

**Notice to the Reader**

The Management, Discussion and Analysis is being refiled to correct certain typographical errors: (1) on page 2, operating profit for the quarter was \$345 (\$0.01 per share) instead of \$240 (\$0.01 per share), and operating loss in the year-ago period was \$336 (\$0.01 per share) instead of \$2,210 (\$0.07 per share); and (2) on page 15, income (net of tax) incurred for the quarter was \$240, instead of \$260. No other changes have been made.

**IBC ADVANCED ALLOYS CORP.****MANAGEMENT'S DISCUSSION AND ANALYSIS****YEAR ENDED JUNE 30, 2018**

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**IBC Advanced Alloys Corp.**  
**Management's Discussion and Analysis**  
Year Ended June 30, 2018

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*The following is management's discussion and analysis ("MD&A") of IBC Advanced Alloys Corp., and its subsidiaries, prepared as of October 31, 2018. This MD&A should be read together with the audited consolidated financial statements and related notes for the year ended June 30, 2018. Financial amounts, other than amounts per share or per pound, are presented in thousands of United States dollars ("\$\$") unless indicated otherwise. Canadian dollar amounts are denoted by "C\$".*

*The terms "IBC", "we", "us" and "our" refer to IBC Advanced Alloys Corp. and its subsidiaries, unless the context otherwise requires.*

*This MD&A contains "forward-looking information" or "forward-looking statements" within the meaning of applicable securities legislation, concerning future financial or operating performance of IBC and its business and operations. Forward-looking statements consist of statements that are not purely historical, including any statements regarding beliefs, plans, expectations or intentions regarding the future. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes" or variations (including negative and grammatical variations) of such words and phrases or statements that certain actions, events or results "may", "could", "would", "should", "might" or "will" be taken, occur or be achieved. No assurance can be given that any of the events anticipated by the forward-looking statements will occur or, if they do occur, what benefits we will obtain from them. These forward-looking statements reflect management's current views and are based on certain assumptions and are effective only as of the date of this MD&A. These assumptions, which include management's current expectations, estimates and assumptions about certain projects and the markets we operate in, the global economic environment, interest rates, exchange rates and, our business strategy, plans, outlook and shareholder value, projections, targets and expectations and our ability to manage our assets and operating costs, may prove to be incorrect.*

*Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause our actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking statements, including: our estimates regarding capital requirements; future production, future cash and total costs of production for our manufacturing operations; our expectations with respect to transactions with third parties; changes in general economic conditions, the financial markets and the demand of our products; our expectations with respect to the timing, progress and success of the various stages comprising our nuclear fuels programs; changes in, and the effects of, the laws, regulations and government policies affecting operations, particularly laws, regulations and policies; and uncertainties in the market price for minerals and metals, such as copper, and exchange rates. Although we have attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in the forward-looking statements or information there may be other factors that cause actual results, performances, achievements or events not to be anticipated, estimated or intended. Other factors that could cause actual results to differ materially include, but are not limited to, those set forth in our most recent Annual Information Form under "Risk Factors". Also, many of the factors are beyond our control. Accordingly, readers should not place undue reliance on forward-looking statements or information. We undertake no obligation to reissue or update forward-looking statements or information as a result of new information or events after the date hereof except as may be required by applicable securities laws. All forward-looking information and statements made in this MD&A are qualified by this cautionary statement.*

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*The Company's audited consolidated financial statements for the year ended June 30, 2018 have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") using accounting policies consistent with IFRS as issued by the IASB and interpretations of the International Financial Reporting Interpretations Committee.*

*Additional information relating to us is available for view on SEDAR at [www.sedar.com](http://www.sedar.com).*

## **Executive Summary**

*Except as noted, all financial amounts are determined in accordance with IFRS and expressed in thousands of US dollars, except per-share amount.*

In the quarter that ended on June 30, 2018, the Company posted stronger year-over-year ("Y/Y") results, including increased sales, higher gross profit, and expanded gross margins. The Company's improved performance was driven by stronger order bookings and improved productivity enabled by previous capital equipment upgrades. For fiscal year 2018, the Company narrowed its comprehensive loss to \$702 (\$0.02 per share), from a comprehensive loss of \$5,362 (\$0.18 per share) for fiscal year 2017.

Some specific highlights of the Company's performance in fiscal Q4 2018 follow:

- **Sales Higher Both quarter-over-quarter ("Q/Q") and Y/Y:** IBC posted a 24.8% increase in year-on-year sales for the quarter, with Engineered Materials division sales up 5.5% and Copper Alloys division sales 31.5% higher. Over the twelve months of its fiscal year 2018, IBC's consolidated sales rose 23.4% to \$19,399 over comparative year-ago period sales of \$15,715, with Copper Alloy sales rising 18.3% and Engineered Materials sales jumping 39.4%.
- **Operating Profits Higher:** On a quarterly basis, the Company swung to an operating profit of \$345 (\$0.01 per share) on total revenue of \$5,224, as compared to a loss in the year-ago period of \$336 (\$0.01 per share) on revenue of \$4,186.
- **Loss in 2018 Narrowed by 87% over 2017:** The Company cut its comprehensive losses in the twelve months of fiscal year 2018 by 86.9% to \$702 (\$0.02 per share), compared a comparative year comprehensive loss of \$5,366 (\$0.18 per share).
- **Gross Margin Up Strongly:** The Company's consolidated gross margin increased in the quarter to 23.0%, from a gross margin of 6.0% in the comparative year. Gross margin for fiscal 2018 increased to 16.0% from a gross margin of 2.0% in the comparable year.
- **SG&A Up in the Quarter But Reduced Y/Y:** Selling, General and Administrative ("SGA") expenses in the quarter increased \$262 compared to the year-ago quarter, but were lower by \$203 over the twelve months of fiscal year 2018 compared to the comparable year.
- **Strong Year-End Cash Position:** The Company closed fiscal year 2018 with \$4,527 in cash and cash equivalents, compared to \$100 in cash and cash equivalents at the end of fiscal year 2017. The Company successfully completed a short form prospectus offering in June of 2018 (see details below), which raised gross proceeds of approximately C\$4.1 million.

## **Our Business**

We are primarily engaged in developing and manufacturing advanced alloys, such as beryllium-aluminum alloys and specialty copper alloys, for a variety of customers in the defense and non-defense sectors, including those in aerospace, automotive, marine defense, electronics, industrial equipment, oil and gas, among others. Our head office is located in Franklin, Indiana. We operate four plants in the United States ("U.S.") that manufacture, heat-treat, machine, or market copper-beryllium, beryllium-aluminum, copper-based master alloys, and similar specialty alloy products including beryllium-aluminum castings.

Our manufacturing operations currently employ 75 people and comprise two divisions: Copper Alloys and Engineered Materials.

- **Copper Alloys** manufactures and distributes a wide variety of copper alloys as castings and forgings: beryllium copper; chrome copper; oxygen-free high conductivity copper and aluminum bronze as plate, block, bar, rings; and specialty copper alloy forgings. The industries we serve with these products include the industrial welding, oil and gas, plastic mold, metal melting, marine defense, electronic and industrial equipment markets.
- **Engineered Materials** manufactures and supplies high-performance, precision-cast beryllium-aluminum components to the aerospace and high-tech manufacturing sectors.

At present, we are engaged in research and development of scandium-containing alloys, and we are monitoring developments related to the potential use of beryllium oxide ("BeO") in enhanced nuclear fuels, which has been the subject of previous research by the Company.

We were formed by an amalgamation under the laws of British Columbia on November 23, 2007 and our common shares are listed on the TSX Venture Exchange (the "TSX-V") under the symbol "IB" and on the OTCQB market under "IAALF".

## **Recent Corporate Developments, Business Initiatives, and Subsequent Events**

- In December 2017, we announced the successful manufacture of several aluminum-scandium alloy ingots at our Wilmington, MA facility. The Company is continuing to progress in its joint development effort with NioCorp Developments Ltd. on potential commercial products related to scandium-doped alloys.
- On January 10, 2018, the Company announced the appointment of James P. Taylor to the position of Interim Chief Financial Officer, effective Monday, January 15, 2018. Mr. Taylor replaced David Anderson (see *Board of Directors and Management Changes* below).
- On February 7, 2018, the Company announced that it had renewed a long-term supply contract to provide a proprietary copper alloy to a Fortune 1000 company that specializes in the manufacture of high-performance materials for the commercial aerospace sector. The U.S.-based Fortune 1000 company is an acknowledged global leader in the copper and strategic metals space and has been an IBC customer for more than 12 years..
- On May 22, 2018, the Company announced that Lockheed Martin had awarded the Company a new three-year contract valued at a minimum of \$7,800 to manufacture beryllium-aluminum azimuth gimbal housings, a key component for the F-35 Lightning II's

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Electro-Optical Targeting System (EOTS). Additional quantities on this contract are expected for spares in the last two years.

- On June 6, 2018, the Company announced a successful closing of its previously announced short form prospectus offering, filed on March 21, 2018 in the provinces of British Columbia, Alberta and Ontario, of debenture units and convertible debenture units of the Company to fund an expansion of its production capacity and for other purposes. The Offering raised gross proceeds to the Company of approximately C\$4.1 million.
- Subsequent to June 30, 2018, the Company announced it awarded options to directors, officers, employees and consultants to purchase up to 1,100,750 common shares on July 25, 2018 at C\$0.31 per share.
- On August 9, 2018, the Company announced that it secured a renewal of its existing line of credit of approximately \$3 million and term loan facility with a maximum of approximately \$1.2 million with BMO Harris Bank. The renewal allows the Company to immediately deploy recently raised funds to purchase and install new capital equipment and supply inventory, which the Company believes will help it expand production capacity, reduce costs, and provide a hedge against supply uncertainty as demand increases for various materials.
- In August 2018, we issued to our directors 55,796 common shares with an issue-date value of \$195, to a non-executive employee 43,710 common shares with an issue date value of \$14 and to a consultant 40,529 common shares with an issue-date value of \$12 as compensation for services.
- In August 2018, a director of the Company exercised stock options and we issued 188,173 common shares with an issue-date value of \$71 to the director.
- On September 5, 2018, the Company announced that it was awarded a contract from a major global manufacturer of commercial satellite systems for a First Article Qualification of Beralcast<sup>®</sup> 363 beryllium-aluminum alloy cast components and subsequent serial production units for satellites. The Company will produce first article demonstration components related to satellite platforms. Assuming the initial components meet performance qualifications, the Company will then produce components for integration into satellites for first launch. Multiple units manufactured by the Company may be used in a single satellite.
- On October 8, 2018, the Company jointly announced with NioCorp Developments Ltd. the successful production of aluminum-scandium master alloy. The master alloy was produced at the Ames Laboratory, a U.S. government-owned, contractor-operated national laboratory of the U.S. Department of Energy (DOE), located in Ames Iowa.
- As of October 30, 2018, convertible note holders elected to convert notes totaling C\$210,000 with the result that 677,414 shares were issued.

## **Board of Directors and Management Changes**

David Anderson resigned as CFO effective January 19, 2018.

James P. Taylor was appointed as Interim Chief Financial Officer, effective January 15, 2018. It is anticipated that James will serve in this position until a permanent CFO is appointed by the Company. Currently, he serves as CFO of Hampson Equities Ltd. From 2013-2017, he served as CFO of Para Resources Inc. (TSX-V:PBR). Prior to that, he served as CFO for Cyber Development Group International, LLC, an early-stage business in the Internet infrastructure space. His achievements include responsibility for the Initial Public Offering of PEER 1 Network Enterprises Inc., where he managed several equity and debt financings as well as a major recapitalization. The company's revenue grew from approximately \$1 million to over \$70 million during his tenure with the company. He graduated from Indiana University with a B.S. in Finance and Accounting and earned his MBA in International Business and Corporate Finance from DePaul University.

Simon Anderson was appointed as Chairman of the Audit Committee, replacing Mike Jarvis, effective October 23, 2018. The remaining members of the Audit Committee are Mark Smith and Geoff Hampson.

## **Manufacturing Operations**

We currently have four manufacturing operations in the U.S. that employ a total of 75 people.

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<b>Location</b>	<b>Building Area</b>		<b>Leased/Owned</b>	<b>Employs</b>
	<b>m<sup>2</sup></b>	<b>sq ft</b>		
Copper Alloys				
Franklin, IN	4,500	48,800	Owned	34
Royersford, PA	1,500	16,000	Leased	5
New Madrid, MO	2,500	26,500	Owned	6
				<hr/> 45
Engineered Materials				
Wilmington, MA	5,800	63,000	Leased	30
				<hr/> 75

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Most of the Company's management and administration are based at the Franklin, IN facility.

### *COPPER ALLOYS*

We manufacture and distribute a wide variety of copper alloys as castings and forgings, including beryllium copper, chrome copper, oxygen-free high conductivity copper, and aluminum bronze as plate, block, bar, rings and specialty copper alloy forgings for various markets and applications. We sell directly to end users and serve various markets through a network of established dealers and distributors. Our Copper Alloys operations are based in Franklin, IN, where we maintain forging (hammer, press and ring rolling), heat-treating, and machining operations. We cast billets at plants in Royersford, Pennsylvania and New Madrid, Missouri. Our

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Franklin plant sits on 4.8 hectares (12.0 acres) of land that has considerable room for expansion should economic conditions and business plans call for such expansion.

We source copper alloys as cast billet, slab, or ingot from mills in North America, Europe, and Asia and convert these into usable industrial products serving the industrial welding, oil and gas, plastic mold, metal melting, marine defense, electronic, and industrial equipment markets. We also provide tooling components for the North American automotive industry, the European and North American consumer plastic tooling producers, the global oil and gas service industry, the prime North American submarine and aircraft carrier producers and repair facilities including the US Navy, electronics industries and general equipment manufacturers.

We produce material at two IBC-owned foundries and buy other billet from independent third-party foundries and mills. We have expertise in melting and casting beryllium-copper and other beryllium-containing alloys. Our casting operations are a primary producer/supplier of beryllium copper casting and master alloy ingot products in North America and markets around the world. We offer our customers a full range of manufacturing and support services including casting and master alloy products, cast and forged billet products, semi-continuous cast input billets, and wrought products. We manufacture our beryllium alloys utilizing certified beryllium-copper master alloy.

Our Royersford, PA facility has three furnaces that have been adapted to meet the specialized requirements of copper alloy manufacturing. We have strong technical and manufacturing engineering resources in the highly specialized copper alloy industry including beryllium copper. This gives us the capability to manufacture large 21-inch diameter copper alloy input billets weighing up to two tons.

Our New Madrid, MO plant is located on a 2.4-hectare (6.0 acres) site that is 265 kilometers (165 miles) south of St. Louis, MO. It has two furnaces and is capable of producing billets in a range of sizes and compositions. Because this facility is currently underutilized, there is room for significant expansion of plant operations at this location should economic conditions and business plans call for such expansion.

*ENGINEERED MATERIALS*

The Engineered Materials division supplies high-performance beryllium-aluminum components to the aerospace and high-tech manufacturing sectors. We currently manufacture the Beralcast<sup>®</sup> family of metal matrices that are used in commercial and defense applications that require complex, lightweight, and/or high-stiffness parts. We have additional, higher-performance products in development. Using our proprietary manufacturing techniques, our objective is to make precision-cast beryllium-aluminum components more accessible and cost-effective for a wide range of industries and applications.

In general, Beralcast<sup>®</sup> alloys serve as a higher-performance or lower-cost replacement materials for cast aluminum, magnesium, titanium, metal matrix composites, non-metallic composites, and pure beryllium or powder metallurgy beryllium-aluminum. Some of their varied applications include automotive braking and structural components and aerospace and satellite system components.

The principal Beralcast<sup>®</sup> metal matrix is more than three times stiffer than aluminum, with 22% less weight, and it can be precision cast to both simple and complex configurations. This material is very lightweight, can be precision cast for three-dimensional stability, and delivers a

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high modulus of elasticity. Such as, Beralcast<sup>®</sup> is ideally suited for certain demanding semiconductor manufacturing equipment, computer components, and other commercial and aerospace applications. IBC's ability to cast Beralcast<sup>®</sup> products in a near-net shape allows for manufacturing cost efficiencies.

Binary beryllium-aluminum composites were developed by a U.S. corporation, which was originally a metallurgical laboratory affiliated with the Massachusetts Institute of Technology (MIT), in cooperation with Lockheed Martin. We own the intellectual property relating to the more advanced development of this technology, which is a proprietary castable metal matrix composite beryllium-aluminum alloy now manufactured as Beralcast<sup>®</sup>. We believe that a competitor has sought to develop an alternative cast beryllium-aluminum product, which, if commercially viable, would be a direct competitor to Beralcast<sup>®</sup>.

*BUSINESS RISKS*

Some of the risks that our business faces, which are specific to our operations, include the following:

*Dependence on Ulba Metallurgical Plant and sole-source suppliers*

Our proprietary Beralcast<sup>®</sup> castings and many of our copper alloys use beryllium which is a specialty metal that is not readily sourced. While we are able to purchase beryllium from a U.S. producer, and from the U.S. National Defense Stockpile, we currently source our vacuum-cast beryllium and beryllium copper master alloy from the Ulba Metallurgical Plant ("Ulba"). Ulba operates a beryllium processing and manufacturing facility and is owned by Kazatomprom of Kazakhstan. We have entered into long-term beryllium and beryllium copper master alloy supply agreements with Ulba lasting through 2021. Ulba's ability to honor its supply obligations will depend on its ability to source raw materials. We understand that production uses long-term stockpiles; however any disruptions in Ulba's ability to manufacture beryllium or CTMA (Carbothermic Master Alloy) to our specifications would have a materially adverse effect on our business. Our ability to purchase those supplies also is contingent upon a continuation of current U.S. laws and regulation governing such purchases.

We are dependent upon several suppliers of our base materials and alloying agents as sole-source suppliers. Approximately 80% of our materials purchased, including Ulba Metallurgical Plant as described above, are primarily from these sole-source suppliers. Any disruptions in these suppliers' ability to manufacture our base materials and alloying agents could have a materially adverse effect on our short-term revenue, while we seek to engage alternative sources.

*Disruptions of our Manufacturing Operations*

From time to time, our operations are adversely affected by disruptions caused by such things as water line failures, power outages, labor turnover, equipment failures, and adverse weather. These issues normally only cause short-term interruptions but can affect our ability to meet our quarterly revenue and profitability objectives.

*Need to Meet Product Specifications*

Most of the products we manufacture are required to conform to a specification. Some of these specifications are very exacting. Small variations in process can cause our products to fall short

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of the required standard. In addition, customers' requirements can change from time to time. If we are unable to address these specification issues in a timely manner, we are at risk of losing short-term revenue and even long-term production contracts.

In the normal course of business operations, the Company and its subsidiaries are parties, from time to time, to various civil and administrative proceedings. These may include product liability claims, health and safety claims, environmental claims and employee-related matters.

On August 7, 2012, we received a demand from Gerald Hoolahan alleging damages related to a Stock Purchase Agreement in connection with the Company's acquisition of Beralcast Corp., now IBC Engineered Materials Corp. On September 8, 2017, an Award was issued in favor of Claimant Gerald Hoolahan against IBC Advanced Alloys Corp. The Award, in the amount of \$1,240 plus attorney's fees, costs, and expenses in the amount of \$155, was granted by the American Arbitration Association's International Centre for Dispute Resolution. The Award is premised on the Arbitrator's general finding of IBC's certain breaches of contract related to the Stock Purchase Agreement previously mentioned. Gerald Hoolahan was a Vendor in that transaction and received shares of the Company as partial consideration for the transaction. These shares were subject to trading restrictions. The Arbitrator's Award is fashioned based upon a calculation of prospective sales of Gerald Hoolahan's shares before the restrictions were removed. The Arbitrator determined the restrictions to be improper. The Company vigorously disputes the allegations and is appealing the Arbitrator's Award. On January 12, 2018, counsel for Mr. Hoolahan filed opposition to IBC's petition and application to Vacate Arbitration Award, calling into question the applicability of the *manifest disregard of the law* exception filed in IBC's petition. IBC believes that Hoolahan's filing misstates the current state of the law with regard to the *manifest disregard of the law* standard and maintains that it remains applicable law in the First Circuit. On January 19, 2018, IBC filed its Reply to the Hoolahan January 12<sup>th</sup> filing and asserted why the Federal District Court of Massachusetts should apply the *manifest disregard of the law* standard to the instant case. The matter is now fully briefed and the parties await a decision from the Court. IBC will re-evaluate its position as to further appeals or actions after it receives the Court's ruling.

On January 21, 2014, a subsidiary in the Copper Alloys division, Nonferrous Products, Inc. ("Nonferrous Products") received a "Special Notice Letter of Potential Liability" from the U.S. Environmental Protection Agency ("EPA"). The letter references the EPA's determination that a release of hazardous materials had occurred at the Chemetco Superfund Site located in Hartford, Illinois. Chemetco, Inc. operated a secondary smelting operation for recycling and after-market processing of copper-bearing scrap and manufacturing by-products. The EPA has identified Nonferrous Products as a potentially responsible party ("PRP") under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"). Nonferrous Products was identified as a PRP due to the EPA's review of Chemetco's records indicating that Nonferrous Products shipped more than 150,000 pounds of material to the Superfund Site. Nonferrous Products has joined a defense group of other PRPs. The presumed amount of shipped material from Nonferrous Products classifies it as a Tier 3 Group member of four tiers, with Tier 1 consisting of PRP's that shipped the highest volume of material to Chemetco. By joining the PRP Group, Nonferrous Products entered into an Amended Cost Sharing Agreement which requires certain assessments based on an interim allocation according to Tier Group. To date, Nonferrous Products has paid immaterial amounts related to these assessments and member fees. These assessments will be used to fund further site investigation to determine the amount of materials sent to Chemetco by each party and the best clean-up method. On September 27, 2017, it was brought to the attention of IBC Counsel that the EPA Special Notice Letter was delivered to the Company's subsidiary Specialloy Copper,

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LLC identifying "Specialloy Metals Company" as a Potentially Responsible Party to the Chemetco Superfund Site. The entity noticed (Specialloy Metals Company) sold assets to Company's subsidiary and was subsequently dissolved. Company's subsidiary is covered under Nonferrous' insurance policies, and other than the asset purchase transaction has no connection to the entity that was noticed. The Company is evaluating its options regarding notifying its insurers of potentially increased liability should the EPA and/or Chemetco PRP Group contribution lawsuit attempt to name Company's subsidiary as a Defendant. Specialloy Metals Company was allocated with over 4 million pounds of material shipped to the Chemetco site, or more than ten times the amount allocated to Nonferrous. Should the EPA and/or PRP Group contribution lawsuit pursue alter ego theories and allege the Company's subsidiary Company, then IBC potentially faces significantly more liability requiring further defensive action.

On April 7, 2015, a subsidiary in the Copper Alloys division, Freedom Alloys, Inc. ("Freedom Alloys") was named as a defendant in a suit filed in the Superior Court of the State of California, Los Angeles County entitled *Godoy et al. v The Argen Corporation et al.* BC578085. This Complaint for Survival and Wrongful Death from Toxic Injuries alleges Freedom Alloys, along with five other defendants, supplied beryllium-containing materials causing fatal chronic beryllium disease to the plaintiffs' deceased father. The complaint alleges the decedent was exposed to beryllium alloys through his employment as a foundry worker at H. Kramer & Co. and also as a dental lab technician at various dental labs in the Los Angeles area. The claim was dismissed in September 2015, but was reinstated on the plaintiffs' appeal in June 2016. A trial date has been set for April 2019. While the outcome of any legal proceeding is difficult to predict, the Company believes that it has adequate defenses to prevail in this matter.

On March 7, 2016, Maxum Indemnity Company filed a Complaint for Declaratory Judgment against Freedom Alloys in the U.S. District Court for the Eastern District of Pennsylvania, seeking a judgment that it owes Freedom Alloys no duty to defend or indemnify Freedom Alloys for the underlying *Godoy et al. v The Argen Corporation et al.* lawsuit described above. The matter is pending as *Maxum Indemnity Company v Freedom Alloys Inc.*, case number 2:16-CV-01077-AB. The matter was stayed by agreement based on the status of *Godoy et al. v The Argen Corporation et al.* However, because *Godoy et al. v The Argen Corporation et al.* has resumed proceedings in the trial court in California, Maxum's counsel has threatened to lift the Stay of Proceedings if Freedom Alloys does not commit to giving up its claim for indemnity if it does not prevail in its defense of the matter. As of this filing, Defendants' Summary Judgment Motion was granted as to Survival Claims per defense counsel's 8/8 update based on statute of limitations arguments. However, there are other claims that have yet to be dismissed with regard to Freedom. Murchison and Cummings, LLP remains Company's defense counsel in this matter, having been engaged by Erie Insurance, who has assumed Company's defense under a reservation of rights. The Company has independently engaged Ballard Spahr LLP to represent it in the matter; however, Company has negotiated a stay of litigation with Maxum pending the outcome of its Summary Judgment motion in the underlying litigation (Godoy matter).

**Operating Performance and Outlook**

*Copper Alloys Division*

In the quarter ended June 30, 2018, and as compared to the year-ago period, the Copper Alloys division booked the following results:

- Sales revenue increased by 31.5%, to \$4,084 from \$3,105;
- Gross profit increased 93.1% to \$751 from \$389;
- Operating profit increased by 549.0% to \$280 from \$51;
- June 2018 quarterly order bookings increased 10.7% to \$3,824 from \$3,453; and
- Gross margin increased 38.5% improving to 18.0% from 13.0%.

Copper Alloys sales also are affected by changes in the underlying price of commodities, primarily copper. Indicative copper prices per pound are:

	<b>2017</b>	<b>2016</b>
September 30	\$2.95	\$2.21
December 29	\$3.35	\$2.50
	<b>2018</b>	<b>2017</b>
March 29	\$3.09	\$2.70
June 30	\$2.99	\$2.72

We aim to pass the cost of copper through to our customers and we do not hold large inventories of copper. Accordingly, our profitability should not be affected by the price of copper in the long term, except to the extent that high copper prices discourage consumption or that competitors lower their margins to obtain business. In the short term, price fluctuations can have a bearing on our profitability as we realize gains or losses on our inventories. Since copper is a significant component of products we sell, the price of copper does materially affect our revenues.

*Engineered Materials Division*

In the quarter ended on June 30, 2018, and as compared to the year-ago period, the Engineered Materials division saw the following:

- Sales revenue increased by 5.5%, to \$1,140 from \$1,081;
- Gross profit swing to a positive \$437 from a loss of \$144;
- Operating profit/loss improved by 136.7% to a profit of \$158 from a loss of \$430; and
- Gross margin shifted to a positive 38.0% from a negative 13.0%.

In the fourth quarter the division experienced disruptions caused by adverse weather including power outages. Performance was further impacted by subcontractor availability and scarcity of

labor. Management believes the constraints experienced in the fourth quarter of fiscal 2018 will be substantially alleviated in the first half of fiscal 2019.

Regarding our business with Lockheed Martin, on May 22, 2018, we announced that Lockheed Martin had awarded the Company a new three-year contract valued at a minimum of \$7,800 to manufacture production azimuth gimbal housings, a key component for the F-35 Lightning II's Electro-Optical Targeting System (EOTS). Additional quantities on this contract are expected for spares in the last two years.

The semiconductor manufacturing sector has remained consistent at previous year's levels with some seasonality in sales returning in the last half of the calendar year.

During the year, beryllium bearing alloys carried in salvage (work in process) inventory were revalued. The adjustment became necessary when a new process was developed allowing recovery of the alloys previously thought to be unrecoverable. The material in question has been stored over time in drums with the belief they would be disposed of. The new process allows the material to be heated in a furnace which allows the usable alloy to separate from contaminants. As of June 30, 2018, the new process has been tested both determining the usability of the material as well as providing yield estimates for the recovery process. The adjustment to record the value of this inventory resulted in a \$979 increase in raw material inventory values and a corresponding adjustment to cost of goods sold.

#### *Consolidated Operations*

On a consolidated basis, the Company posted these results in the quarter ending on June 30, 2018, as compared to the year-ago period:

- Sales revenue increased by 24.8%, to \$5,224 from \$4,186;
- Gross profit increased by 385.0% to \$1,188 from \$245;
- Operating loss swung to income of \$345 from a loss of \$336; and
- Gross margin increased to 23.0% from 6.0%.

#### **Research Initiatives**

From time to time, we sponsor and assist in research and development ("R&D") initiatives to create new market opportunities. Our current R&D focus is on developing scandium-doped aluminum alloys. We have significant in-house expertise in the development of these ultra high-performance alloys, and the head of our Engineered Materials division is a named co-inventor of two pending patents regarding scandium-bearing aluminum alloys. This work was conducted while he was with The Boeing Company, which has actively explored the potential integration of scandium-containing aluminum alloys in commercial aircraft.

In previous years, we actively engaged in R&D regarding the potential use of beryllium oxide ("BeO") in enhanced nuclear fuels. Since 2008, we have sponsored collaborative research agreements with Purdue University and Texas A&M to develop a new type of BeO nuclear fuel. Work to date has confirmed that UO<sub>2</sub> – BeO fuel is longer lasting and more efficient and provides a larger safety margin than current nuclear fuels. Under the terms of the collaborative research agreements, IBC has an option to enter into an exclusive royalty-bearing license for commercial application to the intellectual property relating to the development of an advanced

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BeO nuclear fuel with both Purdue and Texas A&M. Purdue has filed provisional patents covering the IBC-funded nuclear fuel research. The next step in this research initiative will be to have an industrial assembly of the BeO-enhanced fuel approved for irradiation in a test reactor. We have not allocated funds to this initiative but continue to seek a partner to jointly fund the next development step.

**Financial**

Except as noted, all financial amounts are determined in accordance with IFRS and expressed in thousands of US dollars, except per-share amount.

*SELECTED ANNUAL INFORMATION*

During the most recent fiscal years, we have not incurred any loss from discontinued operations or extraordinary items or declared any dividends.

	June 30		
	2018	2017	2016
Revenue (\$000)	19,399	15,715	16,374
Loss for the year (\$000)	(702)	(5,362)	(3,930)
Loss per share, basic and diluted (\$/share)	(0.02)	(0.18)	(0.33)
Total assets (\$000)	20,295	14,897	17,302
Long-term financial liabilities (\$000)	1,769	213	283

*SELECTED QUARTERLY INFORMATION*

During our most recent eight quarters, we have not incurred any loss from discontinued operations.

Quarter Ended	Revenue \$000	Loss for the period (net of tax) \$000	Basic and diluted loss per share <sup>1</sup> \$
September 30, 2016	3,263	(1,607)	(0.05)
December 31, 2016	3,571	(838)	(0.03)
March 31, 2017	4,695	(707)	(0.02)
June 30, 2017	4,186	(2,210)	(0.07)
September 30, 2017	4,298	(602)	(0.02)
December 31, 2017	4,728	(402)	(0.01)
March 31, 2018	5,149	62	0.00
June 30, 2018	5,224	240	0.01

<sup>1</sup> The sum of quarterly loss per share may not add to year-to-date totals due to rounding

General trends and factors affecting revenue and losses include:

- Average quarterly copper COMEX values have fluctuated from \$3.09 per pound for the quarter ended March 31, 2018 to \$2.99 per pound for the quarter ended June 30, 2018, but have generally trended upward since June 30, 2017.
- Some demand for our products are seasonal in nature, particularly sales of commercial castings in our Engineered Materials division. Demand is typically weaker during our second fiscal quarter.
- Significant excess capacity exists in our New Madrid, MO casting facility. This results in significantly higher costs per unit than if the facility was fully utilized.
- Order bookings in the Copper Alloys division have trended upward for the last four quarters.

### **Non-IFRS Measures**

To supplement its consolidated financial statements, which are prepared and presented in accordance with IFRS, IBC uses "operating income (loss)" which is a non-IFRS financial measure. IBC believes that operating income helps identify underlying trends in its business that could otherwise be distorted by the effect of certain income or expenses that IBC includes in loss for the period. IBC further believes that operating income (loss) provides useful information about core operating results, enhances the overall understanding of its past performance and future prospects and allows for greater visibility with respect to key metrics used by management in its financial and operational decision-making. Operating income (loss) should not be considered in isolation or construed as an alternative to loss for the period or any other measure of performance or as an indicator of IBC's operating performance. Operating income (loss) presented here may not be comparable to similarly titled measures presented by other companies. Other companies may calculate similarly titled measures differently, limiting their usefulness as comparative measures to our data.

Operating income (loss) represents loss for the period, excluding foreign exchange loss, interest expense, loss on disposal of assets, interest income, other income (expense), arbitration award liability and income taxes that IBC does not believe are reflective of the core operating performance during the periods presented.

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Operating income (loss)

A reconciliation of annual loss to operating income follows:

Year ended June 30	2018	2017
	\$	\$
Loss for the period	(702)	(5,362)
Foreign exchange loss	52	54
Interest expense	286	194
Loss on disposal of assets	-	294
Interest income	(2)	(1)
Other income (expense)	(14)	27
Arbitration award liability	-	1,395
Income taxes	11	25
Operating loss	(369)	(3,374)

A reconciliation of fourth quarter loss to operating income follows:

Quarter ended June 30	2018	2017
	\$	\$
Income (loss) for the period	240	(2,210)
Foreign exchange loss	3	65
Interest expense	110	52
Loss on disposal of assets	-	298
Interest income	(1)	-
Other income (expense)	(6)	38
Arbitration award liability	-	1,395
Income taxes	(1)	24
Operating loss <sup>1</sup>	345	(338)

<sup>1</sup>Difference in operating loss for fourth quarter 2017 is due rounding.

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**RESULTS OF OPERATIONS – FOURTH QUARTER 2018**

We incurred income (net of tax) of \$240 for the three months ended June 30, 2018 compared to a loss (net of tax) of \$2,210 in the comparative 2017 period. A summary of our results of operations to loss before other items (“operating income (loss)”) follows:

	Three Months Ended June 30, 2018				Three Months Ended June 30, 2017			
	Copper Alloys \$	Eng. Mat. \$	Corp. \$	Consol- idated \$	Copper Alloys \$	Eng. Mat. \$	Corp. \$	Consol- idated \$
Sales	4,084	1,140	-	5,224	3,105	1,081	-	4,186
Cost of sales								
Materials	2,040	(526)	-	1,514	1,556	452	-	2,008
Labor	535	328	-	863	497	290	-	787
Subcontract	26	51	-	77	118	29	-	147
Overhead	522	361	-	883	522	262	-	784
Depreciation	92	102	-	194	34	79	-	113
Change in finished goods	118	387	-	505	(11)	113	-	102
	3,333	703	-	4,036	2,716	1,225	-	3,941
Gross profit (loss)	751	437	-	1,188	389	(144)	-	245
SG&A expenses	471	279	93	843	338	286	(43)	581
Operating income (loss)	280	158	(93)	345	51	(430)	43	(336)
Gross margin	18%	38%	-	23%	13%	(13%)	-	6%

**Segment Analysis for the Quarter**

A discussion about the significant components of the segment operating loss and consolidated net loss follows for the three months ended June 30, 2018 compared to June 30, 2017.

*Copper Alloys*

Sales in the quarter increased \$979 compared to the year-ago period, from \$3,105 to \$4,084, a 31.5% increase. Gross profit improved \$362, due largely to growth in sales revenue, reduced subcontract costs and labor efficiency, while average copper COMEX values decreased by 3.24% from \$3.09 to \$2.99 per pound. The division operating income increased from \$51 to \$280, primarily due to improved gross profit.

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Engineered Materials

Sales increased \$59 to the year-ago period from \$1,081 to \$1,141, a 5.5% increase. Sales volume of commercial castings were up 26% but aerospace and defense castings were down. EMC did not meet their production goal of aerospace and defense castings due to weather, labor and other related production constraints.

Gross profit increased \$581, from a loss of \$144 to a profit of \$437, due to the volume increases and cost of goods sold. Operating loss improved from a loss of \$430 to income of \$158, due significantly to the credit to cost of goods sold from revert and to a lesser extent, revenue increases. The net increase from all inventory adjustments in the period was \$401.

Corporate

Compared to the year-ago period, corporate expenses in the quarter increased \$136 from a recovery of \$43 to an expense of \$93.

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*Results of Operations - Year Ended June 30, 2018*

For the year ended June 30, 2018, as compared to the prior-year period:

- Sales improved 23.4% from \$15,715 to \$19,399;
- Gross profit rose from \$267 to \$3,069
- Operating losses narrowed from a loss of \$3,374 to a loss of \$369; and
- Gross margin rose from 2.0% to 16.0%.

A summary of our results of operations to loss before other items ("operating income (loss)") follows:

	Year Ended June 30, 2018				Year Ended June 30, 2017			
	Copper Alloys \$	Eng. Mat. \$	Corp. \$	Consol- idated \$	Copper Alloys \$	Eng. Mat. \$	Corp. \$	Consol- idated \$
Sales	14,040	5,359	-	19,399	11,872	3,843	-	15,715
Cost of sales								
Materials	6,923	313	-	7,236	6,066	1,116	-	7,182
Labor	2,169	1,251	-	3,420	2,146	1,140	-	3,286
Subcontract	287	183	-	470	556	191	-	747
Overhead	2,126	1,599	-	3,725	1,868	1,395	-	3,263
Depreciation	373	401	-	774	418	329	-	747
Change in finished goods	111	594	-	705	(163)	386	-	223
	11,989	4,341	-	16,330	10,891	4,557	-	15,448
Gross profit (loss)	2,051	1,018	-	3,069	981	(714)	-	267
SG&A expenses	1,808	993	637	3,438	1,567	977	1,097	3,641
Operating income (loss)	243	25	(637)	(369)	(586)	(1,691)	(1,097)	(3,374)
Gross margin	15%	19%	-	16%	8%	(19%)	-	2%

**Segment Analysis for the Fiscal Year to Date**

A discussion follows about the significant components of the segment operating loss and consolidated net loss for the year ended June 30, 2018 compared to June 30, 2017.

*Copper Alloys*

- Sales increased \$2,168 compared to the year ended June 30, 2017, from \$11,872 to \$14,040, an 18.3% increase. Average copper COMEX values increased 10.0%, from \$2.72 to \$2.99 per pound. Gross profit improved \$1,070, due to increased sales volume.

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Operating profit/loss swung \$829 from a loss of \$586 to income of \$243 due to increased gross profit.

- We try to pass price changes of raw materials, both favorable and unfavorable, through to our customers, but sharp declines in price may adversely affect our profitability due to holding losses on inventory.

*Engineered Materials*

- Sales increased \$1,516 compared to the year ended June 30, 2017, from \$3,843 to \$5,359, a 39.4% increase. Gross profit swung from a loss of \$714 to a profit of \$1,018 due to increased sales volume. Operating loss decreased \$1,716 from a loss of \$1,691 to income of \$25.

*Corporate*

- Corporate expenses decreased \$460 compared to the year ended June 30, 2017 from \$1,097 to \$637, as we closed the Vancouver office in fiscal 2017.

*LIQUIDITY AND CAPITAL RESOURCES*

At June 30, 2018, we had working capital of \$2,192 including cash of \$4,527, as compared to working capital deficiency of \$1,505 including cash of \$100 at June 30, 2017. Factors affecting our liquidity include:

- We have not yet achieved sustained profitable operations.
- Current liabilities include an accrual of \$1,395 related to the Arbitration Award discussed in *Legal Matters* above. We are appealing the award.
- We have raised \$375, of which \$75 has been repaid, through the issuance of promissory notes which were due in the third quarter of fiscal 2018. We have agreed to extend these notes by one additional year.
- Our banks have imposed restrictions that currently prevent us from transferring funds from Copper Alloys to our other segments. During the year ended June 30, 2017, quarters ended September 30, 2017 and December 31, 2017, the Company breached certain covenants associated with the line of credit and term loan. On January 31, 2018, BMO Harris Bank waived the covenant breaches and granted the Company a six month extension to its line of credit. During the quarters ended March 31, 2018 and June 30, 2018, the Company breached certain covenants associated with the line of credit and term loan. On July 31, 2018, BMO Harris Bank renewed the line of credit to February 28, 2019 on substantially the same terms as the previous extension.
- Resource prices, particularly for copper, have a bearing on our manufacturing costs and selling prices, as copper is a large component of most of our products.
- We may be obliged to incur material expenditures on purchases of and repairs to property, plant and equipment to maintain our productive capacity or service customers.

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- The Company manages liquidity risk associated with trade receivables by trading with recognized creditworthy third parties and insuring trade receivables. All sales are conducted in U.S. dollar. In addition, receivable balances are monitored on an on-going basis with the result that the Company's exposure to impaired receivables is not significant.
- The Company also manages its liquidity risk by investing its cash only in obligations of Canada or the U.S. or their respective agencies, obligations of enterprises sponsored by any of the above governments; bankers' acceptances purchased in the secondary market and having received the highest credit rating from a recognized rating agency in Canada or the U.S., with a term of less than 180 days; and bank term deposits and bearer deposit notes, with a term of less than 180 days.
- The Company is contractually committed to purchase, at June 30, 2018 prices, an aggregate of \$2,320 in raw materials prior to June 30, 2019.
- The Company has entered into commercial property leases. These leases have an average remaining life of 2.1 years, with no renewal options. The future minimum rental payments under non-cancellable operating leases are \$539 for fiscal 2019 and \$766 for subsequent fiscal years.

We expect that we will need to raise additional funds in the short-term to finance working capital and additional growth initiatives. We may be able to generate additional cash through short-term debt or by issuing shares, but there can be no assurance that we will be successful in obtaining such funds.

*COMMITMENTS*

At June 30, 2018, we had commitments to lease premises over the next three years with an aggregate payment obligation of \$1,305. We are also committed to raw materials purchases over the next year aggregating \$2,320.

*RELATED PARTY TRANSACTIONS*

Except as described below, we do not have any contractual relationships with directors or officers other than employment contracts in the ordinary course of business. The employment contracts are not financially material to our business except that our CEO is eligible to receive payment of up to \$200 in the event of a change of control of IBC, if certain conditions are met.

Our non-executive directors are paid \$36 per year but the directors have agreed to receive the bulk of this amount in common shares. For fiscal 2018, the non-executive directors' compensation of \$144 was not paid but has been accrued.

*FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS*

Our activities expose us to a variety of financial risks, including foreign exchange risk, interest rate risk, commodity price risk and credit risk. We do not have a practice of trading derivatives. We attempt to employ a natural hedge for foreign currency by holding funds in the currency in which we expect to spend the monies.

### *Foreign Exchange Risk*

While the majority of our administrative and manufacturing activities occur in the U.S., we incur some corporate administration costs in Canada and raise equity proceeds in Canadian dollars. We manage exchange risk on equity capital by converting expected U.S. expenditures to U.S. dollars at the time the money is raised.

### *Interest Rate Risk*

Our interest rate risk mainly arises from interest expense on the BMO Harris Bank line of credit. Our term loan has a fixed interest rate and is not exposed to short-term interest rate risk.

### *Commodity Price Risk*

Our profitability and long-term viability depend, in some measure, on the market prices of copper, aluminum, and beryllium. The market prices for metals can be volatile and are affected by factors beyond our control, including the following: global or regional consumption patterns; the supply of, and demand for, these metals; speculative activities; the availability and costs of metal substitutes; expectations for inflation; and political and economic conditions, including interest rates and currency values. We cannot predict the effect of these factors on metal prices. We do not engage in hedging but, where possible, structure selling arrangements in a way that passes commodity price risk through to the customer.

### *Credit Risk*

We manage credit risk by trading with recognized creditworthy third parties and by insuring international trade receivables. In addition, we monitor receivable balances with the result that the Company's exposure to impaired receivables is generally not significant.

### *Adoption of New Accounting Pronouncements and Recent Developments*

Certain pronouncements, issued by the IASB or the IFRS Interpretations Committee, were adopted during the year, or were mandatory for the Company's fiscal years beginning on or after July 1, 2015 or are required to be adopted in future periods. The following pronouncements are relevant to the condensed consolidated interim financial statements, although none of these are expected to have a material effect on financial statement presentation:

New standards, interpretations and amendments not yet effective

- IFRS 9 - Financial Instruments

IFRS 9 Financial Instruments is part of the IASB's wider project to replace *IAS 39 - Financial Instruments: Recognition and Measurement*. IFRS 9 retains but simplifies the mixed measurement model and establishes two primary measurement categories for financial assets: amortized cost and fair value. The basis of classification depends on the entity's business model and the contractual cash flow characteristics of the financial asset. On July 24, 2014, the IASB affirmed its proposal to defer the effective date of IFRS 9 to periods beginning after January 1, 2018. Earlier application of IFRS 9 was permitted. The Company did not early adopt this standard. Due to the nature of the company's operations, the adoption of IFRS 9 and the recognition of expected credit losses will impact the Company's provision for impairment related to its

receivables from customers.

- IFRS 15 - Revenue from Contracts with Customers

In May 2014, the International Accounting Standards Board issued IFRS 15, Revenue from Contracts with Customers, which provides a single, principles-based five-step model for revenue recognition to be applied to all customer contracts, and requires enhanced disclosures. This standard is effective January 1, 2017 and allows early adoption. On July 22, 2015, the IASB unanimously affirmed its proposal to defer the effective date of IFRS 15 to periods beginning after January 1, 2018. Earlier application of IFRS 15 was permitted. The Company did not early adopt this standard. This standard is not expected to materially affect the Company's Consolidated Statements of Loss and Other Comprehensive Loss, but is expected to require additional disclosures.

- IFRS 16 - Leases

IFRS 16 - Leases specifies how to recognize, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring that lessees recognize assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has an insignificant value. IFRS 16 was issued in January 2016 and will be applicable to the Company's fiscal year beginning July 1, 2019, although early adoption is permitted. The Company does not intend to early adopt this standard and is currently evaluating the impact of adopting this standard on the consolidated financial statements.

There are no other pending IFRSs or IFRIC interpretations that are expected to be relevant to the Company's financial statements.

## **Environmental and Occupational Safety Issues**

We melt and machine materials that have the potential, if not controlled and handled appropriately, to have a negative effect on an individual's health and the environment. In addition, our operations use materials such as cutting and hydraulic fluids, which have the capacity to cause environmental contamination if left uncontained.

To mitigate these potential risks, we:

- employ a full-time health and safety manager to administer and monitor our safety programs;
- employ manufacturing practices to minimize and eliminate dispersal of fumes and dust;
- use trap basins and fluid reservoirs to capture and retrieve possible overages;
- use active exhaust vents/hoods located in equipment areas to capture and filter air;
- regularly schedule assessments and maintenance of in-house ventilation systems;
- require our employees to use appropriate personal protective equipment (such as respirators, outer garments, gloves, etc.) selected to limit and protect them from any potential exposures;

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- conduct beryllium lymphocyte proliferation tests (BeLPT) to determine employees' potential for sensitivity to beryllium prior to possible exposure;
- undertake ongoing air quality monitoring and perform periodic employee health exams as per occupational health guidelines; and
- limit access to areas that may have a potential exposure to beryllium dust particles.

Despite these procedures, we remain subject to risk in this regard.

As with all industry, we are subject to periodic inspection by state and local safety, health and environmental authorities. If during an inspection a failing was noted in our system, the potential for the temporary or permanent closure of the facilities could exist. If during the periodic employee health screening, an employee displays elevated exposure to metals, it could require us to place the employee on sick leave, which would have the potential to impact both our direct and indirect costs and cause a disruption of production. There is also the potential that an inherent safety or environmental exposure, if uncontrolled, could initialize legal action by employees, neighbors or those who visit our facilities.

To minimize the risks arising from pre-acquisition activities, we commissioned phase one environmental reviews prior to acquiring our copper alloys businesses. It may be possible that environmental problems remain at our facilities that these phase-one assessments did not uncover.

## **Shareholders' Equity**

### *POTENTIAL SHARE ISSUANCE*

Our board and the TSX-V have approved the issuance of 3,333 shares to settle a contingent liability of \$30 with a supplier but we have not yet issued the shares.

### *PRIVATE PLACEMENT*

In July 2017, we completed a non-brokered private placement issuing 3,828,525 units at an issue price of C\$0.375 per unit for gross proceeds of C\$1,435. We issued 1,914,259 financing warrants exercisable at C\$0.37 until June 6, 2023.

Each unit consists of one common share of IBC and a one-half of one transferable share purchase warrant. Each full warrant entitles the holder to acquire an additional common share of IBC at a price of C\$0.45 until July 12, 2019. The warrants have an acceleration provision, to which, the warrant holders will either need to exercise the warrants or have them expire within 60 days if IBC's common shares trade at C\$0.90 or greater for 21 consecutive trading days. The acceleration clause became effective on July 12, 2018. The securities issued and all securities issued upon exercise of those securities, were subject to a hold period which expired on November 12, 2017.

Certain directors and senior officers of the Company subscribed for an aggregate of 263,333 Units in the private placement for gross proceeds of \$99. Each of these subscriptions constitutes a "related party transaction" within the meaning of TSX Venture Exchange Policy 5.9 - Protection of Minority Security Holders in Special Transactions and Multilateral Instrument 61-101 - Protection of Minority Security Holders in Special Transactions. The Company conducted the private placement in reliance upon certain prospectus and registration exemptions.

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Funds raised under the private placement are being used to provide general working capital, to support current production ramp-up and to serve as a bridge financing until IBC has achieved sustained cash-flow-positive operations. We paid finders' fees on the private placement in the aggregate amount of C\$25 in cash and issued 66,656 non-transferable common share purchase finder's warrants. Each Finder's Warrant is exercisable with the same terms as those Warrants issued to subscribers in the private placement.

*SHORT-FORM PROSPECTUS OFFERING*

In June 2018, the Company closed an offering of debenture units and convertible debenture units. The offering raised gross proceeds of C\$4.1 million. Pursuant to the offering, the Company issued 182 debenture units and 3,987 convertible debenture units at a price of C\$1,000. We issued 9,381,700 financing warrants exercisable at C\$0.37 until June 6, 2023.

Each debenture unit consists of one 9.5% unsecured debenture of the Company in the principal amount of \$1,000 with interest payable semi-annually in arrears on June 30 and December 31 of each year and maturing on June 6, 2023, and 2,300 common share purchase warrants expiring on June 6, 2023.

Each convertible debenture unit consists of one 8.25% unsecured convertible debenture of the Company in the principal amount of \$1,000, convertible into common shares at a conversion price of \$0.31 per common share at the option of the holder, with interest payable semi-annually in arrears on June 30 and December 31 of each year and maturing on June 6, 2023, and 2,300 warrants expiring on June 6, 2023.

Each warrant issued with the debenture units and convertible debenture units entitles the holder to purchase one common share of the Company at an exercise price of \$0.37 at any time up to June 6, 2023.

The agents for the offering were paid a cash commission equal to 6.75% of the gross proceeds of the offering; and issued 1,086,253 broker warrants exercisable at \$0.37 until June 6, 2023.

The offered units were issued pursuant to a final short-form prospectus dated May 28, 2018 filed with the securities regulatory authorities in British Columbia, Alberta and Ontario. The Company received final approval to list the convertible debentures, debenture shares, warrant shares and common shares underlying the convertible debentures and broker warrants on the TSX Venture Exchange.

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*OUTSTANDING SHARE DATA*

As at the date of this MD&A, we have issued:

- A total of 34,175,115 common shares. In addition, we plan to issue 3,333 common shares to settle a liability to a supplier.
- Warrants to purchase 31,422,629 common shares.
- Share options to purchase 1,862,250 common shares.

The maximum number of shares potentially issuable together with the issued shares, is therefore 67,459,994.