



IBC Advanced Alloys

IBC ADVANCED ALLOYS CORP.

MANAGEMENT'S DISCUSSION AND ANALYSIS

NINE MONTHS ENDED MARCH 31, 2020

FISCAL THIRD QUARTER OF 2020

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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 May 8, 2020. This MD&A should be read together with the audited consolidated financial statements and related notes for the year ended June 30, 2019. Financial amounts, other than amounts per share or per pound, are presented in 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; changes in, and the effects of, the laws, regulations and government policies affecting operations; uncertainties in the market price for minerals and metals, such as copper and beryllium; and currency exchange rate fluctuations. 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 as 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.

Certain information in this MD&A may be considered a "financial outlook" within the meaning of applicable securities legislation. Any financial outlook set out in this MD&A is based on a number of significant assumptions. The purpose of this financial outlook is to provide readers with disclosure regarding the Company's reasonable expectations as to the anticipated results of its proposed business activities for the periods indicated. Readers are cautioned that the financial outlook may not be appropriate for other purposes.

The Company's financial statements for the period ended March 31, 2020 have been prepared in accordance with IAS34 – Interim Financial Reporting using accounting policies consistent 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, including our most recent Annual Information Form, is available for view on SEDAR at www.sedar.com.

EXECUTIVE SUMMARY

Except as noted, all financial amounts are determined in accordance with IFRS.

- **Company Achieves Net Profitability on Higher Sales:** We recorded a comprehensive income of \$171,000 in the quarter, or \$0.00 per share, which compared to a loss of \$639,000, or (\$0.02) in the prior-year period. Profitability was driven by higher revenue and stronger gross margins, with consolidated sales up 12% in the quarter and by 17% in the year-to-date period over the comparable prior-year periods.
- **Sales Improved Across Both Operating Divisions:** Copper Alloys sales improved by 10% in the quarter and by 16% in the year-to-date period as compared to the

comparable prior-year periods. Engineered Materials division sales rose by 18% in the quarter and by 20% in the year-to-date period as compared to the comparable prior year periods.

- **Higher Gross Margin Improves:** Comprehensive gross margin strengthened in the quarter and year-to-date, improving to 20.4% in the quarter ended March 31, 2020, from 11.9% in the prior-year period, and rising to 15.9% year-to-date, from 10.1% the prior-year period.
- **Positive YTD Adjusted EBITDA¹:** Consolidated adjusted earnings before interest, taxes, depreciation, and amortization ("Adjusted EBITDA") for the quarter was \$825,000, which compared to Adjusted EBITDA of (\$167,000) for the prior-year period. Adjusted EBITDA for the nine-month period ended March 31, 2020 was \$891,000, as compared to (\$891,000) in the prior-year period. Both operating divisions posted positive Adjusted EBITDA for the quarter and on a year-to-date basis.

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. With our headquarters 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 67 people and comprise of 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

¹ We report non-IFRS measures such as "Adjusted EBITDA" and "Operating Income". Please see information on this and other non-IFRS measures in the "Non-IFRS Measures" section of this MD&A.

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.

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

On May 5, 2020, we received a U.S. Small Business Administration Loan (the "SBA Loan") from PNC Financial Services Group, Inc. under the Paycheck Protection Program established under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"), in the amount of \$776,700. The SBA Loan has a fixed interest rate of 1%, a maturity date of May 4, 2022, and no payments are due on the SBA Loan for six months. We may apply for partial forgiveness of the amount due on the SBA Loan. The maximum amount that is forgivable is generally the sum of the following costs incurred by us during the eight-week period beginning on the date of first disbursement of the SBA Loan: payroll costs, any payment of interest on a covered mortgage obligation, payment on a covered rent obligation, and any covered utility payment. The amount of SBA Loan forgiveness will be calculated in accordance with the requirements of the Paycheck Protection Program, including the provisions of Section 1106 of the CARES Act, although no more than 25% of the amount forgiven can be attributable to non-payroll costs.

COVID-19

Although COVID-19 has forced many businesses to close or significantly scale back, we have been able to continue manufacturing our strategic alloy products because of our essential role as part of the U.S. Defense Industrial Base. All four of our U.S. facilities remain in operation and are serving customers in both the defense and commercial sectors. Demand for our products has slowed somewhat as a result of the COVID-19 pandemic, and

we may not feel the full effects of any continuing decreased market demand until fiscal Q1 of 2021.

While the pandemic appears to be easing, we are still subject to material COVID-19-related risks:

- State or local governments may require that our facilities close or they may impose operating restrictions, such as physical distancing, that make opening our plants uneconomic.
- Our employees may contract COVID-19 and make it difficult or impossible for us to operate normally.
- The effect of COVID-19 on the economy as a whole and on our customers may lead to a reduction in order intake.
- Customers may pay amounts due to us behind schedule, adversely affecting our liquidity.
- General economic concerns may make it difficult to obtain or renew debt facilities or raise equity funding on acceptable terms or at all.

MANUFACTURING OPERATIONS

We currently have four manufacturing operations in the U.S. that, in total, employ 67 people. These facilities are located in Franklin, IN; Royersford, PA; Wilmington, MA; and New Madrid, MO. Most of our 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 division's 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, PA and New Madrid, MO. The 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 we 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 U.S. Navy, electronics industries, and general equipment manufacturers.

We produce material at two IBC-owned foundries and buy other billets and slabs 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 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 also manufacture 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 in the production of beryllium copper alloys. This gives us the capability of manufacturing large 21-inch diameter copper alloy 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

Our EMC division supplies high-performance beryllium-aluminum components to defense, aerospace, high-tech manufacturing, and other sectors. It currently manufactures the Beralcast® family of metal matrices that are used in commercial and defense applications that require complex, lightweight, and high-stiffness parts. The division has additional, higher-performance products in development. Using our proprietary manufacturing techniques, our EMC division's 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® 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® 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 high modulus of elasticity. As such, Beralcast® is ideally suited for certain demanding semiconductor manufacturing equipment, computer components, and other commercial and aerospace applications. Our ability to cast Beralcast® 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®. 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®.

FINANCIAL RESULTS AND OUTLOOK

COMMODITY PRICING FOR COPPER

We aim to pass the cost of copper through to our customers, and we do not hold large inventories of copper. Accordingly, 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 inventories. Since copper is a significant component of products that we sell, the price of copper does materially affect revenues.

IBC Advanced Alloys Corp.
Management's Discussion and Analysis
Nine Months Ended March 31, 2020

Recent indicative copper prices per pound are shown below:

	2020	2019
March 31	\$2.24	\$2.94
	2019	2018
December 31	\$2.83	\$2.65
September 30	\$2.57	\$2.80
June 30	\$2.73	\$2.99

Source: COMEX

IBC Advanced Alloys Corp.
Management's Discussion and Analysis
 Nine Months Ended March 31, 2020

Results of Operations: Fiscal Q3 2020

We earned comprehensive income of \$171,000 for the three months ended March 31, 2020, compared to a comprehensive loss of \$639,000 in the comparative 2019 period. A summary of results of operations to Adjusted EBITDA follows:

	Three Months Ended March 31, 2020				Three Months Ended March 31, 2019			
	Copper Alloys (\$000s)	Eng. Mat. (\$000s)	Corp. (\$000s)	Consol- idated (\$000s)	Copper Alloys (\$000s)	Eng. Mat. (\$000s)	Corp. (\$000s)	Consol- idated (\$000s)
Revenue	3,979	1,873	-	5,852	3,617	1,585	-	5,202
Cost of revenue								
Materials	2,149	418	-	2,567	1,869	393	-	2,262
Labor	561	350	-	911	553	402	-	955
Subcontract	84	45	-	129	109	77	-	186
Overhead	497	252	-	749	470	421	-	891
Depreciation	141	198	-	339	99	99	-	198
Change in finished goods	(45)	9	-	(36)	(2)	93	-	91
	<u>3,387</u>	<u>1,272</u>	<u>-</u>	<u>4,659</u>	<u>3,098</u>	<u>1,485</u>	<u>-</u>	<u>4,583</u>
Gross profit	592	601	-	1,193	519	100	-	619
Gross margin	14.9%	32.1%		20.4%	14.3%	6.3%		11.9%
SG&A expenses	419	328	312	1,059	518	190	293	1,001
Income (loss) before other items	173	273	(312)	134	1	(90)	(293)	(382)
Other income (expense)	(75)	(8)	120	37	(97)	(6)	(154)	(257)
Total comprehensive income (loss)	98	265	(192)	171	(96)	(96)	(447)	(639)
Adjusted EBITDA:								
Add back (deduct):								
Tax expense	-	-	-	-	-	(2)	(1)	(3)
Interest expense	71	12	168	251	77	8	125	210
Depreciation, amortization, & impairment	149	221	-	370	101	98	-	199
Stock-based compensation expense (non-cash)	4	3	26	33	9	7	50	66
Adjusted EBITDA	322	501	2	825	91	15	(273)	(167)

Segment Analysis: Fiscal Q3 2020

Factors affecting our financial performance in the quarter ended March 31, 2020:

- Copper Alloys Sales Division Results:
 - The division posted a comprehensive income of \$98,000 in the quarter, which narrowed a comprehensive loss of \$96,000 in the prior-year period.
 - Copper Alloys division sales of \$4.0 million in the quarter were 10% higher than sales of \$3.6 million in fiscal Q3 of 2019.
 - Averaged gross margin of 14.9% in the quarter grew by 14%, from a 14.1% averaged gross margin in the prior-year period largely as a result of fixed costs being spread over a larger production volume.
 - Adjusted EBITDA for the division was \$322,000 in the quarter, which compared favorably to Adjusted EBITDA of \$91,000 in the prior-year period.
 - Demand for copper alloy products continued to improve well into our 2020 fiscal year 3rd quarter. This growth been driven primarily by strong demand in electronics, marine defense and power generation markets. Growth has also accelerated due in part to the division's ability to produce more value-added products as a result of several strategic capital equipment upgrades made in fiscal year 2019.
- Engineered Materials Division Results:
 - The EMC division posted comprehensive income of \$265,000 in the quarter, which reversed a comprehensive loss of \$96,000 in the prior-year period.
 - In our EMC division, sales in the quarter of \$1.9 million rose by 18% over sales of \$1.6 million in the prior-year period. This increase was due largely to increased demand for BeAl products by semiconductor

equipment manufacturers.

- Adjusted EBITDA for the division was \$501,000 in the quarter, which compared favorably to Adjusted EBITDA of \$15,000 in the prior-year period.
- Demand for BeAl products used in defense applications remained steady in calendar year 2019 but is expected to strengthen as rates of production for F-35 Lightning II aircraft begin to accelerate beyond Low Rates of Initial Production ("LRIP"). For example, according to data released publicly by our customer Lockheed-Martin, the annual rate of production of the F-35 aircraft is expected to nearly double by 2022 from 2018 production levels. We are continuing to pursue additional contracts for high-performance BeAl products in other defense-sector platforms.
- Demand for BeAl products used in commercial applications also is strengthening, as underscored by the Company's signing in October 2019 of a two-year supply agreement with a leading global manufacturer of semiconductor and electronics assembly equipment.

Selling General and Administrative ("SG&A") Expenses

SG&A expenses were 6% higher in the quarter ended March 31, 2020 than such expenses in the prior-year period. The change was mostly due to an unusual charge of \$24,000 in the quarter for a reimbursement to a customer for out-of-spec material that was supplied to IBC by another company. SG&A expenses in the quarter would be 3% higher than in the prior-year period were it not for the one time-time charge noted above.

Other Income (Expense)

The main component of other income (expense) is interest expense.

IBC Advanced Alloys Corp.
Management's Discussion and Analysis
Nine Months Ended March 31, 2020

RESULTS OF OPERATIONS – FISCAL 2020 YEAR-TO-DATE

The Company posted a comprehensive loss of \$1,149,000 for the nine months ended March 31, 2020, compared to a comprehensive loss of \$2,494,000 in the comparative period ended March 31, 2019. A summary of results of the operations to adjusted EBITDA follows:

	Nine Months Ended March 31, 2020				Nine Months Ended March 31, 2019			
	Copper Alloys (\$000s)	Eng. Mat. (\$000s)	Corp. (\$000s)	Consol- idated (\$000s)	Copper Alloys (\$000s)	Eng. Mat. (\$000s)	Corp. (\$000s)	Consol- idated (\$000s)
Revenue	11,410	4,783	-	16,193	9,805	3,994	-	13,799
Cost of revenue								
Materials	5,999	1,124	-	7,123	5,355	506	-	5,861
Labor	1,721	948	-	2,669	1,662	1,203	-	2,865
Subcontract	235	172	-	407	232	240	-	472
Overhead	1,499	589	-	2,088	1,304	1,217	-	2,521
Depreciation	390	617	-	1,007	293	285	-	578
Change in finished goods	-	-	-	-	-	-	-	-
	16	311	-	327	(196)	301	-	105
	9,860	3,762	-	13,622	8,650	3,752	-	12,402
Gross profit	1,550	1,021	-	2,571	1,155	242	-	1,397
Gross margin	13.6%	21.3%		15.9%	11.8%	6.1%		10.1%
SG&A expenses	1,500	936	771	3,207	1,568	778	837	3,183
Income (loss) before other items	50	85	(771)	(636)	(413)	(536)	(837)	(1,786)
Other income (expense)	(256)	(28)	(229)	(513)	(257)	(15)	(436)	(708)
Total comprehensive income (loss)	(206)	57	(1,000)	(1,149)	(670)	(551)	(1,273)	(2,494)
Adjusted EBITDA:								
Add back (deduct):								
Tax expense	(2)	(3)	(2)	(7)	-	(5)	(1)	(6)
Interest expense	249	41	514	804	231	24	452	707
Depreciation, amortization, & impairment	449	687	-	1,136	298	285	-	583
Stock-based compensation expense (non-cash)	12	9	86	107	61	41	217	319
Adjusted EBITDA	502	791	(402)	891	(80)	(206)	(605)	(891)

Segment Analysis: Nine Months Ended March 31, 2020:

- Copper Alloys Sales Division Results:
 - Our Copper Alloys division posted a comprehensive loss of \$206,000 in the nine-month period ended March 31, 2020, which compared favorably to a comprehensive loss of \$670,000 in the prior year-to-date period.
 - Year-to-date Copper Alloys division sales were \$11.4 million, a 16% increase over sales of \$9.8 million in the prior year-to-date period.
 - Adjusted EBITDA was \$502,000 for the period, which compared to Adjusted EBITDA of (\$80,000) in the prior year-to-date period.

As we noted above, demand for copper alloy products continued to improve well into our 2020 Fiscal year 3rd quarter. This growth has been driven primarily by strong demand in electronics, marine defense and power generation markets. Growth has also accelerated due in part to the division's ability to produce more value-added products as a result of several strategic capital equipment upgrades made in fiscal year 2019.

- Engineered Materials Division Results:
 - The EMC division posted comprehensive income of \$57,000 in the nine-month period ended March 31, 2020, which reversed a comprehensive loss of \$551,000 in the prior year-to-date period.
 - EMC sales grew to \$4.8 million, a 20% increase over \$4.0 million in sales in the prior year-to-date period. This change was largely driven by increased demand for BeAl product by semiconductor equipment manufacturers.
 - Adjusted EBITDA was \$791,000 for the period, which compared to Adjusted EBITDA of (\$206,000) in the prior year-to-date period.
 - As noted above, demand for BeAl products used in defense applications remained steady in calendar year 2019 but is expected to strengthen as rates of production for F-35 Lightning II aircraft begin to accelerate beyond LRIP production rates.

- Demand for BeAl products used in commercial applications is strengthening per the aforementioned Company's signing in October 2019 of a two-year supply agreement with a leading global manufacturer of semiconductor and electronics assembly equipment.

Selling, General and Administrative Expenses

SG&A expenses are 1% more in the current year-to-date period than in the prior year-to-date period due to an unusual charge of \$164,000 reimbursing a customer for out-of-spec. material that was supplied to IBC by another company. SG&A expenses would be 4% less year-to-date than in the prior-year period were it not for the unusual charge noted above.

Other Income (Expense)

The main component of other income (expense) is interest expense.

CHANGES IN FINANCIAL CONDITION

Changes in our financial condition since June 30, 2019 are related to operations in the normal course of business. In addition:

- With the adoption of IFRS 16, on July 1, 2019, we recorded a right of use asset of \$931,000 and a corresponding lease liability of \$931,000.
- In November and December 2019, we completed two private placements that raised gross proceeds of C\$2.285 million.
- In January 2020, we signed an extension a commercial property lease and recorded a right-of-use asset of \$3,701,000 and a corresponding lease liability of \$3,701,000 according to IFRS 16.

SELECTED QUARTERLY INFORMATION

Quarter Ended	Revenue	Income (loss) for the period (net of tax)	Basic and diluted loss per share ¹
	(\$000s)	(\$000s)	\$
June 30, 2018	5,224	240	0.01
September 30, 2018	4,693	(766)	(0.02)
December 31, 2018	3,904	(1,088)	(0.03)
March 31, 2019	5,202	(639)	(0.02)
June 30, 2019	4,869	(1,552)	(0.04)
September 30, 2019	4,955	(543)	(0.01)
December 31, 2019	5,386	(770)	(0.02)
March 31, 2020	5,852	171	0.00

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

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

LIQUIDITY AND CAPITAL RESOURCES

On March 31, 2020, we had working capital deficit of \$66,000 including cash of \$88,000 as compared to working capital deficiency of \$1.3 million including cash of \$720,000 on June 30, 2019. Factors affecting liquidity include:

- We have not yet achieved sustained profitable operations.
- Under the terms of our loan agreement with Lind Partners, we must make monthly payments of C\$45,000. Lind has the option to require the issuance of common shares in lieu of cash.
- We successfully renewed our credit facility with BMO Harris in October 2019 but will have to renew it again in September 2020.
- Current liabilities include an accrual of \$1.4 million related to the arbitration award discussed in *Legal Matters* below.

- The Company must repay notes payable: principal and interest of \$50,000 are due August 4, 2020, principal and interest of \$101,000 are due September 27, 2020, and principal and interest of \$51,000 are due August 28, 2020. These notes are secured by accounts receivable and inventory of our EMC division.
- We have the option of settling interest on convertible debentures through the issuance of common shares. In fiscal 2019, doing so benefited our cash flow by C\$341,000.
- Changes in resource prices can have a short-term impact on our manufacturing costs, selling prices, and profitability.
- We may be obliged to incur material expenditures on purchases of and repairs to property, plant and equipment to maintain productive capacity or to service customers.
- We manage liquidity risk associated with trade receivables by trading with recognized creditworthy third parties and insuring trade receivables. All sales are conducted in U.S. dollars. 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.
- We also manage liquidity risk by investing the Company's cash only in obligations of Canada or the U.S. or their respective agencies or 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.
- We are contractually committed to purchase, at March 31, 2020 prices, an aggregate of \$3.3 million in raw materials prior to March 31, 2021.
- We have entered into commercial property and equipment leases. These leases have an average remaining life of 2.7 years, with a certain lease having a renewal option. The future minimum rental payments under non-cancellable operating leases are \$690,000 in the next 12 months and \$4,158,000 in subsequent periods.

- There are signs that some customers may delay payment of trade receivables due to us as a result of their liquidity problems caused by the COVID-19 pandemic. We are unable to determine the magnitude or extent, if any, of such delays.

We may 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 flow through the use of equity markets for raising capital, in addition to adjusting spending, disposing of assets and obtaining other non-equity sources of financing. However, there can be no assurance that we will be successful in obtaining such funds.

COMMITMENTS

On March 31, 2020, we had commitments to lease premises and equipment over the next two years with an aggregate payment obligation of \$4.8 million. We are also committed to raw materials purchases over the next year aggregating \$3.3 million. We may need to raise additional funds to meet our commitments in the same manner as noted above to meet our working capital needs and additional growth initiatives.

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 its business.

Non-executive directors are paid \$36,000 per year but the directors have agreed to receive the bulk of this amount in common shares. In fiscal 2020, we issued 406,228 common shares for services to the non-executive directors and paid \$13,000 in cash. For the nine months period ended March 31, 2020, non-executive directors' compensation of \$117,000 was not paid but has been accrued.

For additional information on related party transactions among the Company and certain of its directors, see *Shareholders' Equity* below.

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, and we attempt to employ a natural hedge for foreign currency by holding funds in the currency in which it expects 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. The 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, aluminium, and beryllium. The 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 our customer.

Credit Risk

We manage credit risk by trading with recognized creditworthy third parties and by insuring all trade receivables. In addition, we monitor receivable balances with the result that our 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, 2019 or are required to be adopted in future periods. The following pronouncement is relevant to the condensed consolidated interim financial statements:

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. Lessors continue to classify leases as operating or finance, with IFRS 16's approach to lessor accounting substantially unchanged from its predecessor, IAS 17. IFRS 16 was issued in January 2016 and is applicable to our fiscal year that began on July 1, 2019. Adoption of IFRS 16 resulted in our recording a right-of-use asset and a corresponding lease liability of \$931,000 in our statement of financial position. On January 23, 2020, we signed an extension of a commercial property lease and recorded a right-of-use asset and a corresponding lease liability of \$3,701,000 in our statement of financial position according to IFRS 16. Although the related interest and depreciation expenses will not be the same as the monthly lease payments, the differences are not material.

There are no other pending IFRSs or IFRIC interpretations that are expected to be relevant to our financial statements.

NON-IFRS MEASURES

To supplement our consolidated financial statements, which are prepared and presented in accordance with IFRS, we use "operating income (loss)" and "Adjusted EBITDA", which are a non-IFRS financial measure.

We believe that operating income (loss) help identify underlying trends in our business that could otherwise be distorted by the effect of certain income or expenses that we include in loss for the period. We further believe that operating income (loss) provides useful information about core operating results, enhances the overall understanding of our past performance and future prospects, and allows for greater visibility with respect to key metrics used by management in our financial and operational decision-making.

We believe that Adjusted EBITDA is a useful indicator for cash flow generated by our business that is independent of our capital structure.

Operating income (loss) and Adjusted EBITDA 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 our operating performance. Operating income (loss) and Adjusted EBITDA presented here may not be comparable to similarly titled measures presented by

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other companies. Other companies may calculate similarly titled measures differently, limiting their usefulness as comparative measures to our data.

Operating Income (Loss)

Operating income (loss) represents loss for the period, excluding foreign exchange loss, interest expense, interest income, other income (expense) and income taxes that we do not believe are reflective of our core operating performance during the periods presented. A reconciliation of our third quarter loss and the nine-month period ended March 31, 2020 income (loss) to operating income follows:

Quarter ended March 31	2020	2019
	(\$000s)	(\$000s)
Income (loss) for the period	171	(639)
Foreign exchange (gain) loss	(288)	30
Interest expense	251	210
Loss on disposal of assets	5	20
Interest income	-	-
Other income	(5)	(5)
Income taxes	-	2
Operating income (loss)	134	(382)

Nine months ended March 31	2020	2019
	(\$000s)	(\$000s)
Loss for the period	(1,149)	(2,494)
Foreign exchange (gain) loss	(288)	(1)
Interest expense	805	708
Loss on disposal of assets	5	20
Interest income	-	(6)
Other income	(17)	(18)
Income taxes	7	5
Operating loss	(637)	(1,786)

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Adjusted EBITDA

Adjusted EBITDA represents our income (loss) for the period before interest, income taxes, depreciation, amortization and share-based compensation. A reconciliation of our third quarter and the nine-month period ended March 31, 2020 income (loss) to Adjusted EBITDA follows:

Quarter ended March 31	2020	2019
	(\$000s)	(\$000s)
Income (loss) for the period	171	(639)
Tax expense	-	(3)
Interest expense	251	210
Depreciation, & amortization,	370	199
Stock-based compensation expense (non-cash)	33	66
Adjusted EBITDA	825	(167)

Nine months ended March 31	2020	2019
	(\$000s)	(\$000s)
Loss for the period	(1,149)	(2,494)
Tax expense	(7)	(5)
Interest expense	805	708
Depreciation, & amortization,	1,135	582
Stock-based compensation expense (non-cash)	107	318
Adjusted EBITDA	891	(891)

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.

BUSINESS RISKS

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

Dependence on Ulba Metallurgical Plant and Sole-source Suppliers

Our proprietary Beralcast® castings and many of our copper alloys use beryllium, which is a specialty metal that produced by a limited number of companies globally. We are able to purchase beryllium from a U.S. producer, from the U.S. National Defense Stockpile, and from Ulba Metallurgical Plant ("Ulba"), owned by Kazatomprom of Kazakhstan. We currently source our vacuum-cast beryllium and beryllium copper master alloy from Ulba, and 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 base materials and alloying agents as sole-source suppliers. Approximately 80% of materials purchased, including those from Ulba, as described above, are primarily from these sole-source suppliers. Any disruptions in these suppliers' ability to manufacture base materials and alloying agents needed by us could have a materially adverse effect on short-term revenue, while we seek to engage alternative sources.

Disruptions of 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 quarterly revenue and profitability objectives.

Need to Relocate Royersford Foundry

The landlord has indicated that it will not renew the lease and so we are investigating (1) relocation of the foundry or its production equipment, (2) consolidation of its production capacity into one or more of our current production facilities, and (3) other options to

secure the alloy material made in Royersford. If we are not able to maintain this production capacity or to find other supply options in a timely basis, it will have a material adverse impact on our ability to produce sufficient alloy material for current customer demand.

Need to Meet Product Specifications

Most of the products that 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 of the required standards. In addition, customer 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.

LEGAL MATTERS

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.

As more fully discussed below, we are from time to time involved in a variety of claims, lawsuits, investigations and proceedings concerning securities law, intellectual property law, environmental law, employment law and the Employee Retirement Income Security Act ("ERISA"). We determine whether an estimated loss from a contingency should be accrued by assessing whether a loss is deemed probable and can be reasonably estimated. We assess our potential liability by analyzing our litigation and regulatory matters using available information. We develop our views on estimated losses in consultation with outside counsel handling our defense in these matters, which involves an analysis of potential results, assuming a combination of litigation and settlement strategies. Should developments in any of these matters cause a change in our determination as to an unfavorable outcome and result in the need to recognize a material accrual, or should any of these matters result in a final adverse judgment or be settled for significant amounts, they could have a material adverse effect on our results of operations, cash flows and financial position in the period or periods in which such change in determination, judgment or settlement occurs.

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 \$1.2 million plus attorney's fees,

costs, and expenses in the amount of \$155,000 was granted by the American Arbitration Association's International Centre for Dispute Resolution. The amount has been accrued and the matter was under appeal. On March 27, 2019, the Company received notice of the U.S. District Court for the District Massachusetts affirming the September 8, 2017 arbitration award made in favor of Gerald Hoolahan. We appealed this decision. Subsequently, on January 22, 2020, the U.S. Court of Appeals for the First Circuit affirmed the judgment of the U.S. District Court for the District of Massachusetts, which found in favor of Gerald Hoolahan. The Company is evaluating its payment options with respect to the award granted to Gerald Hoolahan.

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. ("Chemetco") 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 Product was identified as 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 ("Chemetco PRP Group"). 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 the 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, 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's attempt to name the Company's subsidiary, Nonferrous Products 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 Products. Should the EPA and/or Chemetco PRP Group contribution lawsuit pursue alter ego theories and name the Company's subsidiary Company, Nonferrous Products, as a defendant, then IBC potentially faces significantly more liability requiring further defensive action.

On March 26, 2020, Freedom Alloys, Inc. ("Freedom Alloys"), a subsidiary in our Copper Alloys division, was reimbursed legal fees in connection with the previously disclosed Godoy et al. v The Argen Corporation et al. BC578085. The Superior Court of the State of California, Los Angeles County, previously entered its ruling on summary judgment on February 7, 2019, and Freedom Alloys' motion for summary judgment was granted. We now consider the matter closed.

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 and 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;
- 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 systems, 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 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 is possible that environmental problems remain at our facilities that these phase-one assessments did not uncover.

SHAREHOLDERS' EQUITY

PRIVATE PLACEMENTS

On November 25, 2019, we announced a non-brokered private placement to issue up to 17.1 million common shares at a price of C\$0.117 per common share for gross proceeds of approximately C\$2.0 million. There was no minimum offering amount. This private placement was closed on December 13, 2019, at which time a second non-brokered private placement was announced for an additional 2.1 million common shares at a price of

C\$0.135 per common share for gross proceeds of approximately C\$284,000. The second private placement was closed on December 23, 2019.

SHARE ISSUANCE

In July 2019, we issued 304,671 common shares for services to our directors, 101,557 common shares for services to a consultant, and 185,000 common shares for options exercised by a director.

In July 2019, we issued 737,059 common shares to debentures holders with an issue-date value of C\$161,000 in satisfaction of the June 30, 2019 interest payment in lieu of cash.

In July 2019, 16,129 common shares were issued upon the conversion of C\$5,000 of the 8.25% convertible debentures to common stock.

In October 2019, 36,013 common shares and 230,000 warrants were returned to treasury upon the cancellation of C\$100,000 8.25% convertible debentures.

In December 2019, 17,094,010 and 2,104,540 common shares were issued respectively with the closure of the first and second tranches of the non-brokered private placements closed in December 2019.

In December 2019, 873,023 common shares were issued to debentures with an issue-date value of C\$157,000 in satisfaction of the December 31, 2019 interest payment in lieu of cash.

In December 2019, 633,827 common shares were issued upon the exercise of options and 169,408 common shares upon the exercise of financing warrants.

In January 2020, 161,290 common shares were issued upon the conversion of C\$100,000 of the 8.25% convertible debentures to common stock.

OUTSTANDING SHARE DATA

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

- A total of 61,178,131 common shares.
- Warrants to purchase 37,233,141 common shares.
- Share options to purchase 2,510,750 common shares.

The maximum number of shares potentially issuable together with the issued shares is therefore 100,922,022.