UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)
☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended November 30, 2021

or

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

For the transition period from ________________ to __________________

Commission File Number: 001-11038

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**41-0857886**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

4201 Woodland Road
P.O. Box 69
Circle Pines, Minnesota 55014
(Address of principal executive offices) (Zip Code)

(763) 225-6600
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value $0.02 per share	NTIC	Nasdaq Global Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐	Accelerated filer ☐
Non-accelerated filer ☒	Smaller reporting company ☒
	Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

As of January 6, 2022, there were 9,203,446 shares of common stock of the registrant outstanding.

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION
FORM 10-Q
November 30, 2021

TABLE OF CONTENTS

This quarterly report on Form 10-Q contains certain forward-looking statements that are within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and are subject to the safe harbor created by those sections. For more information, see "Part I. Financial Information – Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations – Forward-Looking Statements."

As used in this report, references to "NTIC," the "Company," "we," "our" or "us," unless the context otherwise requires, refer to Northern Technologies International Corporation and its wholly-owned and majority-owned subsidiaries, all of which are consolidated on NTIC's consolidated financial statements.

As used in this report, references to: (1) "NTIC China" refer to NTIC's wholly-owned subsidiary in China, NTIC (Shanghai) Co., Ltd.; (2) "NTI Europe" refer to NTIC's wholly-owned subsidiary in Germany, NTIC Europe GmbH; (3) "Zerust Mexico" refer to NTIC's wholly-owned subsidiary in Mexico, ZERUST-EXCOR MEXICO, S. de R.L. de C.V; (4) "Zerust India" refer to NTIC's wholly-owned subsidiary in India effective as of September 1, 2021, Harita-NTI Limited; and (5)"NTI Asean" refer to NTIC's majority-owned holding company subsidiary, NTI Asean LLC, which holds investments in certain entities that operate in the Association of Southeast Asian Nations (ASEAN) region, including the following countries: Indonesia, South Korea, Malaysia, Philippines, Singapore, Taiwan, Thailand and Vietnam.

NTIC's consolidated financial statements do not include the accounts of any of its joint ventures. Except as otherwise indicated, references in this report to NTIC's joint ventures do not include any of NTIC's wholly-owned or majority-owned subsidiaries.

As used in this report, references to "EXCOR" refer to NTIC's joint venture in Germany, Excor Korrosionsschutz – Technologien und Produkte GmbH.

All trademarks, trade names or service marks referred to in this report are the property of their respective owners.

PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS AS OF NOVEMBER 30, 2021 (UNAUDITED) AND AUGUST 31, 2021 (AUDITED)

	November 30, 2021	August 31, 2021
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 8,047,565	$ 7,680,641
Available for sale securities	4,634	4,634
Receivables:		
Trade, excluding joint ventures, less allowance for doubtful accounts of $382,000 as of November 30, 2021 and August 31, 2021	13,107,126	11,128,805
Trade, joint ventures	791,246	624,808
Fees for services provided to joint ventures	1,200,869	1,505,127
Income taxes	500,061	386,574
Inventories	11,439,738	11,114,207
Prepaid expenses	2,173,851	1,302,293
Total current assets	37,265,090	33,747,089
PROPERTY AND EQUIPMENT, NET	12,194,674	11,821,458
OTHER ASSETS:		
Investments in joint ventures	21,357,911	27,623,768
Deferred income taxes	—	92,554
Patents and trademarks, net	709,875	709,572
Goodwill	4,782,376	—
Intangible asset, net	6,279,000	—
Operating lease right of use asset	655,819	376,438
Total other assets	33,784,981	28,802,332
Total assets	$ 83,244,745	$ 74,370,879
LIABILITIES AND EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 5,466,381	$ 4,290,972
Line of credit	2,500,000	
Income taxes payable	96,596	178,923
Accrued liabilities:		
Payroll and related benefits	1,604,109	2,879,468
Other	1,407,724	894,497
Current portion of operating lease	314,918	272,336
Total current liabilities	11,389,728	8,516,196
LONG-TERM LIABILITIES:		
Deferred income tax, net	1,883,272	—
Operating lease, less current portion	340,901	104,102
Total long-term liabilities	2,224,173	104,102
COMMITMENTS AND CONTINGENCIES (Note 14)		
EQUITY:		
Preferred stock, no par value; authorized 10,000 shares; none issued and outstanding	—	—
Common stock, $0.02 par value per share; authorized 15,000,000 shares as of November 30, 2021 and August 31, 2021; issued and outstanding 9,203,446 and 9,184,811, respectively	184,069	183,696
Additional paid-in capital	19,146,510	18,736,268
Retained earnings	50,823,730	46,973,092
Accumulated other comprehensive loss	(3,862,085)	(3,525,030)
Stockholders' equity	66,292,224	62,368,026
Non-controlling interests	3,338,620	3,382,555
Total equity	69,630,844	65,750,581
Total liabilities and equity	$ 83,244,745	$ 74,370,879

See notes to consolidated financial statements.

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)
FOR THE THREE MONTHS ENDED NOVEMBER 30, 2021 AND 2020

	Three Months Ended	
	November 30, 2021	November 30, 2020
NET SALES:		
Net sales, excluding joint ventures	$ 17,352,974	$ 12,198,808
Net sales, to joint ventures	840,439	580,304
Total net sales	18,193,413	12,779,112
Cost of goods sold	12,490,483	8,313,321
Gross profit	5,702,930	4,465,791
JOINT VENTURE OPERATIONS:		
Equity in income from joint ventures	1,374,749	1,825,712
Fees for services provided to joint ventures	1,258,858	1,336,561
Total joint venture operations	2,633,607	3,162,273
OPERATING EXPENSES:		
Selling expenses	3,237,758	2,741,768
General and administrative expenses	2,596,347	2,093,982
Research and development expenses	1,235,821	1,075,737
Total operating expenses	7,069,926	5,911,487
OPERATING INCOME	1,266,611	1,716,577
REMEASUREMENT GAIN ON ACQUISITION OF EQUITY METHOD INVESTEE	3,951,550	—
INTEREST INCOME	10,943	69,538
INTEREST EXPENSE	(2,891)	(2,368)
INCOME BEFORE INCOME TAX EXPENSE	5,226,213	1,783,747
INCOME TAX EXPENSE	504,380	378,590
NET INCOME	4,721,833	1,405,157
NET INCOME ATTRIBUTABLE TO NON-CONTROLLING INTERESTS	228,074	142,758
NET INCOME ATTRIBUTABLE TO NTIC	$ 4,493,759	$ 1,262,399
NET INCOME ATTRIBUTABLE TO NTIC PER COMMON SHARE:		
Basic	$ 0.49	$ 0.14
Diluted	$ 0.46	$ 0.13
WEIGHTED AVERAGE COMMON SHARES ASSUMED OUTSTANDING:		
Basic	9,199,976	9,104,623
Diluted	9,779,770	9,644,630
CASH DIVIDENDS DECLARED PER COMMON SHARE	$ 0.07	$ 0.00

See notes to consolidated financial statements.

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)
FOR THE THREE MONTHS ENDED NOVEMBER 30, 2021 AND 2020

	Three Months Ended	
	November 30, 2021	November 30, 2020
NET INCOME	$ 4,721,833	$ 1,405,157
OTHER COMPREHENSIVE INCOME (LOSS) – FOREIGN CURRENCY TRANSLATION ADJUSTMENT	(409,064)	298,665
COMPREHENSIVE INCOME	4,312,769	1,703,822
COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO NON-CONTROLLING INTERESTS	(156,065)	210,663
COMPREHENSIVE INCOME ATTRIBUTABLE TO NTIC	$ 4,468,834	$ 1,493,159

See notes to consolidated financial statements.

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EQUITY (UNAUDITED)
FOR THE THREE MONTHS ENDED NOVEMBER 30, 2021 AND 2020

	STOCKHOLDERS' EQUITY						
	Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Non-Controlling Interests	Total Equity
	Shares	Amount					
BALANCE AS OF AUGUST 31, 2020	9,099,990	$ 182,000	$17,415,043	$42,472,810	$ (3,410,438)	$ 3,045,026	$59,704,441
Stock issued for employee stock purchase plan	4,646	93	36,099	—	—	—	36,192
Stock option expense	—	—	181,669	—	—	—	181,669
Net income	—	—	—	1,262,399	—	142,758	1,405,157
Comprehensive income	—	—	—	—	230,760	67,905	298,665
BALANCE AS OF NOVEMBER 30, 2020	9,104,636	$ 182,093	$17,632,811	$43,735,209	$ (3,179,678)	$ 3,255,689	$61,626,124
BALANCE AS OF AUGUST 31, 2021	9,184,811	$ 183,696	$18,736,268	$46,973,092	$ (3,525,030)	$ 3,382,555	$65,750,581
Stock options exercised	16,000	320	138,880	—	—	—	139,200
Stock issued for employee stock purchase plan	2,635	53	38,479	—	—	—	38,532
Stock option expense	—	—	232,883	—	—	—	232,883
Investment by non-controlling interest	—	—	—	—	—	(200,000)	(200,000)
Dividends paid to shareholders	—	—	—	(643,121)	—	—	(643,121)
Net income	—	—	—	4,493,759	—	228,074	4,721,833
Comprehensive loss	—	—	—	—	(337,055)	(72,009)	(409,064)
BALANCE AS OF NOVEMBER 30, 2021	9,203,446	$ 184,069	$19,146,510	$50,823,730	$ (3,862,085)	$ 3,338,620	$69,630,844

See notes to consolidated financial statements.

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)
FOR THE THREE MONTHS ENDED NOVEMBER 30, 2021 AND 2020

	Three Months Ended	
	November 30, 2021	**November 30, 2020**
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	$ 4,721,833	$ 1,405,157
Adjustments to reconcile net income to net cash provided by operating activities:		
Stock-based compensation	232,883	181,669
Depreciation expense	215,306	211,932
Amortization expense	119,894	49,989
Change in allowance for doubtful accounts	—	30,000
Remeasurement gain on acquisition of equity method investee	(3,951,550)	—
Equity in income from joint ventures	(1,374,749)	(1,825,712)
Dividends received from joint ventures	5,042,271	1,125,361
Deferred income taxes	126,852	338
Changes in current assets and liabilities:		
Receivables:		
Trade, excluding joint ventures	(308,325)	(1,334,199)
Trade, joint ventures	(166,438)	(199,491)
Fees for services provided to joint ventures	304,258	(221,879)
Income taxes	(119,978)	10,001
Inventories	516,283	1,242,101
Prepaid expenses and other	(418,888)	(108,751)
Accounts payable	98,545	1,046,577
Income tax payable	(102,074)	156,951
Accrued liabilities	(1,617,099)	(168,924)
Net cash provided by operating activities	3,319,024	1,601,120
CASH FLOWS FROM INVESTING ACTIVITIES:		
Acquisition of Zerust India business, net of cash acquired (see Note 3)	(5,062,003)	—
Purchase of available for sale securities	—	(838,063)
Purchases of property and equipment	(315,390)	(309,400)
Investments in patents	(52,197)	(30,406)
Net cash used in investing activities	(5,429,590)	(1,177,869)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from line of credit	2,500,000	—
Dividends paid on NTIC common stock	(643,121)	—
Proceeds from the exercise of stock options	139,200	—
Dividends received by non-controlling interest	(200,000)	—
Proceeds from employee stock purchase plan	38,532	36,192
Net cash provided by financing activities	1,834,611	36,192
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS:	642,879	90,866
NET INCREASE IN CASH AND CASH EQUIVALENTS	366,924	550,309
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	7,680,641	6,403,032
CASH AND CASH EQUIVALENTS AT END OF PERIOD	$ 8,047,565	$ 6,953,341

See notes to consolidated financial statements.

1. INTERIM FINANCIAL INFORMATION

In the opinion of management, the accompanying unaudited consolidated financial statements contain all necessary adjustments, which are of a normal recurring nature, and present fairly the consolidated financial position of Northern Technologies International Corporation and its subsidiaries (the Company) as of November 30, 2021 and August 31, 2021 and the results of the Company's operations for the three months ended November 30, 2021 and 2020, the changes in stockholders' equity for the three months ended November 30, 2021 and 2020 and the Company's cash flows for the three months ended November 30, 2021 and 2020, in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP).

These consolidated financial statements should be read in conjunction with the consolidated financial statements and related notes contained in the Company's annual report on Form 10-K for the fiscal year ended August 31, 2021. These consolidated financial statements also should be read in conjunction with the "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" section appearing in this report.

Operating results for the three months ended November 30, 2021 are not necessarily indicative of the results that may be expected for the full fiscal year ending August 31, 2022.

The Company evaluates events occurring after the date of the consolidated financial statements requiring recording or disclosure in the consolidated financial statements.

Impact of COVID-19 Pandemic

In March 2020, the World Health Organization declared the novel coronavirus (COVID-19) outbreak a global pandemic. As a result of the COVID-19 pandemic and related government mandated restrictions on the Company's business as well as the businesses of its joint ventures, customers and suppliers, disruption to the Company's business and the manufacture and sale of its products and services has occurred in the first quarter of fiscal 2022 and is expected to continue during the remainder of fiscal 2022. In the first quarter of fiscal 2022, the Company was impacted by shipping issues, including freight container shortages, shipping delays, and increased costs, and supply chain issues, including longer lead times and raw material cost increases.

2. ACCOUNTING PRONOUNCEMENTS

Recently Issued Accounting Pronouncements

In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-13, *Measurement of Credit Losses on Financial Instruments*, which revises guidance for the accounting for credit losses on financial instruments within its scope, and in November 2018, issued ASU No. 2018-19 and in April 2019, issued ASU No. 2019-04 and in May 2019, issued ASU No. 2019-05, and in November 2019, issued ASU No. 2019-11, which amended the standard. The new standard introduces an approach, based on expected losses, to estimate credit losses on certain types of financial instruments and modifies the impairment model for available-for-sale debt securities. The new approach to estimating credit losses (referred to as the current expected credit losses model) applies to most financial assets measured at amortized cost and certain other instruments, including trade and other receivables, loans, held-to-maturity debt securities, net investments in leases and off-balance-sheet credit exposures. This ASU is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, with early adoption permitted. Entities are required to apply the standard's provisions as a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is adopted. The Company is still evaluating the impact of this ASU.

Although there are several other new accounting pronouncements issued or proposed by the FASB, which the Company has adopted or will adopt, as applicable, the Company does not believe any of these accounting pronouncements has had or will have a material impact on the Company's consolidated financial position or operating results.

3. BUSINESS COMBINATION

On September 21, 2021, the Company announced that it acquired the remaining 50% ownership interest in its Indian joint venture, Harita-NTI Limited (Zerust India), for $6.25 million in cash, effective as of September 1, 2021, the date the Company obtained control. Prior to September 1, 2021, the Company owned 50% of the outstanding capital stock of Zerust India. The Company had historically accounted for this investment under the equity method of accounting. This purchase was funded with cash on hand and borrowings under the Company's revolving line of credit. The Company undertook the acquisition to enhance its Zerust business in India.

The purchase price of $6.25 million was funded with cash on hand and borrowings under the Company's revolving line of credit, which was increased in connection with the transaction to $5.0 million.

Because the Company increased its ownership interest in Zerust India to 100%, the acquisition of Zerust India has been accounted for in accordance with Accounting Standards Codification (ASC) 805, Business Combinations, by using the acquisition method of accounting. Effective September 1, 2021, Zerust India is now a consolidated subsidiary within the Company's financial statements.

The following table summarizes the preliminary purchase price allocation that includes the fair values of the separately identifiable assets acquired and liabilities assumed as of September 1, 2021:

Cash and cash equivalents		$	1,187,997
Trade account receivable			1,954,769
Inventories			886,650
Prepaid expenses and other			396,545
Property, plant and equipment			219,077
Operating lease, right of use asset			355,000
Customer relationships			6,347,000
Goodwill			4,782,376
Current liabilities			(1,370,314)
Deferred tax liability			(1,904,100)
Operating lease			(355,000)
	Net assets acquired	$	12,500,000
Less:			
	Fair value of previously held equity method investment		(1,637,362)
	Cumulative foreign currency translation		(661,088)
	Gain recognized on acquisition		(3,951,550)
			(6,250,000)
Cash paid for acquisition		$	6,250,000

The excess of the fair value of purchase consideration over the fair value of net tangible and identifiable intangible assets acquired was recorded as goodwill. The fair values assigned to tangible and identifiable intangible assets acquired and liabilities assumed are based on management's estimates and assumptions. The fair values of assets acquired and liabilities assumed may be subject to change as additional information is received. The Company expects to finalize the purchase price allocation as soon as practicable, but not later than one year from the acquisition date.

The fair value of the intangible asset associated with customer relationships was estimated using a discounted cash flow method with the application of the multi-period excess earnings method. Under this method, an intangible asset's fair value is equal to the present value of the incremental after-tax cash flows attributable to only the subject intangible asset after deducting contributory asset charges.

The rate used to discount the estimated future net cash flows to their present values for the intangible assets was based upon a weighted average cost of capital calculation. The discount rate was determined after consideration of market rates of return on debt and equity capital, the weighted average return on invested capital and the risk associated with achieving forecasted sales related to the assets acquired from Zerust India. The weighted average discount rate used to determine the fair value of the customer relationships was 15.3%.

The amortization period for the intangible assets is 15 years. The intangible assets are being amortized on a straight-line basis, which is consistent with the pattern that the economic benefits of the intangible assets are expected to be utilized based upon estimated cash flows generated from such asset. Goodwill associated with the acquisition was primarily attributable to the expansion opportunity of the Company's ZERUST business in India.

Authoritative guidance on accounting for business combinations requires that an acquirer re-measure its previously held equity interest in the acquisition at its acquisition date fair value and recognize the resulting gain or loss in earnings. As such, since the Company acquired the remaining 50% ownership interest of Zerust India effective September 1, 2021, the Company recognized a gain of $3,951,550 during the three months ended November 30, 2021. This gain is included in "Remeasurement gain on acquisition of equity method investee" on the Company's consolidated statements of operations for the three months ended November 30, 2021.

The Company has included the financial results of Zerust India in the consolidated financial statements from September 1, 2021. Net revenue and net income related to Zerust India since the date of acquisition totaled $2,452,812 and $292,528, respectively. The transaction costs associated with the acquisition were approximately $50,000 and are recorded in general and administrative expense as incurred during the three months ended November 30, 2021.

Unaudited consolidated pro forma information assuming the acquisition had occurred on September 1, 2020. for the three months ended November 30, 2020 would have an increase in net sales from $12,779,112 to $14,806,403. Unaudited pro forma net income had occurred on September 1, 2020 for the three months ended November 30, 2020 was not considered material to the Company's consolidated net income. The unaudited consolidated pro forma combined financial information does not purport to be indicative of the results which would have been obtained had the acquisition been completed as of the beginning of the earliest period presented or of results that may be obtained in the future. In addition, they do not include any benefits that may result from the acquisition due to synergies that may be derived from the elimination of any duplicative costs.

4. INVENTORIES

Inventories consisted of the following:

	November 30, 2021	August 31, 2021
Production materials	$ 4,590,008	$ 4,453,688
Finished goods	6,849,730	6,660,519
	$ 11,439,738	$ 11,114,207

5. PROPERTY AND EQUIPMENT, NET

Property and equipment, net consisted of the following:

	November 30, 2021	August 31, 2021
Land	$ 310,365	$ 310,365
Buildings and improvements	13,723,824	13,149,258
Machinery and equipment	5,477,338	5,453,679
	19,511,527	18,913,302
Less accumulated depreciation	(7,316,853)	(7,091,844)
	$ 12,194,674	$ 11,821,458

6. PATENTS AND TRADEMARKS, NET

Patents and trademarks, net consisted of the following:

	November 30, 2021	August 31, 2021
Patents and trademarks	$ 3,070,704	$ 3,018,507
Less accumulated amortization	(2,360,829)	(2,308,935)
	$ 709,875	$ 709,572

Patent and trademark costs are amortized over seven years. Costs incurred related to patents and trademarks are capitalized until filed and approved, at which time the amounts capitalized to date are amortized, and any further costs, including maintenance costs, are expensed as incurred. Amortization expense is estimated to be $190,000 in each of the next four fiscal years.

7. INVESTMENTS IN JOINT VENTURES

The consolidated financial statements of the Company's foreign joint ventures are initially prepared using the accounting principles accepted in the respective joint ventures' countries of domicile. Amounts related to foreign joint ventures reported in the below tables and the accompanying consolidated financial statements have subsequently been adjusted to conform with U.S. GAAP in all material respects. All material profits on sales recorded that remain on the consolidated balance sheet from the Company to its joint ventures and from joint ventures to other joint ventures have been eliminated for financial reporting purposes.

Financial information from the audited and unaudited financial statements of the Company's joint venture in Germany, Excor Korrosionsschutz – Technologien und Produkte GmbH (EXCOR), and all the Company's other joint ventures are summarized as follows:

	As of November 30, 2021		
	Total	EXCOR	All Other
Current assets	$ 54,945,793	$ 25,127,390	$ 29,818,403
Total assets	58,833,491	27,282,965	31,550,526
Current liabilities	14,079,093	4,139,822	9,939,271
Noncurrent liabilities	1,288,670	-	1,288,670
Joint ventures' equity	43,465,728	23,143,143	20,322,585
Northern Technologies International Corporation's share of joint ventures' equity	21,357,911	11,571,573	9,786,338
Northern Technologies International Corporation's share of joint ventures' undistributed earnings	19,142,941	11,540,668	7,602,273

	Three Months Ended November 30, 2021		
	Total	EXCOR	All Other
Net sales	$ 27,022,995	$ 11,300,228	$ 15,722,767
Gross profit	11,032,959	5,468,986	5,563,973
Net income	2,777,605	1,821,547	956,058
Northern Technologies International Corporation’s share of equity in income from joint ventures	1,374,749	910,773	463,976
Northern Technologies International Corporation's dividends received from joint ventures	5,042,271	4,255,200	787,071

	As of August 31, 2021		
	Total	EXCOR	All Other(1)
Current assets	$ 69,394,796	$ 33,886,655	$ 35,508,141
Total assets	73,814,402	36,211,520	37,602,882
Current liabilities	16,366,398	5,386,377	10,980,021
Noncurrent liabilities	1,455,524	—	1,455,524
Joint ventures’ equity	55,992,480	30,825,144	25,167,336
Northern Technologies International Corporation’s share of joint ventures’ equity	27,623,768	15,412,574	12,211,194
Northern Technologies International Corporation’s share of joint ventures’ undistributed earnings	24,702,778	14,697,490	10,005,288

	Three Months Ended November 30, 2020		
	Total	EXCOR	All Other(1)
Net sales	$ 26,777,343	$ 9,551,483	$ 17,225,860
Gross profit	12,441,761	5,699,007	6,742,754
Net income	3,651,424	2,021,074	1,630,350
Northern Technologies International Corporation’s share of equity in income from joint ventures	1,825,712	1,010,537	815,175
Northern Technologies International Corporation's dividends received from joint ventures	1,125,361	—	1,125,361

(1) Includes Zerust India since Zerust India was not a consolidated subsidiary of the Company as of August 31, 2021 or November 30, 2020. See Note 3 entitled “Business Combination.”

8. INTANGIBLE ASSET, NET

Intangible asset, net consisted of the following as of November 30, 2021:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	$ 6,347,000	$ (68,000)	$ 6,279,000

The customer relationships was established as a part of purchase accounting related to our Zerust India acquisition. See Note 3 entitled “Business Combination.” The Company amortizes the intangible asset related to the customer relationships using the straight-line method over the estimated useful lives of the asset, which is 15 years. Total amortization expense was $68,000 for the three months ended November 30, 2021. Amortization expense is estimated to be $423,000 in each of the next five fiscal years.

9. CORPORATE DEBT

The Company has a revolving line of credit with PNC Bank, National Association ("PNC Bank") of $5,000,000 as of November 30, 2021. This line of credit was increased from $3,000,000 to $5,000,000 effective as of August 31, 2021. Borrowings of $2,500,000 were outstanding under the line of credit as of November 30, 2021 and no amounts were outstanding as of August 31, 2021. Outstanding advances under the line of credit bear interest at a rate equal to the daily BSBY rate plus 2.50%. The weighted average interest rate during the three months ended November 30, 2021 was 2.57%. The line of credit matures on February 22, 2022. The line of credit is governed under an amended and restated loan agreement. The loan agreement contains covenants, including affirmative financial covenants, such as the maintenance of a minimum fixed charge coverage ratio, and negative covenants, which, among other things, limit the incurrence of additional indebtedness, loans and equity investments, disposition of assets, mergers and consolidations and other matters customarily restricted in such agreements. Under the loan agreement, the Company is subject to a minimum fixed charge coverage ratio of 1.10:1.00. As of November 30, 2021, the Company was in compliance with all debt covenants.

As of November 30, 2021 and August 31, 2021, the Company did not have any letters of credit outstanding with respect to the letter of credit sub-facility available under the revolving line of credit with PNC Bank. As of November 30, 2021 and August 31, 2021, the Company had $104,363 of letters of credit with JP Morgan Chase Bank that are performance based and set to expire between 2021 and 2022.

10. STOCKHOLDERS' EQUITY

On April 23, 2020, the Company announced the temporary suspension of its quarterly cash dividend pending clarity on the financial impact of COVID-19 on the Company. Therefore, the Company did not declare a cash dividend during the three months ended November 30, 2020. However, on January 15, 2021, the Company announced the reinstatement of its quarterly cash dividend. On October 20, 2021, the Company's Board of Directors declared a cash dividend of $0.07 per share of the Company's common stock on, payable on November 17, 2021 to stockholders of record on November 3, 2021.

During the three months ended November 30, 2021 and 2020, the Company repurchased no shares of its common stock.

During the three months ended November 30, 2021, the Company granted stock options under the Northern Technologies International Corporation 2019 Stock Incentive Plan (the 2019 Plan) to purchase an aggregate of 174,840 shares of its common stock to various employees and directors. The weighted average per share exercise price of the stock options is $16.97. The exercise price of the stock options is equal to the fair market value of the Company's common stock on the date of grant. During the three months ended November 30, 2021, 16,000 stock options to purchase common stock were exercised at a weighted average exercise price of $8.70.

During the three months ended November 30, 2020, the Company granted stock options under the 2019 Plan to purchase an aggregate of 419,874 shares of its common stock to various employees and directors. The weighted average per share exercise price of the stock options is $8.24. The exercise price of the stock options is equal to the fair market value of the Company's common stock on the date of grant. During the three months ended November 30, 2020, no stock options to purchase common stock were exercised.

The Company issued 2,636 and 4,646 shares of common stock on September 1, 2021 and 2020, respectively, under the Northern Technologies International Corporation Employee Stock Purchase Plan (the ESPP). As of November 30, 2021, 72,186 shares of common stock remained available for sale under the ESPP.

11. NET INCOME PER COMMON SHARE

Basic net income per common share is computed by dividing net income by the weighted average number of common shares outstanding. Diluted net income per share assumes the exercise of stock options using the treasury stock method, if dilutive.

The following is a reconciliation of the net income per share computation for the three months ended November 30, 2021 and 2020:

	Three Months Ended	
Numerator:	**November 30, 2021**	**November 30, 2020**
Net income attributable to NTIC	$ 4,493,759	$ 1,262,399
Denominator:		
Basic – weighted shares outstanding	9,199,976	9,104,623
Weighted shares assumed upon exercise of stock options	579,794	540,007
Diluted – weighted shares outstanding	9,779,770	9,644,630
Basic net income per share:	$ 0.49	$ 0.14
Diluted net income per share:	$ 0.46	$ 0.13

The dilutive impact summarized above relates to the periods when the average market price of the Company’s common stock exceeded the exercise price of the potentially dilutive option securities granted. Net income per common share was based on the weighted average number of common shares outstanding during the periods when computing basic net income per share. When dilutive, stock options are included as equivalents using the treasury stock market method when computing the diluted net income per share. Excluded from the computation of diluted net income per share for the three months ended November 30, 2021 were options outstanding to purchase 311,061 shares of common stock. Excluded from the computation of diluted net income per share for the three months ended November 30, 2020 were options outstanding to purchase 605,629 shares of common stock.

12. STOCK-BASED COMPENSATION

The Company has three stock-based compensation plans under which stock options or other stock-based awards have been granted: the Northern Technologies International Corporation Amended and Restated 2019 Stock Incentive Plan, the Northern Technologies International Corporation Amended and Restated 2007 Stock Incentive Plan (the 2007 Plan) and the Northern Technologies International Corporation Employee Stock Purchase Plan. The 2019 Plan replaced the 2007 Plan with respect to future grants; and, therefore, no further awards may be made under the 2007 Plan. The Compensation Committee of the Board of Directors and the Board of Directors administer these plans.

The 2019 Plan provides for the grant of incentive stock options, non-statutory stock options, stock appreciation rights, restricted stock, stock unit awards, performance awards, and stock bonuses to eligible recipients to enable the Company and its subsidiaries to attract and retain qualified individuals through opportunities for equity participation in the Company and to reward those individuals who contribute to the achievement of the Company’s economic objectives. On January 15, 2021, the Company’s stockholders approved certain amendments to the 2019 Plan, including an increase in the number of shares of common stock available for issuance under the plan by an additional 800,000 shares. Subject to adjustment as provided in the 2019 Plan, up to a maximum of 1,600,000 shares of the Company’s common stock are issuable under the 2019 Plan. Options granted generally have a term of ten years and become exercisable over a one- or three- year period beginning on the one-year anniversary of the date of grant. Options are granted at per share exercise prices equal to the market value of the Company’s common stock on the date of grant. The Company issues new shares upon the exercise of options. As of November 30, 2021, options to purchase an aggregate of 895,484 shares of the Company’s common stock were outstanding under the 2019 Plan and 704,516 shares of the Company’s common stock remain available for grant under the 2019 Plan. As of November 30, 2021, options to purchase an aggregate of 690,007 shares of the Company’s common stock were outstanding under the 2007 Plan.

The Company granted options to purchase an aggregate of 174,840 and 419,874 shares of its common stock during the three months ended November 30, 2021 and 2020, respectively. The fair value of option grants is determined at the date of grant using the Black-Scholes option pricing model with the assumptions listed below. The Company recognized compensation expense of $232,883 and $181,669 during the three months ended November 30, 2021 and 2020, respectively, related to the options that vested during such time period. As of November 30, 2021, the total compensation cost for non-vested options not yet recognized in the Company's consolidated statements of operations was $1,708,368. Stock-based compensation expense of $698,649 is expected through the remainder of fiscal year 2022, and $671,526 and $338,193 is expected to be recognized during fiscal 2023 and 2024, respectively, based on outstanding options as of November 30, 2021. Future option grants will impact the compensation expense recognized. Stock-based compensation expense is included in general and administrative expense on the consolidated statements of operations.

The fair value of each option grant is estimated on the grant date using the Black-Scholes option pricing model with the following assumptions and results for the grants:

	November 30,	
	2021	**2020**
Dividend yield	1.65%	2.37%
Expected volatility	45.4%	45.6%
Expected life of option (in years)	10	10
Average risk-free interest rate	0.77%	0.28%

The weighted average per share fair value of options granted during the three months ended November 30, 2021 and 2020 was $7.29 and $3.12, respectively. The weighted average remaining contractual life of the options outstanding as of November 30, 2021 and 2020 was 6.41 years and 6.90 years, respectively.

13. SEGMENT AND GEOGRAPHIC INFORMATION

Segment Information

The Company's chief operating decision maker is its Chief Executive Officer. The Company's business is organized into two reportable segments: ZERUST® and Natur-Tec®. The Company has been selling its proprietary ZERUST® rust and corrosion inhibiting products and services to the automotive, electronics, electrical, mechanical, military and retail consumer markets for over 45 years and, more recently, has targeted and expanded into the oil and gas industry. The Company also sells a portfolio of bio-based and compostable (fully biodegradable) polymer resins and finished products under the Natur-Tec® brand.

The following table sets forth the Company's net sales for the three months ended November 30, 2021 and 2020 by segment:

	Three Months Ended	
	November 30, 2021	**November 30, 2020**
ZERUST® net sales	$ 14,423,785	$ 10,220,551
Natur-Tec® net sales	3,769,628	2,558,561
Total net sales	$ 18,193,413	$ 12,779,112

The following table sets forth the Company's cost of goods sold for the three months ended November 30, 2021 and 2020 by segment:

	November 30, 2021	% of Product Sales*	November 30, 2020	% of Product Sales*
Direct cost of goods sold				
ZERUST®	$ 8,706,667	60.4%	$ 5,771,089	56.5%
Natur-Tec®	2,922,098	77.5%	1,767,630	69.1%
Indirect cost of goods sold	861,718	NA	774,602	NA
Total net cost of goods sold ….	$ 12,490,483		$ 8,313,321	

* The percent of segment sales is calculated by dividing the direct cost of goods sold for each individual segment category by the net sales for each segment category.

The Company utilizes product net sales and direct and indirect cost of goods sold for each product in reviewing the financial performance of a product type. Further allocation of Company expenses or assets, aside from amounts presented in the tables above, is not utilized in evaluating product performance, nor does such allocation occur for internal financial reporting.

Geographic Information

Net sales by geographic location for the three months ended November 30, 2021 and 2020 were as follows:

	Three Months Ended	
	November 30, 2021	November 30, 2020
Inside the U.S.A. to unaffiliated customers	$ 6,156,322	$ 4,861,355
Outside the U.S.A. to:		
Joint ventures in which the Company is a shareholder directly and indirectly	840,439	580,304
Unaffiliated customers	11,196,652	7,337,453
	$ 18,193,413	$ 12,779,112

Net sales by geographic location are based on the location of the customer.

Fees for services provided to joint ventures by geographic location as a percentage of total fees for services provided to joint ventures during the three months ended November 30, 2021 and 2020 were as follows:

	Three Months Ended			
	November 30, 2021	% of Total Fees for Services Provided to Joint Ventures	November 30, 2020	% of Total Fees for Services Provided to Joint Ventures
Germany	$ 218,430	17.3%	$ 228,826	17.1%
Poland	176,927	14.1%	189,410	14.2%
Japan	166,807	13.3%	179,962	13.5%
France	116,292	9.2%	105,907	7.9%
Sweden	108,070	8.6%	90,489	6.8%
United Kingdom	94,927	7.5%	61,915	4.6%
Thailand	87,554	7.0%	89,932	6.7%
Finland	80,173	6.4%	76,283	5.7%
Czech Republic	70,098	5.6%	69,353	5.2%
South Korea	62,626	5.0%	85,079	6.4%
Other	76,954	6.0%	71,197	5.3%
	$ 1,258,858	100.0%	$ 1,336,561	100.0%

The geographical distribution of total property and equipment and net sales is as follows:

	As of November 30, 2021	As of August 31, 2021
China	$ 5,380,922	$ 5,110,071
Other	668,393	453,199
United States	6,145,359	6,258,188
Total property and equipment, net	$ 12,194,674	$ 11,821,458

	Three Months Ended	
	November 30, 2021	November 30, 2020
China	$ 4,057,853	$ 4,543,978
Brazil	1,296,217	713,853
India	4,476,984	1,200,468
Other	2,206,037	1,459,458
United States	6,156,322	4,861,355
Total net sales	$ 18,193,413	$ 12,779,112

Long-lived assets consist of property and equipment and intangible assets. These assets are periodically reviewed to assure the net realizable value from the estimated future production based on forecasted sales exceeds the carrying value of the assets.

Sales to the Company's joint ventures are included in the foregoing segment and geographic information; however, sales by the Company's joint ventures to other parties are not included. The foregoing segment and geographic information represents only sales recognized directly by the Company and sold in that geographic territory.

All joint venture operations, including equity in income, fees for services and related dividends, are primarily related to ZERUST® products and services.

14. COMMITMENTS AND CONTINGENCIES

Annual Bonus Plan

On August 26, 2021, the Compensation Committee of the Board of Directors of the Company approved the material terms of an annual bonus plan for the Company's executive officers as well as certain officers and employees for the fiscal year ending August 31, 2022. For fiscal 2022, as in past years, the total amount available under the bonus plan for all plan participants, including executive officers, is dependent upon the Company's earnings before interest, taxes, and other income (EBITOI), as adjusted to take into account amounts to be paid under the bonus plan and certain other adjustments (Adjusted EBITOI). Each plan participant's percentage of the overall bonus pool is based upon the number of plan participants, the individual's annual base salary, and the individual's position and level of responsibility within the Company. In the case of each of the Company's executive officer participants, 75% of the amount of their individual bonus payout will be determined based upon the Company's actual EBITOI for fiscal 2022 compared to a pre-established target EBITOI for fiscal 2022, and 25% of the payout will be determined based upon such executive officer's achievement of certain pre-established individual performance objectives. The payment of bonuses under the plan is discretionary, and bonuses may be paid to executive officer participants in both cash and shares of the Company's common stock, the exact amount and percentages of which are determined by the Company's Board of Directors, upon recommendation of the Compensation Committee, after the completion of the Company's consolidated financial statements for fiscal 2022. There was $483,334 recognized for management bonuses for the three months ended November 30, 2021 compared to $516,667 accrued for management bonuses for the three months ended November 30, 2020.

Concentrations

Two joint ventures (consisting of the Company's joint ventures in the Korea and Japan) accounted for 42.4% of the Company's trade joint venture receivables as of November 30, 2021, and three joint ventures (consisting of the Company's joint ventures in South Korea, USA and India) accounted for 55.6% of the Company's trade joint venture receivables as of November 30, 2020.

Legal Matters

From time to time, the Company is subject to various other claims and legal actions in the ordinary course of its business. The Company records a liability in its consolidated financial statements for costs related to claims, including future legal costs, settlements and judgments, where the Company has assessed that a loss is probable, and an amount could be reasonably estimated. If the reasonable estimate of a probable loss is a range, the Company records the most probable estimate of the loss or the minimum amount when no amount within the range is a better estimate than any other amount. The Company discloses a contingent liability even if the liability is not probable or the amount is not estimable, or both, if there is a reasonable possibility that material loss may have been incurred. In the opinion of management, as of November 30, 2021, the amount of liability, if any, with respect to these matters, individually or in the aggregate, will not materially affect the Company's consolidated results of operations, financial position or cash flows.

15. FAIR VALUE MEASUREMENTS

Assets and liabilities that are measured at fair value on a recurring basis primarily relate to marketable equity securities. These items are marked-to-market at each reporting period, and the Company estimates that market value approximates costs.

The following tables provide information by level for assets and liabilities that are measured at fair value on a recurring basis:

		Fair Value Measurements Using Inputs Considered as		
	Fair value as of November 30, 2021	**Level 1**	**Level 2**	**Level 3**
Available for sale securities	$ 4,634	$ 4,634	$ —	$ —

		Fair Value Measurements Using Inputs Considered as		
	Fair value as of August 31, 2021	**Level 1**	**Level 2**	**Level 3**
Available for sale securities	$ 4,634	$ 4,634	$ —	$ —

There were no transfers between Level 1, Level 2, or Level 3 during the three months ended November 30, 2021 or 2020.

16. SUPPLEMENTAL CASH FLOW INFORMATION

Supplemental disclosures of cash flow information consisted of:

	Three Months Ended	
	November 30, 2021	November 30, 2020
Cash paid for interest	$ 2,891	$ 2,368

17. INCOME TAXES

Income tax expense for the three months ended November 30, 2021 was $504,380 compared to $378,590 for the same prior year period. The expense was largely due to foreign operations. The Company has federal and state tax credit carry forwards, net operating loss carry forwards and foreign tax carry forwards. The Company has recorded a full valuation allowance against the U.S. deferred tax assets as of November 30, 2021 and August 31, 2021.

18. SUBSEQUENT EVENT

On January 4, 2022, the Company and PNC Bank entered into an Amended and Restated Revolving Line of Credit Note, which extended the maturity date to January 7, 2023 and revised the rate at which amounts outstanding under the line of credit bear interest to equal a per annum rate equal to the daily Bloomberg Short-Term Bank Yield Index plus 250 basis points (2.50%). Additionally, beginning February 23, 2022 and through January 7, 2023, the line of credit will be decreased from $5,000,000 to $3,000,000. The other material terms of the line of credit were not affected by this amendment.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Management's Discussion and Analysis provides material historical and prospective disclosures intended to enable investors and other users to assess NTIC's financial condition and results of operations. Statements that are not historical are forward-looking and involve risks and uncertainties discussed under the heading "*Part I. Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations—Forward-Looking Statements*" in this report and under "*Part 1. Item 1A. Risk Factors*" in our annual report on Form 10-K for the fiscal year ended August 31, 2021. The following discussion of the results of the operations and financial condition of NTIC should be read in conjunction with NTIC's consolidated financial statements and the related notes thereto included under the heading "*Part I. Item 1. Financial Statements*."

Business Overview

NTIC develops and markets proprietary, environmentally-beneficial products and services in over 65 countries either directly or via a network of subsidiaries, joint ventures, independent distributors, and agents. NTIC's primary business is corrosion prevention marketed mainly under the ZERUST® brand. NTIC has been selling its proprietary ZERUST® products and services to the automotive, electronics, electrical, mechanical, military, and retail consumer markets for over 45 years and, in recent years, has targeted and expanded into the oil and gas industry. NTIC also markets and sells a portfolio of bio-based and certified compostable (fully biodegradable) polymer resin compounds and finished products under the Natur-Tec® brand. These products are intended to reduce NTIC's customers' carbon footprint and provide environmentally sound waste disposal options.

NTIC's ZERUST® rust and corrosion inhibiting products include plastic and paper packaging, liquids, coatings, rust removers, cleaners, and diffusers as well as engineered solutions designed specifically for the oil and gas industry. NTIC also offers worldwide, on-site, technical consulting for rust and corrosion prevention issues. NTIC's technical service consultants work directly with the end users of NTIC's ZERUST® rust and corrosion inhibiting products to analyze their specific needs and develop systems to meet their performance requirements. In North America, NTIC sells its ZERUST® corrosion prevention solutions through a network of independent distributors and agents supported by a direct sales force.

Internationally, NTIC sells its ZERUST® corrosion prevention solutions through its wholly-owned subsidiary in China, NTIC (Shanghai) Co., Ltd. (NTIC China), starting September 1, 2021 its wholly-owned subsidiary in India, Harita-NTI Ltd. (Zerust India), its majority-owned joint venture holding company for NTIC's joint venture investments in the Association of Southeast Asian Nations (ASEAN) region, NTI Asean LLC (NTI Asean), certain majority-owned and wholly-owned subsidiaries, and joint venture arrangements in North America, Europe, and Asia. NTIC also sells products directly to its European joint venture partners through its wholly-owned subsidiary in Germany, NTIC Europe GmbH (NTI Europe).

One of NTIC's strategic initiatives is to expand into and penetrate other markets for its ZERUST® corrosion prevention technologies. Consequently, for the past several years, NTIC has focused significant sales and marketing efforts on the oil and gas industry, as the infrastructure that supports that industry is typically constructed using metals that are highly susceptible to corrosion. NTIC believes that its ZERUST® corrosion prevention solutions will minimize maintenance downtime on critical oil and gas industry infrastructure, extend the life of such infrastructure, and reduce the risk of environmental pollution due to leaks caused by corrosion.

NTIC markets and sells its ZERUST® rust and corrosion prevention solutions to customers in the oil and gas industry across several countries either directly, through its subsidiaries, or through its joint venture partners and other strategic partners. The sale of ZERUST® corrosion prevention solutions to customers in the oil and gas industry typically involves long sales cycles, often including multi-year trial periods with each customer and a slow integration process thereafter.

Natur-Tec® bio-based and compostable plastics are manufactured using NTIC's patented and/or proprietary technologies and are intended to replace conventional petroleum-based plastics. The Natur-Tec® biopolymer resin compound portfolio includes formulations that have been optimized for a variety of applications, including blown-film extrusion, extrusion coating, injection molding, and engineered plastics. These resin compounds are certified to be fully biodegradable in a composting environment and are currently being used to produce finished products, including can liners, shopping and grocery bags, lawn and leaf bags, branded apparel packaging bags and accessories, and various foodservice items, such as disposable cutlery, drinking straws, food-handling gloves, and coated paper products. In North America, NTIC markets its Natur-Tec® resin compounds and finished products primarily through a network of regional and national distributors as well as independent agents. NTIC continues to see significant opportunities for finished bioplastic products and, therefore, continues to strengthen and expand its North American distribution network for finished Natur-Tec® bioplastic products.

Internationally, NTIC sells its Natur-Tec® resin compounds and finished products both directly and through its wholly-owned subsidiary in China and majority-owned subsidiaries in India and Sri Lanka, and through distributors and certain joint ventures.

Recent Acquisition of Zerust India

On September 21, 2021, NTIC announced that it acquired the remaining 50% ownership interest in its Indian joint venture, Zerust India, for $6.25 million in cash, effective as of September 1, 2021. Prior to September 1, 2021, NTIC owned 50% of the outstanding capital stock of Zerust India. NTIC had historically accounted for this investment under the equity method of accounting.

The purchase price of $6.25 million was funded with cash on hand and borrowings under the Company's revolving line of credit, which was increased in connection with the transaction to $5.0 million.

Because NTIC increased its ownership interest in Zerust India to 100%, the acquisition of Zerust India has been accounted for in accordance with Accounting Standards Codification (ASC) 805, Business Combinations, by using the acquisition method of accounting. Effective September 1, 2021, Zerust India is now a consolidated subsidiary within NTIC's financial statements.

Net sales and net income related to Zerust India since the date of acquisition totaled $2,452,812 and $292,528, respectively. The transaction costs associated with the acquisition were approximately $50,000 and are recorded in general and administrative expense as incurred during the three months ended November 30, 2021.

Authoritative guidance on accounting for business combinations requires that an acquirer re-measure its previously held equity interest in the acquisition at its acquisition date fair value and recognize the resulting gain or loss in earnings. As such, since NTIC acquired the remaining 50% ownership interest of Zerust India effective September 1, 2021, NTIC recognized a gain of $3,951,550 during the three months ended November 30, 2021. This gain is included in "Remeasurement gain on acquisition of equity method investee" on NTIC's consolidated statements of operations.

As a result of the acquisition of Zerust India, NTIC's revenues and operating expenses increased and its equity in income from joint ventures decreased during the three months ended November 30, 2021 as compared to the three months ended November 30, 2020 and it is anticipated that the acquisition will continue to have these effects on NTIC's financial results during the remainder of fiscal 2022.

NTIC's Subsidiaries and Joint Venture Network

NTIC has ownership interests in 10 operating subsidiaries in North America, South America, Europe and Asia. The following table sets forth a list of NTIC's operating subsidiaries as of November 30, 2021, the country in which the subsidiary is organized and NTIC's ownership percentage in each subsidiary:

Subsidiary Name	Country	NTIC Percent (%) Ownership
NTIC (Shanghai) Co., Ltd	China	100%
NTI Asean LLC	United States	60%
Zerust Prevenção de Corrosão S.A.	Brazil	85%
ZERUST-EXCOR MEXICO, S. de R.L. de C.V	Mexico	100%
Harita-NTI Limited	India	100%
Natur-Tec India Private Limited	India	75%
Natur Tec Lanka (Pvt) Ltd	Sri Lanka(1)	75%
NTIC Europe GmbH	Germany	100%
Zerust Singapore Pte Ltd	Singapore(2)	60%
Zerust Vietnam Co. Ltd	Vietnam(2)	60%

(1) Natur Tec Lanka (Pvt) Ltd. is 100% owned by Natur-Tec India Private Limited and, therefore, indirectly owned by NTIC.
(2) Zerust Singapore Pte Ltd and Zerust Vietnam Co. Ltd are 100% owned by NTI Asean LLC and, therefore, indirectly owned by NTIC.

The results of these subsidiaries are fully consolidated in NTIC's consolidated financial statements, including Zerust India, which has been consolidated since September 1, 2021.

NTIC participates in 17 active joint venture arrangements in North America, Europe and Asia. Each of these joint ventures generally manufactures and markets products in the geographic territory to which it is assigned. While most of NTIC's joint ventures exclusively sell rust and corrosion inhibiting products, some of the joint ventures also sell NTIC's Natur-Tec® resin compounds. NTIC has historically funded its investments in joint ventures with cash generated from operations.

The following table sets forth a list of NTIC's operating joint ventures as of November 30, 2021, the country in which the joint venture is organized and NTIC's ownership percentage in each joint venture:

Joint Venture Name	Country	NTIC Percent (%) Ownership
TAIYONIC LTD.	Japan	50%
ACOBAL SAS	France	50%
EXCOR KORROSIONSSCHUTZ – TECHNOLOGIEN UND PRODUKTE GMBH	Germany	50%
ZERUST AB	Sweden	50%
MOSTNIC-ZERUST	Russia	50%
ZERUST OY	Finland	50%
ZERUST (U.K.) LTD.	United Kingdom	50%
EXCOR-ZERUST S.R.O.	Czech Republic	50%
EXCOR SP. Z.O.O.	Poland	50%
ZERUST A.Ş.	Turkey	50%
ZERUST CONSUMER PRODUCTS, LLC	United States	50%
ZERUST – DNEPR	Ukraine	50%
KOREA ZERUST CO., LTD.	South Korea (1)	30%
ZERUST-NIC (TAIWAN) CORP.	Taiwan (1)	30%
PT. CHEMINDO – NTIA	Indonesia (1)	30%
ZERUST SPECIALTY TECH CO. LTD.	Thailand (1)	30%
CHONG WAH-NTIA SDN. BHD.	Malaysia (1)	30%

(1) Indirect ownership interest through NTI Asean.

NTIC receives funds from its joint ventures as fees received for services that NTIC provides to its joint ventures and as dividend distributions. The fees for services provided to joint ventures are determined based on either a flat fee or a percentage of sales depending on local laws and tax regulations. With respect to NTIC's joint venture in Germany (EXCOR), NTIC recognizes an agreed upon quarterly fee for services. NTIC recognizes equity income from each joint venture based on the overall profitability of the joint venture. Such profitability is subject to variability from quarter to quarter, which, in turn, subjects NTIC's earnings to variability from quarter to quarter. The profits of each joint venture are shared by the respective joint venture owners in accordance with their respective ownership percentages. NTIC typically directly or indirectly owns 50% or less of each of its joint venture entities and, thus, does not control the decisions of these entities regarding whether dividends are paid and, if so, what amount is paid in a given year. The payment of a dividend by an entity is determined by a joint vote of the owners and is not at the sole discretion of NTIC.

NTIC accounts for the investments and financial results of its joint ventures in its financial statements utilizing the equity method of accounting.

NTIC considers EXCOR to be individually significant to NTIC's consolidated assets and income as of November 30, 2021. Therefore, NTIC provides certain additional information regarding EXCOR in the notes to NTIC's consolidated financial statements and in this section of this report.

Impact of the COVID-19 Pandemic

In March 2020, the World Health Organization declared the novel coronavirus (COVID-19) outbreak a global pandemic. The COVID-19 pandemic has negatively impacted the global economy, disrupted global supply chains and shipping, created significant volatility and disruption in financial markets and has resulted in an economic recession. The outbreak and continuing rapid spread of COVID-19 has resulted in a substantial curtailment of business activities worldwide and is causing weakened economic conditions, both in the United States and abroad.

As part of efforts to contain the spread of COVID-19, federal, state, local and foreign governments imposed various restrictions on the conduct of business and travel, some of which remain in place in whole or in part and some of which have been or may be reinstated. Government restrictions, such as stay-at-home orders, quarantines and worker absenteeism as a result of COVID-19, led to a significant number of business closures and slowdowns. These business closures and slowdowns adversely impacted and may continue to adversely impact NTIC directly and caused some of NTIC's customers and suppliers to operate at a fraction of their capacities or wholly lock down, which disrupted and may continue to disrupt NTIC's sales and production.

As the events surrounding the COVID-19 pandemic unfolded, NTIC's primary focus was, and continues to be, the health, safety and wellbeing of its employees, customers and suppliers. In order to continue its operations, as permitted by respective state, local and foreign governments, NTIC has adopted numerous safety measures in accordance with U.S. Centers for Disease Control and Prevention, World Health Organization, and federal, state, local and foreign guidance in order to protect its employees, customers and suppliers. These safety measures include, but are not limited to, adhering to social distancing protocols, enabling the majority of its employees to work from home, suspending non-essential travel, disinfecting facilities and workspaces extensively and frequently, suspending all non-essential visitors and requiring employees who must be present at NTIC's facilities to wear face coverings. NTIC expects to continue such safety measures for the foreseeable future and may take further actions, or adapt these existing policies, as government authorities may require or recommend or as it may determine to be in the best interests of its employees, customers and suppliers.

NTIC has been balancing its safety-focused approach with the needs of its customers. Government mandated measures resulting in the substantial curtailment of business activities generally have excluded certain essential businesses and services, including certain manufacturing. With the exception of the temporary closures of NTIC's facilities in China and India during the COVID-19 pandemic in 2020 and again sporadically during 2021, NTIC's manufacturing activities are generally considered part of the "critical sector" with respect to state and local government orders. This has allowed NTIC to continue to receive orders and provide uninterrupted order fulfillment to its customers. However, its facilities have been operating at a reduced capacity in order to abide by local government requirements and recommendations, such as social distancing practices, and in response to reduced demand. During the first quarter of fiscal 2022, certain of NTIC's facilities were impacted by reduced levels of production, manufacturing inefficiencies due to the reconfiguration of certain of its manufacturing processes in order to implement social distancing protocols and reduced demand. NTIC has engaged and continues to engage in communications with its suppliers in an attempt to identify and mitigate supply chain risks and shipping delays and proactively manage inventory levels in order to align production with demand. While domestic and international governmental measures may be modified or extended, NTIC currently expects that its global facilities will remain operational, although operating at reduced production capacity at certain of its facilities. However, such expectation is dependent upon future governmental actions and demand for NTIC's products, the stability of its global supply chain and the ability of carriers to transport supplies to its facilities and products to its customers.

As a result of the global economic slowdown caused by the COVID-19 pandemic, NTIC experienced softened demand in various regions and markets during the three months ended November 30, 2021, which had an adverse effect on NTIC's operating results and financial condition. NTIC expects this softness in sales to continue through at least the second quarter of fiscal 2022. In addition, NTIC has experienced supply shortages and price increases on raw materials and increased labor costs, which have adversely affected its margins. NTIC has also experienced increased shipping costs and shipping delays as a result of freight container shortages. These issues have persisted into second quarter of fiscal 2022 and are expected to continue to persist throughout fiscal 2022. Due to the international reach of COVID-19, NTIC's international joint ventures have also been adversely impacted. It is not possible to predict how long the pandemic will last or the time that it will take for economic activity to return to prior levels for all business units.

Any of these events could materially adversely affect NTIC's business, operating results and financial condition.

Worldwide Supply Chain Disruptions

Worldwide supply chain disruptions, which were initially brought about by the impact of the COVID-19 pandemic, have persisted despite the recovery in the global economy and financial markets. These issues have continued into the second quarter of fiscal 2022 and are expected to continue throughout fiscal 2022. NTIC has experienced longer lead times for raw materials, has been forced to find new suppliers of certain raw materials, and has experienced raw material cost increases compared to prior fiscal quarters. Additionally, NTIC has experienced significantly longer shipping times and significant price increases per shipping container compared to prior fiscal quarters due to ocean freight capacity issues resulting from increased demand for shipping and reduced capacity and equipment. These and other issues resulting from worldwide supply chain disruptions are expected to continue throughout fiscal 2022 and could continue to have a material adverse effect on NTIC's business, operating results and financial condition. The precise financial impact and duration, however, cannot be reasonably estimated at this time.

Financial Overview

NTIC's management, including its chief executive officer, who is NTIC's chief operating decision maker, reports and manages NTIC's operations in two reportable business segments based on products sold, customer base and distribution center: ZERUST® products and services and Natur-Tec® products.

Highlights of our second quarter of fiscal 2022 financial results include:

- NTIC's consolidated net sales increased 42.4% during the three months ended November 30, 2021 compared to the three months ended November 30, 2020. NTIC's consolidated net sales for the three months ended November 30, 2021 were positively affected by incremental sales as a result of the Zerust India acquisition and to a lesser extent increased demand, partially offset by softened demand in certain regions and markets due to the COVID-19 pandemic. NTIC expects this softness in sales as a result of the pandemic to continue through at least the second quarter of fiscal 2022.

- During the three months ended November 30, 2021, 79.3% of NTIC's consolidated net sales were derived from sales of ZERUST® products and services, which increased 41.1% to $14,423,785 compared to $10,220,551 for the three months ended November 30, 2020. This increase was due to incremental sales as a result of the Zerust India acquisition and increased sales to new and existing customers due to increased global demand.. NTIC's consolidated net sales for the three months ended November 30, 2021 included $971,816 of sales made to customers in the oil and gas industry compared to $562,693 for the three months ended November 30, 2020.

- Net sales of Natur-Tec® products increased 47.3% during the three months ended November 30, 2021 compared to the three months ended November 30, 2020 primarily due to an increase in finished product sales in North America and at NTIC’s majority-owned subsidiary in India, Natur-Tec India Private Limited.

- Cost of goods sold as a percentage of net sales increased to 68.7% during the three months ended November 30, 2021, compared to 65.1% during the three months ended November 30, 2020 primarily as a result of price increases on raw materials used in NTIC’s products, as well as increased labor costs.

- NTIC’s equity in income from joint ventures decreased 24.7% to $1,374,749 during the three months ended November 30, 2021 compared to $1,825,712 during the three months ended November 30, 2020. This decrease was primarily due to the fact that Zerust India is now a consolidated subsidiary within NTIC’s financial statements and to a lesser extent an increase in operating expenses and a decrease in gross margins at the joint ventures.

- Net sales at the joint ventures increased 0.9% to $27,022,995 during the three months ended November 30, 2021, compared to $26,777,343 for the three months ended November 30, 2020. The increase in the net sales of NTIC’s joint ventures was due primarily to increased sales to existing customers as a result of increased global demand for existing products, partially offset by a decrease in net sales at the joint ventures as a result of the Zerust India acquisition and its sales being included in NTIC’s net sales.

- NTIC’s total operating expenses increased 19.6% to $7,069,926 during the three months ended November 30, 2021 compared to $5,911,487 for the three months ended November 30, 2020. This increase was primarily due to $558,337 in incremental expenses due to the Zerust India acquisition and increased personnel, travel and research and development expenses.

- Since NTIC acquired the remaining 50% ownership interest of Zerust India effective September 1, 2021, NTIC recognized a gain of $3,951,550 during the three months ended November 30, 2021, which is included in “Remeasurement gain on acquisition of equity method investee” on NTIC’s consolidated statements of operations.

- NTIC incurred net income attributable to NTIC of $4,493,759, or $0.46 per diluted common share, for the three months ended November 30, 2021 compared to $1,262,399, or $0.13 per diluted common share, for the three months ended November 30, 2020. Of this increase, $3,951,550, was due to the gain from the Zerust India acquisition.

Results of Operations

The following table sets forth NTIC's results of operations for the three months ended November 30, 2021 and 2020.

	Three Months Ended					
	November 30, 2021	% of Net Sales	November 30, 2020	% of Net Sales	$ Change	% Change
Net sales, excluding joint ventures	$ 17,352,974	95.4%	$ 12,198,808	95.5%	5,154,166	42.3%
Net sales, to joint ventures	840,439	4.6%	580,304	4.5%	260,135	44.8%
Cost of goods sold	12,490,483	68.7%	8,313,321	65.1%	4,177,162	50.2%
Equity in income from joint ventures	1,374,749	n/a	1,825,712	n/a	(450,963)	(24.7)%
Fees for services provided to joint ventures	1,258,858	n/a	1,336,561	n/a	(77,703)	(5.8)%
Selling expenses	3,237,758	17.8%	2,741,768	21.5%	495,990	18.1%
General and administrative expenses	2,596,347	14.3%	2,093,982	16.4%	502,365	24.0%
Research and development expenses	1,235,821	6.8%	1,075,737	8.4%	160,084	14.9%

Net Sales. NTIC's consolidated net sales increased 42.4% to $18,193,413 during the three months ended November 30, 2021 compared to the three months ended November 30, 2020. NTIC's consolidated net sales to unaffiliated customers excluding NTIC's joint ventures increased 42.3% to $17,352,974 during the three months ended November 30, 2021 compared to the same period in fiscal 2021. These increases were primarily a result of $2,452,812 in incremental sales as a result of the Zerust India acquisition and increased demand, partially offset by softened demand in certain regions and markets due to the COVID-19 pandemic. NTIC expects this softness in sales as a result of the pandemic to continue through at least the second quarter of fiscal 2022.

The following table sets forth NTIC's net sales by product segment for the three months ended November 30, 2021 and 2020 by segment:

	Three Months Ended			
	November 30, 2021	November 30, 2020	$ Change	% Change
Total ZERUST® sales	$ 14,423,785	$ 10,220,551	$ 4,203,234	41.1%
Total Natur-Tec® sales	3,769,628	2,558,561	1,211,067	47.3%
Total net sales	$ 18,193,413	$ 12,779,112	$ 5,414,301	42.4%

During the three months ended November 30, 2021, 79.3% of NTIC's consolidated net sales were derived from sales of ZERUST® products and services, which increased 41.1% to $14,423,785 during the three months ended November 30, 2021 compared to $10,220,551 during the three months ended November 30, 2020. This increase was primarily a result of incremental sales as a result of the Zerust India acquisition and increased demand in North America.

The following table sets forth NTIC's net sales of ZERUST® products for the three months ended November 30, 2021 and 2020:

	Three Months Ended			
	November 30, 2021	November 30, 2020	$ Change	% Change
ZERUST® industrial net sales	$ 12,611,530	$ 9,077,554	$ 3,533,976	38.9%
ZERUST® joint venture net sales	840,439	580,304	260,135	44.8%
ZERUST® oil & gas net sales	971,816	562,693	409,123	72.7%
Total ZERUST® net sales	$ 14,423,785	$ 10,220,551	$ 4,203,234	41.1%

NTIC's total ZERUST® net sales increased during the three months ended November 30, 2021, compared to the prior fiscal year period, primarily due to overall increased demand for ZERUST® industrial products and services. Overall demand for ZERUST® products and services depends heavily on the overall health of the markets in which NTIC sells its products, including the automotive, oil and gas, agriculture, and mining markets in particular.

ZERUST® oil and gas net sales increased 72.7% during the three months ended November 30, 2021 compared to the same period last fiscal year primarily as a result of new opportunities with new customers compared to the prior fiscal year period. NTIC anticipates that its sales of ZERUST® products and services into the oil and gas industry will continue to remain subject to significant volatility from quarter to quarter as sales are recognized, specifically due to the volatility of oil prices. Demand for oil and gas products around the world depends primarily on market acceptance and the reach of NTIC's distribution network. Because of the typical size of individual orders and overall size of NTIC's net sales derived from sales of oil and gas products, the timing of one or more orders can materially affect NTIC's quarterly sales compared to prior fiscal year quarters.

During the three months ended November 30, 2021, 20.7% of NTIC's consolidated net sales were derived from sales of Natur-Tec® products, compared to 20.0% during the three months ended November 30, 2020. Sales of Natur-Tec® products increased 47.3% to $3,769,628 during the three months ended November 30, 2021 compared to $2,558,561 during the three months ended November 30, 2020 as a result of increased global demand. The COVID-19 pandemic has adversely impacted demand for Natur-Tec® products from across the apparel industry, as well as many large users of bioplastics, including college campuses, stadiums, arenas, restaurants, and corporate office complexes. NTIC still expects these customers will be some of the last businesses to fully re-open, and accordingly, anticipates that the COVID-19 pandemic will continue to adversely affect sales of Natur-Tec® products during the remainder of fiscal 2022.

Cost of Goods Sold. Cost of goods sold increased 50.2% for the three months ended November 30, 2021 compared to the three months ended November 30, 2020 primarily as a result of the increase in net sales, as described above. Cost of goods sold as a percentage of net sales increased to 68.7% for the three months ended November 30, 2021 compared to 65.1% for the three months ended November 30, 2020 primarily due to price increases on raw materials used in NTIC's products, as well as increased labor costs. Although NTIC intends to take certain actions to address inflationary pressures, it expects these inflationary pressures to persist into at least the second quarter of fiscal 2022 and does not expect to realize benefits from its actions until the second half of fiscal 2022.

Equity in Income from Joint Ventures. NTIC's equity in income from joint ventures decreased 24.7% to $1,374,749 during the three months ended November 30, 2021 compared to $1,825,712 during the three months ended November 30, 2020. This decrease was primarily due to the fact that Zerust India is now a consolidated subsidiary within NTIC's financial statements and to a lesser extent an increase in operating expenses and a decrease in gross margins at the joint ventures. NTIC's equity in income from joint ventures fluctuates based on net sales and profitability of the joint ventures during the respective periods. Of the total equity in income from joint ventures, NTIC had equity in income from joint ventures of $910,773 attributable to EXCOR during the three months ended November 30, 2021 compared to $1,010,537 during the three months ended November 30, 2020. NTIC had equity in income from all other joint ventures of $463,976 during the three months ended November 30, 2021, compared to $815,175 during the three months ended November 30, 2020.

Fees for Services Provided to Joint Ventures. NTIC recognized fee income for services provided to joint ventures of $1,258,858 during the three months ended November 30, 2021 compared to $1,336,561 during the three months ended November 30, 2020, representing a decrease of $77,703, or 5.8%. Fee income for services provided to joint ventures is traditionally a function of the sales made by NTIC's joint ventures; however, at various joint ventures, the fee income for services is a fixed amount that does not fluctuate with the increase in sales which was experienced by certain joint ventures during the three months ended November 30, 2021. Total net sales of NTIC's joint ventures increased 0.9% to $27,022,995 during the three months ended November 30, 2021 compared to $26,777,343 for the three months ended November 30, 2020 due to increased global demand, partially offset by Zerust India previously being included in the net sales of NTIC's joint ventures. Net sales of NTIC's joint ventures are not included in NTIC's product sales and are not included in NTIC's consolidated financial statements. Of the total fee income for services provided to joint ventures, fees of $218,430 were attributable to EXCOR during the three months ended November 30, 2021 compared to $228,826 attributable to EXCOR during the three months ended November 30, 2020.

Selling Expenses. NTIC's selling expenses increased 18.1% for the three months ended November 30, 2021 compared to the same period in fiscal 2021 due primarily to incremental expenses due to the Zerust India acquisition, as well as an increase in travel and personnel expenses compared to the expenses incurred during the three months ended November 30, 2020. Selling expenses as a percentage of net sales decreased to 17.8% for the three months ended November 30, 2021 from 21.5% during the three months ended November 30, 2020 primarily due to the fluctuations in net sales and selling expenses, as previously described.

General and Administrative Expenses. NTIC's general and administrative expenses increased 24.0% for the three months ended November 30, 2021 compared to the same period in fiscal 2021 due primarily to incremental expenses due to the Zerust India acquisition, as well as increased travel and personnel expenses compared to the expenses incurred during the three months ended November 30, 2020. As a percentage of net sales, general and administrative expenses decreased to 14.3% for the three months ended November 30, 2021 from 16.4% for the three months ended November 30, 2020 primarily due to the increase in net sales, as previously described.

Research and Development Expenses. NTIC's research and development expenses increased 14.9% for the three months ended November 30, 2021 compared to the same period in fiscal 2021 primarily due to incremental expenses due to the Zerust India acquisition, as well as increased personnel and development efforts.

Interest Income. NTIC's interest income decreased to $10,943 during the three months ended November 30, 2021 compared to $69,538 during the three months ended November 30, 2020 due primarily to changes in the invested cash balances.

Interest Expense. NTIC's interest expense increased to $2,891 during the three months ended November 30, 2021 compared to $2,368 during the three months ended November 30, 2020 due primarily to outstanding borrowings under the line of credit during the current fiscal year period.

Remeasurement Gain on Acquisition of Equity Method Investee. Authoritative guidance on accounting for business combinations requires that an acquirer re-measure its previously held equity interest in the acquisition at its acquisition date fair value and recognize the resulting gain or loss in earnings. As such, since NTIC acquired the remaining 50% ownership interest of Zerust India effective September 1, 2021, NTIC recognized a gain of $3,951,550 during the three months ended November 30, 2021. This gain is included in "Remeasurement gain on acquisition of equity method investee" on NTIC's consolidated statements of operations.

Income Before Income Tax Expense. NTIC had income before income tax expense of $5,226,213 for the three months ended November 30, 2021 compared to $1,783,747 for the three months ended November 30, 2020.

Income Tax Expense. Income tax expense was $504,380 during the three months ended November 30, 2021 compared to $378,590 during the three months ended November 30, 2020. Income tax expense was calculated based on management's estimate of NTIC's annual effective income tax rate.

NTIC considers the earnings of certain foreign joint ventures to be indefinitely invested outside the United States on the basis of estimates that NTIC's future domestic cash generation will be sufficient to meet future domestic cash needs. As a result, U.S. income and foreign withholding taxes have not been recognized on the cumulative undistributed earnings of $19,142,941 and $24,702,778 as of November 30, 2021 and August 31, 2021, respectively. To the extent undistributed earnings of NTIC's joint ventures are distributed in the future, they are not expected to result in any material additional income tax liability after the application of foreign tax credits.

Net Income Attributable to NTIC. Net income attributable to NTIC increased $3,231,360 to $4,493,759, or $0.46 per diluted common share, for the three months ended November 30, 2021 compared to $1,262,399, or $0.13 per diluted common share, for the three months ended November 30, 2020. This increase was primarily due to the remeasurement gain related to the acquisition of Zerust India of $3,951,550 during the three months ended November 30, 2021 included in "Remeasurement gain on acquisition of equity method investee" on NTIC's consolidated statements of operations, as well as increased gross profit, partially offset by a decrease in joint venture operations and increased operating expenses during the three months ended November 30, 2021. NTIC anticipates that its earnings for the remainder of fiscal 2022 will continue to be somewhat adversely affected by the COVID-19 pandemic. Additionally, NTIC anticipates that its quarterly net income will continue to remain subject to significant volatility primarily due to the financial performance of its subsidiaries and joint ventures, sales of its ZERUST® products and services into the oil and gas industry, and sales of its Natur-Tec® bioplastics products, which sales fluctuate more on a quarterly basis than the traditional ZERUST® business.

Other Comprehensive Income - Foreign Currency Translations Adjustment. The changes in the foreign currency translations adjustment were due to the fluctuation of the U.S. dollar compared to the Euro and other foreign currencies during the three months ended November 30, 2021 compared to the same period in fiscal 2021.

Liquidity and Capital Resources

Sources of Cash and Working Capital. NTIC's working capital, defined as current assets less current liabilities, was $25,875,362 as of November 30, 2021, including $8,047,565 in cash and cash equivalents and $4,634 in available for sale securities, compared to $25,230,893 as of August 31, 2021, including $7,680,641 in cash and cash equivalents and $4,634 in available for sale securities.

As of November 30, 2021, NTIC has a revolving line of credit with PNC Bank of $5.0 million, which was increased from $3.0 million effective as of August 31, 2021. $2,500,000 was outstanding under the line of credit as of November 30, 2021. Outstanding advances under the line of credit bear interest at the daily BSBY rate plus 250 basis points (2.50%). The revolving line of credit matures on February 22, 2022. The line of credit is governed under an amended and restated loan agreement. The loan agreement contains standard covenants, including affirmative financial covenants, such as the maintenance of a minimum fixed charge coverage ratio, and negative covenants, which, among other things, limit the incurrence of additional indebtedness, loans and equity investments, disposition of assets, mergers and consolidations and other matters customarily restricted in such agreements. Under the loan agreement, NTIC is subject to a minimum fixed charge coverage ratio of 1.10:1.00. As of November 30, 2021, NTIC was in compliance with all debt covenants. As of November 30, 2021, NTIC did not have any letters of credit outstanding with respect to the letter of credit sub-facility available under the revolving line of credit with PNC Bank.

On January 4, 2022, NTIC and PNC Bank entered into an Amended and Restated Revolving Line of Credit Note, which extended the maturity date to January 7, 2023 and revised the rate at which amounts outstanding under the line of credit bear interest to equal a per annum rate equal to the daily Bloomberg Short-Term Bank Yield Index plus 250 basis points (2.50%). Additionally, beginning February 23, 2022 and through January 7, 2023, the line of credit will be decreased from $5.0 million to $3.0 million. The other material terms of the line of credit were not affected by this amendment.

NTIC believes that a combination of its existing cash and cash equivalents, available for sale securities, forecasted cash flows from future operations, anticipated distributions of earnings, anticipated fees to NTIC for services provided to its joint ventures, and funds available through existing or anticipated financing arrangements will be adequate to fund its existing operations, investments in new or existing joint ventures or subsidiaries, capital expenditures, debt repayments, cash dividends, and any stock repurchases for at least the next 12 months. During the remainder of fiscal 2022, NTIC expects to continue to invest directly and through its use of working capital in Zerust India, NTIC China, Zerust Mexico, NTI Europe, its joint ventures, research and development, marketing efforts, resources for the application of its corrosion prevention technology in the oil and gas industry, and its Natur-Tec® bio-plastics business, although the amounts of these various investments are not known at this time. In order to take advantage of such new product and market opportunities to expand its business and increase its revenues, NTIC may decide to finance such opportunities by borrowing under its revolving line of credit or raising additional financing through the issuance of debt or equity securities. There is no assurance that any financing transaction will be available on terms acceptable to NTIC or at all or that any financing transaction will not be dilutive to NTIC’s current stockholders.

NTIC traditionally has used the cash generated from its operations, distributions of earnings from joint ventures and fees for services provided to its joint ventures to fund NTIC’s new technology investments and capital contributions to new and existing subsidiaries and joint ventures. NTIC’s joint ventures traditionally have operated with little or no debt and have been self-financed with minimal initial capital investment and minimal additional capital investment from their respective owners. Therefore, NTIC believes there is limited exposure by NTIC’s joint ventures that could materially impact their respective operations and/or liquidity.

Uses of Cash and Cash Flows. Net cash provided by operating activities during the three months ended November 30, 2021 was $3,319,024, which resulted principally from NTIC’s net income, dividends received from joint ventures, deferred income tax, depreciation expense, and stock-based compensation, partially offset by the remeasurement gain on acquisition of equity method investee and equity in income from joint ventures. Net cash provided by operating activities during the three months ended November 30, 2020 was $1,601,120, which resulted principally from NTIC’s net income, dividends received from joint ventures, depreciation expense, and stock-based compensation, partially offset by equity in income from joint ventures.

NTIC’s cash flows from operations are impacted by significant changes in certain components of NTIC’s working capital, including inventory turnover and changes in receivables and payables. NTIC considers internal and external factors when assessing the use of its available working capital, specifically when determining inventory levels and credit terms of customers. Key internal factors include existing inventory levels, stock reorder points, customer forecasts and customer requested payment terms. Key external factors include the availability of primary raw materials and sub-contractor production lead times. NTIC’s typical contractual terms for trade receivables, excluding joint ventures, are traditionally 30 days and 90 days for trade receivables from its joint ventures. Before extending unsecured credit to customers, excluding NTIC’s joint ventures, NTIC reviews customers’ credit histories and will establish an allowance for uncollectible accounts based upon factors surrounding the credit risk of specific customers and other information. Accounts receivable over 30 days are considered past due for most customers. NTIC does not accrue interest on past due accounts receivable. If accounts receivables in excess of the provided allowance are determined uncollectible, they are charged to selling expense in the period that the determination is made. Accounts receivable are deemed uncollectible based on NTIC exhausting reasonable efforts to collect. NTIC’s typical contractual terms for receivables for services provided to its joint ventures are 90 days. NTIC records receivables for services provided to its joint ventures on an accrual basis, unless circumstances exist that make the collection of the balance uncertain, in which case the fee income will be recorded on a cash basis until there is consistency in payments. This determination is handled on a case-by-case basis.

NTIC experienced an increase in trade receivables and inventory as of November 30, 2021 compared to August 31, 2021. Trade receivables excluding joint ventures as of November 30, 2021 increased $1,978,321 compared to August 31, 2021, primarily related to an increase in sales.

Outstanding trade receivables, excluding joint ventures balances, as of November 30, 2021 remained comparable to an average of 69 days from balances outstanding from these customers as of August 31, 2021.

Outstanding trade receivables from joint ventures as of November 30, 2021 increased $166,438 compared to August 31, 2021 primarily due to the timing of payments. Outstanding balances from trade receivables from joint ventures decreased an average of 1 day from an average of 87 days from balances outstanding from these customers compared to August 31, 2021. The average days outstanding of trade receivables from joint ventures as of November 30, 2021 were primarily due to the receivables balances at NTIC's joint ventures in the United States, South Korea and Japan.

Outstanding receivables for services provided to joint ventures as of November 30, 2021 decreased $304,258 compared to August 31, 2021 and the average days to pay decreased an average of 1 day from an average of 88 days to an average of 87 days, compared to August 31, 2021.

Net cash used in investing activities for the three months ended November 30, 2021 was $5,429,590, which was primarily the result of the purchase of the remaining 50% ownership interest in Zerust India, purchases of property and equipment, and investments in patents. Net cash used in investing activities for the three months ended November 30, 2020 was $1,177,869, which was primarily the result of the purchase of available for sale securities, purchases of property and equipment, and investments in patents.

Net cash provided by financing activities for the three months ended November 30, 2021 was $1,834,611, which resulted from borrowings under the line of credit and proceeds from NTIC's employee stock purchase plan and the exercise of stock options, partially offset by dividends paid to shareholders and dividends received by non-controlling interests. Net cash provided by financing activities for the three months ended November 30, 2020 was $36,192, which resulted from proceeds from NTIC's employee stock purchase plan.

Share Repurchase Plan. On January 15, 2015, NTIC's Board of Directors authorized the repurchase of up to $3,000,000 in shares of NTIC common stock through open market purchases or unsolicited or solicited privately negotiated transactions. This program has no expiration date but may be terminated by NTIC's Board of Directors at any time. No repurchases occurred during the three months ended November 30, 2021. As of November 30, 2021, up to $2,640,548 in shares of NTIC common stock remained available for repurchase under NTIC's stock repurchase program.

Cash Dividends. On April 23, 2020, the Company announced the temporary suspension of its quarterly cash dividend pending clarity on the financial impact of COVID-19 on the Company. Therefore, the Company did not declare a cash dividend during the three months ended November 30, 2020. However, on January 15, 2021, the Company announced the reinstatement of its quarterly cash dividend. On October 20, 2021, the Company's Board of Directors declared a cash dividend of $0.07 per share of NTIC's common stock on, payable on November 17, 2021 to stockholders of record on November 3, 2021. The declaration of future dividends is not guaranteed and will be determined by NTIC's Board of Directors in light of conditions then existing, including NTIC's earnings, financial condition, cash requirements, restrictions in financing agreements, business conditions and other factors, including without limitation the effect of COVID-19 on NTIC's business, operating results and financial condition.

Capital Expenditures and Commitments. NTIC spent $315,390 on capital expenditures during the three months ended November 30, 2021, which related primarily to the purchase of new equipment and facility improvements. NTIC expects to spend an aggregate of approximately $2,200,000 to $2,500,000 on capital expenditures during fiscal 2022, which it expects will relate primarily to anticipated renovation and equipment costs.

Contractual Obligations

There has been no material change to NTIC's contractual obligations as provided in "*Part II. Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations—Contractual Obligations*," included in NTIC's annual report on Form 10-K for the fiscal year ended August 31, 2021.

Off-Balance Sheet Arrangements

NTIC does not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which are established for the purpose of facilitating off-balance sheet financial arrangements. As such, NTIC is not materially exposed to any financing, liquidity, market or credit risk that could arise if NTIC had engaged in such arrangements.

Inflation and Seasonality

Although inflation in the United States and abroad historically has had little effect on NTIC, inflationary pressures adversely affected NTIC's gross margins during the first quarter of fiscal 2022 and are expected to persist into at least the second quarter of fiscal 2022. Although NTIC's business historically has not been seasonal, NTIC believes there is some seasonality in its business. NTIC anticipates its net sales in the second fiscal quarter may be adversely affected by the long Chinese New Year, the North American holiday season and overall less corrosion taking place at lower winter temperatures worldwide.

Market Risk

NTIC is exposed to some market risk stemming from changes in foreign currency exchange rates, commodity prices and interest rates.

Because the functional currency of NTIC's foreign operations and investments in its foreign joint ventures is the applicable local currency, NTIC is exposed to foreign currency exchange rate risk arising from transactions in the normal course of business. NTIC's principal exchange rate exposure is with the Euro, the Japanese Yen, the Indian Rupee, the Chinese Renminbi, the South Korean Won, and the English Pound against the U.S. Dollar. NTIC's fees for services provided to joint ventures and dividend distributions from these foreign entities are paid in foreign currencies and, thus, fluctuations in foreign currency exchange rates could result in declines in NTIC's reported net income. Since NTIC's investments in its joint ventures are accounted for using the equity method, any changes in foreign currency exchange rates would be reflected as a foreign currency translation adjustment and would not change NTIC's equity in income from joint ventures reflected in its consolidated statements of operations. NTIC does not hedge against its foreign currency exchange rate risk.

Some raw materials used in NTIC's products are exposed to commodity price changes. The primary commodity price exposures are with a variety of plastic resins.

Any outstanding advances under NTIC's revolving line of credit with PNC Bank bear interest at an annual rate based on daily LIBOR plus 2.50%. As of November 30, 2021, NTIC had borrowings of $2,500,000 under the line of credit that existed as of that date.

Critical Accounting Policies and Estimates

There have been no material changes to NTIC's critical accounting policies and estimates from the information provided in "*Part II. Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies*," included in NTIC's annual report on Form 10-K for the fiscal year ended August 31, 2021, other than the new critical accounting policy below in light of NTIC's Zerust India acquisition.

Business Combinations

When applicable, NTIC accounts for the acquisition of a business in accordance with the accounting standards codification guidance for business combinations, whereby the total consideration transferred is allocated to the assets acquired and liabilities assumed, including amounts attributable to non-controlling interests, when applicable, based on their respective estimated fair values as of the date of acquisition. Goodwill represents the excess of consideration transferred over the estimated fair value of the net assets acquired in a business combination.

Assigning estimated fair values to the net assets acquired requires the use of significant estimates, judgments, inputs, and assumptions regarding the fair value of intangible assets that are separately identifiable from goodwill, inventory, and property, plant, and equipment. While the ultimate responsibility for determining estimated fair values of the acquired net assets resides with management, for material acquisitions NTIC may retain the services of certified valuation specialists to assist with assigning estimated fair values to certain acquired assets and assumed liabilities, including intangible assets that are separately identifiable from goodwill, inventory, and property, plant, and equipment. Estimated fair values of acquired intangible assets that are separately identifiable from goodwill, inventory, and property, plant, and equipment are generally based on available historical information, future expectations, available market data, and assumptions determined to be reasonable but are inherently uncertain with respect to future events, including economic conditions, competition, technological obsolescence, the useful life of the acquired assets, and other factors. These significant estimates, judgments, inputs, and assumptions include, when applicable, the selection of an appropriate valuation method depending on the nature of the respective asset, such as the income approach, the market or sales comparison approach, or the cost approach; estimating future cash flows based on projected revenues and/or margins that NTIC expects to generate subsequent to the acquisition; applying an appropriate discount rate to estimate the present value of those projected cash flows NTIC expects to generate; selecting an appropriate terminal growth rate and/or royalty rate or estimating a customer attrition or technological obsolescence factor where necessary and appropriate given the nature of the respective asset; assigning an appropriate contributory asset charge where needed; determining an appropriate useful life and the related depreciation or amortization method for the respective asset; and assessing the accuracy and completeness of other historical financial metrics of the acquiree used as standalone inputs or as the basis for determining estimated projected inputs such as margins, customer attrition, and costs to hold and sell product.

In determining the estimated fair value of intangible assets that are separately identifiable from goodwill, NTIC typically utilizes the income approach, which discounts the projected future cash flows using a discount rate that appropriately reflects the risks associated with the projected cash flows. Generally, NTIC estimates the fair value of acquired customer relationships using the relief from royalty method under the income approach, which is based on the hypothetical royalty stream that would be received if NTIC were to license the acquired trade name. For most other acquired intangible assets, NTIC estimates fair value using the excess earnings method under the income approach, which is typically applied when cash flows are not directly generated by the asset, but rather, by an operating group that includes the particular asset. In certain instances, particularly in relation to developed technology or patents, NTIC may utilize the cost approach depending on the nature of the respective intangible asset and the recency of the development or procurement of such technology. The useful lives and amortization methods for the acquired intangible assets that are separately identifiable from goodwill are generally determined based on the period of expected cash flows used to measure the fair value of the acquired intangible assets and the nature of the use of the respective acquired intangible asset, adjusted as appropriate for entity-specific factors including legal, regulatory, contractual, competitive, economic, and/or other factors such as customer attrition rates and product or order lifecycles that may limit the useful life of the respective acquired intangible asset. In determining the estimated fair value of acquired inventory, NTIC typically utilizes the cost approach for raw materials and the sales comparison approach for work in process, finished goods, and service parts. In determining the estimated fair value of acquired property, plant, and equipment, NTIC typically utilizes the sales comparison approach or the cost approach depending on the nature of the respective asset and the recency of the construction or procurement of such asset.

NTIC may refine the estimated fair values of assets acquired and liabilities assumed, if necessary, over a period not to exceed one year from the date of acquisition by taking into consideration new information that, if known as of the date of acquisition, would have affected the estimated fair values ascribed to the assets acquired and liabilities assumed. The judgments made in determining the estimated fair value assigned to assets acquired and liabilities assumed, as well as the estimated useful life and depreciation or amortization method of each asset, can materially impact the net earnings of the periods subsequent to an acquisition through depreciation and amortization, and in certain instances through impairment charges, if the asset becomes impaired in the future. During the measurement period, any purchase price allocation changes that impact the carrying value of goodwill will affect any measurement of goodwill impairment taken during the measurement period, if applicable. If necessary, purchase price allocation revisions that occur outside of the measurement period are recorded within cost of sales, selling expenses or general and administrative expenses within NTIC's consolidated statements of operations depending on the nature of the adjustment.

Recent Accounting Pronouncements

See Note 2 to NTIC's consolidated financial statements for a discussion of recent accounting pronouncements.

Forward-Looking Statements

This quarterly report on Form 10-Q contains not only historical information, but also forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements are subject to the safe harbor created by those sections. In addition, NTIC or others on NTIC's behalf may make forward-looking statements from time to time in oral presentations, including telephone conferences and/or web casts open to the public, in press releases or reports, on NTIC's Internet web site, or otherwise. All statements other than statements of historical facts included in this report or expressed by NTIC orally from time to time that address activities, events, or developments that NTIC expects, believes, or anticipates will or may occur in the future are forward-looking statements, including, in particular, the statements about NTIC's plans, objectives, strategies, and prospects regarding, among other things, NTIC's financial condition, results of operations and business, the anticipated effect of COVID-19 and its recent acquisition of Zerust India on NTIC's business, operating results and financial condition, the outcome of contingencies, such as legal proceedings. NTIC has identified some of these forward-looking statements in this report with words like "believe," "can," "may," "could," "would," "might," "forecast," "possible," "potential," "project," "will," "should," "expect," "intend," "plan," "predict," "anticipate," "estimate," "approximate," "outlook," or "continue" or the negative of these words or other words and terms of similar meaning. The use of future dates is also an indication of a forward-looking statement. Forward-looking statements may be contained in the notes to NTIC's consolidated financial statements and elsewhere in this report, including under the heading "*Management's Discussion and Analysis of Financial Condition and Results of Operations*."

Forward-looking statements are based on current expectations about future events affecting NTIC and are subject to uncertainties and factors that affect all businesses operating in a global market as well as matters specific to NTIC. These uncertainties and factors are difficult to predict, and many of them are beyond NTIC's control. The following are some of the uncertainties and factors known to us that could cause NTIC's actual results to differ materially from what NTIC has anticipated in its forward-looking statements:

- The effect of COVID-19 on NTIC's business, operating results and financial condition, including disruption to our customers, suppliers and subcontractors, as well as the global economy and financial markets;
- The effect of worldwide disruption in supply issues on NTIC's business, operating results and financial condition, which will likely continue throughout fiscal year 2022, regardless of the status of the COVID-19 pandemic;
- The effect of current worldwide economic conditions and any turmoil and disruption in the global credit and financial markets on NTIC's business;
- Variability in NTIC's sales of ZERUST® products and services to the oil and gas industry and Natur-Tec® products and NTIC's equity income of joint ventures, which variability in sales and equity in income from joint ventures, in turn, subject NTIC's earnings to quarterly fluctuations;
- Risks associated with NTIC's international operations and exposure to fluctuations in foreign currency exchange rates, import duties, taxes, and tariffs;
- The effect of the United Kingdom's process to exit the European Union on NTIC's operating results, including, in particular, future net sales of NTIC's European and other joint ventures;
- The effect of the health of the U.S. automotive industry on NTIC's business;
- NTIC's dependence on the success of its joint ventures and fees and dividend distributions that NTIC receives from them;
- Risks associated with NTIC's recent acquisition of the remaining 50% ownership interest in its Indian joint venture, Zerust India;
- NTIC's relationships with its joint ventures and its ability to maintain those relationships, especially in light of anticipated succession planning issues, and risks associated with possible future acquisitions of the remaining ownership interests of certain joint ventures;
- Fluctuations in the cost and availability of raw materials, including resins and other commodities, including supply chain disruptions and weather related impacts;
- The success of and risks associated with NTIC's emerging new businesses and products and services, including in particular NTIC's ability and the ability of NTIC's joint ventures to sell ZERUST® products and services to the oil and gas industry and Natur-Tec® products and the often lengthy and extensive sales process involved in selling such products and services;
- NTIC's ability to introduce new products and services that respond to changing market conditions and customer demand;
- Market acceptance of NTIC's existing and new products, especially in light of existing and new competitive products;
- Maturation of certain existing markets for NTIC's ZERUST® products and services and NTIC's ability to grow market share and succeed in penetrating other existing and new markets;

- Increased competition, especially with respect to NTIC's ZERUST® products and services, and the effect of such competition on NTIC's and its joint ventures' pricing, net sales, and margins;
- NTIC's reliance upon and its relationships with its distributors, independent sales representatives, and joint ventures;
- NTIC's reliance upon suppliers;
- Oil prices, which may affect sales of NTIC's ZERUST® products and services to the oil and gas industry;
- NTIC's operations in China, and the risks associated therewith;
- The costs and effects of complying with laws and regulations and changes in tax, fiscal, government, and other regulatory policies, including rules relating to environmental, health, and safety matters;
- Unforeseen product quality or other problems in the development, production, and usage of new and existing products;
- Unforeseen production expenses incurred in connection with new customers and new products;
- Loss of or changes in executive management or key employees;
- Ability of management to manage around unplanned events;
- Pending and future litigation;
- NTIC's reliance on its intellectual property rights and the absence of infringement of the intellectual property rights of others;
- NTIC's ability to maintain effective internal control over financial reporting, especially in light of its joint venture arrangements;
- Changes in applicable laws or regulations and NTIC's failure to comply with applicable laws, rules, and regulations;
- Changes in generally accepted accounting principles and the effect of new accounting pronouncements;
- Fluctuations in NTIC's effective tax rate;
- The effect of extreme weather conditions on NTIC's operating results; and
- NTIC's reliance upon its management information systems.

For more information regarding these and other uncertainties and factors that could cause NTIC's actual results to differ materially from what NTIC has anticipated in its forward-looking statements or otherwise could materially adversely affect its business, financial condition or operating results, see NTIC's annual report on Form 10-K for the fiscal year ended August 31, 2021 under the heading "*Part I. Item 1A. Risk Factors*."

All forward-looking statements included in this report are expressly qualified in their entirety by the foregoing cautionary statements. NTIC wishes to caution readers not to place undue reliance on any forward-looking statement that speaks only as of the date made and to recognize that forward-looking statements are predictions of future results, which may not occur as anticipated. Actual results could differ materially from those anticipated in the forward-looking statements and from historical results due to the uncertainties and factors described above and others that NTIC may consider immaterial or does not anticipate at this time. Although NTIC believes that the expectations reflected in its forward-looking statements are reasonable, NTIC does not know whether its expectations will prove correct. NTIC's expectations reflected in its forward-looking statements can be affected by inaccurate assumptions NTIC might make or by known or unknown uncertainties and factors, including those described above. The risks and uncertainties described above are not exclusive, and further information concerning NTIC and its business, including factors that potentially could materially affect its financial results or condition, may emerge from time to time. NTIC assumes no obligation to update, amend, or clarify forward-looking statements to reflect actual results or changes in factors or assumptions affecting such forward-looking statements. NTIC advises you, however, to consult any further disclosures NTIC makes on related subjects in its annual reports on Form 10-K, quarterly reports on Form 10-Q, and current reports on Form 8-K that NTIC files with or furnishes to the Securities and Exchange Commission.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

NTIC is exposed to some market risk stemming from changes in foreign currency exchange rates, commodity prices and interest rates.

Because the functional currency of NTIC's foreign operations and investments in its foreign joint ventures is the applicable local currency, NTIC is exposed to foreign currency exchange rate risk arising from transactions in the normal course of business. NTIC's principal exchange rate exposure is with the Euro, the Japanese Yen, the Indian Rupee, the Chinese Renminbi, the South Korean Won, and the English Pound against the U.S. Dollar. NTIC's fees for services provided to joint ventures and dividend distributions from these foreign entities are paid in foreign currencies, and, thus, fluctuations in foreign currency exchange rates could result in declines in NTIC's reported net income. Since NTIC's investments in its joint ventures are accounted for using the equity method, any changes in foreign currency exchange rates would be reflected as a foreign currency translation adjustment and would not change NTIC's equity in income from joint ventures reflected in its consolidated statements of operations. NTIC does not hedge against its foreign currency exchange rate risk.

Some raw materials used in NTIC's products are exposed to commodity price changes. The primary commodity price exposures are with a variety of plastic resins.

Any outstanding advances under NTIC's revolving line of credit with PNC Bank bear interest at an annual rate based on daily LIBOR plus 2.50%. As of November 30, 2021, NTIC had borrowings of $2,500,000 under the line of credit that existed as of that date.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

NTIC maintains disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) that are designed to provide reasonable assurance that information required to be disclosed by NTIC in the reports it files or submits under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to NTIC's management, including NTIC's principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. NTIC's management evaluated, with the participation of its Chief Executive Officer and its Chief Financial Officer, the effectiveness of the design and operation of NTIC's disclosure controls and procedures as of the end of the period covered in this report. Based on that evaluation, NTIC's Chief Executive Officer and Chief Financial Officer concluded that NTIC's disclosure controls and procedures were effective as of the end of such period to provide reasonable assurance that information required to be disclosed in the reports that NTIC files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to NTIC's management, including NTIC's Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There was no change in NTIC's internal control over financial reporting that occurred during the quarter ended November 30, 2021 that has materially affected or is reasonably likely to materially affect NTIC's internal control over financial reporting, other than changes implemented to begin integrating Zerust India's internal controls with NTIC's internal controls.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

See Note 14 to NTIC’s consolidated financial statements in *Part I. Item 1. Financial Statements* of this report.

ITEM 1A. RISK FACTORS

This Item 1A is inapplicable to NTIC as a smaller reporting company.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Recent Sales of Unregistered Equity Securities

During the three months ended November 30, 2021, NTIC did not issue any shares of its common stock or other equity securities of NTIC that were not registered under the Securities Act of 1933, as amended.

Issuer Purchases of Equity Securities

The following table shows NTIC’s first quarter of fiscal 2022 stock repurchase activity.

Period	Total Number of Shares (or Units) Purchased	Average Price Paid Per Share (or Unit)	Total Number of Shares (or Units) Purchased As Part of Publicly Announced Plans or Programs	Maximum Number of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs
September 1, 2021 through September 30, 2021	0	$0	0	(1)
October 1, 2021 through October 31, 2021	0	$0	0	(1)
November 1, 2021 through November 30, 2021	0	$0	0	(1)
Total	0	$0	0	(1)(2)

(1) On January 15, 2015, NTIC’s Board of Directors authorized the repurchase of up to $3,000,000 in shares of NTIC common stock through open market purchases or unsolicited or solicited privately negotiated transactions. This program has no expiration date but may be terminated by NTIC’s Board of Directors at any time.

(2) As of November 30, 2021, up to $2,640,548 in shares of NTIC common stock remained available for repurchase under NTIC’s stock repurchase program.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Subsequent to the Company's issuance of its first quarter fiscal 2022 earnings release on January 6, 2022, the Company revised its preliminary purchase price allocation that includes the fair values of the separately identifiable assets acquired and liabilities assumed as of September 1, 2021 related to the Company's acquisition of the remaining 50% ownership interest in its Indian joint venture, Harita-NTI Limited (Zerust India), for $6.25 million in cash. The result is a $913,000 increase in goodwill, a $774,000 increase in deferred tax liability and a $139,000 decrease in Intangible assets on the Company's consolidated balance sheet as of November 30, 2021 as included in this Quarterly Report on Form 10-Q as compared to the respective amounts reflected on the consolidated balance sheet as of November 30, 2021 included in the Company's first quarter fiscal 2022 earnings release.

ITEM 6. EXHIBITS

The following exhibits are being filed or furnished with this quarterly report on Form 10-Q:

Exhibit No.	Description
10.1	Amended and Restated Loan Agreement dated as of August 31, 2021 by and between Northern Technologies International Corporation and PNC Bank, National Association (incorporated by reference to Exhibit 10.1 to NTIC's Current Report on Form 8-K as filed with the Securities and Exchange Commission on September 22, 2021 (File No. 001-11038))
10.2	Amended and Restated Revolving Line of Credit Note dated as of August 31, 2021 issued by Northern Technologies International Corporation to PNC Bank, National Association (incorporated by reference to Exhibit 10.2 to NTIC's Current Report on Form 8-K as filed with the Securities and Exchange Commission on September 22, 2021 (File No. 001-11038))
31.1	Certification of President and Chief Executive Officer pursuant to SEC Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
31.2	Certification of Chief Financial Officer pursuant to SEC Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.1	Certification of President and Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith)
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith)
101	The following materials from NTIC's Quarterly Report on Form 10-Q for the fiscal quarter ended November 30, 2021, formatted in Inline XBRL (Extensible Business Reporting Language): (i) the unaudited Consolidated Balance Sheets, (ii) the unaudited Consolidated Statements of Operations, (iii) the unaudited Consolidated Statements of Comprehensive Income , (iv) the unaudited Consolidated Statements of Equity, (v) the unaudited Consolidated Statements of Cash Flows, and (vi) Notes to Consolidated Financial Statements (filed herewith)
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION

Date: January 12, 2022	/s/ Matthew C. Wolsfeld Matthew C. Wolsfeld, CPA Chief Financial Officer (Principal Financial and Accounting Officer and Duly Authorized to Sign on Behalf of the Registrant)

Exhibit 31.1

CERTIFICATION PURSUANT TO SECTION 302(a) OF THE SARBANES-OXLEY ACT OF 2002

I, G. Patrick Lynch, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Northern Technologies International Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: January 12, 2022

/s/ G. Patrick Lynch
G. Patrick Lynch
President and Chief Executive Officer
(principal executive officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO SECTION 302(a) OF THE SARBANES-OXLEY ACT OF 2002

I, Matthew C. Wolsfeld, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Northern Technologies International Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: January 12, 2022

/s/ Matthew C. Wolsfeld
Matthew C. Wolsfeld, CPA
Chief Financial Officer and Corporate Secretary
(principal financial officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Northern Technologies International Corporation (the “Company”) on Form 10-Q for the period ended November 30, 2021, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, G. Patrick Lynch, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge and belief:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ G. Patrick Lynch
G. Patrick. Lynch
President and Chief Executive Officer
(principal executive officer)

Circle Pines, Minnesota
January 12, 2022

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Northern Technologies International Corporation (the "Company") on Form 10-Q for the period ended November 30, 2021, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Matthew C. Wolsfeld, Chief Financial Officer and Corporate Secretary of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge and belief:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Matthew C. Wolsfeld
Matthew C. Wolsfeld, CPA
Chief Financial Officer and Corporate Secretary (principal financial officer)

Circle Pines, Minnesota
January 12, 2022