



IBC Advanced Alloys

IBC ADVANCED ALLOYS CORP.

MANAGEMENT'S DISCUSSION AND ANALYSIS

SIX MONTHS ENDED DECEMBER 31, 2022

FISCAL SECOND QUARTER OF 2023

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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 February 28, 2023. This MD&A should be read together with the unaudited interim financial statements for the period ended December 31, 2022, and the audited consolidated financial statements and related notes for the year ended June 30, 2022. 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 include information concerning future strategic

objectives, business prospects, anticipated savings, financial results (including expenses, earnings, liquidity, cash flow and capital expenditures), industry or market conditions, demand for and pricing of our products, acquisitions and divestitures, anticipated results of litigation and regulatory developments, or general economic conditions. Words such as “plans”, “expects”, “budget”, “scheduled”, “estimates”, “projects”, “forecasts”, “intends”, “anticipates”, “believes” and future or conditional verbs such as “will”, “may”, “could”, “would”, “should”, or as well as any other statement that necessarily depends on future events, are intended to identify forward-looking statements. 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 in which we operate, the global economic environment, interest rates, exchange rates, our business strategy, plans, outlook, 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; commercial demand for 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, beryllium and other inputs we consume, 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 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 our 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.

Our financial statements for the period ended December 31, 2023 have been prepared in accordance with IAS 34 – *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.¹

SELECTED RESULTS: Consolidated Operations (\$000s)				
	Quarter Ended 12-31-2022	Quarter Ended 12-31-2021	Six Months Ended 12-31-2022	Six Months Ended 12-31-2021
Revenue	\$7,495	\$7,124	\$13,423	\$14,214
Operating income (loss)	\$202	\$554	\$(1,214)	\$368
Adjusted EBITDA	\$672	\$1,095	\$(264)	\$1,303
Income (loss) for the period	\$(395)	\$344	\$(2,403)	\$(237)

- Copper Alloys division sales rose by 76.2% in the quarter and 49.6% in the six-month period ended December 31, 2022 over the comparable prior-year periods. Engineered Materials (“EM”) division sales declined 54.9% in the quarter and 56.0% in the six-month period ended December 31, 2022 compared to the prior-year periods. EM's lower sales performance was largely due to lower demand for BeAl products used to manufacture semiconductor chips as compared to the prior-year periods, where demand was at a historic high.
- Gross profit and gross margins in the quarter and six-month periods ended December 31, 2022 improved in the Copper Alloys Division over the prior-year periods, but declined in the Engineered Materials division, due to lower sales to commercial markets and lower yields.
- Consolidated adjusted earnings before interest, taxes, depreciation, and amortization (“Adjusted EBITDA”) in the quarter and six-month period ended December 31, 2022 improved respectively by 1,041.9% and 430.2% in the Copper Alloys division but declined in the Engineered Materials division. On a consolidated basis, we booked a loss for the quarter of \$395,000 or (\$0.00) per share as compared to income of \$344,000 or \$0.00 per share in the quarter ended December 31, 2021 and a loss for the six-month period ended December 31, 2022 of \$2.4 million or (\$0.03) per share compared to a loss of \$237,000 or (\$0.00) in the comparable prior-year period.

OUR BUSINESS

We are primarily engaged in developing and manufacturing advanced alloys, such as beryllium-aluminum (“BeAl”) alloys and specialty copper alloys, for a variety of customers in the defense and non-defense sectors. Headquartered in Franklin, IN, we currently operate two plants in the United States (“U.S.”) that manufacture, heat-treat, machine, or market copper-beryllium, BeAl, copper-based master alloys, and similar specialty alloy products including BeAl castings.

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.

Our manufacturing operations currently employ 80 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, aerospace, and industrial equipment markets.
- Engineered Materials manufactures and supplies high-performance, precision-cast BeAl components to the defense 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".

MANUFACTURING OPERATIONS

We currently operate two manufacturing operations in the U.S. that, in total, employ 74 people. These facilities are located in Franklin, Ind. and Wilmington, Mass. Most of our management and administration are based at the Franklin, Ind. facility, which also serves as our corporate headquarters.

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, Indiana, where we maintain forging (hammer, press and ring rolling), heat-treating, and machining operations. In March 2022 our Franklin, Indiana plant started casting billets that were previously cast in Royersford, Pennsylvania and New Madrid, Missouri and in quarter ended December 31, 2022 we began enjoying operating benefits as a result.

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 and we also 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 foundry has furnaces and associated equipment 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. We expect that once the casting production operations are fully ramped up, we will realize operating cost savings and reduce production lead times.

ENGINEERED MATERIALS

Our Engineered Materials division supplies high-performance BeAl components to defense, aerospace, high-tech manufacturing, and other sectors. We currently manufacture 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 Engineered Materials division's objective is to make precision-cast BeAl 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 BeAl. Some of their varied applications include 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 BeAl 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 BeAl alloy now manufactured as Beralcast®. We believe that a competitor has sought to develop an alternative cast BeAl product, which, if commercially viable, would be a direct competitor to Beralcast®.

RECENT CORPORATE DEVELOPMENTS, BUSINESS INITIATIVES, AND SUBSEQUENT EVENTS

- In October 2022, we received a purchase order valued at \$2.9 million to supply specialized copper alloy forged components to a customer working as part of a classified U.S. Department of Defense program.
- In October 2022, we entered into an agreement to supply BeAl alloy components to L3Harris Technologies (NYSE:LHX) for use in an undisclosed aerospace application.

FINANCIAL RESULTS AND OUTLOOK

SELECTED QUARTERLY INFORMATION

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

Quarter Ended	Revenue	Income (loss) for the period (net of tax)	Basic and diluted loss per share ¹
	(\$000s)	(\$000s)	\$
March 31, 2021	5,411	139	0.00
June 30, 2021	7,042	(402)	(0.01)
September 30, 2021	7,090	(581)	(0.01)
December 31, 2021	7,124	344	0.00
March 31, 2022	6,278	288	0.00
June 30, 2022	6,419	(1,183)	(0.01)
September 30, 2022	5,928	(2,008)	(0.02)
December 31, 2022	7,495	(395)	(0.00)

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

Quarterly operating results are affected by trends in the various sectors that we serve. Frequently, weak performance in one sector is offset by strength in another, but this is not always the case. Most operating costs other than materials, supplies, and energy are largely fixed, so small changes in sales volume can have a big effect on operating income or loss. Recently, Engineered Materials division sales are slower in the first and second fiscal quarters when demand for non-aerospace components falls. In prior years we have seen a general trend of increasing margins as sales increased and we installed new machinery allowing it to manufacture more efficiently.

In addition to these general trends the following factors have caused variation over the quarters presented:

- Sales have increased in Copper Alloys in the current-year periods, as compared to the prior-year periods, primarily due to increased market demand for our products.
- Sales in the Engineered Materials division continue to experience quarter-to-quarter variability, largely due to swings in demand from commercial customers. Defense-sector demand for BeAl products continues to grow relative to prior-year periods.
- 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.
- 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.
- We have not been impacted by the war in Ukraine and at this point we do not envision any adverse impacts.

RESULTS OF OPERATIONS: FISCAL 2023 Q2

We incurred a loss, net of tax, of \$395,000 for the three months ended December 31, 2022, compared to income, net of tax, of \$344,000 in the prior-year period. A summary of results of operations, and a reconciliation of income (loss) to Adjusted EBITDA, follows. Amounts are shown net of intercompany transactions.

	Three Months Ended December 31, 2022				Three Months Ended December 31, 2021			
	Copper Alloys (\$000s)	Eng. Mat. (\$000s)	Corp. (\$000s)	Consol- idated (\$000s)	Copper Alloys (\$000s)	Eng. Mat. (\$000s)	Corp. (\$000s)	Consol- idated (\$000s)
Revenue	5,708	1,787	-	7,495	3,239	3,885	-	7,124
Cost of revenue								
Materials	2,694	1,126	(4)	3,816	2,038	806	-	2,844
Labor	586	620	-	1,206	616	695	-	1,311
Subcontract	174	85	-	259	33	21	-	54
Overhead	416	389	-	805	383	549	-	932
Depreciation	123	219	-	342	113	230	-	343
Change in finished goods	91	(415)	(1)	(325)	(211)	(52)	-	(263)
	4,084	2,024	(5)	6,103	2,972	2,249	-	5,221
Gross profit (loss)	1,624	(237)	5	1,392	267	1,636	-	1,903
Gross margin	28.5%	-13.3%		18.6%	8.2%	42.1%		26.7%
SG&A expenses	547	502	141	1,190	627	599	123	1,349
Income (loss) before other items	1,077	(739)	(136)	202	(360)	1,037	(123)	554
Other income (expense)	(157)	(74)	(366)	(597)	196	(56)	(350)	(210)
Income (loss) for the period, net of tax	920	(813)	(502)	(395)	(164)	981	(473)	344
Adjusted EBITDA:								
Add back (deduct):								
Tax expense (recovery)	1	-	6	7	-	-	-	-
Interest expense	156	79	378	613	(100)	36	334	270
Gain (loss) on revaluation of derivative (non-cash)	-	-	(29)	(29)	-	-	-	-
Depreciation, amortization, & impairment	126	259	24	409	122	267	-	389
Stock-based compensation expense (non-cash)	12	6	49	67	13	15	64	92
Adjusted EBITDA	1,215	(469)	(74)	672	(129)	1,299	(75)	1,095

Amounts are net of intercompany transactions

RESULTS OF OPERATIONS: FISCAL 2023 YEAR-TO-DATE

We incurred a loss, net of tax, of \$2,403,000 for the six months ended December 31, 2022, compared to a loss, net of tax, of \$237,000 in the prior-year period. A summary of results of operations, and a reconciliation of income (loss) to Adjusted EBITDA, follows. Amounts are shown net of intercompany transactions.

	Six Months Ended December 31, 2022				Six Months Ended December 31, 2021			
	Copper Alloys (\$000s)	Eng. Mat. (\$000s)	Corp. (\$000s)	Consol- idated (\$000s)	Copper Alloys (\$000s)	Eng. Mat. (\$000s)	Corp. (\$000s)	Consol- idated (\$000s)
Revenue	10,110	3,313	-	13,423	6,757	7,457	-	14,214
Cost of revenue								
Materials	5,390	2,567	(4)	7,953	4,130	2,279	-	6,409
Labor	1,191	1,204	-	2,395	1,149	1,353	-	2,502
Subcontract	340	99	-	439	84	53	-	137
Overhead	750	815	-	1,565	814	1,141	-	1,955
Depreciation	246	438	-	684	227	462	-	689
Change in finished goods	136	(896)	(1)	(761)	(102)	(296)	-	(398)
	8,053	4,227	(5)	12,275	6,302	4,992	-	11,294
Gross profit	2,057	(914)	5	1,148	455	2,465	-	2,920
Gross margin	20.3%	-27.6%		8.6%	6.7%	33.1%		20.5%
SG&A expenses	1,109	993	260	2,362	1,152	1,069	331	2,552
Income (loss) before other items	948	(1,907)	(255)	(1,214)	(697)	1,396	(331)	368
Other income (expense)	(252)	(135)	(802)	(1,189)	196	(114)	(687)	(605)
Income (loss) for the period, net of tax	696	(2,042)	(1,057)	(2,403)	(501)	1,282	(1,018)	(237)
Adjusted EBITDA:								
Add back (deduct):								
Tax expense (recovery)	1	-	2	3	7	-	17	24
Interest expense	250	145	838	1,233	(139)	82	655	598
Gain (loss) on revaluation of derivative (non-cash)	-	-	(59)	(59)	-	-	-	-
Depreciation, amortization, & impairment	252	519	48	819	245	536	-	781
Stock-based compensation expense (non-cash)	26	15	102	143	17	18	102	137
Adjusted EBITDA	1,225	(1,363)	(126)	(264)	(371)	1,918	(244)	1,303

Amounts are net of intercompany transactions

SEGMENT ANALYSIS: THREE AND SIX MONTHS ENDED DECEMBER 31, 2022

In the quarter and six-month period ended December 31 2022, the main factors affecting our financial performance were (1) increased sales and stronger gross margin performance in our Copper Alloys division, offset by higher cost of materials for the division; and (2) sharply lower sales of Be-Al products for commercial markets and lower yields. Since many of our operating costs are fixed, these trends resulted in significantly stronger performance in our Copper Alloys division but significantly weaker performance in our Engineered Materials division.

Copper Alloys Sales Division Results:

Sales	Sales increased the quarter and six-month period ended December 31, 2022 of Copper Alloys product lines mostly due to increased demand from customers in the electronics sector who are manufacturing products related to the rapidly growing network connectivity of consumer goods and the transition to 5G networks.
Gross profit	Two factors contributed to improved gross margins. As sales increased, fixed operating costs were spread over a larger volume of production. In addition, we realized savings from consolidating our Royersford, Pennsylvania and New Madrid, Missouri copper casting operations to our Franklin, Indiana facility, with notable savings in rent and utility costs.
SG&A expenses	SG&A expenses decreased both in the quarter and in the six-month period ended December 31, 2022, over the comparable prior-year periods, primarily due to higher information technology costs and higher legal and other fees related to the financing of our Copper Alloys division consolidation and expansion of operations in Franklin, IN incurred in the prior-year periods.
Other income (expense)	Other income (expense) is primarily comprised of interest expense which increased in the quarter and six-month period ended December 31, 2022 largely due to the capitalization of interest incurred on borrowings related to the Copper Alloys consolidation and expansion in the quarter and six-month period ended December 31, 2021.

Engineered Materials Division Results:

Sales	Sales decreased in the quarter and six-month period ended December 31, 2022, largely due to lower demand for BeAl products in commercial markets used to manufacture semiconductor chips as compared to the
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	<p>prior-year period, where demand was at a historic high and by a decline in yield, which the Engineered Materials division has largely addressed.</p> <p>Production of our BeAl products used in defense applications is expected to remain strong due to the increasing use of BeAl alloys in a variety of defense systems, and the defense industry's interest in utilizing near-net-shape cast BeAl alloy components, which we manufacture, where possible.</p> <p>We continue to pursue additional contracts for high-performance BeAl products in both defense and commercial sector platforms.</p>
Gross profit	Gross margin declined from the comparable prior-year periods mostly due to sharply lower sales to commercial markets and, particularly in the period from July to November, lower yields on certain products.
SG&A expenses	SG&A expenses decreased in quarter and in six-month period ended December 31, 2022 as compared to the prior-year periods, mostly due to higher information technology costs in the comparable prior-year periods ended December 31, 2021.
Other income (loss)	Other income (expense) is primarily comprised of higher interest expense related to a factory lease extension with higher lease costs that were effective February 1, 2021.

Corporate

SG&A expenses	SG&A expenses decreased in the six-month period ended December 31, 2022 compared to the prior-year period primarily because the Company incurred abnormally high information technology consulting costs in the prior year to maintain compliance with federal regulations and ITAR system requirements.
Other income (expense)	<p>The main components of other income (expense) are typically interest expense and foreign exchange gain (loss).</p> <p>Other income (expense) was higher in the quarter and six-month period ended December 31, 2022, than in the prior-year period due largely to the higher interest expense due to higher debt and higher interest rates on our short-term borrowings related to the increase in the prime rate as compared to the prior year period.</p>

CHANGES IN FINANCIAL CONDITION

Changes in our financial condition since June 30, 2022, are related to operations in the normal course of business except:

- In August 2022, the Company entered into a credit facility agreement for \$1,200,000. See Related Party Transactions below.
- In December 2022, we completed a private placement that raised gross proceeds of C\$1,217,000 (approximately \$896,000).

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.

Recent indicative copper prices per pound are shown below:

	2022	2021
December 31	\$3.82	\$4.39
September 30	\$3.39	\$4.09
June 30	\$3.69	\$4.28
March 31	\$4.74	\$4.00

Source: COMEX

LIQUIDITY AND CAPITAL RESOURCES

On December 31, 2022, we had working capital deficiency of \$7,476,000, including cash of \$1,178,000, as compared to working capital deficiency of \$6,776,000, including cash of \$478,000 on June 30, 2022. Factors affecting liquidity include:

- We have not yet achieved sustained profitable operations.
- The principal and resulted interest under a \$1,200,000 credit facility are due in February 2023.
- We have C\$3,500,000 8.25% convertible debentures and C\$182,000 non-convertible debentures with an aggregate value of \$2,700,000 that mature on June 6, 2023.
- A combination of increased inventory and accounts receivable required to support Copper Alloy division growth and operating losses in the Engineered Materials division have constrained operating cash flows. The Company is working to remedy this.

- We have the option of settling interest on convertible debentures through the issuance of common shares. In the year ended June 30, 2022, settling interest on convertible debentures through the issuance of common shares benefitted our cash flow by \$242,000.
- Under the terms of our second funding loan agreement with Lind Partners, we must make monthly payments of C\$84,000. Lind may request the issuance of common shares in lieu of cash. In the year ended June 30, 2022, Lind accepted shares in lieu of cash for prepaid accrued interest benefitting our cash flow by \$40,000.
- 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 our exposure to impaired receivables is not significant.
- We also manage liquidity risk by investing our 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 December 31, 2022 prices, an aggregate of \$2,016,000 in raw materials prior to June 30, 2023 and \$3,250,000 of raw materials in the year ending June 30, 2024.
- We have entered into commercial property and equipment leases. These leases have a weighted average remaining life of 3.1 years, with a certain lease having a renewal option at 95% of fair market value. The future minimum rental payments under non-cancellable operating leases are \$496,000 in the period ending June 30, 2023 and \$2.3 million in subsequent periods.

We may need to raise additional funds in the short-term to finance working capital and additional growth initiatives, such as our Copper Alloys facilities consolidation. 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.

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.

As of December 31, 2022, \$292,000 (June 30, 2022 - \$220,000) is owing to directors and officers for services and \$1,000 (June 30, 2022 - \$9,000) is owing to officers for expenses paid on the Company's

behalf. As of December 31, 2022, \$Nil (June 30, 2022 - \$136,000) is owing to key management employees for bonuses and \$Nil (June 30, 2022 - \$10,000) is owing to key management employees for related payroll taxes on the accrued bonuses.

On August 19, 2022, the Company entered into a credit facility agreement with Mark A. Smith, CEO, and chairman of the board of the Company. The non-revolving credit facility in the amount of up to \$1,200,000 included an establishment fee of 2.5% of the amount drawn down with a term expiring on February 19, 2023. The credit facility bears interest at 10% per year calculated monthly in arrears and is payable on the date of the repayment of the loan. The Company has drawn down the full amount of the facility. During the six-month period ended December 31, 2022, the Company incurred interest expense of \$44,000 (2021 - \$Nil) on this facility.

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

The Company's interest rate risk mainly arises from the interest rate impact on interest expense on the ASPA with Sallyport Commercial Financing, LLC, with the Utica financing agreement and the BMO Harris Bank line of credit in the prior year period.

Commodity Price Risk

Our profitability and long-term viability depend, in some measure, on the market prices of copper, aluminum, 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

The following new standards, interpretations, and amendments to existing standards have been issued by the IASB or IFRC and are effective in the current year and are relevant to the Company.

- **Onerous Contracts - Cost of Fulfilling a Contract (Amendments to IAS 37)** - The amendments to IAS 37 specify which costs an entity includes in determining the cost of fulfilling a contract for the purpose of assessing whether the contract is onerous. Costs that relate directly to a contract can either be incremental costs of fulfilling that contract (examples would be direct labor, materials) or an allocation of other costs that relate directly to fulfilling contracts (an example would be the allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract). The amendments to IAS 37 are not expected to have a material impact on the Company's consolidated financial statements.

Certain new standards, and amendments to standards and interpretations, are not effective for our current fiscal year and have not been early adopted in preparing these financial statements. The Company is currently assessing the potential impact, if any, on the Company's financial statements. The following accounting standards and amendments are effective for future periods:

Our fiscal years beginning on July 1, 2023

Classification of Liabilities as Current or Non-current (Amendments to IAS 1) - The amendments to IAS 1 provide a more general approach to the classification of liabilities based on the contractual arrangements in place at the reporting date.

NON-IFRS MEASURES

To supplement our consolidated financial statements, which are prepared and presented to supplement our audited 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 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 second fiscal quarter and six-month period ended December 31, 2022, loss to operating loss follows:

Quarter ended December 31	2022	2021
	(\$000s)	(\$000s)
Income (loss) for the period	(395)	344
Foreign exchange (gain) loss	2	3
Interest expense	613	270
Loss on disposal of assets	-	(70)
(Gain) loss on revaluation of derivative	(29)	-
Other income	4	7
Income tax expense (recovery)	7	-
Operating income (loss)	202	554

Six months ended December 31	2022	2021
	(\$000s)	(\$000s)
Loss for the period	(2,403)	(237)
Foreign exchange (gain) loss	7	2
Interest expense	1,233	598
Loss on disposal of assets	-	(21)
(Gain) loss on revaluation of derivative	(59)	-
Other income	5	2
Income tax expense (recovery)	3	24
Operating income (loss)	(1,214)	368

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 second fiscal quarter and six-month period ended December 31, 2022 loss to Adjusted EBITDA follows:

Quarter ended December 31	2022	2021
	(\$000s)	(\$000s)
Income (loss) for the period	(395)	344
Income tax expense (recovery)	7	-
Interest expense	613	270
(Gain) loss on revaluation of derivative	(29)	-
Depreciation, amortization, & impairment	409	389
Stock-based compensation expense (non-cash)	67	92
Adjusted EBITDA	672	1,095

Six months ended December 31	2022	2021
	(\$000s)	(\$000s)
Loss for the period	(2,403)	(237)
Income tax expense (recovery)	3	24
Interest expense	1,233	598
(Gain) loss on revaluation of derivative	(59)	-
Depreciation, amortization, & impairment	819	781
Stock-based compensation expense (non-cash)	143	137
Adjusted EBITDA	(264)	1,303

BUSINESS RISKS

Some of the risks that we face, 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 2023. 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 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, we and our 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. On March 27, 2019, we 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 Mr. Hoolahan. We are evaluating its payment options with respect to the award granted to Mr. 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 our 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. We are 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 our 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 our subsidiary Company, Nonferrous Products, as a defendant, then IBC potentially faces significantly more liability requiring further defensive action.

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 December 30, 2022, we completed a non-brokered private placement issuing 11,269,444 units at price of C\$0.108 per common share for gross proceeds of C\$1,217,000. Each unit comprised of one common share and common share purchase warrant, each warrant entitling the holder to acquire one further common share (a "warrant share") at a price of C\$0.135 per warrant share until December 30, 2024.

SHARE ISSUANCES

- In July 2022, 500,000 common shares were issued upon on the exercise of 500,000 options at C\$0.15 with an expiry date of July 7, 2025. Also, in July 2022, 2,373,324 common shares were issued upon the exercise of 62,500 options at C\$0.20 with an expiry date of December 1, 2026 and the exercise of 62,500 options at C\$0.24 with an expiry date of June 7, 2027, and upon the exercise of 2,248,324 warrants at C\$0.23 with an expiry date of June 23, 2023.
- In January 2023, we issued 1,186,786 common shares to debenture-holder with an issue-date value of C\$153,000 in satisfaction of the December 31, 2022 interest payment in lieu of cash.

OUTSTANDING SHARE DATA

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

- A total of 100,087,013 common shares.
- Warrants to purchase 33,799,888 common shares.
- Share options to purchase 5,926,750 common shares.

The maximum number of shares potentially issuable together with the issued shares is therefore 139,813,651.