

LIQUIDMETAL TECHNOLOGIES INC  
Form 10-K  
March 07, 2016  
**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, 2015

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

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

**Commission File No. 001-31332**

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**LIQUIDMETAL TECHNOLOGIES, INC.**

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

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

**30452 Esperanza**  
**Rancho Santa Margarita, CA 92688**  
*(Address of principal executive offices, 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 No

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 No

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 the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. 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      Accelerated filer      Non-accelerated filer      Smaller reporting company

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

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant as of June 30, 2015 was approximately \$54,041,042. For purposes of this calculation only, (i) shares of common stock are deemed to have a market value of \$0.13 per share, the closing price of the common stock as reported on the "Over-the-Counter Bulletin Board" on June 30, 2015 and (ii) each of the executive officers, directors and persons holding more than 10% of the outstanding common stock as of June 30, 2015 is deemed to be an affiliate. The number of shares of common stock outstanding as of March 3, 2016 was 477,149,485.

Documents Incorporated by Reference

Portions of the definitive proxy statement for the registrant's 2016 Annual Meeting of Stockholders, to be subsequently filed with the Securities and Exchange Commission, are incorporated by reference into Part III of this Report.

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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 plans, future events, objectives, current expectations, estimates, forecasts, assumptions or 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 “believes,” “estimates,” “projects,” “expects,” “intends,” “may,” “anticipate,” “plans,” “seeks,” and similar expressions identify forward-looking statements. Forward-looking statements involve risks and uncertainties that could cause actual outcomes and results to differ materially from the anticipated outcomes or results. These statements are not guarantees of future performance, and undue reliance should not be placed on these statements. It is important to note that our 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” (Item 1A of this report) as well as the following risks and uncertainties:

- Our ability to fund our operations in the short and long term through financing transactions on terms acceptable to us, or at all;
- Our history of operating losses and the uncertainty surrounding our ability to achieve or sustain profitability;
- Our limited history of developing and selling products made from our bulk amorphous alloys;
- Our limited history in licensing our technology to third parties;
- 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.

We undertake 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 and manufacturing company that develops and commercializes products made from amorphous alloys. Our Liquidmetal® family of alloys consists of a variety of proprietary bulk alloys and composites that utilize the advantages offered by amorphous alloy technology. We design, develop, manufacture, and sell products and custom components from bulk amorphous alloys to customers in a wide range of industries. We also partner with third-party manufacturers and licensees to develop and commercialize Liquidmetal alloy products.

Amorphous alloys are, in general, 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 are proprietary amorphous alloys that 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. Our alloys and the injection molding technology we employ result in components that exhibit: exceptional dimensional control and repeatability that rivals precision machining, excellent corrosion resistance, brilliant surface finish, high strength, high hardness, high elastic limit, alloys that are non-magnetic, and the ability to form complex shapes common to the injection molding of plastics. Interestingly, all of these characteristics are achievable from the molding process, so design engineers do not have to select specific alloys to achieve one or more of the characteristics, as is the case with crystalline materials. We believe these advantages could result in Liquidmetal alloys supplanting high-performance alloys, such as titanium, stainless steel, and other incumbent materials in a 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.

## **General Corporate Information**

We were originally incorporated in California in 1987, and we reincorporated in Delaware in May 2003. Our principal executive office is 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](http://www.liquidmetal.com) and all of our filings with the Securities and Exchange Commission (“SEC”) are available free of charge on our website.

## **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.

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. We obtained the exclusive right to commercialize the bulk amorphous alloy through a license agreement with Caltech and have developed the technology to enable the commercialization of bulk amorphous alloys.

### ***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. 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 potential 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. The unique combined process results of precise dimensional control and repeatability, surface finish, strength, hardness, elasticity, and corrosion resistance are uncommon in crystalline material alternatives. Additionally, the ability to leverage injection molding processes and related tooling technologies provides the ability to deliver a broad range of material characteristics in a complex shaped component.

### *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 precision and repeatability, high yield strength, strength-to-weight ratio, elasticity, corrosion resistance and hardness.

The comparatively high yield strength of bulk Liquidmetal alloys means that a very high amount of stress must be exerted to cause the material to fail. However, because the yield strength is so high, the yield strength of many of our Liquidmetal alloys' compositions is very near their ultimate strength, which is the measure of stress at which plastic deformation 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 high resistance to crack initiation because of their very high strength and hardness, specific 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 continue to develop 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. 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. Liquidmetal alloys also 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.

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.

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 continue to engage 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 alloys have processing characteristics similar in some respects to plastics, which lend themselves to near-to-net shape molding, Liquidmetal alloys can in many cases be shaped efficiently into

intricate, engineered products. This capability can eliminate or reduce certain post-molding steps, such as machining and re-forming, and therefore has the potential to significantly reduce processing costs associated with making parts in high volume.

### **Our Strategy**

The key elements of our strategy include:

*Focusing Our Marketing Activities on Select Products with Optimized Gross-Margins.* We have focused and continue to focus our marketing activities on select products with optimized gross margins for the long term. This strategy is designed to align our product development initiatives with our processes and 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 products that possess design features that take advantage of our existing and developing manufacturing technology and that command a price commensurate with the performance advantages of our alloys. In addition, 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 ourselves and/or third parties.

*Pursuing Strategic Partnerships in Order to More Rapidly Develop and Commercialize Products.* We have and continue 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 limited licensing 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 effectively handle product design and process challenges.

*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 engaged in 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**

There are a very broad number of markets where Liquidmetal alloys have application opportunities. Some of the more prominent markets include: aerospace, automotive, defense, medical/dental, non-consumer electronics, and sporting equipment. 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 partnership transactions could also create valuable opportunities beyond the parameters of these target markets, we anticipate continuing to pursue these markets both internally and in conjunction with partners.

### ***Medical Devices***

We are engaged in product development efforts relating to various medical devices that could be made from bulk 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 for incumbent materials, such as machined stainless steel and titanium, or components made from other more traditional metalworking technologies currently used in various medical device applications. Our ongoing emphasis has been on minimally invasive surgical instrument applications for Liquidmetal alloys. These include, but are not limited to, specialized blades, clamps, tissue suturing components, tissue manipulation devices and orthopedic instruments utilized for implant surgery procedures, dental devices, and general surgery devices. The potential value offered by our alloys is higher performance in some cases and cost reduction in others, the latter stemming from the ability of Liquidmetal alloys to be net shape molded into components, thus reducing costs of secondary processing common with other metalworking processes. The status of most components in the prototyping phase is subject to non-disclosure agreements with our customers.

We believe that our prospects for success in this market will be enhanced through our focus on validating our materials through standardized industry tests such as the ASTM 10993 biocompatibility tests, optimizing existing alloy compositions and developing new alloy compositions to satisfy the industry's rigorous material performance standards.

### *Components for Non-Consumer Electronic Products*

We design, develop and produce components for non-consumer electronic devices utilizing our bulk Liquidmetal alloys and believe that our alloys offer enhanced performance and design benefits for these components in certain applications. Our strategic focus is primarily on parts that command a price commensurate with the performance advantages of our alloys. These product categories in the non-consumer electronics field include, but are not limited to, aerospace components, defense parts, medical devices, sporting goods, leisure products, automotive components and industrial machines. We believe that there are multiple applications and opportunities in the non-consumer electronics product category for us to produce parts that command the higher margin and premium prices consistent with our core business strategy.

We believe that the continued miniaturization of, and the introduction of advanced features to non-consumer electronic devices is a primary driver of growth, market share, and profits in our industry. The high strength-to-weight ratio and elastic limit, along with the processing advantages of bulk Liquidmetal alloys enable the production of smaller, thinner, but stronger electronic parts. We also believe that the strength characteristics of our alloys could facilitate the creation of a new generation of non-consumer electronic devices which currently may not be viable because of strength limitations of conventional metal parts in the marketplace today. Lastly, we believe that our alloys offer style and design flexibility, such as shiny metallic finishes, to accommodate the changing tastes of our customers.

On August 5, 2010, we entered into a license transaction with Apple Inc. ("Apple") pursuant to which, for a one time license fee, we granted to Apple a perpetual, worldwide, fully-paid, exclusive license to commercialize our intellectual property in the field of "consumer electronic" products, as defined in the license agreement. As a result, we will not pursue application of our bulk Liquidmetal alloys in the consumer electronics field. However, we continue to work with Apple to develop and advance research and development in the amorphous alloy space to benefit both consumer and non-consumer electronics fields. For more information regarding our transaction with Apple, see " – Licensing Transactions" below.

### *Aerospace and Defense*

We design and develop components for aerospace and defense customers to meet their requirements for complex, high strength parts with precision tolerances through our near net-shape molding process. Some of the parts we have developed cannot be made by any other conventional fabrication process, offering designers of high performance, mission critical systems unique alternatives.

Because of the high degree of uniformity and consistency of our volume molding process, we are able to reduce significant costs associated with machining and verifying the dimensional tolerances of high precision parts and post-fabrication steps required to apply highly polished surfaces. Additional key properties for the aerospace and defense market are Liquidmetal alloy's tensile strength, hardness, wear resistance, resistance to corrosion, and Liquidmetal alloy's unique properties associated with explosives and munitions.

The many high value and specialized applications within the aerospace and defense industry present significant opportunities for our technology and solutions, and as they are designed into key systems, will provide us with potential long-term revenue streams.

### *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, corrosion resistance, and elasticity of our bulk alloys have the potential to enhance performance in a variety of products including, but not limited to, golf clubs, tennis rackets, archery, sporting arms and scuba equipment. We further believe that many sporting goods products are conducive to our strategy of focusing on high-margin products that meet our design criteria.

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 knives. We further believe that Liquidmetal technology can be used to make high-quality, high-strength jewelry from precious metals.

### **Licensing Transactions**

***Apple License Transaction***

On August 5, 2010, the Company entered into a license transaction with Apple Inc. (“Apple”) pursuant to which (i) the Company contributed substantially all of its intellectual property assets to a newly organized special-purpose, wholly-owned subsidiary, called Crucible Intellectual Property, LLC (“CIP”), (ii) CIP granted to Apple a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in the field of consumer electronic products, as defined in the license agreement, in exchange for a license fee, and (iii) CIP granted back to the Company a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in all other fields of use.

Under the agreements relating to the license transaction with Apple, the Company was obligated to contribute, to CIP, all intellectual property that it developed through February 2012. Subsequently, this obligation has been extended to apply to all intellectual property developed through February 2016. The Company is also obligated to maintain certain limited liability company formalities with respect to CIP at all times after the closing of the license transaction.

***Visser Precision Cast, LLC License Transaction***

On June 1, 2012, the Company entered into a Master Transaction Agreement (the “Visser MTA”) with Visser Precision Cast, LLC (“Visser”) relating to a strategic transaction for manufacturing services and financing. Under the manufacturing and service component of the Visser MTA, the Company agreed to engage Visser as a perpetual, exclusive manufacturer of non-consumer electronic products. Under the financing component of the Visser MTA, the Company issued and sold to Visser in a private placement transaction (i) 30,000,000 shares of common stock at a purchase price of \$0.10 per share resulting in proceeds of \$3,000,000 and (ii) two warrants to purchase 15,000,000 shares of common stock at an original exercise price of \$0.22 per share which expire on June 1, 2017.

On May 20, 2014, the Company and Visser entered into a settlement agreement whereby the parties have amended and restated the sublicense and financing components of the Visser MTA. Additionally, the manufacturing services component and remaining considerations of the Visser MTA were terminated. Under the amended and restated sublicense agreement, the Company granted to Visser a fully paid-up, royalty-free, irrevocable, perpetual, worldwide, non-transferable, nonexclusive sublicense to all of the Company's intellectual property developed on or prior to May 20, 2014 (the "Effective Date"), for all fields of use other than certain excluded fields as set forth therein. Visser does not have any rights, now or in the future, to the Company's intellectual property developed after the Effective Date. The license to the Company's intellectual property developed on or prior to the Effective Date does not include the right to use the "Liquidmetal" trademark or any of the Company's other trademarks, except in certain defined situations, as set forth in the amended and restated agreement.

With the foregoing revised arrangements, the Company is no longer required to use Visser as its exclusive manufacturer and is free to license other manufacturers on a non-exclusive basis in any industry or geographic market as to which the Company has not previously granted an exclusive license to a third party. Any such manufacturers licensed by the Company in the future will be able both to manufacture parts for the Company and its customers, and to manufacture and sell products for their own account for such industries or markets as the Company may agree, subject to whatever royalty arrangements the Company may negotiate. The Company has not yet licensed any manufacturers other than Visser. Visser will also have the right to manufacture and sell products under the amended and restated sublicense agreement.

The settlement amended and restated the two warrants the Company issued to Visser in June 2012 to purchase 15,000,000 shares of its common stock at an exercise price of \$0.22 per share. Those warrants contained anti-dilution mechanisms under which the number of shares issuable upon exercise of those warrants would be increased, and the exercise price for such shares would be reduced if we issued shares of our common stock at prices less than the warrants' exercise price. The amended and restated warrant agreement includes the effect of such anti-dilution adjustments and is exercisable for 18,611,079 shares of common stock (increased further to 18,937,931 shares under the anti-dilution provisions of the warrants, see footnote 14) at an exercise price of \$0.17 per share. The amended and restated warrant agreement continues to contain comparable anti-dilution adjustment mechanisms. The amended and restated warrant agreement also removes certain lock-up provisions that were included in the original warrants. These warrants expire on June 1, 2017.

### *Other License Transactions*

On January 31, 2012, the Company entered into a Supply and License Agreement for a five year term with Engel Austria GmbH ("Engel") whereby Engel was granted a non-exclusive license to manufacture and sell injection molding machines to the Company's licensees. Since that time, the Company and Engel have agreed on an injection molding machine configuration that can be commercially supplied and supported by Engel. On December 6, 2013, the companies entered into an Exclusive License Agreement for a 10 year term whereby Engel was granted an exclusive license to manufacture and sell injection molding machines to the Company's licensees in exchange for certain royalties to be paid by Engel to the Company based on a percentage of the net sales price of such injection molding

machines.

The Company's Liquidmetal Golf subsidiary has the exclusive right and license to utilize the Company's 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. Liquidmetal Technologies owns 79% of the outstanding common stock in Liquidmetal Golf.

In June 2003, the Company entered into an exclusive license agreement with LLPG, Inc. ("LLPG"). Under the terms of the agreement, LLPG has the exclusive right to commercialize Liquidmetal alloys, particularly precious-metal based compositions, in jewelry and high-end luxury product markets. The Company, in turn, will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by LLPG. The exclusive license agreement with LLPG expires on December 31, 2021.

In March 2009, the Company entered into a license agreement with Swatch Group, Ltd. ("Swatch") under which Swatch was granted a non-exclusive license to the Company's technology to produce and market watches and certain other luxury products. In March 2011, this license agreement was amended to grant Swatch exclusive rights as to watches and all third parties (including the Company), but non-exclusive as to Apple, and the Company's license agreement with LLPG was simultaneously amended to exclude watches from LLPG's rights. The Company will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by Swatch. The license agreement with Swatch will expire on the expiration date of the last licensed patent.

### **Our Intellectual Property**

Pursuant to our transaction with Apple described under "Licensing Transactions" above, we license substantially all our intellectual property from our wholly-owned subsidiary, Crucible Intellectual Property, LLC. 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 86 owned or licensed U.S. patents and 58 patent applications pending 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 acquired patent rights that provide us with the exclusive right to commercialize the amorphous alloys and other amorphous alloy technology developed at 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 and the processing of our alloys. The patents expire on various dates between 2016 and 2035. Our policy is to seek patent protection for all technology, inventions, and improvements that are of commercial importance to the development of our business, except to the extent that we believe it is advisable to maintain such technology or invention as a trade secret.

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

### **Research and Development**

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

- *Enhance Material Processing and Manufacturing Efficiencies.* We are working with our strategic partners to 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 one of the key technology drivers 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. We 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 as we expand the forms, compositions, and methods of processing of our alloys.

We conduct our research and development programs internally, as well as through strategic relationships with third parties. Currently, our internal research and development efforts are conducted by a team of nine scientists, engineers, and technicians each of whom we either employ directly or engage as a consultant.

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, 2015, 2014 and 2013 were \$2.1 million, \$1.6 million and \$1.2 million, respectively.

### **Raw Materials**

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

### **Manufacturing**

During 2015 we continued to expand on the development of our Manufacturing Center of Excellence, which will allow (i) on-site manufacturing of customer products and (ii) our customers and strategic partners to inspect, collaborate, and demonstrate the latest developments of our alloy composition development and manufacturing processes. As part of these efforts, we received our ISO 9001:2008 certification during 2015 as further validation of our on-site processes and focus on product quality.

In addition, our current manufacturing strategy is to partner with global companies that are contract manufacturers and alloy producers. We seek third party companies with proven track records of success and that can gain specialized skills and knowledge of our alloys through close collaborations with our team of scientists and engineers. We believe that partnering with these global companies will allow us to forgo the capital intensive requirements of maintaining our own large scale manufacturing facilities and allow us to grow the number of applications for the technology much faster than could be accomplished on our own.

### **Customers**

During 2015, there were three major customers, who together accounted for 52% of our revenue. During 2014, there were four major customers, who together accounted for 84% of our revenue. During 2013, there was one major customer, who accounted for 80% of our revenue. As of December 31, 2015, three customers represented 100%, or \$30,000, of the total outstanding trade accounts receivable. As of December 31, 2014, two customers represented 100%, or \$83,000, of the total outstanding trade accounts receivable. In the future, we expect that a significant portion of our revenue may continue to be concentrated in a limited number of customers, even if our bulk alloys business grows.

### **Competition**

We believe it would be difficult to develop, manufacture, or sell bulk amorphous alloys, or products made from 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, zinc and stainless steel in our non-consumer electronics components business, and titanium and composites will continue to be used widely in medical devices and sporting goods. Many of these competitive materials are produced by domestic and international companies that have substantially greater financial and other resources than we do. Based on our experience 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, dimensional precision, 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 in 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 processed by simple traditional metalworking processes into shapes and components that are satisfactory for their intended applications. Our alloys are generally more competitive with respect to price compared to components machined from various metals, such as titanium, stainless steel and other higher performance crystalline metals. 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.

We experience and will continue to experience indirect competition from the competitors of our customers. Because we 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**

Because of the minimal lead-time associated with orders of bulk alloy parts, we generally do not carry a significant backlog. 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. Our goal is to educate customers on the benefits of our technology and help them gain adequate knowledge to apply the technology to their upcoming product application designs. To that end, we have 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. We currently have 4 full-time employees engaged in sales and marketing activities. Additionally, we have expanded our outside sales forces to complement our internal team, as evidenced through the continued partnering with territorial market sales representatives.

### **Employees**

As of December 31, 2015, we had 23 full-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**

Government regulation of our products will depend on the nature and type of product and the jurisdictions in which the products are sold. For example, 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. 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 and may need to obtain similar approvals before marketing these medical device products in foreign countries.

### **Environmental Law Compliance**

Our operations are subject to national, state, and local environmental laws in 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.

### **Golf Subsidiary**

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. However, in December 2012, we recommenced activities and discussions with potential partners regarding 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. Such activities continued through 2015. 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, which comprises Liquidmetal Technologies' 79% ownership interest in Liquidmetal Golf.



## **Item 1A. Risk Factors**

*Investing in our securities involves a high degree of risk. The risks described below are not the only ones facing us. Additional risks not currently known to us or that we currently believe are immaterial also may impair our business, operations, liquidity and stock price materially and adversely. You should carefully consider the risks and uncertainties described below in addition to the other information included or incorporated by reference in this Annual Report on Form 10-K. If any of the following risks actually occur, our business, financial condition or results of operations would likely suffer. In that case, the trading price of our common stock could fall and you could lose all or part of your investment.*

### **We have limited funds to support our current operations.**

We have a relatively limited history of producing bulk amorphous alloy components and products on a mass-production scale. Furthermore, the ability of future contract manufacturers 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. Such factors will likely require that we raise additional funds to support our operations beyond 2016 and into 2017. There is no assurance that we will be able to raise such additional funds on acceptable terms, if at all. If we raise additional funds by issuing securities, existing stockholders may be diluted. If funding is insufficient at any time in the future, we may be required to alter or reduce the scope of our operations or to cease operations entirely.

### **Funding from our 2014 Purchase Agreement may be limited or insufficient to fund our operations or to implement our strategy.**

The extent to which we utilize the 2014 Purchase Agreement (see note 3 in the accompanying footnotes to the consolidated financial statements) as a source of funding will depend on a number of factors, including the prevailing market price of our common stock, the volume of trading in our common stock and the extent to which we are able to secure funds from other sources. The number of shares that we may sell under the 2014 Purchase Agreement on any given day and during the term of the agreement is limited. Additionally, we may not effect any sales of shares of our common stock under the 2014 Purchase Agreement during the continuance of an event of default or on any trading day that the closing sale price of our common stock is less than \$0.10 per share. Even if we are able to access the full \$30.0 million under the 2014 Purchase Agreement, we may still need additional capital to fully implement our business, operating and development plans.

If we elect to raise additional funds or additional funds are required, we may raise such funds from time to time through public or private equity offerings, debt financings, corporate collaboration and licensing arrangements or

other financing alternatives, as well as through sales of common stock under the 2014 Purchase Agreement. Additional equity or debt financing or corporate collaboration and licensing arrangements may not be available on acceptable terms, if at all. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we will be prevented from pursuing acquisition, licensing, development and commercialization efforts and our ability to generate revenues and achieve or sustain profitability will be substantially harmed.

If we raise additional funds by issuing equity securities, our stockholders will experience dilution. Debt financing, if available, would result in increased fixed payment obligations and may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Any debt financing or additional equity that we raise may contain terms, such as liquidation and other preferences, which are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish valuable rights to our technologies, future revenue streams or product candidates or to grant licenses on terms that may not be favorable to us. Should the financing we require to sustain our working capital needs be unavailable or prohibitively expensive when we require it, our business, operating results, financial condition and prospects could be materially and adversely affected and we may be unable to continue our operations.

**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 cumulative operating losses since our inception. Our operating loss for the fiscal years ended December 31, 2015, 2014, and 2013 were \$9.3 million, \$8.9 million, and \$6.1 million, respectively. We had an accumulated deficit of approximately \$218.0 million at December 31, 2015, approximately \$210.6 million at December 31, 2014, and approximately \$204.1 million at December 31, 2013. 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 have a limited history of developing and selling products made from our bulk amorphous alloys.**

We have a relatively limited history of producing bulk amorphous alloy components and products on a mass-production scale. Furthermore, our suppliers' 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 its 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 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 market penetration, revenue targets or profitability.

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

As a result of our limited history of developing and marketing bulk amorphous alloy components and products, as well as our new manufacturing strategy of partnering with contract manufacturers and alloy producers, our historical results of operations may not be indicative of our future results.

**We primarily rely on limited suppliers for mold making, manufacturing and alloying of our bulk amorphous alloys and parts, as well as the manufacturing of our bulk amorphous alloy production machines.**

We currently have two suppliers who fulfill the mold making and manufacturing of our bulk amorphous alloy parts. Our suppliers may allocate their limited capacity to fulfill the production requirements of their other customers. In the event of a disruption of the operations of our suppliers, we may not have other manufacturing sources immediately available. Such an event could cause significant delays in shipments and may adversely affect our revenue, cost of goods sold and results of operations.

We currently have one supplier who fulfills our alloying/manufacturing of bulk amorphous alloys. In the event of a disruption of the operations of our alloy supplier, we may not have a secondary alloying source immediately available. Such an event could cause significant delays in shipments and may adversely affect our revenue, cost of goods sold

and results of operations.

Our bulk amorphous alloy production machines are manufactured by one supplier. Orders for additional machines are estimated to be built with a 13 to 26-week lead time. If our bulk alloy parts supplier requires more production machines to manufacture customer parts due to an unexpected demand, we may experience delays in shipment, increased cost of goods sold or loss in revenues. Additionally, in the event of a disruption in the operations of our production machine supplier, our bulk alloy parts supplier may not have a secondary machine manufacturer immediately available. Such an event could cause significant delays in fulfilling customers' orders and may adversely affect our revenue, cost of goods sold and results of operations.

**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 novel nature 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. Even 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, obtain regulatory approvals.

We believe that our average sales cycle (the time we deliver a proposal to a customer until the time our customer fully integrates our Liquidmetal alloys into its product) could be a significant period of time. Our history to date has demonstrated that the sales cycle could extend beyond two years. 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 Liquidmetal 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 be significant, with an additional period of time before a customer commences volume production of products incorporating our components and products, if ever. Moreover, because of this lengthy development cycle, we may experience a delay between the time we accrue expenses for research and development and sales and marketing efforts

and the time when we generate revenue, if any. We may incur substantial costs in an attempt to transition a customer from initial testing to prototype and from prototype to final product. If we are unable to minimize these transition costs, or to recover the costs of these transitions from our customers, our operating results will be adversely affected.

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

For the near future, we expect that a significant portion of our revenue may be concentrated in a limited number of customers. 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 and harm our business. 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 and licensees 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 and licensees to successfully market and sell their finished goods that incorporate our products. We may have little control over our customers' and licensees' 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 Liquidmetal products or the marketing efforts of our customers and licensees.

**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 Liquidmetal 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 many of which have substantially greater financial and other resources than we do. These different materials may include plastics, zinc, titanium alloys, metal injection molding, or stainless steel, among others, and 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 continue expanding and improving our technology platform by, among other things, constantly refining and improving our 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. We do not have “key man” or similar insurance on any of the key members of our management and scientific staff. 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 otherwise highly qualified non-U.S. citizens may be restricted by applicable immigration laws.

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

As 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 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 novel nature 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 partners, we may not be able to consummate transactions with these strategic partners on favorable terms or obtain the benefits we anticipate from such a transaction.

**We may derive some portion of our revenue from sales outside the United States, which may expose the Company to foreign commerce risks.**

We may sell a portion of our products to customers outside of the United States, and our operations and revenue may be subject to risks associated with foreign commerce, including transportation delays and foreign tax and legal compliance. Moreover, customers may sell finished goods that incorporate our components and products outside of the United States, which indirectly expose us 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 generally 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.

**Our business could be subject to the potentially 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.

**Our inability to protect our licenses, patents, trademarks, and proprietary rights in the United States and foreign countries could harm our business.**

We own several patents relating to amorphous alloy technology, and we have other rights to amorphous alloy patents through an exclusive license from the California Institute of Technology. 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 owned and licensed patented technology; and

operate our business without infringing on the intellectual property rights of third parties.

Our licensed technology is comprised of several issued United States patents covering the composition, method of manufacturing, and application and use 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. Those patents have expiration dates between 2016 and 2035. 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.



In August 2010, we entered into a license transaction with Apple Inc. (“Apple”) pursuant to which (i) we contributed substantially all of our intellectual property assets to a newly organized special-purpose, wholly-owned subsidiary, called Crucible Intellectual Property, LLC (“CIP”), (ii) CIP granted to Apple a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in the field of consumer electronic products, as defined in the license agreement, and (iii) CIP granted back to us a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in all other fields of use.

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 or individuals 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 without breaching any licenses that may relate to our technologies 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 from 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.

**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 SEC XBRL mandate, new SEC regulations and International Financial Reporting Standards (“IFRS”), 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. 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 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 our business 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 for our Liquidmetal alloys that we have identified or may identify in the future may be subject to government regulations. For example, any medical devices made from our alloys likely will be subject to extensive government regulation in the United States by the Food and Drug Administration (“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 Liquidmetal alloy medical device products in the United States. 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 Golf subsidiary creates potential for conflicts of interest.**

We directly own 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 21% of the Liquidmetal Golf stock is owned by approximately 95 stockholders of record. As a result, conflicts of interest may develop between us and the minority

stockholders of Liquidmetal Golf. To the extent that our officers and directors are also officers or directors of Liquidmetal Golf, matters may arise that place the fiduciary duties of these individuals in conflicting positions.

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

During 2015, the highest bid price for our common stock was \$0.18 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:

limited current liquidity and the possible need to raise additional capital;

quarter-to-quarter variations in results of operations;

announcements of technological innovations by us or our potential competitors;

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;

future sales of common stock, or securities convertible into or exercisable for common stock;

adverse judgments or settlements obligating us to pay damages;

future issuances of common stock in connection with acquisitions or other transactions;

acts of war, terrorism, or natural disasters;

industry, domestic and international market and economic conditions, including the global macroeconomic downturn over the last three years and related sovereign debt issues in certain parts of the world;

low trading volume in our stock;

developments relating to patents or property rights;

government regulatory changes; 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.

**Future sales of our common stock could depress our stock price.**

Sales of a large number of shares of our common stock, or the availability of a large number of shares for sale, could adversely affect the market price of our common stock and could impair our ability to raise funds in additional stock offerings. In the event that we propose to register additional shares of common stock under the Securities Act of 1933 for our own account, certain shareholders are entitled to receive notice of that registration and to include their shares in the registration, subject to limitations described in the agreements granting these rights.

**A limited public trading market exists for our common stock, which makes it more difficult for our stockholders to sell their common stock in the public markets.**

Our common stock is currently traded under the symbol "LQMT" and currently trades at a low volume, based on quotations on the "Over-the-Counter Bulletin Board," meaning that the number of persons interested in purchasing our common stock at or near bid prices at any given time may be relatively small or non-existent. This situation is attributable to a number of factors, including the fact that we are a small company which is still relatively unknown to stock analysts, stock brokers, institutional investors, and others in the investment community that generate or influence sales volume, and that even if we came to the attention of such persons, they tend to be risk-averse and

might be reluctant to follow an unproven company such as ours or purchase or recommend the purchase of our stock until such time as we became more viable. Additionally, many brokerage firms may not be willing to effect transactions in our securities. As a consequence, there may be periods of several days or more when trading activity in our stock is minimal or non-existent, as compared to a seasoned issuer which has a large and steady volume of trading activity that will generally support continuous sales without an adverse effect on share price. We cannot give you any assurance that a broader or more active public trading market for our common stock will develop or be sustained, or that trading levels will be sustained.

**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 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 the sole source of gain for the foreseeable future for our common stockholders.

**FINRA sales practice requirements may also limit a shareholder's ability to buy and sell our stock.**

The Financial Industry Regulatory Authority ("FINRA") has adopted rules that require in recommending an investment to a customer a broker-dealer must have reasonable grounds for believing that the investment is suitable for that customer. Prior to recommending speculative low priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer's financial status, tax status, investment objectives and other information. Under interpretations of these rules, FINRA believes that there is a high probability that speculative low priced securities will not be suitable for at least some customers. The FINRA requirements make it more difficult for broker-dealers to recommend that their customers buy our common stock, which may limit your ability to buy and sell our stock and have an adverse effect on the market for our shares.

**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 in such a transaction. 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; 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, as well as other provisions in our certificate of incorporation, our bylaws, and Delaware law 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 office and principal research and development offices are located in Rancho Santa Margarita, California and consist of approximately 15,000 square feet. We occupy this facility pursuant to a lease agreement that expires in April 2023. We currently expect that the foregoing facility will meet our anticipated research, warehousing, and administrative needs for the foreseeable future.

**Item 3. Legal Proceedings**

None.

**Item 4. Mine Safety Disclosures**

Not Applicable.



**PART II****Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**

Our common stock is currently quoted on the “Over-the-Counter Bulletin Board” under the symbol “LQMT.” On March 3, 2016, the last reported sales price of our common stock was \$0.08 per share. As of March 3, 2016, we had 220 active 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, as reported by the “Over-the-Counter Bulletin Board.” These quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

<b>2015</b>	<b>High</b>	<b>Low</b>
Fourth Quarter	\$0.10	\$0.06
Third Quarter	\$0.14	\$0.10
Second Quarter	\$0.16	\$0.12
First Quarter	\$0.18	\$0.12
<b>2014</b>	<b>High</b>	<b>Low</b>
Fourth Quarter	\$0.20	\$0.10
Third Quarter	\$0.28	\$0.18
Second Quarter	\$0.29	\$0.17
First Quarter	\$0.41	\$0.16

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 our operations and future growth.

## Stock Price Performance

The stock price performance graph below compares the cumulative total return of our common stock against the cumulative total return of the Standard & Poor's Small Cap 600 NASDAQ U.S. index and the Russell 2000 ® index for the past five fiscal years. The graph indicates a measurement point of December 31, 2010, and assumes a \$100 investment on such date in our common stock, the Standard & Poor's Small Cap 600 and the Russell 2000 ® indices. With respect to the payment of dividends, the Company has not paid any dividends on its common stock, but the Standard & Poor's Small Cap 600 and the Russell 2000 ® indices assume that all dividends were reinvested. The stock price performance graph set forth shall not be deemed "soliciting material" or to be "filed" with the SEC, and will not be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that the Company specifically incorporates this graph by reference into such a filing.

**Item 6. Selected Financial Data**

The following selected financial data insofar as it relates to the years ended December 31, 2015, 2014, 2013, 2012, and 2011 has been derived from our audited financial statements. The information that follows should be read in conjunction with the audited consolidated financial statements and notes thereto for the period ended December 31, 2015 included in Part IV of this Form 10-K. See also Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations".

*(\$ in thousands, except for per share data)*

	<b>Year Ended December 31,</b>				
	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
Statement of Operations Data:					
Total revenue	\$ 125	\$ 603	\$ 1,026	\$ 650	\$ 972
Net (loss) income and comprehensive (loss) income	\$(7,317)	\$(6,558)	\$(14,248)	\$(14,025)	\$ 6,155
Net (loss) income and comprehensive (loss) income applicable to Liquidmetal Technologies shareholders	\$(7,309)	\$(6,546)	\$(14,206)	\$(14,025)	\$ 6,155
Per Share:					
Net (loss) income- basic	\$(0.02)	\$(0.01)	\$(0.04)	\$(0.07)	\$ 0.05
Net (loss) income- diluted	\$(0.02)	\$(0.01)	\$(0.04)	\$(0.07)	\$ 0.03
Weighted-average common shares outstanding (basic)	470,955,041	441,439,018	341,451,559	188,298,113	118,523,228
Weighted-average common shares outstanding (diluted)	470,955,041	441,439,018	341,451,559	188,298,113	163,292,496

	<b>Year Ended December 31,</b>				
	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
Balance Sheet Data:					
Current assets	\$ 5,302	\$ 10,466	\$ 2,689	\$ 7,915	\$ 811
Total assets	\$ 7,273	\$ 12,284	\$ 4,103	\$ 8,973	\$ 1,993
Current liabilities	\$ 1,974	\$ 860	\$ 1,071	\$ 6,923	\$ 3,610
Total liabilities	\$ 2,889	\$ 3,721	\$ 6,848	\$ 10,545	\$ 4,219
Common stock	\$ 477	\$ 464	\$ 376	\$ 242	\$ 130
Accumulated deficit	\$(217,945)	\$(210,636)	\$(204,090)	\$(189,884)	\$(175,859)
Stockholders' equity (deficit)	\$ 4,384	\$ 8,563	\$(2,745)	\$(1,572)	\$(2,226)

Common shares issued and outstanding have increased from 134,467,554 as of December 31, 2011 to 477,149,485 as of December 31, 2015. The increase is primarily due to the issuance of shares to investors upon the settlement of convertible debt, the issuance of shares to investors in private placements, and the issuance of shares to employees.

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

*This management's discussion and analysis should be read in conjunction with the 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, estimates, forecasts, assumptions or projections. 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," "plan," "seek," and similar expressions identify forward-looking statements. These statements involve risks and uncertainties that could cause actual outcomes and results to differ materially from the anticipated outcomes or results, and undue reliance should not be placed on these statements. These risks and uncertainties include, but are not limited to, the matters discussed under the caption "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 bulk alloys and composites that utilize the advantages offered by amorphous alloy technology. We design, develop and sell products and components from bulk amorphous alloys to customers in various industries. We also partner with third-party manufacturers and licensees to develop and commercialize Liquidmetal alloy products.

Amorphous alloys are, in general, 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 are proprietary amorphous alloys that 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, in laboratory testing, 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, 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 i) selling our bulk Liquidmetal alloy products, which include non-consumer electronic devices, medical products, automotive components, and sports and leisure goods; ii) selling tooling and prototype parts such as demonstration parts and test samples for customers with products in development; iii) product licensing and royalty revenue, and iv) research and development revenue. We expect that these sources of revenue will continue to significantly change the character of our revenue mix.

Our cost of sales consists primarily of the costs of manufacturing, which include raw allow and internal labor required to operate our on-site production cell. Selling, general, and administrative expenses currently consist primarily of salaries and related benefits, 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 expenses, 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 the research and development of Liquidmetal bulk 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.

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 Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 815-10, *Derivatives and Hedging*, due to their price-based anti-dilution rights, 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.

## SIGNIFICANT TRANSACTIONS

### 2014 Stock Purchase Agreement

On August 20, 2014, we entered into a common stock purchase agreement (“2014 Purchase Agreement”) with Aspire Capital Fund LLC (“Aspire Capital”), which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of \$30,000,000 worth of our common stock, \$0.001 par value, over the 36-month term of the 2014 Purchase Agreement.

From time to time over the term of the 2014 Purchase Agreement, we may, at our sole discretion, provide Aspire Capital with a regular purchase notice (each a “Regular Purchase Notice”) directing Aspire Capital to purchase up to 1,000,000 shares, but not to exceed \$400,000, of our common stock per trading day at a price per share equal to the lesser of (i) the lowest sale price of our common stock on the purchase date; or (ii) the arithmetic average of the three lowest closing sale prices for our common stock during the twelve consecutive trading days ending on the trading day immediately preceding the purchase date.

In addition, on any date on which we submit a Regular Purchase Notice to Aspire Capital for the purchase of at least 500,000 shares at a price above \$0.30, we also have the right, in our sole discretion, to present Aspire Capital with a volume-weighted average price purchase notice (each, a “VWAP Purchase Notice”) directing Aspire Capital to purchase an amount of stock equal to up to 30% of the aggregate shares of our common stock traded on our principal market on the next trading day (the “VWAP Purchase Date”), subject to a maximum number of shares we may determine. The purchase price per share pursuant to such VWAP Purchase Notice is generally 95% of the volume-weighted average price for our common stock traded on our principal market on the VWAP Purchase Date.

We may deliver multiple Regular Purchase Notices and VWAP Purchase Notices to Aspire Capital from time to time during the term of the 2014 Purchase Agreement, so long as the most recent purchase has been completed. The 2014 Purchase Agreement provides that we and Aspire Capital shall not effect any sales under the 2014 Purchase Agreement on any purchase date where the closing sale price of our common stock is less than \$0.10 per share. There are no trading volume requirements or restrictions under the 2014 Purchase Agreement, and we will control the timing and amount of sales of our common stock to Aspire Capital.

On September 9, 2014, an initial registration statement covering 75,000,000 shares issued and issuable pursuant to the 2014 Purchase Agreement was declared effective by the SEC. As of December 31, 2015, we had received an aggregate of \$1,568,000 under the 2014 Purchase Agreement through the issuance of 12,500,000 shares of our common stock at a weighted average price of \$0.13 per share.

### Line of Credit Facility

In February 2015, we entered into a \$2,000,000 line of credit facility, with a fixed interest rate of 2.1%, which originally matured on February 13, 2016. The facility has been extended through August 25, 2016, with reductions in available borrowings and associated collateral requirements to \$1,000,000. Amounts available under this facility are secured by cash collateral. Such collateral is included as restricted cash on our consolidated balance sheet. As of December 31, 2015, there was \$700,000 in outstanding borrowings under this facility. Interest expense applicable to these borrowings was \$4,000 for the year ended December 31, 2015 and \$0 for the years ended December 31, 2014 and 2013.

### 2013 Stock Purchase Agreement

On November 8, 2013, we entered into a Common Stock Purchase Agreement (the “2013 Purchase Agreement”) with Kingsbrook Opportunities Master Fund LP, Tech Opportunities LLC, and Iroquois Master Fund Ltd. (each, a “2013 Investor” and collectively, the “2013 Investors”). The 2013 Purchase Agreement provided that, upon the terms and subject to the conditions set forth therein, each of the 2013 Investors had committed to purchase such 2013 Investor’s pro rata portion of up to \$20,000,000 worth of our common stock, over the 36-month term of the 2013 Purchase Agreement. In consideration for the execution and delivery of the 2013 Purchase Agreement, on November 8, 2013, we issued 2,666,667 shares of common stock to the 2013 Investors. As of December 31, 2014, we had received an aggregate of \$16,000,000 under the 2013 Purchase Agreement through the issuance of 85,355,615 shares of our common stock at a weighted average price of \$0.19 per share. On August 22, 2014, we voluntarily terminated the 2013 Purchase Agreement, effective August 25, 2014.

### July 2012 Private Placement

On July 2, 2012, we entered into a private placement transaction (the “July 2012 Private Placement”) pursuant to which we issued \$12,000,000 in principal amount of senior convertible notes that were due on September 1, 2013. The notes were convertible into shares of our common stock at a conversion price of \$0.352 per share. The notes bore interest at 8% per annum and were payable in twelve equal monthly installments of principal and interest beginning on October 1, 2012. Each monthly installment payment was payable in cash, shares of our common stock, or a combination thereof. If paid in shares, such shares were valued at the lower of (i) the then applicable conversion price or (ii) a price that was 87.5% of the arithmetic average of the ten (or in some cases fewer) lowest weighted average prices of our common stock during the twenty trading day period ending two trading days before the payment date or the date on which we elected to pay in shares, whichever was lower. As of July 17, 2013, we had issued 163,641,547 shares of common stock in full satisfaction of the notes (see note 3 in the accompanying footnotes to the consolidated financial statements).





As a part of the July 2012 Private Placement, we issued warrants to purchase 18,750,000 shares of our common stock at an exercise price of \$0.384 per share (reduced to \$0.19 per share under the anti-dilution and price reset provisions of the warrants, see note 14 in the accompanying footnotes to the financial statements), and such warrants first became exercisable on January 2, 2013 which was six months after the issuance date thereof. In the event that we issue or sell shares of our common stock at a price per share that is less than the exercise price then in effect, the exercise price of the warrants will be reduced based on a weighted-average formula. In addition, on the two year anniversary of the issuance date, the then applicable exercise price was reset to equal 87.5% of the arithmetic average of the ten lowest weighted average prices of the common stock during the twenty trading day period ending two trading days immediately preceding the reset date. All of the warrants will expire on July 2, 2017 (see note 3 in the accompanying footnotes to the consolidated financial statements).

#### Apple License Transaction

On August 5, 2010, we entered into a license transaction with Apple Inc. (“Apple”) pursuant to which (i) we contributed substantially all of our intellectual property assets to a newly organized special-purpose, wholly-owned subsidiary, called Crucible Intellectual Property, LLC (“CIP”), (ii) CIP granted to Apple a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in the field of consumer electronic products, as defined in the license agreement, in exchange for a license fee, and (iii) CIP granted back to us a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in all other fields of use.

Under the agreements relating to the license transaction with Apple, we were obligated to contribute to CIP all intellectual property that we developed through February 2012 (“Capture Period”). Subsequently, we have amended the Capture Period to extend through February 2016. We are also obligated to maintain certain limited liability company formalities with respect to CIP at all times after the closing of the license transaction.

#### Visser Precision Cast, LLC License Transaction

On June 1, 2012, we entered into a Master Transaction Agreement (the “Visser MTA”) with Visser Precision Cast, LLC (“Visser”) relating to a strategic transaction for manufacturing services and financing. Under the manufacturing and service component of the Visser MTA, we had agreed to engage Visser as a perpetual, exclusive manufacturer of non-consumer electronic products. Under the financing component of the Visser MTA, we issued and sold to Visser in a private placement transaction (i) 30,000,000 shares of common stock at a purchase price of \$0.10 per share resulting in proceeds of \$3,000,000 and (ii) two warrants to purchase 15,000,000 shares of common stock at an original exercise price of \$0.22 per share which were to expire on June 1, 2017.

On May 20, 2014, we and Visser entered into a settlement agreement whereby the parties have amended and restated the sublicense and financing components of the Visser MTA. Additionally, the manufacturing services component and remaining considerations of the Visser MTA were terminated. Under the amended and restated sublicense agreement, we have granted to Visser a fully paid-up, royalty-free, irrevocable, perpetual, worldwide, non-transferable, nonexclusive sublicense to all of our intellectual property developed on or prior to May 20, 2014 (the "Effective Date"), for all fields of use other than certain excluded fields as set forth therein. Visser does not have any rights, now or in the future, to our intellectual property developed after the Effective Date. The license to our intellectual property developed on or prior to the Effective Date does not include the right to use the "Liquidmetal" trademark or any of our other trademarks, except in certain defined situations, as set forth in the amended and restated agreement.

With the foregoing revised arrangements, we are no longer required to use Visser as our exclusive manufacturer and are free to license other manufacturers on a non-exclusive basis in any industry or geographic market as to which we have not previously granted an exclusive license to a third party. Any such manufacturers licensed by us in the future will be able both to manufacture parts for us and our customers, and to manufacture and sell products for their own account for such industries or markets as we may agree, subject to whatever royalty arrangements we may negotiate. We have not yet licensed any manufacturers other than Visser. Visser will also have the right to manufacture and sell products under the amended and restated sublicense agreement.

The settlement amended and restated the two warrants we issued to Visser in June 2012 to purchase 15,000,000 shares of our common stock at an exercise price of \$0.22 per share. Those warrants contained anti-dilution mechanisms under which the number of shares issuable upon exercise of those warrants would be increased, and the exercise price for such shares would be reduced if we issued shares of our common stock at prices less than the warrants' exercise price. The amended and restated warrant agreement includes the effect of such anti-dilution adjustments and is exercisable for 18,611,079 shares of common stock (increased further to 18,937,931 shares under the anti-dilution provisions of the warrants, see footnote 14 in the accompanying footnotes to the financial statements) at an exercise price of \$0.17 per share. The amended and restated warrant agreement continues to contain comparable anti-dilution adjustment mechanisms. The amended and restated warrant agreement also removes certain lock-up provisions that were included in the original warrants. These warrants expire on June 1, 2017.

Other License Transactions

On January 31, 2012, we entered into a Supply and License Agreement for a five year term with Engel Austria GmbH (“Engel”) whereby Engel was granted a non-exclusive license to manufacture and sell injection molding machines to our licensees. Since that time, we and Engel have agreed on an injection molding machine configuration that can be commercially supplied and supported by Engel. On December 6, 2013, the companies entered into an Exclusive License Agreement for a 10 year term whereby Engel was granted an exclusive license to manufacture and sell injection molding machines to our licensees in exchange for certain royalties to be paid by Engel to us based on a percentage of the net sales price of such injection molding machines.

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. We own 79% of the outstanding common stock of Liquidmetal Golf.

In June 2003, we entered into an exclusive license agreement with LLPG, Inc. (“LLPG”). Under the terms of the agreement, LLPG has the exclusive right to commercialize Liquidmetal alloys, particularly precious-metal based compositions, in jewelry and high-end luxury product markets. We, in turn, will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by LLPG. The exclusive license agreement with LLPG expires on December 31, 2021.

In March 2009, we entered into a license agreement with Swatch Group, Ltd. (“Swatch”) under which Swatch was granted a non-exclusive license to our technology to produce and market watches and certain other luxury products. In March 2011, this license agreement was amended to grant Swatch exclusive rights as to watches and all third parties (including us), but non-exclusive as to Apple, and our license agreement with LLPG was simultaneously amended to exclude watches from LLPG’s rights. We will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by Swatch. The license agreement with Swatch will expire on the expiration date of the last licensed patent.

**RESULTS OF OPERATIONS**

	For the years ended December 31,								
	2015			2014			2013		
	in 000's	% of Revenue		in 000's	% of Revenue		in 000's	% of Revenue	
<b>Revenue:</b>									
Products	\$98			\$565			\$1,007		
Licensing and royalties	27			38			19		
<b>Total revenue</b>	<b>125</b>			<b>603</b>			<b>1,026</b>		
Cost of sales	349	279 %		483	80 %		774	75 %	
<b>Gross profit (loss)</b>	<b>(224 )</b>	-179 %		<b>120</b>	20 %		<b>252</b>	25 %	
Selling, marketing, general and administrative	7,010	5608 %		7,463	1238 %		5,157	503 %	
Research and development	2,047	1638 %		1,596	265 %		1,156	113 %	
Total operating expense	9,057			9,059			6,313		
<b>Operating loss</b>	<b>(9,281)</b>			<b>(8,939)</b>			<b>(6,061 )</b>		
Change in value of warrants, gain (loss)	1,946			2,700			(2,155 )		
Change in value of embedded conversion feature liability, gain	-			-			621		
Debt discount amortization expense	-			(373 )			(6,504 )		
Other income	-			30			-		
Interest expense	(4 )			-			(245 )		
Interest income	22			24			5		
Gain on extinguishment of debt	-			-			91		
<b>Net loss</b>	<b>\$(7,317)</b>			<b>\$(6,558)</b>			<b>\$(14,248)</b>		

In discussing the results of our operations, we have categorized the specific items in our statements of operations into various categories to facilitate the understanding of our core business operations. Explanations of each category as well as analyses of specific items contained in that category are discussed below:

*(a) Year Ended December 31, 2015 Compared to Year Ended December 31, 2014*

**Operating revenue and expenses**

The operating revenue and expenses category of statements of operations items represent those items that pertain to our core operations in the bulk alloy manufacturing and licensing business as follows:

*Revenue.* Our revenues are segregated into two types representing i) products, which contain revenues related to our bulk alloy manufacturing business and ii) licensing and royalties, which contain revenues related to our bulk alloy licensing business.

Total revenue decreased by \$478 thousand to \$125 thousand for the year ended December 31, 2015 from \$603 thousand for the year ended December 31, 2014. The decrease for the period was primarily attributable to a reduction in research and development services provided to licensees during 2015 as a result of a shift towards on-site production and prototyping activities with customers to further develop and support the commercialization of our technology.

*Cost of sales.* Cost of sales was \$349 thousand, or 279% of total revenue, for the year ended December 31, 2015, a decrease from \$483 thousand, or 80% of total revenue, for the year ended December 31, 2014. The decrease in our cost of sales for the year ended December 31, 2015 was primarily attributable to lower revenues, off-set by higher costs associated with initial on-site manufacturing activities than previously encountered when providing product development and prototyping services to customers.

The cost to manufacture parts from our bulk alloys manufacturing business is variable and differs based on the unique design of each product. Given the continued development and refinement of our manufacturing efforts during 2015, our cost of sales as a percentage of product revenue is not necessarily representative of our future cost percentages and is expected to improve over time with increases in volume and continued improvements to our internal processes. When we begin increasing our products revenues with shipments of routine, commercial parts through our manufacturing facility and/or third party contract manufacturers, we expect our cost of sales percentages to decrease, stabilize and be more predictable.

*Gross profit (loss).* Our gross profit (loss) decreased by \$344 thousand from \$120 thousand as of December 31, 2014 to \$(224) thousand as of December 31, 2015. Our gross margin percentage decreased from 20% as of December 31, 2014 to (179)% as of December 31, 2015. As discussed above under “Cost of sales”, early production orders are resulting in a higher cost mix, relative to revenue, than would otherwise be incurred in an on-site production environment, with higher volumes and more established operating processes, or through contract manufacturers. As such, our gross profit (loss) percentages have fluctuated and may continue to fluctuate based on volume and quoted production prices per unit and may not be representative of our future business. When we begin increasing our product revenues with shipments of routine, commercial parts with future orders to our manufacturing facility and/or third party contract manufacturers, we expect our gross margin percentages to stabilize, increase and be more predictable.

*Selling, marketing, general, and administrative expenses.* Selling, marketing, general, and administrative expenses decreased by \$453 thousand to \$7.0 million, or 5608% of revenue, for the year ended December 31, 2015 from \$7.5 million, or 1238% of revenue, for the year ended December 31, 2014. The decrease in expense from the prior year is due primarily to additional legal costs incurred during 2014 in conjunction with the arbitration proceeding and settlement discussions with Visser.

*Research and development expenses.* Research and development expenses increased by \$451 thousand to \$2.1 million, or 1638% of revenue, for the year ended December 31, 2015, from \$1.6 million, or 265% of revenue, for the year ended December 31, 2014. The increase from the prior year was mainly due to additional Company research projects during 2015 and additional personnel hires to support our manufacturing and process development efforts. We continue to (i) perform research and development of new Liquidmetal alloys and related processing capabilities, (ii) develop new manufacturing techniques, and (iii) contract with consultants to advance the development of Liquidmetal alloys and related production processes

*Operating loss.* Operating loss increased by \$342 thousand from \$8.9 million for the year ended December 31, 2014 to \$9.3 million for the year ended December 31, 2015. As discussed above, the increase in our operating loss is primarily related to a decrease in gross margin and an increase in operating expense categories from 2014 to 2015.

We continue to invest in our technology infrastructure to expedite the adoption of our technology, but we have experienced long sales lead times for customer adoption of our technology. Until such time where we can either i)

increase our revenues with shipments of routine, commercial parts through a combination of our manufacturing facility or third party contract manufacturers or ii) obtain significant licensing revenues, we expect to continue to have operating losses for the foreseeable future.

### **Non-operational expenses**

Our statement of operations contains various, significant items that are non-operational in nature. These categories of expenses may have significant gains and losses based on the volatility of our stock price as follows:

*Change in value of warrants, gain (loss).* The change in value of warrants was a non-cash gain of \$1.9 million for the year ended December 31, 2015, which resulted from periodic valuation adjustments for warrants issued in connection with the Visser MTA and the July 2012 Private Placement. The gain noted during the year ended December 31, 2015 compared to a gain of \$2.7 million during the year ended December 31, 2014 was primarily due to continued decreases in our stock price during 2015 from \$0.12 as of December 31, 2014 to \$0.06 as of December 31, 2015, compounded by a reduction in volatility and other assumptions impacting the valuation model. Changes in the value of our warrants are non-cash and do not affect the core operations of our business.

*Debt discount amortization expense.* Debt discount amortization expense was \$0 for the year ended December 31, 2015, as compared to \$373 thousand for the year ended December 31, 2014. Expense recorded for the year ended December 31, 2014, was primarily related to the periodic amortization of issuance costs associated with the 2013 Purchase Agreement and the write-off of such costs following the termination of the 2013 Purchase Agreement on August 25, 2014. No such expenses were recorded during the year ended December 31, 2015.

*Other income.* Other income was \$30 thousand for the year ended December 31, 2014. No such income was recorded during the year ended December 31, 2015. Other income during 2014 was primarily due to the sale of our remaining membership interest in a former subsidiary that was recorded as a cost method investment.

*Interest expense.* Interest expense was \$4 thousand for the year ended December 31, 2015, relating to interest incurred under our line of credit facility. No such costs were incurred during the year ended December 31, 2014.



*Interest income.* Interest income was \$22 thousand and \$24 thousand for the years ended December 31, 2015 and 2014, respectively, from interest earned on cash deposits.

*Net loss.* Our annual net losses of \$7.3 million as of December 31, 2015 and \$6.5 million as of December 31, 2014 are reflective of operating expenses associated with our on-going business as well as non-operational expenses, discussed above, primarily related to gains in our warrant valuations, which are not reflective of our on-going business.

***(b) Year Ended December 31, 2014 Compared to Year Ended December 31, 2013***

**Operating revenue and expenses**

The operating revenue and expenses category of statements of operations items represent those items that pertain to our core operations in the bulk alloy manufacturing and licensing business as follows:

*Revenue.* Our revenues are segregated into two types representing i) products, which contain revenues related to our bulk alloy manufacturing business and ii) licensing and royalties, which contain revenues related to our bulk alloy licensing business.

Total revenue decreased by \$423 thousand to \$603 thousand for the year ended December 31, 2014 from \$1.0 million for the year ended December 31, 2013. The decrease for the period was primarily attributable to a reduction in research and development services to licensees during 2014 as a result of a shift towards prototyping activities with potential customers to support the commercialization of our technology.

*Cost of sales.* Cost of sales was \$483 thousand, or 80% of total revenue, for the year ended December 31, 2014, a decrease from \$774 thousand, or 75% of total revenue, for the year ended December 31, 2013. The cost to manufacture parts from our bulk alloys manufacturing business is variable and differs based on the unique design of each product. In addition, much of our current product mix consists of prototype parts and other revenue which have higher internal variable cost percentages, relative to products revenue, than would otherwise be incurred by contract manufacturers. Therefore, our cost of sales as a percentage of products revenue may not be representative of our future cost percentages. When we begin increasing our products revenues with shipments of routine, commercial parts through our manufacturing facility or third party contract manufacturers, we expect our cost of sales percentages to stabilize and be more predictable.

*Gross profit (loss).* Our gross profit (loss) decreased by \$132 thousand from \$252 thousand as of December 31, 2013 to \$120 thousand as of December 31, 2014. Our gross margin percentage decreased from 25% as of December 31, 2013 to 20% as of December 31, 2014. As discussed above under “Cost of revenue”, much of our current product mix consists of prototype parts and other revenue which have higher internal variable cost percentages, relative to revenue, than would otherwise be incurred by contract manufacturers. As such, our gross profit (loss) percentages may fluctuate based on volume and quoted production prices per unit and may not be representative of our future business. When we begin increasing our revenues with shipments of routine, commercial parts through our manufacturing facility or third party contract manufacturers, we expect our gross margin percentages to stabilize and be more predictable.

*Selling, marketing, general, and administrative expenses.* Selling, marketing, general, and administrative expenses increased by \$2.3 million to \$7.5 million, or 1238% of revenue, for the year ended December 31, 2014 from \$5.2 million, or 503% of revenue, for the year ended December 31, 2013. The increase in expense from the prior year is due primarily to additional legal costs incurred in conjunction with the arbitration proceeding and settlement discussions with Visser, increases in stock based compensation related to 2014 stock option grants, and increased payroll expenses associated with additional personnel hires to support our sales and marketing efforts.

*Research and development expenses.* Research and development expenses increased by \$440 thousand to \$1.6 million, or 265% of revenue, for the year ended December 31, 2014, from \$1.2 million, or 113% of revenue, for the year ended December 31, 2013. The increase from the prior year was mainly due to additional Company research projects during 2014 and additional personnel hires to support our manufacturing and process development efforts. We continue to (i) perform research and development of new Liquidmetal alloys and related processing capabilities, (ii) develop new manufacturing techniques, and (iii) contract with consultants to advance the development of Liquidmetal alloys and related production processes.

*Operating loss.* Operating loss increased by \$2.8 million from \$6.1 million for the year ended December 31, 2013 to \$8.9 million for the year ended December 31, 2014. As discussed above, the increase in our operating loss is primarily related to a decrease in gross margin and an increase in operating expense categories from 2013 to 2014.

**Non-operational expenses**

Our statement of operations contains various, significant items that are non-operational in nature. These categories of expenses may have significant gains and losses based on the volatility of our stock price as follows:

*Change in value of warrants, gain (loss).* The change in value of warrants was a non-cash gain of \$2.7 million for the year ended December 31, 2014, which resulted from periodic valuation adjustments for warrants issued in connection with the Visser MTA and the July 2012 Private Placement. The significant gain noted during the year ended December 31, 2014 compared to a loss of \$2.2 million during the year ended December 31, 2013 was primarily due to decreases in our stock price during 2014 from \$0.17 as of December 31, 2013 to \$0.12 as of December 31, 2014, compounded by a reduction in volatility and other assumptions impacting the valuation model. Changes in the value of our warrants are non-cash and do not affect the core operations of our business.

*Change in value of embedded conversion feature liability, gain.* The change in value of the embedded conversion feature liability was a non-cash gain of \$621 thousand for the year ended December 31, 2013. As part of the final conversion on July 17, 2013 of the senior convertible notes issued in the July 2012 Private Placement, the associated embedded conversion liability was reduced to zero due to the exercise of the conversion option and was included in the calculation of the resulting gain on extinguishment of the senior convertible notes (see note 13 in the accompanying footnotes to the consolidated financial statements). As a result, there was no activity for this transaction during the year ended December 31, 2014.

*Debt discount amortization expense.* Debt discount amortization expense was \$373 thousand for the year ended December 31, 2014, as compared to \$6.5 million for the year ended December 31, 2013. For the year ended December 31, 2014, debt discount amortization primarily related to the periodic amortization of issuance costs associated with the 2013 Purchase Agreement and the write-off of such costs following the termination of the 2013 Purchase Agreement on August 25, 2014. The expense recorded for the year ended December 31, 2013 relates to the amortization of the original issue discount and deferred financing costs associated with the July 2012 Private Placement, as well as imputed interest related to discounted stock issuances in settlement of installment payments of senior secured notes.

*Other income.* Other income was \$30 thousand for the year ended December 31, 2014. No such income was recorded during the year ended December 31, 2013. Other income is primarily due to the sale of our remaining membership interest in a former subsidiary that was recorded as a cost method investment.

*Interest expense.* Interest expense was \$245 thousand for the year ended December 31, 2013. Following the full satisfaction of obligations under the senior convertible notes during July 2013, no such expense was recorded during

the year ended December 31, 2014.

*Interest income.* Interest income was \$24 thousand and \$5 thousand for the years ended December 31, 2014 and 2013, respectively, from interest earned on cash deposits.

*Gain on extinguishment of debt.* Gain on extinguishment of debt was \$91 thousand for the year ended December 31, 2013. The gain consisted of the write-off of unamortized debt discount, unamortized debt issuance costs, embedded conversion feature liabilities, and the difference between the reacquisition price of the shares issued and the contractual conversion price of the Senior Convertible Notes (see note 13 in the accompanying footnotes to the consolidated financial statements). No such gain was recorded during the year ended December 31, 2014.

*Net loss.* Due to the significant impact of our non-recurring, non-cash and non-operating expenses discussed above, our annual losses of \$6.5 million as of December 31, 2014 and \$14.2 million as of December 31, 2013 are reflective of significant fluctuations that are unrelated to the operations of our bulk alloy business.

## **LIQUIDITY AND CAPITAL RESOURCES**

### **Cash used in operating activities**

Cash used in operating activities totaled \$6.8 million for the year ended December 31, 2015, \$7.4 million for the year ended December 31, 2014, and \$5.0 million for the year ended December 31, 2013. The cash was primarily used to fund operating expenses related to our business and product development efforts.

### **Cash used in investing activities**

Cash used in investing activities totaled \$2.7 million for the year ended December 31, 2015, \$1.1 million for the year ended December 31, 2014, and \$200,000 for the year ended December 31, 2013. Annual amounts primarily consist of capital expenditures to support our manufacturing efforts. Also included in investing cash flows for the year ended December 31, 2015 is \$2 million related to an increase in restricted cash to support collateral requirements for our line of credit facility.



### **Cash provided by financing activities**

Cash provided by financing activities totaled \$2.3 million for the year ended December 31, 2015, \$16.4 million for the year ended December 31, 2014, and \$74,000 for the year ended December 31, 2013. The 2015 results include \$1.6 million of proceeds from the issuance of common stock under the 2014 Purchase Agreement and \$700 thousand in borrowings under the line of credit facility. The 2014 results include \$16.0 million of proceeds from the issuance of common stock under the 2013 Purchase Agreement.

### **Financing arrangements and outlook**

On August 20, 2014, we entered into the 2014 Purchase Agreement with Aspire Capital, which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of \$30,000,000 worth of our common stock, \$0.001 par value, over the 36-month term of the 2014 Purchase Agreement.

From time to time over the term of the 2014 Purchase Agreement, we may, in our sole discretion, provide Aspire Capital with a regular purchase notice (each a “Regular Purchase Notice”) directing Aspire Capital to purchase up to 1,000,000 shares, but not to exceed \$400,000, of our common stock per trading day at a price per share equal to the lesser of (i) the lowest sale price of our common stock on the purchase date; or (ii) the arithmetic average of the three lowest closing sale prices for our common stock during the twelve consecutive trading days ending on the trading day immediately preceding the purchase date. In addition, on any date on which we submit a Regular Purchase Notice to Aspire Capital for the purchase of at least 500,000 shares at a price above \$0.30 per share, we also have the right, in our sole discretion, to present Aspire Capital with a volume-weighted average price purchase notice (each, a “VWAP Purchase Notice”) directing Aspire Capital to purchase an amount of stock equal to up to 30% of the aggregate shares of our common stock traded on its principal market on the next trading day (the “VWAP Purchase Date”), subject to a maximum number of shares that we may determine. The purchase price per share pursuant to such VWAP Purchase Notice is generally 95% of the volume-weighted average price for our common stock traded on its principal market on the VWAP Purchase Date.

We may deliver multiple Regular Purchase Notices and VWAP Purchase Notices to Aspire Capital from time to time during the term of the 2014 Purchase Agreement, so long as the most recent purchase has been completed. The 2014 Purchase Agreement provides that we and Aspire Capital shall not effect any sales under the 2014 Purchase Agreement on any purchase date where the closing sale price of our common stock is less than \$0.10 per share. There are no trading volume requirements or restrictions under the 2014 Purchase Agreement, and we will control the timing and amount of sales of our common stock to Aspire Capital.

On September 9, 2014, an initial registration statement covering 75,000,000 shares issued and issuable pursuant to the 2014 Purchase Agreement was declared effective by the SEC. As of December 31, 2015, we had received an aggregate of \$1,568,000 under the 2014 Purchase Agreement through the issuance of 12,500,000 shares of our common stock at a weighted average price of \$0.13 per share.

The accompanying consolidated financial statements have been prepared assuming that we will continue as a going concern. The accompanying consolidated financial statements do not include any adjustments related to the recoverability and classification of assets or the amounts and classification of liabilities or any other adjustments that might be necessary if we are unable to continue as a going concern. We have a relatively limited history of producing bulk amorphous alloy components and products on a mass-production scale. Furthermore, the ability of future contract manufacturers 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. These factors will likely require that we make further equity sales under the 2014 Purchase Agreement, raise additional funds by other means, or pursue other strategic initiatives to support our operations beyond 2016. There is no assurance that we will be able to make equity sales under the 2014 Purchase Agreement or raise additional funds by other means on acceptable terms, if at all. If we were to make equity sales under the 2014 Purchase Agreement or to raise additional funds through other means by issuing securities, existing stockholders may be diluted. If funding is insufficient at any time in the future, we may be required to alter or reduce the scope of our operations or to cease operations entirely. Uncertainty as to the outcome of these factors raises substantial doubt about our ability to continue as a going concern.

## 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. As of December 31, 2015, the Company did not have any off-balance sheet arrangements.

## 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:

- We recognize revenue pursuant to applicable accounting standards including FASB ASC Topic 605 (“ASC 605”), Revenue Recognition. ASC 605 summarize certain points of the SEC staff’s views in applying generally accepted accounting principles to revenue recognition in financial statements and provides guidance on revenue recognition issues in the absence of authoritative literature addressing a specific arrangement or a specific industry.

Our revenue recognition policy complies with the requirements of ASC 605. Revenue is recognized when i) persuasive evidence of an arrangement exists, ii) delivery has occurred, iii) the sales price is fixed or determinable, iv) collection is probable and v) all obligations have been substantially performed pursuant to the terms of the arrangement. Revenues primarily consist of the sales and prototyping of Liquidmetal mold and bulk alloys, licensing and royalties for the use of the Liquidmetal brand and bulk Liquidmetal alloys. Revenue is deferred and included in liabilities when the Company receives cash in advance for goods not yet delivered or if the licensing term has not begun.

License revenue arrangements in general provide for the grant of certain intellectual property rights for patented technologies owned or controlled by the Company. These rights typically include the grant of an exclusive or non-exclusive right to manufacture and/or sell products covered by patented technologies owned or controlled by us. The intellectual property rights granted may be perpetual in nature, extending until the expiration of the related



patents, or can be granted for a defined period of time.

Licensing revenues that are one-time fees upon the granting of the license are recognized when i) the license term begins in a manner consistent with the nature of the transaction and the earnings process is complete, ii) collectability is reasonably assured or upon receipt of an upfront fee, and iii) all other revenue recognition criteria have been met. Pursuant to the terms of these agreements, we have no further obligation with respect to the grant of the license. Licensing revenues that are related to royalties are recognized as the royalties are earned over the related period.

We value our long-lived assets at the lower of cost or fair market value. We review long-lived assets to be held and used in operations for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may be impaired. These evaluations may result from significant decreases in the market price of an asset, a significant adverse change in the extent or manner in which an asset is being used in its physical condition, a

- significant adverse change in legal factors or in the business climate that could affect the value of an asset, as well as economic or operational analyses. An impairment loss is recognized when the estimated fair value of the assets is less than the carrying value of the assets. Based on our review of both qualitative and quantitative factors no significant indicators of impairment were identified during the years ended December 31, 2015, 2014 and 2013, respectively.

We record valuation allowances to reduce our deferred tax assets to the amounts deemed more likely than not of being 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 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 our outstanding warrants as a derivative in accordance with FASB ASC 815-10, *Derivatives and Hedging*, and FASB ASC 815-40, *Contracts in Entity's Own Equity*. The fair value of warrants is measured at each period end using the Black-Scholes pricing model and changes in fair value during the period are reported in our earnings. The Black-Scholes pricing model requires estimates of expected volatility, expected dividends, the risk-free rate, and the expected term of the warrant. If any of the assumptions used in the valuation model change significantly, changes in the fair value of warrants may differ materially in the future from that recorded in the current period.

We account for share-based compensation in accordance with the fair value recognition provisions of FASB ASC Topic 718, *Share-based Payment*, which requires all share-based payments to employees, including grants of employee stock options, to be recognized in the consolidated financial statements based on their fair values. The fair value of stock options is calculated by using the Black-Scholes option pricing formula that requires estimates for expected volatility, expected dividends, the risk-free interest rate and the term of the option. If any of the assumptions used in the Black-Scholes model change significantly, share-based compensation expense may differ materially in the future from that recorded in the current period.

## RECENT ACCOUNTING PRONOUNCEMENTS

### *Revenue from Contracts with Customers*

In May 2014, the FASB issued an accounting standards update which modifies the requirements for identifying, allocating, and recognizing revenue related to the achievement of performance conditions under contracts with customers. This update also requires additional disclosure related to the nature, amount, timing, and uncertainty of revenue that is recognized under contracts with customers. This guidance is effective beginning January 1, 2018 and is required to be applied retrospectively to all revenue arrangements. The Company is currently assessing the effects this guidance may have on its consolidated financial statements.

### *Ability to Continue as a Going Concern*

In August 2014, the FASB issued an accounting standards update which requires an assessment of an entity's ability to continue as a going concern by incorporating and expanding upon certain principles that are currently addressed by U.S. auditing standards. This standard is effective for the fiscal years ending after December 15, 2016, and for annual

periods and interim periods thereafter. The adoption of this pronouncement is not expected to have a material impact on the Company's consolidated financial statements and accompanying disclosures.

*Inventory*

In July 2015, the FASB issued an accounting standards update which modifies the requirements for measuring the value of inventory on a periodic basis. The new requirement will be to measure inventory at the lower of cost or net realizable value. This standard is effective for the fiscal years ending after December 15, 2016, and for annual periods and interim periods thereafter. The adoption of this guidance is not expected to have a significant impact on the Company's consolidated financial statements.

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 the Company's present or future consolidated financial statements.

**CONTRACTUAL OBLIGATIONS**

Contractual Obligations	Total	Payments Due by Period			
		Less than 1 year	1-3 years	4-5 years	After 5 years
<i>(in \$ thousands)</i>					
Short-Term Debt	\$ 700	\$ 700	-	-	-
Operating Leases	1,724	206	429	490	599
	\$ 2,424	\$ 906	\$ 429	\$ 490	\$ 599

**Item 7A. Quantitative and Qualitative Disclosures about Market Risk**

Our line of credit facility provides for a fixed interest rate of 2.1% per annum on all outstanding borrowings. A change in interest rates impacts the fair value of our outstanding debt under the line of credit facility but has no impact on interest incurred or cash flows. As of December 31, 2015, there was \$700,000 in outstanding borrowings under this facility. Given the proximity to maturity, the carrying amount of short-term debt approximates fair value as of December 31, 2015.

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

The financial statements required by this item can be found beginning on page 49 of this Annual Report on Form 10-K.

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

None.

**Item 9A. Controls and Procedures**

Evaluation of Disclosure Controls and Procedures. Under the supervision and with the participation of our management, including our Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Financial Officer), we conducted an evaluation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15(d)-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Based on this evaluation, our Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Financial Officer) concluded that our disclosure controls and procedures were effective as of December 31, 2015 (the end of the period covered by this report).

Changes in Internal Controls. There were no changes in our internal control over financial reporting (as that term is defined in Rules 13a-15(f) or 15d-15(f) under the Exchange Act) during the quarter ended December 31, 2015 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management’s Report on Internal Control over Financial Reporting. The Company’s management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. 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 for external purposes in accordance with accounting principles generally accepted in the United States and includes those policies and procedures that (1) pertain to the 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 accounting principles generally accepted in the United States, 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 (2013)* 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, 2015. Management has not identified any material weaknesses in the company's internal control over financial reporting as of December 31, 2015. The effectiveness of our internal control over financial reporting as of December 31, 2015 has been audited by SingerLewak LLP, an independent registered public accounting firm, as stated in their report which is included herein.

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Shareholders

Liquidmetal Technologies, Inc.

Rancho Santa Margarita, California

We have audited Liquidmetal Technologies, Inc. and subsidiaries' (collectively, the "Company") internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's 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 for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (b) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (c) 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.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Liquidmetal Technologies, Inc. and subsidiaries as of December 31, 2015 and 2014, and the related consolidated statements of operations and comprehensive loss, shareholders' equity (deficit), and cash flows for each of the three years in the period ended December 31, 2015, and our report dated March 7, 2016 expressed an unqualified opinion and includes an emphasis paragraph relating to an uncertainty as to the Company's ability to continue as a going concern.

/s/SingerLewak LLP

Los Angeles, California

March 7, 2016



**Item 9B. Other Information**

None.

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## **PART III**

### **Item 10. Directors, Executive Officers and Corporate Governance**

The information required by this Item is incorporated herein by reference to the definitive proxy statement for our 2016 annual meeting of shareholders to be filed with the SEC not later than 120 days after December 31, 2015.

### **Item 11. Executive Compensation**

The information required by this Item is incorporated herein by reference to the definitive proxy statement for our 2016 annual meeting of shareholders to be filed with the SEC not later than 120 days after December 31, 2015.

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

The information required by this Item is incorporated herein by reference to the definitive proxy statement for our 2016 annual meeting of shareholders to be filed with the SEC not later than 120 days after December 31, 2015.

### **Item 13. Certain Relationships and Related Transactions, and Director Independence**

The information required by this Item is incorporated herein by reference to the definitive proxy statement for our 2016 annual meeting of shareholders to be filed with the SEC not later than 120 days after December 31, 2015.

### **Item 14. Principal Accountant Fees and Services**

The information required by this Item is incorporated herein by reference to the definitive proxy statement for our 2016 annual meeting of shareholders to be filed with the SEC not later than 120 days after December 31, 2015.



## **PART IV**

### **Item 15. Exhibits, Financial Statement Schedules**

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

1. *Financial Statements*. See the Index to Consolidated Financial Statements on page 49.

2. *Exhibits*. See Item 15(b) below.

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

(c) *Financial Statement Schedule*. See Item 15(a)(1) above.

## EXHIBIT INDEX

Exhibit Number	Document Description
3.1	Amended and Restated Certificate of Incorporation ( <i>incorporated by reference to Exhibit 3.1 to the Form 8-K filed on October 28, 2013</i> ).
3.2	Amended and Restated ByLaws of Liquidmetal Technologies, Inc. ( <i>incorporated by reference to Exhibit 3.1 to the Form 8-K filed on October 5, 2015</i> ).
4.1	Reference is made to Exhibits 3.1 and 3.2.
4.2	Form of Common Stock Certificate ( <i>incorporated by reference to Exhibit 4.2 to the Form 10-Q filed on August 14, 2003</i> ).
10.1	Amended and Restated License Agreement, dated September 1, 2001, between Liquidmetal Technologies, Inc. and California Institute of Technology ( <i>incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-1 filed on November 20, 2001 (Registration No. 333-73716)</i> ).
10.2*	1996 Stock Option Plan, as amended, together with form of Stock Option Agreement ( <i>incorporated by reference to Exhibit 10.7 to the Registration Statement on Form S-1 filed on November 20, 2001 (Registration No. 333-73716)</i> ).
10.3*	2002 Equity Incentive Plan ( <i>incorporated by reference to Exhibit 10.23 to the Registration Statement on Form S-1 (Amendment No. 2) filed on April 5, 2002 (Registration No. 333-73716)</i> ).
10.4*	2002 Non-Employee Director Stock Option Plan ( <i>incorporated by reference to Exhibit 10.24 to the Registration Statement on Form S-1 (Amendment No. 2) filed on April 5, 2002 (Registration No. 333-73716)</i> ).
10.5	Form of Indemnity Agreement between Liquidmetal Technologies, Inc. and directors and executive officers ( <i>incorporated by reference from Exhibit 10.59 to the Form 10-K filed on March 16, 2006</i> ).
10.6	Standard Industrial / Commercial Single-Tenant Lease, dated February 13, 2007, between Liquidmetal Technologies, Inc. and 30452 Esperanza LLC ( <i>incorporated by reference from Exhibit 10.1 to the Form 10-Q filed on May 15, 2007</i> ).
10.7	Lease, dated March 19, 2007, between Liquidmetal Technologies, Inc. and Larry Ruffino and Roland Ruffino ( <i>incorporated by reference from Exhibit 10.1 to the Form 10-Q filed on May 15, 2007</i> ).
10.8	

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Form of Common Stock Purchase Warrant issued in connection with the 8% Senior Secured Convertible Subordinated Notes *(incorporated by reference from Exhibit 10.3 to the Form 8-K filed on May 7, 2009)*.

- 10.9 Form of Common Stock Purchase Warrant issued in connection with the Series A Preferred Stock *(incorporated by reference from Exhibit 10.4 to the Form 8-K filed on May 7, 2009)*.
- 10.10\* Employment Agreement, dated August 3, 2010, between Thomas Steipp and Liquidmetal Technologies, Inc. *(incorporated by reference from Exhibit 10.1 to the Form 10-Q filed on November 4, 2010)*.
- 10.11\* Restricted Stock Agreement, dated August 3, 2010, between Thomas Steipp and Liquidmetal Technologies, Inc. *(incorporated by reference from Exhibit 10.2 to the Form 10-Q filed on November 4, 2010)*.
- 10.12\*\* Master Transaction Agreement, dated August 5, 2010, among Apple Inc., Liquidmetal Technologies, Inc., Liquidmetal Coatings, LLC and Crucible Intellectual Property, LLC *(incorporated by reference from Exhibit 10.3 to the Form 10-Q filed on November 4, 2010)*.

- 10.13 Subscription Agreement, dated August 10, 2010, between Liquidmetal Technologies, Inc. and Norden LLC (*incorporated by reference from Exhibit 10.4 to the Form 10-Q filed on November 4, 2010*).
- 10.14 Consent Agreement among Liquidmetal Technologies, Inc. and holders of the Series A-1 Preferred Stock and holders of the Series A-2 Preferred Stock (*incorporated by reference from Exhibit 10.5 to the Form 10-Q filed on November 4, 2010*).
- 10.15 Amendment No. 1 to Restricted Stock Award Agreement, dated July 27, 2011, between Liquidmetal Technologies, Inc. and Thomas Steipp (*incorporated by reference from Exhibit 10.2 on the Form 10-Q filed on August 10, 2011*).
- 10.16 Stock Purchase Agreement, dated August 5, 2011, between Liquidmetal Technologies, Inc. and Innovative Materials Groups, LLC (*incorporated by reference from Exhibit 10.3 on the Form 10-Q filed on August 10, 2011*).
- 10.17\*\* License Agreement, dated August 5, 2011, between Liquidmetal Technologies, Inc. and Innovative Materials Groups, LLC (*incorporated by reference from Exhibit 10.4\* on the Form 10-Q filed on August 10, 2011*).
- 10.18\* Liquidmetal Technologies, Inc. 2012 Equity Incentive Plan (*incorporated by reference from Exhibit 10.1 to the Form 8-K filed on July 2, 2012*).
- 10.19 Securities Purchase Agreement, dated as of July 2, 2012, by and among Liquidmetal Technologies, Inc. and each of the investors named on the Schedule of Buyers attached thereto (*incorporated by reference from Exhibit 10.1 to the Form 8-K filed on July 2, 2012*).
- 10.20 Registration Rights Agreement, dated as of July 2, 2012, by and among Liquidmetal Technologies, Inc. and the investors named on the Schedule of Buyers attached thereto (*incorporated by reference from Exhibit 10.2 to the Form 8-K filed on July 2, 2012*).
- 10.21 Form of Senior Convertible Note (*incorporated by reference from Exhibit 10.3 to the Form 8-K filed on July 2, 2012*).
- 10.22 Form of Warrant to Purchase Common Stock (*incorporated by reference from Exhibit 10.4 to the Form 8-K filed on July 2, 2012*).
- 10.23 Master Transaction Agreement, dated as of June 1, 2012, between Liquidmetal Technologies, Inc. and Visser Precision Cast, LLC. (*incorporated by reference from Exhibit 10.32 to the Registration Statement on S-1 filed July 18, 2012*)
- 10.24\*\* Manufacturing Services Agreement, dated as of June 1, 2012, between Liquidmetal Technologies, Inc. and Visser Precision Cast, LLC. (*incorporated by reference from Exhibit 10.33 to the Registration Statement on S-1 filed July 18, 2012*)

- 10.25 Subscription Agreement, dated as of June 1, 2012, between Liquidmetal Technologies, Inc. and Visser Precision Cast, LLC. *(incorporated by reference from Exhibit 10.34 to the Registration Statement on Form S-1 filed July 18, 2012)*
- 10.26 Security Agreement, dated as of June 1, 2012, between Liquidmetal Technologies, Inc. and Visser Precision Cast, LLC. *(incorporated by reference from Exhibit 10.35 to the Registration Statement on Form S-1 filed July 18, 2012)*
- 10.27 Registration Rights Agreement, dated as of June 1, 2012, between Liquidmetal Technologies, Inc. and Visser Precision Cast, LLC. *(incorporated by reference from Exhibit 10.36 to the Registration Statement on Form S-1 filed July 18, 2012)*
- 10.28 VPC Sublicense Agreement, dated as of June 1, 2012, between Liquidmetal Technologies, Inc. and Visser Precision Cast, LLC. *(incorporated by reference from Exhibit 10.37 to the Registration Statement on Form S-1 filed July 18, 2012)*



- 10.29 6% Senior Secured Convertible Note, dated June 1, 2012, issued to Visser Precision Cast, LLC. *(incorporated by reference from Exhibit 10.38 to the Registration Statement on Form S-1 filed July 18, 2012)*
- 10.30 Common Stock Purchase Warrant, dated June 1, 2012, issued to Visser Precision Cast, LLC. *(incorporated by reference from Exhibit 10.39 to the Registration Statement on Form S-1 filed July 18, 2012)*
- 10.31 Common Stock Purchase Warrant, dated June 28, 2012, issued to Visser Precision Cast, LLC. *(incorporated by reference from Exhibit 10.40 to the Registration Statement on Form S-1 filed July 18, 2012)*
- 10.32 Amendment Number One to Master Transaction Agreement and Other Transaction Documents, dated June 15, 2012, among Apple Inc., Liquidmetal Technologies, Inc., Liquidmetal Coatings, LLC and Crucible Intellectual Property, LLC. *(incorporated by reference from Exhibit 10.41 to the Registration Statement on Form S-1 (Amendment No. 1) filed on August 3, 2012).*
- 10.33 Form of Change of Control Agreement, dated September 13, 2013. *(incorporated by reference from Exhibit 10.1 of the Form 8-K filed September 17, 2013)*
- 10.34 Common Stock Purchase Agreement, dated November 8, 2013 among Liquidmetal Technologies, Inc., Kingsbrook Opportunities Master Fund LP, Tech Opportunities LLC and Iroquois Master Fund Ltd. *(incorporated by reference from Exhibit 10.1 to the Form 8-K filed November 12, 2013)*
- 10.35 Registration Rights Agreement, dated November 8, 2013 among Liquidmetal Technologies, Inc., Kingsbrook Opportunities Master Fund LP, Tech Opportunities LLC and Iroquois Master Fund Ltd. *(incorporated by reference from Exhibit 10.2 to the Form 8-K filed November 12, 2013)*
- 10.36 Amendment Number Two to Master Transaction Agreement and Other Transaction Documents, dated May 19, 2014, among Apple Inc., Liquidmetal Technologies, Inc., Liquidmetal Coatings, LLC and Crucible Intellectual Property, LLC. *(incorporated by reference from Exhibit 10.1 on the Form 10-Q filed on August 12, 2014).*
- 10.37 Settlement Agreement and Mutual General Release, dated May 20, 2014, between Liquidmetal Technologies, Inc. and Visser Precision Cast, LLC. *(incorporated by reference from Exhibit 10.1 to the Form 8-K filed on May 20, 2014).*
- 10.38 Amended and Restated VPC Sublicense Agreement, dated May 20, 2014, between Liquidmetal Technologies, Inc. and Visser Precision Cast, LLC. *(incorporated by reference from Exhibit 10.2 to the Form 8-K filed on May 20, 2014).*
- 10.39 Amended and Restated Registration Rights Agreement, dated May 20, 2014, between Liquidmetal Technologies, Inc. and Visser Precision Cast, LLC. *(incorporated by reference from Exhibit 10.3 to the Form 8-K filed on May 20, 2014).*
- 10.40 Amended and Restated Mutual Nondisclosure Agreement, dated May 20, 2014, between Liquidmetal Technologies, Inc. and Visser Precision Cast, LLC. *(incorporated by reference from Exhibit 10.4 to the Form 8-K filed on May 20, 2014).*

- 10.41 Amended and Restated Common Stock Purchase Warrant, dated May 20, 2014, issued to Visser Precision Cast, LLC. *(incorporated by reference from Exhibit 10.5 to the Form 8-K filed on May 20, 2014).*
- 10.42 Registration Rights Agreement, dated August 20, 2014, between Liquidmetal Technologies, Inc. and Aspire Capital Fund, LLC. *(incorporated by reference from Exhibit 4.1 to the Form 8-K filed on August 25, 2014).*
- 10.43 Common Stock Purchase Agreement, dated August 20, 2014, between Liquidmetal Technologies, Inc. and Aspire Capital Fund, LLC *(incorporated by reference from Exhibit 10.1 to the Form 8-K filed on August 25, 2014).*
- 10.45 Liquidmetal Technologies, Inc. 2015 Equity Incentive Plan *(incorporated by reference from Exhibit 10.1 to the Form 8-K filed on February 9, 2015).*

- 10.46 Revolving Note, dated February 24, 2015, by Liquidmetal Technologies, Inc. in favor of City National Bank *(incorporated by reference from Exhibit 10.1 to the Form 8-K filed on February 26, 2015)*.
- 10.47 Security Agreement, dated February 24, 2015, by Liquidmetal Technologies, Inc. in favor of City National Bank *(incorporated by reference from Exhibit 10.2 to the Form 8-K filed on February 26, 2015)*.
- 10.48 Amendment Number Three to Master Transaction Agreement and Other Transaction Documents, dated June 17, 2015, among Apple Inc., Liquidmetal Technologies, Inc., Liquidmetal Coatings, LLC and Crucible Intellectual Property, LLC *(incorporated by reference from Exhibit 10.1 on the Form 10-Q filed on August 6, 2015)*.
- 10.49 Confidential Separation Agreement and Release of Claims, dated August 21, 2015, between Liquidmetal Technologies, Inc. and Ricardo Salas *(incorporated by reference from Exhibit 10.1 on the Form 8-K filed on August 25, 2015)*.
- 10.50 Form of Director and Officer Indemnification Agreement *(incorporated by reference from Exhibit 10.1 to the Form 8-K filed on October 5, 2015)*.
- 10.51 Form of Amended and Restated Director and Officer Indemnification Agreement *(incorporated by reference from Exhibit 10.2 to the Form 8-K filed on October 5, 2015)*.
- 10.52\* Amended and Restated Employment Agreement, dated February 4, 2016, between Thomas Steipp and Liquidmetal Technologies, Inc. *(incorporated by reference from Exhibit 10.1 to the Form 8-K filed on February 9, 2016)*.
- 10.53 Form of Amendment to Change of Control Agreement *(incorporated by reference from Exhibit 10.3 to the Form 8-K filed on February 9, 2016)*.
- 14 Code of Ethics for Chief Executive Officer and Senior Financial and Accounting Officers *(incorporated by reference to Exhibit 14 to the Form 10-K filed on November 10, 2004)*.
- 21.1 Subsidiaries of the Registrant *(incorporated by reference from Exhibit 21.1 to the Registration Statement on S-1 filed July 18, 2012)*.
- 24.1 Power of Attorney relating to subsequent amendments (included on the signature page(s) of this report).
- 31.1 Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as amended.
- 31.2 Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as amended.
- 32.1 Certification pursuant to 18 U.S.C. Section 1350.
- 101 The following financial statements from Liquidmetal Technologies, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2015, formatted in XBRL (eXtensible Business Reporting Language): (i)

Consolidated Balance Sheets, (ii) Consolidated Statements of Operations and Comprehensive Loss, (iii) Consolidated Statements of Shareholder's Equity, (iv) Consolidated Statements of Cash Flows, and (v) Notes to Consolidated Financial Statements.

\* Denotes a management contract or compensatory plan or arrangement.

\*\* Portions of this exhibit have been omitted pursuant to a confidential treatment request. Omitted information has been filed separately with the Securities and Exchange Commission.

## SIGNATURES

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

### Liquidmetal Technologies, Inc.

By: /s/ Thomas Steipp

Thomas Steipp  
President and Chief Executive Officer  
(Principal Executive Officer)

Date: March 7, 2016

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

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

<b>Signature</b>	<b>Title</b>	<b>Date</b>
/s/ Thomas Steipp		
Thomas Steipp	President, Chief Executive Officer and Director (Principal Executive Officer)	March 7, 2016
/s/ Tony Chung		
Tony Chung	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 7, 2016

/s/ Abdi Mahamedi		
Abdi Mahamedi	Chairman of the Board and Director	March 7, 2016
/s/ Scott Gillis		
Scott Gillis	Director	March 7, 2016
/s/ Bob Howard-Anderson		
Bob Howard-Anderson	Director	March 7, 2016

/s/ Richard Sevcik                      Director    March 7, 2016

Richard Sevcik

/s/ Walter Weyler                      Director    March 7, 2016

Walter Weyler

Certifications provided as Exhibits.

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Shareholders

Liquidmetal Technologies, Inc.

Rancho Santa Margarita, California

We have audited the accompanying consolidated balance sheets of Liquidmetal Technologies, Inc. and subsidiaries (collectively, the “Company”) as of December 31, 2015 and 2014, and the related consolidated statements of operations and comprehensive loss, shareholders' equity (deficit), and cash flows for each of the three years in the period ended December 31, 2015. Our audits also included the financial statement schedule of the Company listed in Item 15(a). These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and schedule based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2015 and 2014, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 4 to the consolidated financial statements, the Company has suffered recurring losses from operations, has negative cash flows from operations and has an accumulated deficit. This raises substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters also are described in Note 4. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013, and our report dated March 7, 2016 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ SingerLewak LLP

Los Angeles, California

March 7, 2016

**LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES****CONSOLIDATED BALANCE SHEETS**

(in thousands, except share and per share data)

	<b>December 31, 2015</b>	<b>December 31, 2014</b>
<b><u>ASSETS</u></b>		
Current assets:		
Cash	\$2,773	\$10,009
Restricted cash	2,008	-
Trade accounts receivable, net of allowance for doubtful accounts	30	83
Inventory	83	-
Prepaid expenses and other current assets	408	374
<b>Total current assets</b>	<b>\$5,302</b>	<b>\$10,466</b>
Property and equipment, net	1,370	1,118
Patents and trademarks, net	570	669
Other assets	31	31
<b>Total assets</b>	<b>\$7,273</b>	<b>\$12,284</b>
<b><u>LIABILITIES AND SHAREHOLDERS' EQUITY</u></b>		
Current liabilities:		
Short-term debt	700	-
Accounts payable	250	155
Accrued liabilities	947	705
Deferred revenue	77	-
<b>Total current liabilities</b>	<b>\$1,974</b>	<b>\$860</b>
Long-term liabilities		
Warrant liabilities	59	2,005
Other long-term liabilities	856	856
<b>Total liabilities</b>	<b>\$2,889</b>	<b>\$3,721</b>
Shareholders' equity (deficit):		
Preferred Stock, \$0.001 par value; 10,000,000 shares authorized; 0 shares issued and outstanding at December 31, 2015 and December 31, 2014, respectively	-	-
Common stock, \$0.001 par value; 700,000,000 shares authorized; 477,149,485 and 464,482,819 shares issued and outstanding at December 31, 2015 and December 31, 2014,	477	464

respectively

Warrants	18,179	18,179
Additional paid-in capital	203,735	200,610
Accumulated deficit	(217,945)	(210,636)
Non-controlling interest in subsidiary	(62 )	(54 )
<b>Total shareholders' equity (deficit)</b>	<b>\$4,384</b>	<b>\$8,563</b>
<b>Total liabilities and shareholders' equity (deficit)</b>	<b>\$7,273</b>	<b>\$12,284</b>

The accompanying notes are an integral part of the consolidated financial statements.

**LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS**

(in thousands, except share and per share data)

	<b>Years Ended December 31,</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
Revenue			
Products	\$98	\$565	\$1,007
Licensing and royalties	27	38	19
<b>Total revenue</b>	125	603	1,026
Cost of sales	349	483	774
<b>Gross profit (loss)</b>	(224 )	120	252
Operating expenses			
Selling, marketing, general and administrative	7,010	7,463	5,157
Research and development	2,047	1,596	1,156
<b>Total operating expenses</b>	9,057	9,059	6,313
<b>Operating loss</b>	(9,281 )	(8,939 )	(6,061 )
Change in value of warrants, gain (loss)	1,946	2,700	(2,155 )
Change in value of embedded conversion feature liability, gain	-	-	621
Debt discount amortization expense	-	(373 )	(6,504 )
Other income	-	30	-
Interest expense	(4 )	-	(245 )
Interest income	22	24	5
Gain on extinguishment of debt (Note 13)	-	-	91
<b>Loss before income taxes</b>	(7,317 )	(6,558 )	(14,248 )
Income taxes	-	-	-
<b>Net loss and comprehensive loss</b>	(7,317 )	(6,558 )	(14,248 )
Net loss attributable to non-controlling interest	8	12	42
<b>Net loss and comprehensive loss attributable to Liquidmetal Technologies shareholders</b>	(7,309 )	(6,546 )	(14,206 )

Per common share basic and diluted:

Net loss per common share attributable to Liquidmetal Technologies shareholders, basic	\$(0.02	) \$(0.01	) \$(0.04	)
Net loss per common share attributable to Liquidmetal Technologies shareholders, diluted	\$(0.02	) \$(0.01	) \$(0.04	)
Number of weighted average shares - basic	470,955,041	441,439,018	341,451,559	
Number of weighted average shares - diluted	470,955,041	441,439,018	341,451,559	

The accompanying notes are an integral part of the consolidated financial statements.

## LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (DEFICIT)

(in thousands, except share and per share data)

	Preferred Shares	Common Shares	Preferred Stock	Common Stock	Warrants part of Additional Paid-in Capital	Additional Paid-in Capital	Accumulated Deficit	Non- controlling Interest	Total
<b>Balance, December 31, 2012</b>	<b>506,936</b>	<b>242,074,324</b>	<b>\$ -</b>	<b>\$ 242</b>	<b>\$ 18,179</b>	<b>\$ 169,891</b>	<b>\$(189,884 )</b>	<b>\$ -</b>	<b>\$(1,572 )</b>
Conversion of preferred stock	(506,936 )	16,896,070	-	17	-	(17 )	-	-	-
Common stock issuance	-	116,136,796	-	116	-	12,137	-	-	12,253
Stock option exercises	-	600,000	-	1	-	74	-	-	75
Stock-based compensation	-	-	-	-	-	213	-	-	213
Restricted stock issued to officer	-	-	-	-	-	312	-	-	312
Dividend distribution	-	-	-	-	-	222	-	-	222
Net loss	-	-	-	-	-	-	(14,206 )	(42 )	(14,248)
<b>Balance, December 31, 2013</b>	<b>-</b>	<b>375,707,190</b>	<b>\$ -</b>	<b>\$ 376</b>	<b>\$ 18,179</b>	<b>\$ 182,832</b>	<b>\$(204,090 )</b>	<b>\$(42 )</b>	<b>\$(2,745 )</b>
Common stock issuance	-	85,355,615	-	85	-	15,915	-	-	16,000
Warrant exercises	-	1,178,000	-	1	-	225	-	-	226
Stock option exercises	-	2,242,014	-	2	-	203	-	-	205
Stock-based compensation	-	-	-	-	-	907	-	-	907
	-	-	-	-	-	312	-	-	312

Restricted stock issued to officer									
Reclassification of warrant liability to equity upon exercise	-	-	-	-	-	216	-	-	216
Net loss	-	-	-	-	-	-	(6,546 )	(12 )	(6,558 )
<b>Balance, December 31, 2014</b>	-	<b>464,482,819</b>	<b>\$ -</b>	<b>\$ 464</b>	<b>\$ 18,179</b>	<b>\$ 200,610</b>	<b>\$(210,636 )</b>	<b>\$(54 )</b>	<b>\$ 8,563</b>
Common stock issuance	-	12,500,000	-	13	-	1,555	-	-	1,568
Stock option exercises	-	166,666	-	-	-	13	-	-	13
Stock-based compensation	-	-	-	-	-	1,375	-	-	1,375
Restricted stock issued to officer	-	-	-	-	-	182	-	-	182
Net loss	-	-	-	-	-	-	(7,309 )	(8 )	(7,317 )
<b>Balance, December 31, 2015</b>	-	<b>477,149,485</b>	<b>\$ -</b>	<b>\$ 477</b>	<b>\$ 18,179</b>	<b>\$ 203,735</b>	<b>\$(217,945 )</b>	<b>\$(62 )</b>	<b>\$ 4,384</b>

The accompanying notes are an integral part of the consolidated financial statements.



**LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF CASH FLOWS**

(in thousands, except share and per share data)

	<b>Years Ended December 31,</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Operating activities:</b>			
Net loss	\$(7,317)	\$(6,558)	\$(14,248)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	522	301	214
Gain on sale of fixed asset	-	(5)	-
Bad debt expense	-	-	11
Stock-based compensation	1,375	907	213
Restricted stock compensation issued to officer	182	312	312
(Gain) Loss from change in value of warrants	(1,946)	(2,700)	2,155
Gain from change in value of embedded conversion feature liability	-	-	(621)
Gain on extinguishment of debt (Note 13)	-	-	(91)
Debt discount amortization	-	373	6,504
Non-cash interest expense	-	-	242
Changes in operating assets and liabilities:			
Trade accounts receivable	53	132	(162)
Inventory	(83)	-	-
Prepaid expenses and other current assets	(34)	38	(83)
Other assets	-	(3)	-
Accounts payable and accrued liabilities	337	(216)	577
Deferred revenue	77	-	-
<b>Net cash used in operating activities</b>	<b>(6,834)</b>	<b>(7,419)</b>	<b>(4,977)</b>
<b>Investing Activities:</b>			
Purchases of property and equipment	(675)	(1,061)	(185)
Increase in restricted cash	(2,008)	-	-
Proceeds from sale of fixed assets	-	5	1
Investment in patents and trademarks	-	(9)	(13)
<b>Net cash used in investing activities</b>	<b>(2,683)</b>	<b>(1,065)</b>	<b>(197)</b>
<b>Financing Activities:</b>			
Proceeds from short-term debt	700	-	-
Proceeds from exercise of stock options	13	205	74

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Proceeds from exercise of warrants	-	226	-
Proceeds from stock issuance	1,568	16,000	-
<b>Net cash provided by financing activities</b>	<b>2,281</b>	<b>16,431</b>	<b>74</b>
<b>Net increase (decrease) in cash</b>	<b>(7,236 )</b>	<b>7,947</b>	<b>(5,100 )</b>
<b>Cash at beginning of period</b>	<b>10,009</b>	<b>2,062</b>	<b>7,162</b>
<b>Cash at end of period</b>	<b>\$2,773</b>	<b>\$10,009</b>	<b>\$2,062</b>

**Supplemental Schedule of Non-Cash Investing and Financing Activities:**

Pre-installment payment of convertible debt through common stock issuance	-	-	7,187
Dividends paid in common stock upon preferred stock conversion	-	-	222
Financing costs paid through common stock issuance	-	-	373
Accrued capital expenditures	-	5	-

The accompanying notes are an integral part of the consolidated financial statements.

## **LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES**

### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(in thousands, except share and per share data)**

#### **1. Description of Business**

Liquidmetal Technologies, Inc. (the “Company”) is a materials technology and manufacturing company that develops and commercializes products made from amorphous alloys. The Company’s family of alloys consists of a variety of bulk alloys and composites that utilizes the advantages offered by amorphous alloys technology. The Company designs, develops, manufactures and sells products and custom components from bulk amorphous alloys to customers in a wide range of industries. The Company also partners with third-party manufacturers and licensees to develop and commercialize Liquidmetal alloy products.

Amorphous alloys are, in general, 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 are proprietary amorphous alloys that possess a combination of performance, processing, and potential cost advantages that the Company believes will make them preferable to other materials in a variety of applications. The amorphous atomic structure of bulk 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. The Company’s alloys and the injection molding technology it employs results in components that exhibit: exceptional dimensional control and repeatability that rivals precision machining, excellent corrosion resistance, brilliant surface finish, high strength, high hardness, high elastic limit, alloys that are non-magnetic, and the ability to form complex shapes common to the injection molding of plastics. Interestingly, all of these characteristics are achievable from the molding process, so design engineers do not have to select specific alloys to achieve one or more of the characteristics as is the case with crystalline materials. The Company believes 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, the Company believes these advantages could enable the introduction of entirely new products and applications that are not possible or commercially viable with other materials.

The Company’s revenues are derived from i) selling bulk Liquidmetal alloy products, which include non-consumer electronic devices, medical products, automotive components, and sports and leisure goods, ii) selling tooling and prototype parts such as demonstration parts and test samples for customers with products in development, iii) product licensing and royalty revenue, and iv) research and development revenue. The Company expects that these sources of revenue will continue to significantly change the character of the Company’s revenue mix.

## 2. Summary of Significant Accounting Policies

*Principles of Consolidation.* The consolidated financial statements include the accounts of Liquidmetal Technologies, Inc., its special-purpose wholly-owned subsidiary, Crucible Intellectual Property, and Liquidmetal Golf. All intercompany balances and transactions have been eliminated.

*Non-Controlling Interest.* The results of operations attributable to the non-controlling interest of Liquidmetal Golf are presented within equity and are shown separately from the Company's equity.

*Revenue Recognition.* Revenue is recognized pursuant to applicable accounting standards including FASB ASC Topic 605 ("ASC 605"), Revenue Recognition. ASC 605 summarizes certain points of the SEC staff's views in applying generally accepted accounting principles to revenue recognition in financial statements and provides guidance on revenue recognition issues in the absence of authoritative literature addressing a specific arrangement or a specific industry.

The Company's revenue recognition policy complies with the requirements of ASC 605. Revenue is recognized when i) persuasive evidence of an arrangement exists, ii) delivery has occurred, iii) the sales price is fixed or determinable, iv) collection is probable and v) all obligations have been substantially performed pursuant to the terms of the arrangement. Revenues primarily consist of the sales and prototyping of Liquidmetal molds and bulk alloys, licensing and royalties for the use of the Liquidmetal brand and bulk Liquidmetal alloys. Revenue is deferred and included in liabilities when the Company receives cash in advance for goods not yet delivered or if the licensing term has not begun.

License revenue arrangements in general provide for the grant of certain intellectual property rights for patented technologies owned or controlled by the Company. These rights typically include the grant of an exclusive or non-exclusive right to manufacture and/or sell products covered by patented technologies owned or controlled by the Company. The intellectual property rights granted may be perpetual in nature, extending until the expiration of the related patents, or can be granted for a defined period of time.

Licensing revenues that are one time fees upon the granting of the license are recognized when i) the license term begins in a manner consistent with the nature of the transaction and the earnings process is complete, ii) when collectability is reasonably assured or upon receipt of an upfront fee, and iii) when all other revenue recognition criteria have been met. Pursuant to the terms of these agreements, the Company has no further obligation with respect to the grant of the license. Licensing revenues that are related to royalties are recognized as the royalties are earned over the related period.



## LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(in thousands, except share and per share data)

*Cash.* The Company considers all highly liquid investments with maturity dates of three months or less when purchased to be cash equivalents. The Company limits the amount of credit exposure to each individual financial institution and places its temporary cash into investments of high credit quality with a financial institution that exceeds federally insured limits. The Company has not experienced any losses related to these balances and believes its credit risk to be minimal. As of December 31, 2015 and 2014, the Company held no deposits in such highly liquid investments.

*Trade Accounts Receivable.* The Company grants credit to its customers generally in the form of short-term trade accounts receivable. The creditworthiness of customers is evaluated prior to signing a contract with the customer. As of December 31, 2015, three customers represented 100%, or \$30, of the total outstanding trade accounts receivable. As of December 31, 2014, two customers represented 100%, or \$83, of the total outstanding trade accounts receivable. During 2015, there were three major customers, who together accounted for 52% of total revenue. During 2014, there were four major customers, who together accounted for 84% of total revenue. During 2013, there was one major customer, who accounted for 80% of total revenue. In the future, the Company expects that a significant portion of the revenue may continue to be concentrated in a limited number of customers, even if the bulk alloys business grows.

The allowance for doubtful accounts reflects management's best estimate of probable losses inherent in the trade accounts receivable. Management primarily determines the allowance based on the aging of accounts receivable balances, historical write-off experience, customer concentrations, customer creditworthiness and current industry and economic trends. The Company's provisions for uncollectible receivables are included in selling, marketing, general and administrative expense in the consolidated statements of operations and comprehensive loss. At December 31, 2015 and 2014, the Company had not recorded an allowance for doubtful accounts.

*Inventory.* Inventory is stated at the lower of weighted-average cost or market. Inventory is recorded at actual cost when purchased and then expensed at weighted-average cost as used in production and/or shipped to satisfy customer orders.

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

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

*Impairment of Long-lived Assets.* The Company reviews long-lived assets to be held and used in operations for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may be impaired. These evaluations may result from significant decreases in the market price of an asset, a significant adverse change in the extent or manner in which an asset is being used in its physical condition, a significant adverse change in legal factors or in the business climate that could affect the value of an asset, as well as economic or operational analyses. An impairment loss is recognized when the estimated fair value of the assets is less than the carrying value of the assets. Based on the Company's review of both qualitative and quantitative factors no significant indicators of impairment were identified during the years ended December 31, 2015, 2014, and 2013, respectively.

*Fair Value Measurements.* The estimated fair values of financial instruments reported in the consolidated financial statements have been determined using available market information and valuation methodologies, as applicable. The fair value of cash, trade receivables, restricted cash, accounts payable, and short-term debt approximate their carrying value due to their short maturities.

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Entities are required to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value based upon the following fair value hierarchy:

- Level 1 — Quoted prices in active markets for identical assets or liabilities;
- Level 2 — Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

**LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****(in thousands, except share and per share data)**

The Company has one financial instrument, namely warrant liabilities that are recorded at fair value on a periodic basis using Level 2 measurement inputs. Warrants are evaluated under the hierarchy of FASB ASC Subtopic 480-10, FASB ASC Paragraph 815-25-1 and FASB ASC Subparagraph 815-10-15-74 addressing embedded derivatives. The fair value of such warrants is estimated using the Black-Scholes option-pricing model. The foregoing warrants have certain anti-dilution and exercise price reset provisions which qualify the warrants to be classified as a liability under FASB ASC 815 (see note 14).

As of December 31, 2015, the following table represents the Company's fair value hierarchy for items that are required to be measured at fair value on a recurring basis:

	<b>Fair Value</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
Warrant liabilities	-	-	59	-

As of December 31, 2014, the following table represents the Company's fair value hierarchy for items that are required to be measured at fair value on a recurring basis:

	<b>Fair Value</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
Warrant liabilities	-	-	2,005	-

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



*Advertising and Promotion Expenses.* Advertising and promotion expenses are expensed when incurred. Advertising and promotion expenses were \$76, \$252 and \$78, for the years ended December 31, 2015, 2014 and 2013, respectively.

*Legal Costs.* Legal costs are expensed as incurred.

*Stock-Based Compensation.* The Company accounts for share-based compensation in accordance with the fair value recognition provisions of FASB ASC Topic 718, *Share-based Payment*, which requires all share-based payments to employees, including grants of employee stock options, to be recognized in the consolidated financial statements based on their fair values. The fair value of stock options is calculated by using the Black-Scholes option pricing formula that requires estimates for expected volatility, expected dividends, the risk-free interest rate and the term of the option. If any of the assumptions used in the Black-Scholes model change significantly, share-based compensation expense may differ materially in the future from that recorded in the current period.

*Income Taxes.* Income taxes are provided under the asset and liability method as required by FASB ASC Topic 740, *Accounting for Income Taxes*. Under this method, deferred income taxes are recognized for the tax consequences of “temporary differences” by applying enacted statutory tax rates applicable to future years to differences between the financial statement carrying amounts and the tax basis of existing assets and liabilities. The effect of a tax rate change on deferred taxes is recognized in operations in the period that the change in the rate is enacted. Valuation allowances are established when necessary to reduce net deferred tax assets to the amount expected to be realized. Under the provisions of FASB ASC Topic 740, the Company had no material unrecognized tax positions and no adjustments to liabilities or operations were required. The Company, when applicable, will recognize interest and penalties related to uncertain tax positions in income tax expense. There was no expense related to interest and penalties for the years ended December 31, 2015, 2014 and 2013, respectively.

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

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

*Subsequent Events.* The Company evaluated subsequent events through the filing of its Annual Report on Form 10-K with the SEC.

*Supplemental Cash Flow Information.* Cash payments for interest were \$4, \$0, and \$0 in the years ended December 31, 2015, 2014, and 2013, respectively.

**LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(in thousands, except share and per share data)**

*Recent Accounting Pronouncements.*

*Revenue from Contracts with Customers*

In May 2014, the FASB issued an accounting standards update which modifies the requirements for identifying, allocating, and recognizing revenue related to the achievement of performance conditions under contracts with customers. This update also requires additional disclosure related to the nature, amount, timing, and uncertainty of revenue that is recognized under contracts with customers. This guidance is effective beginning January 1, 2018 and is required to be applied retrospectively to all revenue arrangements. The Company is currently assessing the effects this guidance may have on its consolidated financial statements.

*Ability to Continue as a Going Concern*

In August 2014, the FASB issued an accounting standards update which requires an assessment of an entity's ability to continue as a going concern by incorporating and expanding upon certain principles that are currently addressed by U.S. auditing standards. This standard is effective for the fiscal years ending after December 15, 2016, and for annual periods and interim periods thereafter. The adoption of this pronouncement is not expected to have a material impact on the Company's consolidated financial statements and accompanying disclosures.

*Inventory*

In July 2015, the FASB issued an accounting standards update which modifies the requirements for measuring the value of inventory on a periodic basis. The new requirement will be to measure inventory at the lower of cost or net realizable value. This standard is effective for the fiscal years ending after December 15, 2016, and for annual periods and interim periods thereafter. The adoption of this guidance is not expected to have a significant impact on the Company's consolidated financial statements.

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 the Company's present or future consolidated financial statements.

### **3. Significant Transactions**

#### ***2014 Stock Purchase Agreement***

On August 20, 2014, the Company entered into a common stock purchase agreement (“2014 Purchase Agreement”) with Aspire Capital Fund LLC (“Aspire Capital”), which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of \$30,000 worth of the Company's common stock, \$0.001 par value, over the 36-month term of the 2014 Purchase Agreement.

From time to time over the term of the 2014 Purchase Agreement, the Company may, at its sole discretion, provide Aspire Capital with a regular purchase notice (each a “Regular Purchase Notice”) directing Aspire Capital to purchase up to 1,000,000 shares, but not to exceed \$400, of the Company's common stock per trading day at a price per share equal to the lesser of (i) the lowest sale price of the Company's common stock on the purchase date; or (ii) the arithmetic average of the three lowest closing sale prices for the Company's common stock during the twelve consecutive trading days ending on the trading day immediately preceding the purchase date.

In addition, on any date on which the Company submits a Regular Purchase Notice to Aspire Capital for the purchase of at least 500,000 shares at a price above \$0.30, the Company also has the right, in its sole discretion, to present Aspire Capital with a volume-weighted average price purchase notice (each, a “VWAP Purchase Notice”) directing Aspire Capital to purchase an amount of stock equal to up to 30% of the aggregate shares of the Company's common stock traded on its principal market on the next trading day (the “VWAP Purchase Date”), subject to a maximum number of shares the Company may determine. The purchase price per share pursuant to such VWAP Purchase Notice is generally 95% of the volume-weighted average price for the Company's common stock traded on its principal market on the VWAP Purchase Date.

The Company may deliver multiple Regular Purchase Notices and VWAP Purchase Notices to Aspire Capital from time to time during the term of the 2014 Purchase Agreement, so long as the most recent purchase has been completed. The 2014 Purchase Agreement provides that the Company and Aspire Capital shall not effect any sales under the 2014 Purchase Agreement on any purchase date where the closing sale price of the Company's common stock is less than \$0.10 per share. There are no trading volume requirements or restrictions under the 2014 Purchase Agreement, and the Company will control the timing and amount of sales of the Company's common stock to Aspire Capital.



## **LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES**

### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(in thousands, except share and per share data)**

On September 9, 2014, an initial registration statement covering 75,000,000 shares issued and issuable pursuant to the 2014 Purchase Agreement was declared effective by the SEC. As of December 31, 2015, the Company had received an aggregate of \$1,568 under the 2014 Purchase Agreement through the issuance of 12,500,000 shares of its common stock at a weighted average price of \$0.13 per share.

#### ***Line of Credit Facility***

In February 2015, the Company entered into a \$2,000 line of credit facility, with a fixed interest rate of 2.1%, which originally matured on February 13, 2016. The facility has been extended through August 25, 2016, with reductions in available borrowings and associated collateral requirements to \$1,000. Amounts available under this facility are secured by cash collateral. Such collateral is included as restricted cash on the Company's consolidated balance sheet. As of December 31, 2015, there was \$700 in outstanding borrowings under this facility. Interest expense applicable to these borrowings was \$4 for the year ended December 31, 2015 and \$0 for the years ended December 31, 2014 and 2013.

#### ***2013 Stock Purchase Agreement***

On November 8, 2013, the Company entered into a Common Stock Purchase Agreement (the "2013 Purchase Agreement") with Kingsbrook Opportunities Master Fund LP, Tech Opportunities LLC, and Iroquois Master Fund Ltd. (each, a "2013 Investor" and collectively, the "2013 Investors"). The 2013 Purchase Agreement provided that each of the 2013 Investors had committed to purchase such 2013 Investor's pro rata portion of up to \$20,000 (the "Total Commitment") worth of the Company's common stock, \$0.001 par value (the "Shares"), over the 36-month term of the 2013 Purchase Agreement. In consideration for the execution and delivery of the 2013 Purchase Agreement, on November 8, 2013, the Company issued 2,666,667 shares of common stock ("the Commitment Shares") to the 2013 Investors.

From time to time over the term of the 2013 Purchase Agreement, the Company was able to, at its sole discretion, provide each of the 2013 Investors with draw down notices (each a "Draw Down Notice") requiring them to purchase a specified dollar amount of Shares (the "Draw Down Amount") over a five (5) consecutive trading day period commencing on the trading day specified in the applicable Draw Down Notice (the "Pricing Period") with each draw

down subject to certain limitations. The maximum amount of Shares requested to be purchased pursuant to any single Draw Down Notice could not exceed a dollar amount equal to the lesser of (i) 300% of the average trading volume of the Company's common stock during the ten (10) trading days immediately preceding the date the applicable Draw Down Notice was delivered (the "Applicable Draw Down Exercise Date") multiplied by the lower of (A) the closing trade price of the Company's common stock on the trading day immediately preceding the Applicable Draw Down Exercise Date and (B) the average of the closing trade prices of our common stock for the three (3) trading days immediately preceding the Applicable Draw Down Exercise Date (such lower price, the "Reference Price"), and (ii) a specified dollar amount set forth in the 2013 Purchase Agreement based on the Reference Price as of the Applicable Draw Down Exercise Date.

## **LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES**

### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(in thousands, except share and per share data)**

As of December 31, 2014, the Company had received an aggregate of \$16,000 under the 2013 Purchase Agreement through the issuance of 85,355,615 shares of its common stock at a weighted average price of \$0.19 per share. On August 22, 2014, the Company voluntarily terminated the 2013 Purchase Agreement, effective August 25, 2014.

#### ***July 2012 Private Placement***

On July 2, 2012, the Company entered into a private placement transaction (the “July 2012 Private Placement”) pursuant to which the Company issued \$12,000 in principal amount of senior convertible notes that were due on September 1, 2013. The notes were convertible into shares of the Company’s common stock at a conversion price of \$0.352 per share. The notes bore interest at 8% per annum and were payable in twelve equal monthly installments of principal and interest beginning on October 1, 2012. Each monthly installment payment was payable in cash, shares of the Company’s common stock, or a combination thereof. If paid in shares, such shares were valued at the lower of (i) the then applicable conversion price or (ii) a price that was 87.5% of the arithmetic average of the ten (or in some cases fewer) lowest weighted average prices of the Company’s common stock during the twenty trading day period ending two trading days before the payment date or the date on which the Company elected to pay in shares, whichever was lower. As of July 17, 2013, the Company had issued 163,641,547 shares of common stock in full satisfaction of the notes (see note 13).

As a part of the July 2012 Private Placement, the Company issued warrants to purchase 18,750,000 shares of the Company’s common stock at an exercise price of \$0.384 per share (reduced to \$0.19 per share under the anti-dilution and price reset provisions of the warrants, see note 14), and such warrants first became exercisable on January 2, 2013 which was six months after the issuance date thereof. In the event that the Company issues or sells shares of the Company’s common stock at a price per share that is less than the exercise price then in effect, the exercise price of the warrants will be reduced based on a weighted-average formula. In addition, on the two-year anniversary of the issuance date, the then applicable exercise price was reset to equal 87.5% of the arithmetic average of the ten lowest weighted average prices of the common stock during the twenty trading day period ending two trading days immediately preceding the reset date. All of the warrants will expire on July 2, 2017 (see note 14).

#### ***Apple License Transaction***



On August 5, 2010, the Company entered into a license transaction with Apple Inc. (“Apple”) pursuant to which (i) the Company contributed substantially all of its intellectual property assets to a newly organized special-purpose, wholly-owned subsidiary, called Crucible Intellectual Property, LLC (“CIP”), (ii) CIP granted to Apple a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in the field of consumer electronic products, as defined in the license agreement, in exchange for a license fee, and (iii) CIP granted back to the Company a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in all other fields of use. Additionally, in connection with the license transaction, Apple required the Company to complete a statement of work related to the exchange of Liquidmetal intellectual property information. The Company recognized a portion of the one-time license fee upon receipt of the initial payment and completion of the foregoing requirements under the license transaction. The remaining portion of the one-time license fee was recognized at the completion of the required statement of work.

Under the agreements relating to the license transaction with Apple, the Company was obligated to contribute, to CIP, all intellectual property that it developed through February 2012. Subsequently, this obligation has been extended to apply to all intellectual property developed through February 2016. The Company is also obligated to maintain certain limited liability company formalities with respect to CIP at all times after the closing of the license transaction.

#### *Visser Precision Cast, LLC License Agreement*

On June 1, 2012, the Company entered into a Master Transaction Agreement (the “Visser MTA”) with Visser Precision Cast, LLC (“Visser”) relating to a strategic transaction for manufacturing services and financing. Under the manufacturing and service component of the Visser MTA, the Company had agreed to engage Visser as a perpetual, exclusive manufacturer of non-consumer electronic products. Under the financing component of the Visser MTA, the Company issued and sold to Visser in a private placement transaction (i) 30,000,000 shares of common stock at a purchase price of \$0.10 per share resulting in proceeds of \$3,000 and (ii) two warrants to purchase 15,000,000 shares of common stock at an original exercise price of \$0.22 per share which expire on June 1, 2017.

On May 20, 2014, the Company and Visser entered into a settlement agreement whereby the parties have amended and restated the sublicense and financing components of the Visser MTA. Additionally, the manufacturing services component and remaining considerations of the Visser MTA were terminated. Under the amended and restated sublicense agreement, the Company has granted to Visser a fully paid-up, royalty-free, irrevocable, perpetual, worldwide, non-transferable, nonexclusive sublicense to all of the Company’s intellectual property developed on or prior to May 20, 2014 (the “Effective Date”), for all fields of use other than certain excluded fields as set forth therein. Visser does not have any rights, now or in the future, to intellectual property of the Company developed after the Effective Date. The license to the Company’s intellectual property developed on or prior to the Effective Date does not include the right to use the “Liquidmetal” trademark or any of the Company’s other trademarks, except in certain defined situations, as set forth in the amended and restated agreement.

## LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(in thousands, except share and per share data)

With the foregoing revised arrangements, the Company is no longer required to use Visser as its exclusive manufacturer and is free to license other manufacturers on a non-exclusive basis in any industry or geographic market as to which the Company has not previously granted an exclusive license to a third party. Any such manufacturers licensed by the Company in the future will be able both to manufacture parts for the Company and the Company's customers, and to manufacture and sell products for their own account for such industries or markets as the Company may agree, subject to whatever royalty arrangements the Company may negotiate. The Company has not yet licensed any manufacturers other than Visser. Visser will also have the right to manufacture and sell products under the amended and restated sublicense agreement.

The settlement amended and restated the two warrants the Company issued to Visser in June 2012 to purchase 15,000,000 shares of the Company's common stock at an exercise price of \$0.22 per share. Those warrants contained anti-dilution mechanisms under which the number of shares issuable upon exercise of those warrants would be increased, and the exercise price for such shares would be reduced if the Company issued shares of its common stock at prices less than the warrants' exercise price. The amended and restated warrant agreement includes the effect of such anti-dilution adjustments and is exercisable for 18,611,079 shares of common stock (increased further to 18,937,931 shares under the anti-dilution provisions of the warrants, see note 14) at an exercise price of \$0.17 per share. The amended and restated warrant agreement continues to contain comparable anti-dilution adjustment mechanisms. The amended and restated warrant agreement also removes certain lock-up provisions that were included in the original warrants.

#### *Other License Transactions*

On January 31, 2012, the Company entered into a Supply and License Agreement for a five year term with Engel Austria GmbH ("Engel") whereby Engel was granted a non-exclusive license to manufacture and sell injection molding machines to the Company's licensees. Since that time, the Company and Engel have agreed on an injection molding machine configuration that can be commercially supplied and supported by Engel. On December 6, 2013, the companies entered into an Exclusive License Agreement for a 10 year term whereby Engel was granted an exclusive license to manufacture and sell injection molding machines to the Company's licensees in exchange for certain royalties to be paid by Engel to the Company based on a percentage of the net sales price of such injection molding machines.

The Company's Liquidmetal Golf subsidiary has the exclusive right and license to utilize the Company's 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. The Company owns 79% of the outstanding common stock of Liquidmetal Golf.

In June 2003, the Company entered into an exclusive license agreement with LLPG, Inc. ("LLPG"). Under the terms of the agreement, LLPG has the exclusive right to commercialize Liquidmetal alloys, particularly precious-metal based compositions, in jewelry and high-end luxury product markets. The Company, in turn, will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by LLPG. The exclusive license agreement with LLPG expires on December 31, 2021.

In March 2009, the Company entered into a license agreement with Swatch Group, Ltd. ("Swatch") under which Swatch was granted a non-exclusive license to the Company's technology to produce and market watches and certain other luxury products. In March 2011, this license agreement was amended to grant Swatch exclusive rights as to watches and all third parties (including the Company), but non-exclusive as to Apple, and the Company's license agreement with LLPG was simultaneously amended to exclude watches from LLPG's rights. The Company will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by Swatch. The license agreement with Swatch will expire on the expiration date of the last licensed patent.

#### **4. Liquidity and Going Concern Issues**

As of December 31, 2015, the Company's cash and restricted cash balance was \$4,781, which consisted of \$2,773 of cash and \$2,008 of short-term restricted cash. The Company will need to raise funds during 2016 to be able to continue its operations beyond 2016.

The consolidated financial statements have been prepared assuming that the Company will continue as a going concern. The consolidated financial statements do not include any adjustments related to the recoverability and classification of assets or the amounts and classification of liabilities or any other adjustments that might be necessary if the Company were unable to continue as a going concern. The Company has a relatively limited history of producing bulk amorphous alloy components and products on a mass-production scale. Furthermore, the ability of future contract manufacturers to produce the Company's products in desired quantities and at commercially reasonable prices is uncertain and is dependent on a variety of factors that are outside of the Company's control, including the nature and design of the component, the customer's specifications, and required delivery timelines. These factors will likely require that the Company make further equity sales under the 2014 Purchase Agreement, raise additional funds by other means, or pursue other strategic initiatives to support its operations beyond 2016. There is no assurance that the Company will be able to make equity sales under the 2014 Purchase Agreement or raise additional funds by other means on acceptable terms, if at all. If the Company were to make equity sales under the 2014 Purchase Agreement or to raise additional funds through other means by issuing securities, existing stockholders may be diluted. If funding is insufficient at any time in the future, the Company may be required to alter or reduce the scope of its operations or to

cease operations entirely. Uncertainty as to the outcome of these factors raises substantial doubt about the Company's ability to continue as a going concern.

For the year ended December 31, 2015, the Company's cash used in operations was \$6,834, cash used in investing activities was \$2,683, primarily due to increases in restricted cash to support the line of credit facility, and cash provided by financing activities was \$2,281, primarily due to cash received from equity sales under the 2014 Purchase Agreement and borrowings under the line of credit.

On August 20, 2014, the Company entered into the 2014 Purchase Agreement which allows it to raise up to \$30,000 through periodic issuances of common stock over a three year period. The Company may not raise funds through the 2014 Purchase Agreement when the closing sales price of the Company's common stock is less than \$0.10 per share. As of December 31, 2015, the Company had received an aggregate of \$1,568 under the 2014 Purchase Agreement through the issuance of 12,500,000 shares of its common stock at a weighted average price of \$0.13 per share.

**LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****(in thousands, except share and per share data)****5. Trade accounts receivable**

Trade accounts receivable were comprised of the following:

	<b>December 31,</b>	
	<b>2015</b>	<b>2014</b>
Trade accounts receivable	\$ 30	\$ 83
Less: Allowance for doubtful accounts	-	-
Trade accounts receivable, net	\$ 30	\$ 83

**6. Prepaid Expenses and Other Current Assets**

Prepaid expenses and other current assets totaled \$408 and \$374 as of December 31, 2015 and December 31, 2014, respectively. Included within these totals as of December 31, 2015 and 2014 are the following:

	<b>December 31,</b>	
	<b>2015</b>	<b>2014</b>
Prepaid service invoices	\$48	\$43
Prepaid manufacturing and mold costs	118	73
Prepaid insurance premiums	192	193
Other receivables	50	65
Total	408	374

**7. Inventory**

Inventory totaled \$83 and \$0 as of December 31, 2015 and December 31, 2014, respectively, and primarily consisted of raw alloy and finished goods inventory to satisfy future customer orders. Inventory is stated at the lower of weighted-average cost or market.

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

(in thousands, except share and per share data)

**8. Property and Equipment**

Property and equipment consist of the following:

	<b>December 31,</b>	
	<b>2015</b>	<b>2014</b>
Machinery and equipment	\$2,545	\$1,903
Computer equipment	218	218
Office equipment, furnishings, and improvements	564	531
Total	3,327	2,652
Accumulated depreciation	(1,957)	(1,534)
Total property and equipment, net	\$1,370	\$1,118

Depreciation expense for the years ended December 31, 2015, 2014 and 2013 was \$423, \$197, and \$96, respectively. For the year ended December 31, 2015, \$29 of depreciation expense was included in cost of sales and \$394 was included in selling, marketing, general and administrative expenses. For the years ended December 31, 2014 and 2013, \$0 of depreciation expense was included in cost of sales and \$197 and \$96, respectively, was included in selling, marketing, general and administrative expenses.

**9. Patents and trademarks, net**

Patents and trademarks consist of the following:

	<b>December 31,</b>	
	<b>2015</b>	<b>2014</b>
Purchased and licensed patent rights	\$566	\$566
Internally developed patents	1,664	1,664

Trademarks	148	148
Total	2,378	2,378
Accumulated amortization	\$(1,808)	\$(1,709)
Total intangible assets, net	\$570	\$669

Amortization expense was \$99, \$104, and \$118 for the years ended December 31, 2015, 2014, and 2013, respectively, and is included in research and development expense in the consolidated statements of operations and comprehensive loss. The estimated aggregate amortization expense for each of the five succeeding years is as follows:

December 31,	Aggregate Amortization Expense	
2016	\$	97
2017		86
2018		84
2019		83
2020		80
Thereafter		140
	\$	570



**LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****(in thousands, except share and per share data)**

Accumulated amortization for the years ended December 31, 2015 and 2014 is as follows:

	<b>December 31,</b>	
	<b>2015</b>	<b>2014</b>
Purchased and licensed patent rights	\$(517 )	\$(500 )
Internally developed patents	(1,177)	(1,103)
Trademarks	(114 )	(106 )
Total	\$(1,808)	\$(1,709)

The weighted average amortization periods for the years ended December 31, 2015 and 2014 are as follows:

	<b>December</b>	
	<b>31,</b>	
	<b>2015</b>	<b>2014</b>
Purchased and licensed patent rights	17	17
Internally developed patents	17	17
Trademarks	10	10

Purchased patent rights represent the exclusive right to commercialize the bulk amorphous alloy and other amorphous alloy technology acquired from California Institute of Technology (“Caltech”), through a license agreement with Caltech and other institutions. All fees and other amounts payable by the Company for these rights and licenses have been paid or accrued in full, and no further royalties, license fees or other amounts will be payable in the future under the license agreements.

In addition to the purchased and licensed patents, the Company has capitalized legal and registration costs incurred to obtain and maintain the respective patents. The Company currently holds various patents and numerous pending

patent applications in the United States, as well as numerous foreign counterparts to these patents outside of the United States.

## **10. Short-Term Debt**

Short-term debt totaled \$700 and \$0 as of December 31, 2015 and December 31, 2014, respectively, and consisted of borrowings under a line of credit facility, with a fixed interest rate of 2.1%. Interest expense related to outstanding borrowings was \$4, \$0, and \$0 for the years ended December 31, 2015, 2014, and 2013, respectively.

This credit facility requires the Company to maintain collateral for the full amount of the facility. A failure to meet this requirement could trigger a prepayment of all outstanding borrowings.

Given the proximity to maturity, the carrying amount of short-term debt approximates fair value.

## **11. Accrued Liabilities**

Accrued liabilities totaled \$947 and \$705 as of December 31, 2015 and December 31, 2014, respectively. Included within these totals are employee related accruals for normal wages, bonuses, and vacation liabilities, of \$766 and \$567, as well as accrued audit fees of \$109 and \$95 as of December 31, 2015 and 2014, respectively. In addition, as of December 31, 2015 and 2014, respectively, \$72 and \$43 of deferred straight-line rent liabilities existed related to the Company's warehouse and office facility lease.

## **12. Other Long-Term Liabilities**

Other Long-term Liabilities balance of \$856 and \$856 as of December 31, 2015 and 2014, respectively, consists of long term, aged payables to vendors, individuals, and other third parties that have been outstanding for more than 5 years. The Company is in the process of researching and resolving the balances for settlement and/or write-off in accordance with applicable accounting rules.

## **13. Convertible Notes, Embedded Conversion Feature Liability, and Gain on Extinguishment of Debt**

On July 2, 2012, the Company entered into the July 2012 Private Placement for \$12,000 in principal amount of senior convertible notes due on September 1, 2013 (see note 3). The notes were convertible at any time at the option of the holders, into shares of the Company's common stock at a conversion price of \$0.352 per share. Pursuant to ASC 815-40, due to the anti-dilution provision of the convertible notes, the conversion feature of the convertible notes was not indexed to the Company's own stock and was bifurcated and recognized as a derivative liability in the consolidated balance sheets and measured at fair value. The notes bore interest at 8% per annum and were payable in twelve equal monthly installments of principal and interest beginning on October 1, 2012.

## **LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES**

### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(in thousands, except share and per share data)**

The embedded conversion feature liability and warrants issued in connection with the senior convertible notes were valued utilizing the Monte Carlo simulation and Black-Scholes pricing model at \$8,865 and \$5,053, respectively, totaling \$13,918 as of July 2, 2012. \$12,000 of this total was recorded as debt discount and the excess of the face value of the embedded conversion feature liability and warrants of \$1,918 was booked to debt discount amortization on July 2, 2012.

Pursuant to the terms of the Senior Convertible Notes, the Company opted to pay the first eleven monthly installment payments due prior to June 30, 2013 with shares of the Company's common stock. On July 17, 2013, the Company and each of the holders of the Senior Convertible Notes agreed to cause all remaining principal and interest under the Senior Convertible Notes to be converted into an aggregate of 18,679,584 shares of the Company's common stock in full satisfaction of the notes. As a result of this conversion, the Senior Convertible Notes were paid off in full and are no longer outstanding as of the conversion date. As the final conversion occurred pursuant to terms that were not included in the original terms of the Senior Convertible Notes, the Company recorded a gain on extinguishment of debt in the amount of \$91 which consisted of the write-off of unamortized debt discount, unamortized debt issuance costs, embedded conversion feature liabilities, and the difference between the reacquisition price of the shares issued and the contractual conversion price of the Senior Convertible Notes.

Upon final settlement, the Company had issued 163,641,547 shares of common stock, at a weighted average conversion price of \$0.0774, for the twelve installment payments due under the Senior Convertible Notes, consisting of \$12,000 principal and \$680 of interest.

#### **14. Warrant Liabilities**

Pursuant to FASB ASC 815, the Company is required to report the value of certain warrants as a liability at fair value and record the changes in the fair value of the warrant liabilities as a gain or loss in its consolidated statement of operations and comprehensive loss due to the price-based anti-dilution rights of warrants.

During June 2012, the Company issued warrants to purchase a total of 15,000,000 shares of common stock to Visser under the Visser MTA (see note 3). These warrants had an original exercise price of \$0.22 per share and expire on June 1, 2017 and were originally valued at \$4,260. The foregoing warrants have certain anti-dilution and exercise price reset provisions which qualify the warrants to be classified as a liability under FASB ASC 815. As a result of subsequent issuances of the Company's common stock, which resulted in an anti-dilution impact, the exercise price of these warrants was reduced to \$0.17 and \$0.18 as of December 31, 2015 and December 31, 2014, respectively. In addition, the number of shares to be issued under the warrants as a result of the anti-dilution provision increased to 18,937,931 and 18,706,235 as of December 31, 2015 and December 31, 2014, respectively. As of December 31, 2015, these warrants were valued at \$34 using the Black-Scholes valuation model utilizing the following assumptions: (i) expected life of 1.42 years, (ii) volatility of 57%, (iii) risk-free interest rate of 1.1%, and (iv) dividend rate of 0. The change in warrant value for these warrants for the years ended December 31, 2015, 2014 and 2013 was a gain (loss) of \$1,019, \$1,506, and \$(1,299), respectively.

On July 2, 2012, the Company issued warrants to purchase a total of 18,750,000 shares of common stock related to the July 2012 Private Placement (see note 3). These warrants had an exercise price of \$0.384 per share and expire on July 2, 2017 and were originally valued at \$5,053. The foregoing warrants have certain anti-dilution and exercise price reset provisions which qualify the warrants to be classified as a liability under FASB ASC 815. As a result of executed draw-downs under the 2013 and 2014 Purchase Agreements, which resulted in an anti-dilution impact, as well as contractually defined price resets following the second anniversary of the July 2012 Private Placement, the exercise price of these warrants was reduced to \$0.19 as of December 31, 2015 and December 31, 2014. As of December 31, 2015 there were warrants to purchase a total of 17,572,000 shares of common stock outstanding, which were valued at \$25 using the Black-Scholes valuation model utilizing the following assumptions: (i) expected life of 1.50 years, (ii) volatility of 56%, (iii) risk-free interest rate of 1.1%, and (iv) dividend rate of 0. The change in warrant value for these warrants for the years ended December 31, 2015, 2014 and 2013 was a gain (loss) of \$927, \$1,194, and \$(856), respectively.

**LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****(in thousands, except share and per share data)**

The following table summarizes the change in the Company's warrant liability for the year ended December 31, 2015:

	<b>Visser MTA Agreement</b>	<b>July 2, 2012 Private Placement</b>	<b>Total</b>
Beginning Balance - December 31, 2014	\$ 1,053	\$ 952	2,005
Change in value of warrant liability, gain	\$ (1,019 )	\$ (927 )	(1,946)
Ending Balance - December 31, 2015	\$ 34	\$ 25	\$59

As of December 31, 2015 and 2014, the Company had 36,509,931 and 66,057,792 warrants outstanding, respectively. As of December 31, 2015 and 2014, the Company valued the 36,509,931 and 36,278,235 warrants classified as liabilities using the Black-Scholes model and recorded \$59 and \$2,005 respectively, in warrant liabilities. The change in fair value of warrants resulted in a total non-cash gain of \$1,946 and \$2,700 for the years ended December 31, 2015 and 2014, respectively.

The fair value of warrants outstanding for the following periods was computed using the Black-Scholes model under the following assumptions:

	<b>December 31,</b>			
	<b>2015</b>		<b>2014</b>	
Expected life in years	1.42 -	1.50	2.42 -	2.50
Volatility	56%-	57%	96%-	97%
Risk-free interest rate	1.1%		1.1%	
Dividend rate	0%		0%	

As of December 31, 2015, outstanding warrants to acquire shares of the Company's common stock are as follows:

<b>Number of Shares</b>	<b>Exercise Price</b>	<b>Expiration Date</b>
18,937,931	\$ 0.174	June 1, 2017
17,572,000	\$ 0.190	July 2, 2017
36,509,931		

## **15. Shareholders' Equity (Deficit)**

### Common stock

In June 2012, the Company issued 30,000,000 shares of common stock to Visser in connection with the Visser MTA (see note 3).

Pursuant to the terms of the Company's Senior Convertible Notes issued in the July 2012 Private Placement, the Company opted to pay the twelve monthly installment payments prior to the September 1, 2013 maturity date with shares of the Company's common stock. Upon final settlement, the Company had issued 163,641,547 shares of common stock at a weighted average conversion price of \$0.0774, for the twelve installment payments due under the notes, consisting of \$12,000 principal and \$680 of interest (see notes 3 and 13).

During the year ended December 31, 2013, the holders of the Company's Series A Preferred Stock converted all of the outstanding 506,936 shares of preferred stock into 16,896,070 shares of the Company's common stock (see "Preferred stock" below). After giving effect to such conversion, the Company has no shares of preferred stock outstanding.

On February 28, 2013, the Company's stockholders approved an amendment to the Certificate of Incorporation of the Company increasing the number of authorized shares of common stock from 400 million shares to 500 million shares.

On October 24, 2013, the Company's stockholders approved an amendment to the Company's Certificate of Incorporation increasing the number of authorized shares of common stock from 500 million shares to 700 million shares.





## LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES

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In connection with the execution of the 2013 Purchase Agreement, the Company issued to each of the 2013 Investors a pro rata portion of 2,666,667 shares of the Company's common stock. As of December 31, 2014, the Company had received an aggregate of \$16,000 under the 2013 Purchase Agreement through the issuance of 85,355,615 shares of its common stock at a weighted average price of \$0.19 per share. On August 22, 2014, the Company voluntarily terminated the 2013 Purchase Agreement, effective August 25, 2014 (see Note 3).

On September 9, 2014, an initial registration statement covering 75,000,000 shares issued and issuable pursuant to the 2014 Purchase Agreement was declared effective by the SEC. As of December 31, 2015, the Company had received an aggregate of \$1,568 under the 2014 Purchase Agreement through the issuance of 12,500,000 shares of its common stock at a weighted average price of \$0.13 per share (see Note 3).

#### Preferred stock

On May 1, 2009, pursuant to a Securities Purchase and Exchange Agreement, the Company issued 500,000 shares of convertible Series A-1 Preferred Stock with an original issue price of \$5.00 per share and 2,625,000 shares of Series A-2 Preferred Stock with an original issue price of \$5.00 per share as part of a financing transaction. In October 2009, the Company entered into an agreement with various investors to issue 180,000 shares of Series A-1 Preferred Stock with identical terms as the Series A-1 Preferred Stock issued on May 1, 2009.

The Series A Preferred Stock and any accrued and unpaid dividends thereon was convertible, at the option of the holders of the Series A Preferred Stock, into common stock of the Company at a conversion price of \$0.10 per share in the case of the Series A-1 Preferred Stock and a conversion price of \$0.22 per share in the case of the Series A-2 Preferred Stock (in both cases subject to adjustments for any stock dividends, splits, combinations and similar events).

During the year ended December 31, 2012, the holders of the Company's Series A Preferred Stock converted 792,215 shares of preferred stock into 25,669,752 shares of the Company's common stock. As of December 31, 2012, the Company had 506,936 shares of Series A Preferred Stock outstanding, consisting of 105,231 and 401,705 shares of Series A-1 and Series A-2 Preferred Stock, respectively. Preferred stock as of December 31, 2012 was \$0 due to an

insignificant balance, and accrued dividends on the Series A Preferred Stock as of December 31, 2012 were \$222.

During the year ended December 31, 2013, all of the holders of the Company's Series A Preferred Stock converted all of the outstanding shares of preferred stock and accrued dividends into 16,896,070 shares of the Company's common stock. Therefore, as of December 31, 2013, the Company no longer had any outstanding Preferred Stock and the related \$222 accrued dividends were reclassified to additional paid-in capital as of December 31, 2013.

### Warrants

In connection with the Series A Preferred Stock issuances in 2009, warrants to purchase 29,779,557 shares of the Company's common stock, valued at \$18,179, were outstanding through July 15, 2015. Due to extension of the expiration date of these warrants during 2010, they no longer contained anti-dilution provisions and were reflected as equity as they did not meet the criteria under FASB ASC 815 for liability treatment. Such warrants had exercise prices ranging between \$0.48 and \$0.49 and expired on July 15, 2015.

## **16. Stock Compensation Plan**

On April 4, 2002, our shareholders and Board of Directors adopted the 2002 Equity Incentive Plan ("2002 Plan"). The 2002 Plan provides for the grant of stock options to officers, employees, consultants and directors of the Company and its subsidiaries. A total of 10,000,000 shares of our common stock may be granted under the 2002 Plan. The 2002 Plan expired by its terms in April 2012, but it will remain in effect only with respect to the equity awards that have been granted prior to its expiration. As of December 31, 2015, there were 822,000 options outstanding under the 2002 Plan.

On June 28, 2012, the Company adopted the 2012 Equity Incentive Plan ("2012 Plan"), with the approval of the shareholders, which provided for the grant of stock options to officers, employees, consultants and directors of the Company and its subsidiaries. The 2012 Plan provides for the granting to employees of incentive stock options within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, and for the granting to employees and consultants of non-statutory stock options. In addition, the Plan permits the granting of stock appreciation rights, or SARs, with or independently of options, as well as stock bonuses and rights to purchase restricted stock. A total of 30,000,000 shares of the Company's common stock may be granted under the 2012 Equity Incentive Plan, and all options granted under this plan had exercise prices that were equal to the fair market value on the date of grant. During 2015, the Company granted options to purchase 3,085,001 shares of common stock, with total options outstanding of 25,988,734 as of December 31, 2015.



**LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****(in thousands, except share and per share data)**

On January 27, 2015, the Company adopted its 2015 Equity Incentive Plan (“2015 Plan”), which provided for the grant of stock options to officers, employees, consultants and directors of the Company and its subsidiaries. A total of 40,000,000 shares of the Company’s common stock are available for issuance under the 2015 Plan. All options granted under the 2015 Plan had exercise prices that were equal to the fair market value on the dates of grant. During 2015, the Company granted options to purchase 17,200,000 shares of common stock, with total options outstanding of 15,100,000 as of December 31, 2015.

FASB ASC 718, *Compensation – Stock Compensation*, requires all share-based payments to employees, including grants of employee stock options, to be recognized in the financial statements based on their fair values. Under ASC 718, Company is required to measure the cost of employee services received in exchange for stock options and similar awards based on the grant-date fair value of the award and recognize this cost in the income statement over the period during which an employee is required to provide service in exchange for the award. The Company recorded \$1,557, \$1,219, and \$525 for the years ended December 31, 2015, 2014, and 2013, respectively, of non-cash charges for stock compensation related to amortization of the fair value of restricted stock and unvested stock options. The total compensation costs related to non-vested awards not yet recognized were \$3,904, \$3,090, and \$487 for the years ended December 31, 2015, 2014, and 2013, respectively.

On August 3, 2010, in conjunction with an employment agreement with Thomas Steipp, the Company’s Chief Executive Officer, the Company also granted an aggregate of 6,000,000 restricted shares of the Company’s common stock, which will ratably vest each year over five years. During the years December 31, 2015, 2014, and 2013, the Company recorded \$182, \$312, and \$312, respectively, of compensation expense related to Mr. Steipp’s restricted shares, which are included in the stock-based compensation totals above.

The fair value of each option grant is estimated on the date of the grant using the Black-Scholes option-pricing model with the assumptions noted in the following table.

	<b>December 31,</b>		<b>2014</b>		<b>2013</b>	
	<b>2015</b>					
Expected volatility	84.19%	-168.46%	157.24%	-179.87%	128.55%	-168.09%
Expected dividends	-		-		-	
Expected term (in years)	0.73	-6.32	5.50	-7.50	6.32	-9.61

Risk-free rate            0.39% -1.96%    1.65% -2.22%    1.26% -2.49%

Expected volatilities are based on historical volatility expected over the expected life of the options. The Company uses historical data to estimate option exercise and employee termination within the valuation model. The expected term of options granted represents the period of time that options granted are expected to be outstanding. Forfeiture rates of 5.34%, 7.01% and 28.3% were used for options granted during the years ended December 31, 2015, 2014 and 2013, respectively. The risk free rate for period within the expected life of the options is based on U.S. Treasury rates in effect at the time of grant.

## LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES

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The following table summarizes the Company's stock option transactions for the years ended December 31, 2015 and 2014:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value  (in thousands)
Options outstanding at December 31, 2013	15,734,500	0.13		
Granted	15,292,914	0.29		
Exercised	(2,242,014 )	0.09		
Forfeited	(1,219,501 )	0.20		
Expired	(25,000 )	1.43		
Options outstanding at December 31, 2014	27,540,899	0.21		
Granted	20,285,001	0.14		
Exercised	(166,666 )	0.08		
Forfeited	(4,933,500 )	0.18		
Expired	(815,000 )	0.64		
Options outstanding at December 31, 2015	41,910,734	\$ 0.18	7.8	\$ -
Options exercisable at December 31, 2015	10,424,408	\$ 0.18	7.3	\$ -
Options unvested at December 31, 2015	31,486,326	\$ 0.17	7.9	\$ -
Options vested or expected to vest at December 31, 2015	38,032,146	\$ 0.18	7.8	\$ -

The following table provides supplemental data on stock options for the years ended December 31, 2015, 2014 and 2013:

**December 31,**  
**2015   2014   2013**

Weighted average grant date fair value per option granted	\$0.12	\$0.28	\$0.08
Fair value of options vested	1,584	385	54
Cash from participants to exercise stock options	13	205	74
Intrinsic value of options exercised	8	385	22

The following table summarizes the Company's stock options outstanding and exercisable by ranges of option prices as of December 31, 2015:

<b>Options Outstanding</b>			<b>Options Exercisable</b>			
<b>Range of Exercise Prices</b>	<b>Numbers of Options Outstanding</b>	<b>Weighted</b>	<b>Weighted</b>	<b>Number of Options Exercisable</b>	<b>Weighted</b>	<b>Weighted</b>
		<b>Average Remaining Contractual Life (Years)</b>	<b>Average Exercise Price</b>		<b>Average Remaining Contractual Life (Years)</b>	<b>Average Exercise Price</b>
\$0.00 - 0.10	10,340,820	6.99	\$ 0.08	4,701,724	7.01	\$ 0.08
0.11 - 1.442	31,569,914	8.01	0.21	5,722,684	7.48	0.26
Total	41,910,734			10,424,408		

**LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****(in thousands, except share and per share data)**

The Company's non-vested options at the beginning and ending of fiscal year 2015 had weighted-average grant-date fair values of \$0.21 and \$0.16 per option, respectively.

**17. Income Taxes**

Significant components of deferred tax assets are as follows:

	<b>Years Ended December 31,</b>	
	<b>2015</b>	<b>2014</b>
Loss carry forwards	\$53,693	\$53,310
Derivative valuations	(955 )	(178 )
NQSO	1,710	1,111
Tax Credits	433	433
Other	198	272
<b>Total deferred tax asset</b>	<b>55,079</b>	<b>54,948</b>
Valuation allowance	(55,079)	(54,948)
<b>Total deferred tax asset, net</b>	<b>-</b>	<b>-</b>

The following table accounts for the differences between the expected federal tax benefit (based on the statutory U.S. federal income tax rate of 34%) and the actual tax provision:

	<b>Years Ended December 31,</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>



Expected federal tax benefit	-34.0%	-34.0%	-34.0%
Permanent items	0.4 %	0.1 %	0.1 %
Net operating loss utilized or expired	0.0 %	0.0 %	0.0 %
Increase in valuation allowance and others	33.6 %	33.9 %	33.9 %
<b>Effective tax rate</b>	<b>0 %</b>	<b>0 %</b>	<b>0 %</b>

As of December 31, 2015, the Company had approximately \$141.6 million of net operating loss (“NOL”) carryforwards for U.S. federal income tax purposes expiring in 2018 through 2035. As of December 31, 2015, the Company had approximately \$95.1 million of NOL carryforwards for California income tax purposes expiring in 2016 through 2035, respectively. The Company and Liquidmetal Golf, Inc. file on a separate company basis for federal income tax purposes. Accordingly, the federal NOL carryforwards of one legal entity are not available to offset federal taxable income of the other. Liquidmetal Golf, Inc. had approximately \$35.9 million in federal NOL carryforwards, expiring in 2018 through 2035.

We recognize excess tax benefits associated with the exercise of stock options directly to stockholders’ equity only when realized. Accordingly, deferred tax assets are not recognized for NOL carryforwards resulting from excess tax benefits. As of December 31, 2015, deferred tax assets do not include approximately \$96 of these tax effected excess tax benefits from employee stock option exercise that are a component of our NOL carryforwards. Accordingly, additional paid-in capital will increase up to an additional \$96 if and when such excess tax benefits are realized.

As of December 31, 2015, the Company had approximately \$189 of Research & Development (“R&D”) credit carryforwards for U.S. federal income tax purposes expiring in 2021 through 2030. In addition, the Company has California R&D credit carryforwards of approximately \$243, which do not expire under current California law.

Section 382 of the Internal Revenue Code (“IRC”) imposes limitations on the use of NOL’s and credits following changes in ownership as defined in the IRC. The limitation could reduce the amount of benefits that would be available to offset future taxable income each year, starting with the year of an ownership change. As a result of the completion of the complex analysis required by the IRC to determine if an ownership change has occurred, the Company has determined that its annual NOL carryforward limitation under Section 382 of the IRC is \$764 per year.

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

The Company adopted the provisions of FASB ASC Topic 470 – Income Taxes. At the adoption date and as of December 31, 2015, the Company had no material unrecognized tax benefits and no adjustments to liabilities or operations were required. The Company recognizes interest and penalties related to uncertain tax positions in income tax expense which were \$0 for the years ended December 31, 2015, 2014 and 2013.

As of December 31, 2015, the tax years 2013 through 2014, and 2010 through 2014 are subject to examination by the federal and California taxing authorities, respectively.

#### **18. Loss Per Common Share**

Basic earnings per share ("EPS") is computed by dividing earnings (loss) attributable to common shareholders by the weighted average number of common shares outstanding for the periods. Diluted EPS reflects the potential dilution of securities that could share in the earnings.

Options to purchase 41,910,734 shares of common stock at prices ranging from \$0.08 to \$1.44 per share were outstanding at December 31, 2015, but were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive, given the Company's net loss. Options to purchase 27,540,899 shares of common stock at prices ranging from \$0.08 to \$2.33 per share were outstanding at December 31, 2014, but were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive, given the Company's net loss. Options to purchase 15,734,500 shares of common stock at prices ranging from \$0.08 to \$2.33 per share were outstanding at December 31, 2013, but were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive, given the Company's net loss.

Warrants to purchase 36,509,931 shares of common stock, with prices ranging from \$0.17 to \$0.19 per share, outstanding at December 31, 2015 were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive, given the Company's net loss. Warrants to purchase 66,057,792 shares of common stock, with prices ranging from \$0.18 to \$0.49 per share, outstanding at December 31, 2014 were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive, given the Company's net loss. Warrants to purchase 67,092,382 shares of common stock, with prices ranging from \$0.18 to \$0.49 per share, outstanding at December 31, 2013 were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive, given the Company's net loss.

## 19. Segment Information

The primary business of the Company is to develop and manufacture products and applications from amorphous alloys. As a result, the Company's financial results are reported in a single segment.

## 20. Commitments and Contingencies

### *Operating Lease Commitments*

The Company leases its offices and warehouse facilities under various lease agreements, certain of which are subject to escalations based upon increases in specified operating expenses or increases in the Consumer Price Index. As of December 31, 2015 and 2014, the Company has recorded \$72 and \$43, respectively, of deferred rent expenses. Future minimum lease payments under non-cancelable operating leases during subsequent years are as follows:

<b>December 31,</b>	<b>Minimum Payments</b>
<b>2016</b>	206
<b>2017</b>	212
<b>2018</b>	217
<b>2019</b>	242
<b>2020</b>	248
<b>Thereafter</b>	599
<b>Total</b>	<b>\$ 1,724</b>

Rent expense was \$225, \$204, and \$200 for the years ended December 31, 2015, 2014, and 2013, respectively.

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#### **21. 401(k) Savings Plan**

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

#### **22. Related Party Transactions**

The Company entered into a license agreement (the “IMG License Agreement”) with Innovative Materials Group, LLC (“IMG”), a California limited liability company which is majority owned by Mr. John Kang, a former Chief Executive Officer and former Chairman of the Company, to license certain patents and technical information for the limited purpose of manufacturing certain licensed products with the Company’s first generation die cast machines. The IMG License Agreement granted a non-exclusive license to certain product categories, as well as an exclusive license to specific types of consumer eyewear products and obligated IMG to pay the Company a running royalty based on its sales of licensed products through August 5, 2021. The Company recognized \$0, \$6, and \$8 in royalty revenues from IMG during years ended December 31, 2015, 2014, and 2013, respectively.

In February 2013, Mr. Abdi Mahamedi, the Company’s Chairman, converted his 58,600 shares of Series A-1 Preferred Stock and 260,710 shares of Series A-2 Preferred Stock into a total of 10,387,883 shares of the Company’s common stock, including dividends received in the form of common stock.

Mr. Thomas Steipp, the Company’s Chief Executive Officer, sold an aggregate of 400,000 shares of the common stock of the Company on August 5, 2013 pursuant to a trading plan that Mr. Steipp previously adopted under SEC Rule 10b5-1 under the Securities Exchange Act of 1934, as amended. Mr. Steipp adopted the trading plan on March 22, 2013 for the purpose of providing him with funds to satisfy certain tax liabilities as a result of the vesting on August 3,

2013 of 1,200,000 shares of Company restricted common stock held by Mr. Steipp. The restricted shares were granted to Mr. Steipp in 2010 under a previously disclosed Restricted Stock Award Agreement, dated August 3, 2010, between Mr. Steipp and the Company. On March 27, 2014, Mr. Steipp adopted a new 10b5-1 trading plan that allowed for the sale of 500,000 shares of common stock of the Company on August 4, 2014 and August 4, 2015.

In September 2013, the Company entered into Change of Control Agreements with Tony Chung, the Company's Chief Financial Officer, and certain other executive officers who are not named executive officers of the Company for SEC reporting purposes. The Change of Control Agreements provide that if the executive officer's employment with the Company is terminated without cause during the one-year period after a change of control of the Company, then the terminated officer will receive lump sum severance compensation in an amount equal to twelve months of his then-current base salary. Under the agreements, each of the executive officers will also be entitled to the above-described severance compensation in the event he terminates his own employment within one year after a change of control because of a salary decrease or assignment to a lower-level position. In addition, upon termination, all unvested stock options related to these officers will automatically and immediately vest and shall thereafter be exercisable in accordance with the terms and provisions of the applicable award agreements.

The Company has an exclusive license agreement with LLPG, Inc. ("LLPG"), a corporation owned principally by Jack Chitayat, a former director of the Company. 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. The Company, in turn, will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by LLPG. The exclusive license agreement with LLPG expires on December 31, 2021. There were no revenues recognized from product sales and licensing fees from LLPG during the years ended December 31, 2015, 2014, or 2013.

On February 27, 2013, Mr. Chitayat converted his 28,928 shares of Series A-1 Preferred Stock and 109,528 shares of Series A-2 Preferred Stock into a total of 4,626,840 shares of the Company's common stock, including dividends received in the form of common stock.

On June 1, 2012, the Company entered into the Visser MTA relating to a strategic transaction for manufacturing services and financing. In November 2013, the Company and Visser entered into arbitration proceedings to resolve disputes associated with this agreement. As part of the May 2014 settlement of these proceedings, the Company has granted to Visser a fully paid-up, royalty-free, irrevocable, perpetual, worldwide, non-transferable, nonexclusive sublicense to all of the Company's intellectual property developed on or prior to May 20, 2014, for all fields of use other than certain excluded fields as set forth therein. Visser does not have any rights, now or in the future, to intellectual property of the Company developed after the Effective Date of the agreement. The license to the Company's intellectual property does not include the right to use the "Liquidmetal" trademark or any of the Company's other trademarks, except in certain defined situations, as set forth in the amended and restated agreement entered into in connection with the settlement (see note 3). As of December 31, 2015, Visser is a greater-than-5% beneficial owner of the Company.



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

(in thousands, except share and per share data)

**23. Subsequent Events***Line of Credit Facility*

On March 4, 2016, the Company extended its cash collateralized line of credit facility. As part of the extension, the total available borrowings under the facility was reduced to \$1,000, with an equal reduction in collateral requirements. The extended facility will mature on August 25, 2016 and contains a fixed rate of interest of 2.1%.

**24. Quarterly Financial Information (Unaudited)**

(in thousands, except per share data)

	<b>Quarter Ended</b>				
	<b>March</b>	<b>June</b>	<b>September</b>	<b>December</b>	<b>Total</b>
	<b>31,</b>	<b>30,</b>	<b>30, 2015</b>	<b>31, 2015</b>	
	<b>2015</b>	<b>2015</b>			
Revenue	\$26	\$39	\$ 42	\$ 18	\$125
Gross profit (loss)	7	(94 )	(118 )	(19 )	\$(224 )
Operating loss	(2,327)	(2,440)	(2,372 )	(2,142 )	\$(9,281)
Net loss and comprehensive loss	(2,480)	(2,085)	(1,230 )	(1,522 )	\$(7,317)
Basic and diluted net loss per common share	\$(0.01 )	\$(0.01 )	\$ (0.00 )	\$ (0.00 )	\$(0.02 )

	<b>Quarter Ended</b>				
	<b>March</b>	<b>June</b>	<b>September</b>	<b>December</b>	<b>Total</b>
	<b>31,</b>	<b>30,</b>	<b>30, 2014</b>	<b>31, 2014</b>	
	<b>2014</b>	<b>2014</b>			
Revenue	\$160	\$153	\$ 97	\$ 193	\$603



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Gross profit	20	78	12	10	\$120
Operating loss	(2,165)	(2,335)	(2,333 )	(2,106 )	\$(8,939)
Net loss and comprehensive loss	(3,912)	(2,509)	(1,018 )	881	\$(6,558)
Basic and diluted net loss per common share	\$(0.01 )	\$(0.01 )	\$ (0.00 )	\$ 0.00	\$(0.01 )

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## Schedule II

## LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES

## Valuation and Qualifying Accounts

*(in \$ thousands)*

<b>Year ended</b>	<b>Balance at Beginning of Period</b>	<b>Additions Charged to Costs and Expenses</b>	<b>Other Accounts</b>	<b>Deductions</b>	<b>Balance at End of Period</b>
<b>December 31, 2015</b>					
Uncollectible accounts	-	19	-	(19)	-
Deferred tax asset valuation allowance	54,948	4,451	-	(4,320)	55,079
Total	\$ 54,948	\$ 4,470	\$ 0	\$ (4,339)	\$ 55,079
<b>Year ended December 31, 2014</b>					
Uncollectible accounts	-	-	-	-	-
Deferred tax asset valuation allowance	52,374	2,582	-	(8)	54,948
Total	\$ 52,374	\$ 2,582	\$ 0	\$ (8)	\$ 54,948
<b>Year ended December 31, 2013</b>					
Uncollectible accounts	11	-	-	(11)	-
Deferred tax asset valuation allowance	59,877	2,843	-	(10,346)	52,374
Total	\$ 59,888	\$ 2,843	\$ 0	\$ (10,357)	\$ 52,374

