IBC ADVANCED ALLOYS CORP.

MANAGEMENT'S DISCUSSION AND ANALYSIS

SIX MONTHS ENDED DECEMBER 31, 2021

FISCAL SECOND QUARTER OF 2022

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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, 2022. This MD&A should be read together with the audited consolidated financial statements and related notes for the fiscal year ended June 30, 2021. 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; 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.

The Company's financial statements for the period ended December 31, 2021 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.

- **Company Swings to Profitability, Buoyed by Sharply Higher Sales** We booked comprehensive income of $344,000 in the quarter, or $0.00 per share, which compared to a loss of $304,000, or ($0.00) in the prior-year period. Comprehensive sales increased 44.5% in the quarter over the prior-year period and were higher by 51.9% year to date over the prior-year period. We recorded a consolidated comprehensive loss of ($237,000) in the six-month period ended December 31, 2021, compared to ($1,259,000) for the prior year ended December 31, 2020.

- **Beryllium-Aluminum Alloy Sales Continue to Climb for Sixth Straight Quarter: :** Engineered Materials ("EM") division sales of beryllium-aluminum ("BeAl") alloy products rose by 89% in the quarter as compared to the comparable prior-year period, and 126.5% as compared to the prior year. Driven largely by increased commercial product sales, this marked the 6th straight quarter of higher EM division sales.

- **Copper Alloy Division Sales Also Higher by Double Digits:** Copper Alloys division sales rose by 12.7% in the quarter as compared to the prior-year period, and by 11.4% year to date over the prior-year period.

- **Comprehensive Gross Margin Continues to Strengthen:** Consolidated gross margin improved in the quarter to 26.7% from 17.0% in the prior-year period. Gross margin for the EM division rose to 42.1% from 26.0% in the quarter ended December 31, 2021. Copper Alloy's gross margin decreased in the quarter and year, mostly due to higher material costs and costs associated with the division's consolidation and new facility construction efforts at our Franklin, Ind. facility.

- **Consolidated Adjusted EBITDA[1] Sharply Higher**: Our Consolidated adjusted earnings before interest, taxes, depreciation, and amortization ("Adjusted EBITDA") for the quarter ended December 31, 2021, rose by 301% to $1,095,000 from$273,000 for the prior-year period. In the six-month period ended Dec. 31, 2021 Adjusted EBITDA jumped 757% to $1,303,000, from $152,000 in the prior-year period. The increase is primarily due to higher sales at our EM division.

OUR BUSINESS

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

Our manufacturing operations currently employ 85 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

[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.

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 BeAl 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 July 29, 2021, we replaced our line of credit agreement with BMO Harris Bank with a line of credit agreement with Iron Horse Credit, LLC with a facility limit of $4,000,000 which bears interest at 1.166% per month. We also entered into an account sale and purchase agreement ("ASPA") to provide $4,000,000 in advance purchase financing between Sallyport Commercial Finance LLC and our subsidiaries. The ASPA bears interest at the prevailing prime rate plus 2% per year. The initial term of both the line of credit and the ASPA is 12 months with an inter-creditor facility between Iron Horse Credit, LLC and Sallyport Commercial Finance LLC which requires that we maintain a minimum debt service coverage and positive cash flows as they pertain to our operations.

- On October 4, 2021, we entered into a 51-month financing agreement among Utica Leaseco LLC and Utica Equipment Finance, LLC (collectively, "Utica") and certain of our U.S. subsidiaries. With the financing agreement with Utica, we granted a security interest in certain equipment located on our premises in exchange for $900,000 under a four-year term loan. We make monthly payments of $24,390, with the monthly payments increasing by 1.00% for every 0.25% increase to the prime rate of Comerica Bank. We have used the proceeds of the financing agreement to advance the Copper Alloys division's consolidation and expansion and for working capital purposes.

- On October 14, 2021, we completed a second definitive funding agreement with the Lind Partners for an initial amount of $1,500,000. We have executed a convertible security funding agreement for the issue of a convertible security in the principal amount of $1,500,000 (the "Convertible Security") to Lind Global Fund II, LP, managed by the Lind Partners, LLC (together, the "investor" or "Lind"). The Convertible Security had a principal amount of $1,500,000, with a prepaid interest amount of $187,500 for an aggregate face value of $1,687,500 and is due in October 2023. The Principal Amount less a $75,000 closing fee is convertible into IBC common shares at the option of the Investor at a fixed conversion price per share of C$0.21. We make monthly repayments of $75,000 commencing in February 2022. In connection with the issuance of the Convertible Security, the Investor received 4,270,591 common share purchase warrants with an exercise price equal to C$0.21, which expire in October 2023. The Investor has the right to invest another $750,000 with an additional interest amount of $93,750 with pro-rata terms and fees.

- On October 19, 2021, we promoted Ben Rampulla to serve as our Chief Technology Officer, a new position, appointed Mark Doelling, a 30-year veteran of the specialty alloy industry, to replace Mr. Rampulla as President of the Engineered Materials division.

- On January 24, 2022 we completed the payments on the $1,700,000 term loan with BMO Harris Bank, fully satisfying the obligations on this mortgage.

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 of our U.S. facilities have remained in operation since the start of the pandemic and are serving customers in both the defense and commercial sectors. Copper Alloys order intake has generally increased since the start of our 2022 fiscal year, and we believe that the negative effects of the pandemic will continue to diminish over the balance of fiscal year 2022.

We are still subject to material COVID-19-related risks such as the following:

- State or local governments may require that our facilities close or they may impose operating restrictions, such as physical distancing, that make opening our operations 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 continue to 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 operate two manufacturing operations in the U.S. that, in total, employ 85 people. These facilities are located in Franklin, IN and Wilmington, MA. Most of our management and administration are based at the Franklin, IN 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, IN, where we maintain forging (hammer, press and ring rolling), heat-treating, and machining operations. We previously cast billets in Royersford, PA but are relocating these operations to Franklin, IN. Our metal foundry operations are temporarily shut down pending start-up of the new facility which is expected in March 2022. The Franklin plant sits on 4.8 hectares (12.0 acres) of land that has sufficient room for consolidation of our existing operations and also to provide expansion of our production base to satisfy future revenue growth, as business dictates.

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. These furnaces and associated equipment are currently being relocated to our expanded and modernized Copper Alloys facility in Franklin, IN. We expect that once the casting operations are operating as planned, we will realize operating cost savings and reduce production lead times.

ENGINEERED MATERIALS

Our EM division supplies high-performance BeAl 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 EM 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 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 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®.

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 *($000s)*	Income (loss) for the period (net of tax) *($000s)*	Basic and diluted loss per share [1] $
March 31, 2020	5,818	171	0.00
June 30, 2020	5,056	27	0.00
September 30, 2020	4,427	(955)	(0.02)
December 31, 2020	4,929	(304)	(0.00)
March 31, 2021	5,412	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

[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. Generally, EM division sales are slower in the second and third 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:

- 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.

Results of Operations: Fiscal 2022 Q2

We incurred comprehensive income of $344,000 for the three months ended December 31, 2021, compared to comprehensive loss of $304,000 in the prior-year period. A summary of results of operations, and a reconciliation of income (loss) to Adjusted EBITDA, follows:

	Three Months Ended December 31, 2021				Three Months Ended December 31, 2020			
	Copper Alloys	Eng. Mat.	Corp.	Consol-idated	Copper Alloys	Eng. Mat.	Corp.	Consol-idated
	($000s)	($000s)	($000s)	($000s)	($000s)	($000s)	($000s)	($000s)
Revenue	3,239	3,885	-	7,124	2,873	2,056	-	4,929
Cost of revenue								
Materials	2,038	806	-	2,844	1,580	497	-	2,077
Labor	616	695	-	1,311	534	348	-	882
Subcontract	20	21	-	41	32	43	-	75
Overhead	383	550	-	933	431	311	-	742
Depreciation	113	230	-	343	122	164	-	286
Change in finished goods	(199)	(52)	-	(251)	(130)	159	-	29
	2,971	2,250	-	5,221	2,569	1,522	-	4,091
Gross profit	268	1,635	-	1,903	304	534	-	838
Gross margin	8.3%	42.1%		26.7%	10.6%	26.0%		17.0%
SG&A expenses	627	599	123	1,349	506	336	210	1,052
Income (loss) before other items	(359)	1,036	(123)	554	(202)	198	(210)	(214)
Other income (expense)	194	(55)	(349)	(210)	(78)	(25)	13	(90)
Income (loss) for the period, net of tax	(165)	981	(472)	344	(280)	173	(197)	(304)
Adjusted EBITDA:								
Add back (deduct):								
Tax expense (recovery)	-	-	-	-	1	-	22	23
Interest expense	(99)	36	333	270	84	31	57	172
Depreciation, amortization, & impairment	122	267	-	389	130	183	-	313
Stock-based compensation expense (non-cash)	13	15	64	92	11	8	50	69
Adjusted EBITDA	(129)	1,299	(75)	1,095	(54)	395	(68)	273

Results of Operations: Fiscal 2022 Year-to-Date

We incurred a loss, net of tax, of $237,000 for the six months ended December 31, 2021, compared to a loss, net of tax, of $1,259,000 in the prior-year period. A summary of results of operations, and a reconciliation of income (loss) to Adjusted EBITDA, follows:

	Six Months Ended December 31, 2021				Six Months Ended December 31, 2020			
	Copper Alloys ($000s)	Eng. Mat. ($000s)	Corp. ($000s)	Consol-idated ($000s)	Copper Alloys ($000s)	Eng. Mat. ($000s)	Corp. ($000s)	Consol-idated ($000s)
Revenue	6,757	7,457	-	14,214	6,064	3,292	-	9,356
Cost of revenue								
Materials	4,130	2,279	-	6,409	3,306	780	-	4,086
Labor	1,149	1,353	-	2,502	1,154	707	-	1,861
Subcontract	71	53	-	124	74	77	-	151
Overhead	814	1,142	-	1,956	863	595	-	1,458
Depreciation	227	462	-	689	248	351	-	599
Change in	-	-	-		-	-	-	
finished goods	(90)	(296)	-	(386)	(174)	(24)	-	(198)
	6,301	4,993	-	11,294	5,471	2,486	-	7,957
Gross profit	456	2,464	-	2,920	593	806	-	1,399
Gross margin	6.7%	33.0%		20.5%	9.8%	24.5%		15.0%
SG&A expenses	1,152	1,069	331	2,552	923	662	533	2,118
Income (loss) before other items	(696)	1,395	(331)	368	(330)	144	(533)	(719)
Other income (expense)	195	(113)	(687)	(605)	(176)	(54)	(310)	(540)
Income (loss) for the period, net of tax	(501)	1,282	(1,018)	(237)	(506)	90	(843)	(1,259)
Adjusted EBITDA:								
Add back (deduct):								
Tax expense (recovery)	7	-	17	24	4	-	16	20
Interest expense	(138)	82	654	598	182	65	324	571
Depreciation, amortization, & impairment	245	536	-	781	264	389	-	653
Stock-based compensation expense (non-cash)	17	18	102	137	13	9	145	167
Adjusted EBITDA	(370)	1,918	(245)	1,303	(43)	553	(358)	152

Segment Analysis: Three and Six months ended December 31, 2021

Factors affecting our financial performance in the three- and six-month periods ended December 31, 2021, include the following:

Copper Alloys Sales Division Results:

Sales	In the quarter and six months ended December 31, 2021, sales of our Copper Alloys product lines increased mostly due to increased demand from customers in the electronics sector that are manufacturing products related to the rapidly growing network connectivity of consumer goods and the transition to 5G networks.
Gross profit	We recorded a gross margin of 8.3% in the quarter compared to 10.6% in the prior-year period, and 6.7% in the six-month period ended December 31, 2021 compared to 9.8% in the prior-year period. As sales increased, gross margin decreased largely due to higher material costs, partially offset by lower variable and fixed costs we have gained from consolidating our Royersford, PA and New Madrid, MO copper casting operations.
SG&A expenses	SG&A expenses increased in the quarter and six-month period ended December 31, 2021, over the prior-year periods, primarily due to an increase in information technology costs necessary to maintain compliance with federal regulations. Expenses also increased as a result of higher legal and other fees related to the financing of our Copper Alloys division consolidation and expansion of operations in Franklin, IN.
Other income (expense)	Other income (expense) in the quarter and six months ended December 31, 2021 primarily comprised interest expense, which decreased due largely to capitalization of interest incurred on the borrowings related to the Copper Alloys consolidation and expansion.

Engineered Materials Division Results:

Sales	Sales increased in the quarter and six months ended December 31, 2021 due largely to higher demand for BeAl products in commercial markets used to manufacture semiconductor chips that are increasingly used in the rapidly growing Internet of Things ("IoT") and for the transition to 5G networks. 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. We continue to pursue additional contracts for high-performance BeAl products in both defense and commercial sector platforms.
Gross profit	Gross margin of 42.1% in the quarter increased from 26% in the prior-year period, and gross margin of 33% in the six-month period ended December 31, 2021, increased from 24.5% in the prior-year period, mostly due to fixed costs being a lower proportion of sales. Material costs increased in the three- and six-month periods ended December 31, 2021, in addition to normal revenue changes, primarily due to higher raw material costs mostly due to higher Be prices as well as a $300,000 work-in-process inventory adjustment. The adjustment reflects revised material content assumptions identified on implementation of a new and more sophisticated ERP system. Labor costs also increased in the quarter due to increased pay rates and an expansion of our workforce in Massachusetts, driven by higher customer demand for our products.
SG&A expenses	SG&A expenses increased in the three- and six-month periods ended December 31, 2021, compared to the prior-year periods, mostly due to an increase in information technology consulting costs to maintain compliance with federal regulations.

Other income (loss)	Other income (expense) is primarily comprised of imputed interest expense under IFRS 16, which increased due to higher factory rental payments pursuant to the factory lease extension effective February 1, 2021.

Corporate

SG&A expenses	SG&A expenses decreased in the quarter and six months ended December 31, 2021, over the prior-year periods primarily due to the fact that share-based compensation was higher in the prior-year period due to the amortization of the options awarded in July and October 2020.
Other income (expense)	The main components of other income (expense) are typically interest expense and foreign exchange gain (loss). Other income (expense) was higher in the three- and six-month periods ended December 31, 2021, than in the prior-year period due largely to the higher recognized foreign exchange expense in the three and six-month periods ended December 31, 2021. Additionally, interest expense increased due to higher debt with the closing of the third Lind funding in October 2021.

CHANGES IN FINANCIAL CONDITION

Changes in our financial condition since June 30, 2021, are related to operations in the normal course of business and:

- In conjunction with the consolidation of our foundry facilities including plant and equipment, we have made purchases of $2,400,000.
- In October 2021, we raised cash from the second convertible security funding agreement from Lind Global Macro Fund LP for the issuance of a convertible security in the principal amount of $,1500,000 closing of a loan with Lind that provided cash of $1.5 million.

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:

	2021	**2020**
December 31	$4.39	$3.54
September 30	$4.09	$3.03
June 30	$4.28	$2.73
March 31	$4.00	$2.24

Source: COMEX

Liquidity and Capital Resources

On December 31, 2021, we had working capital deficit of $1,051,000, including cash of $760,000, as compared to working capital deficit of $23,000, including cash of $2,359,000 on June 30, 2021. Factors affecting liquidity include:

- We have not yet achieved sustained profitable operations.
- Our term loan with BMO Harris of $300,000 ($792,000 at June 30, 2021) comes due on January 31, 2022. Subsequently, on January 24, 2022, we completed the payments under the term loan with BMO Harris, fully satisfying the obligations under this mortgage[SA1].
- We have the option of settling interest on convertible debentures through the issuance of common shares. In fiscal 2021, doing so benefited our cash flow by $242,000.
- Under the terms of our loan agreement with Lind Partners, we must make monthly payments of C$84,000 commencing March 31, 2021, according to the second funding. Lind has the option to require the issuance of common shares in lieu of cash. In fiscal 2021 Lind accepted shares in lieu of principal and interest payments benefitting our cash flow by $274,000 via Lind's conversion notices.
- Holders of C$25,000 8.25% convertible debentures requested conversions of the convertible debentures to shares benefitting our cash flow by $19,000 in fiscal 2021.

- 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, 2021 prices, an aggregate of $1,667,000 in raw materials prior to June 30, 2022.
- We have entered into commercial property and equipment leases. These leases have a weighted average remaining life of 4.1 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 $430,000 in the next 12 months and $3.1 million 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.

RELATED PARTY TRANSACTIONS

Except as described below, we do not have any contractual relationships with directors or officers other than employment contracts in the ordinary course of business. The employment contracts are not financially material to our business.

Non-executive directors are each paid $36,000 per year but the directors have agreed to receive the bulk of this amount in common shares. In fiscal 2021, we issued 813,615 common shares for services to the non-executive directors and 12,364 common shares to a consultant. For the period ended December 31, 2021, non-executive directors' compensation of $119,000 was not paid but has been accrued. In November 2021, we issued 600,000 common shares for services to directors.

For additional information on related party transactions among us and certain of our 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 arises from interest expense on the Accounts Sale and Purchase Agreement with Sallyport Commercial Finance LLC and our subsidiaries. Our interest rate risk also results from interest expense on term loan payable with Utica and our subsidiaries.

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

Certain pronouncements, issued by the IASB or the IFRS Interpretations Committee, were adopted during the year, or were mandatory for our fiscal years beginning on or after July 1, 2021, or are required to be adopted in future periods. There were no pronouncements relevant to the consolidated financial statements.

There are no 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 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, 2021, Income (loss) to Operating income (loss) follows:

Quarter ended December 31	2021	2020
	($000s)	*($000s)*
Income (loss) for the period	344	(304)
Foreign exchange (gain) loss	3	(86)
Interest expense	270	172
Loss on disposal of assets	(70)	-
Other income	7	(19)
Income tax expense (recovery)	-	23
Operating income (loss)	554	(214)

Six months ended December 31	2021	2020
	($000s)	*($000s)*
Loss for the period	(237)	(1,259)
Foreign exchange (gain) loss	2	(24)
Interest expense	598	571
Loss on disposal of assets	(21)	(3)
Other income	2	(24)
Income tax expense (recovery)	24	20
Operating income (loss)	368	(719)

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, 2021 loss to Adjusted EBITDA follows:

Quarter ended December 31	2021 *($000s)*	2020 *($000s)*
Income (loss) for the period	344	(304)
Income tax expense (recovery)	-	23
Interest expense	270	172
Depreciation, amortization, & impairment	389	313
Stock-based compensation expense (non-cash)	92	69
Adjusted EBITDA	1,095	273

Six months ended December 31	2021 *($000s)*	2020 *($000s)*
Loss for the period	(237)	(1,259)
Income tax expense (recovery)	24	20
Interest expense	598	571
Depreciation, amortization, & impairment	781	653
Stock-based compensation expense (non-cash)	137	167
Adjusted EBITDA	1,303	152

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 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.

Problems Restarting Foundry Operations

Our Royersford, PA lease expired at the end of January 2022 and we have vacated the premises. We have constructed a new casting plant in Franklin, IN and have relocated our Royersford, PA equipment to our Franklin, IN facility. We plan to recommence casting operations in March 2022. If we are not able to satisfactorily recommence casting operations in Franklin, IN, it will have a material adverse impact on our ability to produce sufficient material to meet customer demand. If we commence casting operations but experience difficulty in optimizing production, production may be delayed, or we may experience lower profitability than planned.

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. The amount has been accrued and the matter was under appeal. 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

SHARE ISSUANCES

In November 2021, we issued 600,000 common shares for services to directors.

In December 2021, 771,043 common shares were issued to debenture holders with an issue date value of C$154,000 in satisfaction of the December 31, 2021 interest payment in lieu of cash.

OUTSTANDING SHARE DATA

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

- A total of 79,796,084 common shares.
- Warrants to purchase 36,200,986 common shares.
- Share options to purchase 5,278,250 common shares.

The maximum number of shares potentially issuable together with the issued shares is therefore 121,75,320.