. and is currently serving as President and CEO of ATIC, an IT Venture Capital Company based in Korea. Mr. Cho received his bachelor s degree majoring in Business Administration and Material Sciences from the Korea University of Seoul.

**Change in Principal Financial Officer** 

On December 1, 2008 Gerald Morrow ceased to be our company s Chief Financial Officer upon appointment of Tony Chung as our Chief Financial Officer by our Board of Directors. Mr. Morrow was previously elected to serve as our Chief Financial Officer on January 13, 2008 by our Board of Directors. Additional information regarding Mr. Chung is set forth above in this Item 10.

**BOARD OF DIRECTORS** 

#### **Terms of Directors**

Our board of directors is divided into three classes (designated CLASS I, CLASS II, and CLASS III), as nearly equal in number as possible, with each class serving three-year terms expiring at the third annual meeting of stockholders after their elections or until their respective successors have been elected and qualified. CLASS I currently consist of the following directors whose term is scheduled to expire at the 2009 annual meeting of stockholders or the first annual meeting thereafter: Robert Biehl and John Kang. CLASS II currently consists of the following directors whose term is scheduled to expire at the 2010 annual meeting of stockholders: Dean Tanella and CK Cho. CLASS III consisted of directors whose term was to expire at the 2008 annual meeting of stockholders: There are no directors under this class as of April 3, 2009.

### Audit Committee

Our board of directors has an Audit Committee that is currently comprised of Mr. Tanella and Mr. Biehl. The Audit Committee is responsible for reviewing the independence, qualifications, and activities of our independent certified accountants and our financial policies, control procedures, and accounting staff. The Audit Committee is also responsible for the review of transactions between us and any officer, director, or entity in which an officer or director of our company has a material interest. Our board of directors has determined that Mr. Tanella qualifies as audit committee financial expert as defined by the regulations of the Securities and Exchange Commission. In addition, our board of directors has determined that Mr. Tanella is an independent director within the meaning of Rule 10A-3(b)(i) under the Securities Exchange Act of 1934. The Audit Committee is governed by a written charter approved by the board of directors.

**Compensation Committee** 

The Compensation Committee is comprised of Mr. Cho and Mr. Biehl. All of the members of the Compensation Committee are independent directors, as defined by the rules applicable to members of the Compensation Committee. The Compensation Committee is responsible for establishing the compensation of our senior management, including salaries, bonuses, termination arrangements, and other executive officer benefits. The Compensation Committee also administers our equity incentive plans.

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**Corporate Governance and Nominating Committee** 

A Corporate Governance and Nominating Committee ( the Committee ) was formed on February 18, 2003, and is comprised of Mr. Tanella and Mr. Biehl. All members of the Committee are independent directors, as defined by the rules applicable to members of the Committee. The Committee is generally responsible for adopting policies, procedures, and practices designed to help ensure that our corporate governance policies, procedures, and practices continue to assist the board and our management in effectively and efficiently promoting the best interests of our stockholders. The Committee is also responsible for selecting and recommending for approval by the Board and the Company s stockholders a slate of director nominees for election at each of the Company s annual meetings of stockholders, and otherwise for determining the Board committee members and chairmen, subject to Board ratification, as well as recommending to the Board director nominees to fill vacancies or new positions on the Board or its committees that may occur or be created from time to time, all in accordance with the Company s Bylaws and applicable law.

The Corporate Governance Committee s principal functions include:

- developing and maintaining our corporate governance policy guidelines;
- developing and maintaining our codes of conduct and ethics;

• overseeing the interpretation and enforcement of our Code of Conduct and our Code of Ethics for Chief Executive Officer and Senior Financial and Accounting Officers;

• evaluating the performance of our board, its committees, and committee chairmen and our directors; and

• selecting and recommending a slate of director nominees for election at each of the Company s annual meeting of the shareholders and recommending to the Board director nominees to fill vacancies or new positions on the Board or its committees that may occur from time to time.

### **Compensation Committee Interlocks and Insider Participation**

None of the members of our compensation committee serves, or has at any time served, as an officer or employee of us or any of our subsidiaries. None of our executive officers has served as a member of the compensation committee, or other committee serving an equivalent function, of any other entity, one of whose executive officers served as a member of our compensation committee.

#### Limitation of Liability and Indemnification of Officers and Directors

Our by-laws provide that our directors, officers and employees shall be indemnified by us to the fullest extent authorized by Delaware law, as it now exists or may in the future be amended, against all expense, liability and loss reasonably incurred or suffered by them in connection with their service for or on behalf of us. In addition, we have entered into separate indemnification agreements with our directors and executive officers. We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and executive officers. These indemnification agreements may require us to indemnify our directors and executive officers for related expenses, including attorneys fees, judgments, fines and amounts paid in settlement that were actually and reasonably incurred or suffered by a director or executive officer in an action or proceeding arising out of his or her service as one of our directors or executive officers. In order to cover the foregoing potential expenses and liability, we have obtained insurance that insures our directors and officers against specified losses.

#### **Code of Ethics**

Our board of directors has adopted a Code of Ethics that is applicable to its principal executive officer, principal financial officer, principal accounting officer or controller, and persons performing similar functions. The Code of Ethics is attached as Exhibit 14 to our Annual Report on Form 10-K filed on November 10, 2004. In addition, we intend to promptly disclose (1) the nature of any amendment to our Code that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (2) the nature of any waiver, including an implicit waiver, from a provision of our Code that is granted to one of these specified officers, the name of such person who is granted the waiver and the date of the waiver on our website in the future. You may also request a copy of the Code by sending the request to information@liquidmetal.com.

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### Item 11. Executive Compensation

#### COMPENSATION DISCUSSION AND ANALYSIS

This compensation discussion describes the material elements of compensation awarded to, earned by, or paid to each of our executive officers who served as named executive officers during the last completed fiscal year. This compensation discussion focuses on the information contained in the following tables and related footnotes and narrative for primarily the last completed fiscal year, but we also describe compensation actions taken before or after the last completed fiscal year to the extent it enhances the understanding of our executive compensation disclosure.

The compensation committee currently oversees the design and administration of our executive compensation program.

The principal elements of our executive compensation program are base salary, annual cash incentives, long-term equity incentives in the form of stock options, other benefits and perquisites, post-termination severance and acceleration of stock option vesting for certain named executive officers upon termination and/or a change in control. Our other benefits and perquisites consist of reimbursement for certain automobile payments and health insurance benefits. Our philosophy is to position the aggregate of these elements at a level that is commensurate with our size and sustained performance.

#### **Compensation Program Objectives and Philosophy**

The objectives of our compensation programs are to:

- attract, motivate and retain talented and dedicated executive officers;
- provide our executive officers with both cash and equity incentives to further the interests of us and our stockholders; and
  - provide employees with long-term incentives so we can retain them and provide stability during our growth stage.

Generally, the compensation of our executive officers is composed of a base salary, an annual incentive compensation award and equity awards in the form of stock options. In setting base salaries, the compensation committee reviewed the individual contributions of the particular executive. The management incentive program for 2008 is a discretionary award determined by the compensation committee based on company

### BOARD OF DIRECTORS

performance. In addition, stock options are granted to provide the opportunity for long-term compensation based upon the performance of our common stock over time.

For each of our named executive officers, the compensation committee reviews and approves all elements of compensation taking into consideration recommendations from our principal executive officer (for compensation other than his own), as well as competitive market guidance provided at the request of the compensation committee.

We have designed our management incentive program so that bonuses paid thereunder will qualify as performance-based compensation under Section 162(m) of the Internal Revenue Code of 1986, as amended (the Code). Given the compensation cost to us of awarding stock options under recent accounting pronouncements, we will consider the size and frequency of any future stock option awards under our long-term equity incentive program.

#### **Base Salaries**

We provide the opportunity for our named executive officers and other executives to earn a competitive annual base salary. We provide this opportunity to attract and retain an appropriate caliber of talent for the position, and to provide a base wage that is not subject to our performance risk. We review base salaries for our named executive officers annually in January and increases are based on our performance and individual performance. The salary of our principal executive officer is set by our compensation committee.

#### **Cash Incentives**

We provide the opportunity for our named executive officers and other executives to earn cash incentive award. We provide this opportunity to attract and retain an appropriate caliber of talent for the position and to motivate executives to achieve our annual business goals. We plan to review cash incentive awards for our named executive officers and other executives annually in March to determine award payments for the last completed fiscal year, as well as to establish award opportunities for the current fiscal year.

Awards are subject to the compensation committee s discretion and may take into account corporate performance measures, including, but not limited to, revenues, EBITDA and net income. The compensation committee establishes award criteria, generally, as a percentage of annual growth.

For the year ended December 31, 2008, John Kang, our chairman of the board is eligible to receive cash awards under the 2008 management incentive program based on revenue and profit growth. The awards are subject to final approval by the compensation committee based on overall performance of the company. There were no such awards declared or paid to our named executive officers during 2008.

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In setting the target bonus amounts, our Board took into consideration that our named executive officers have significant equity interests in us through direct ownership of shares or prior option grants, which already provide them with performance incentives.

#### **Equity-Based Compensation.**

Our equity-based awards to our executive officers consist principally of stock options granted from time to time under our 2002 Equity Incentive Plan and our 1996 Stock Option Plan. Stock option grants are based on various factors, including the executive officer s position, responsibility and tenure, each executive officer s ability to contribute to our future success, and the other elements of such executive officer s compensation. Generally, we use equity-based compensation to better align the interests of our executive officers with those of our stockholders.

For our named executive officers, our stock option program is based on grants that are individually negotiated in connection with employment agreements and other grants to our executives. We have traditionally used stock options as its form of equity compensation because stock options provide a relatively straightforward incentive for our executives, result in less immediate dilution of existing shareholders interests and, prior to our adoption of SFAS 123(R), resulted in less compensation expense for us relative to other types of equity awards. During 2008, all grants of stock options to our employees were granted with exercise prices equal to or greater than the fair market value of our common stock on the respective grant dates. For a discussion of the determination of the fair market value of these grants, see Item 7 Management s Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies .

We do not time stock option grants to executives in coordination with the release of material non-public information. Our stock options have a 10-year contractual exercise term or 5-year contractual term if the optionee owns more than 10% of voting power of the company. In general, the option grants are also subject to the following post-termination and change in control provisions:

Event	Award Vesting	Exercise Term					
Termination by Us Reason Other than Cause, Disability or Death	Forfeit Unvested (1)	3 months from Date of Termination (1)					
Disability or Death	Forfeit Unvested	12 months from Date of Termination					
Termination for Cause	Forfeit Vested and Unvested						
Other Termination	Forfeit Unvested	90 days from Date of Termination					
Change in Control	Accelerated (2)	Accelerated (2)					

(1) Options granted under the 2002 Non-employee Director Option Plan will continue to vest and be exercisable for 12 months following the termination.

(2) The Board of Directors may, at its discretion, amend vesting rights including additional grant additional shares in case of mergers or reorganizations for anti-dilution purposes.

The vesting of certain of our named executive officers stock options may be accelerated pursuant to the terms of their employment agreements in certain termination and/or change in control events. These terms are more fully described in Employment Agreements and Potential Payments upon Termination or Change in Control.

#### **Executive Benefits and Perquisites**

We provide the opportunity for our named executive officers and other executives to receive certain perquisites and general health and welfare benefits. We also offer participation in our defined contribution 401(k) savings plan. We do not match employee contributions under our 401(k) plan. Participation in general health and welfare benefits and the 401(k) plan are voluntary and are available to all eligible employees of the company. We provide these benefits to provide an additional incentive for our executives and to remain competitive in the general marketplace for executive talent. For the last completed fiscal year, perquisites other than general health and welfare benefits consisted of car payment reimbursements provided to John Kang, our chairman of the board, CK Cho, our director, and Larry Buffington, our chief executive officer and president.

Set forth below is information regarding compensation earned by or paid or awarded to the following executive officers of the company during the year ended December 31, 2008: (i) Larry Buffington, our president and chief executive officer; (ii) Tony Chung, our chief executive officer; (iii) John Kang, our chairman of the board, which persons are our principal executive officer, principal financial officer, and our most highly compensated executive whose total compensation exceeded \$200,000 other than our principal executive officer, who were serving as executive officers at December 31, 2008. These persons are hereafter referred to as our

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named executive officers. The identification of such named executive officers is determined based on the individual s total compensation for the year ended December 31, 2008, as reported below in the Summary Compensation Table.

#### **Summary Compensation Table**

The following table sets forth for each of the named executive officers: (i) the dollar value of base salary and bonus earned during the year ended December 31, 2008; (ii) the aggregate grant date fair value of stock and option awards granted during the year, computed in accordance with SFAS 123 (R); (iii) the dollar value of earnings for services pursuant to awards granted during the year under non-equity incentive plans; (iv) the change in pension value and non-qualified deferred compensation earnings during the year; (v) all other compensation for the year; and, finally, (vi) the dollar value of total compensation for the year.

								Change in Pension Value				
								and				
								Nonqualified				
Name and						Option	Non-Equity	Deferred				
Principal					Stock	Awards	Incentive Plan	Compensation		All Other		
Position	Year		Salary	Bonus	Awards	(1)	Compensation	Earnings	C	Compensation		Total
Larry Buffington	2008 2007	\$ \$	250,000 250,000			\$ 161,171			\$	9,600(2)	\$ \$	259,600 411,171
Tony Chung	2008 2007	\$	12,500			\$ 9,027					\$	21,527
John Kang	2008 2007	\$ \$	300,000 300,000			\$ 161,171			\$ \$	14,163(2) 13,110(2)		314,163 474,281
Ricardo Salas	2008 2007	\$	20,000						\$ \$	220,000(3) 180,000(4)		240,000 180,00

(1) Amount represent the fair value of stock options granted in 2008 under SFAS 123(R) as discussed in Note 13, Stock Compensation Plan to our financial statement included elsewhere in this annual report on Form 10-K.

(2) Amount represents automobile lease payments and use of a company car.

(3) Amount represents compensation earned for consulting services provided to the company from January 2008 through November 2008.

(4) Amount represents compensation earned for consulting services provided to the company from January 2007 through December 2007.

For a description of the material terms of employment agreements with our named executive officers, see Employment Agreements.

### Grants of Plan-based Awards

The following table sets forth information regarding all incentive plan awards that were made to the named executive officers during 2008, including incentive plan awards (equity-based and non-equity based) and other planned-based awards. Disclosure on a separate line item is provided for each grant of an award made to a named executive officer during the year. The information supplements the dollar value disclosure of stock, option and non-stock awards in the Summary Compensation Table by providing additional details about such awards. Equity incentive-based awards are subject to a performance condition or a market condition as those terms are defined by SFAS 123(R). Non-equity incentive plan awards are awards that are not subject to SFAS 123(R) and are intended to serve as an incentive for performance to occur over a specified period.

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								All			
	Grant	Non-E	Future Payo quity Incentiv Awards	ve Plan	Equity I	l Future Payo ncentive Plar	Other Stock Awards: Number of Shares of Stock	All Other Option Awards: Number of Securities Underlying	Exercise or Base Price of Option		
Name	Date	Threshold	Target	Maximum	Threshold	Target	Maximum	or Units	Options	Aw	ards
Larry Buffington											
Tony Chung	12/01/08								200,000	\$	0.086
John Kang											
Ricardo Salas											

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**Outstanding Equity Awards at Fiscal Year-End** 

The following table sets forth information on outstanding option and stock awards held by the named executive officers at December 31, 2008, including the number of shares underlying both exercisable and unexercisable portions of each stock option as well as the exercise price and expiration date of each outstanding option.

				Stock	Awards Equity					
									Incentive Plan	Equity
									Awards:	Incentive Plan
									Number	Awards: Market or
									of	Payout
									Unearned Shares,	Value of
			Equity					Market	Units or	Unearned Shares,
			Incentive Plan					Value of Shares or Units of	Other	Units or
	Number of	Number of	Awards Number of				Number of Shares	Stock	Rights	Other
	Securities Underlying	Securities Underlying	Securities Underlying		Option	Vesting	or Units of Stock	That	That	Rights
Name	Unexercised Options Exercisable	Unexercised Options Unexercisable	Unexercised Unearned	Option Exercise Price	Expiration Date	Commencement	That Have Not	Have Not Vested	Have Not Vested	That Have Not Vested
	Exercisable	Unexercisable	Options	Price	Date	Date	Vested	vested	vested	Not vested
Larry Buffington	100,000	400,000		\$ 0.772	09/19/2017	09/20/2008(1)				
Tony Chung		200,000		\$ 0.086	11/30/2018	12/01/2009(1)				
John Kang	21,505 1,591,399 30,000	20,000		\$ 4.650 \$ 4.650 \$ 2.326	12/30/2010 12/31/2014	12/31/2000(2) 12/31/2000(2) 01/01/2006(1)				
	596	1,192		\$ 0.772	09/19/2017					