

**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 December 31, 2023

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 1-5828

CARPENTER TECHNOLOGY CORPORATION
(Exact name of Registrant as specified in its Charter)

Delaware
(State or other jurisdiction of incorporation or organization)

23-0458500
(I.R.S. Employer Identification No.)

**1735 Market Street, 15th Floor
Philadelphia, Pennsylvania**
(Address of principal executive offices)

19103
(Zip Code)

610-208-2000
(Registrant's telephone number, including area code)

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

<u>Common Stock, \$5 Par Value</u>	<u>CRS</u>	<u>New York Stock Exchange</u>
Title of each class	Trading Symbol	Name of each exchange on which registered

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	☐	(Do not check if a smaller reporting company)	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 ☒

The number of shares outstanding of the issuer's common stock as of January 22, 2024, was 49,412,387.

CARPENTER TECHNOLOGY CORPORATION
FORM 10-Q
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PART I - FINANCIAL INFORMATION
Item 1. Financial Statements

CARPENTER TECHNOLOGY CORPORATION
CONSOLIDATED BALANCE SHEETS
(Unaudited)

(\$ in millions, except share data)	December 31, 2023	June 30, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 15.7	\$ 44.5
Accounts receivable, net	508.4	531.3
Inventories	797.8	639.7
Other current assets	88.3	66.4
Total current assets	1,410.2	1,281.9
Property, plant, equipment and software, net	1,364.2	1,383.8
Goodwill	241.4	241.4
Other intangibles, net	25.4	28.7
Deferred income taxes	6.7	6.6
Other assets	111.3	111.5
Total assets	\$ 3,159.2	\$ 3,053.9
LIABILITIES		
Current liabilities:		
Short-term credit agreement borrowings	\$ 13.9	\$ —
Accounts payable	313.4	278.1
Accrued liabilities	158.4	181.3
Total current liabilities	485.7	459.4
Long-term debt	693.6	693.0
Accrued pension liabilities	191.2	190.1
Accrued postretirement benefits	47.2	45.8
Deferred income taxes	168.8	170.3
Other liabilities	98.9	99.2
Total liabilities	1,685.4	1,657.8
Contingencies and commitments (see Note 9)		
STOCKHOLDERS' EQUITY		
Common stock — authorized 100,000,000 shares; issued 56,634,411 shares at December 31, 2023 and 56,143,131 shares at June 30, 2023; outstanding 49,412,070 shares at December 31, 2023 and 48,635,740 shares at June 30, 2023	283.2	280.7
Capital in excess of par value	327.9	328.4
Reinvested earnings	1,294.8	1,228.0
Common stock in treasury (7,222,341 shares and 7,507,391 shares at December 31, 2023 and June 30, 2023, respectively), at cost	(289.7)	(298.0)
Accumulated other comprehensive loss	(142.4)	(143.0)
Total stockholders' equity	1,473.8	1,396.1
Total liabilities and stockholders' equity	\$ 3,159.2	\$ 3,053.9

See accompanying notes to consolidated financial statements.

CARPENTER TECHNOLOGY CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

(\$ in millions, except per share data)	Three Months Ended December 31,		Six Months Ended December 31,	
	2023	2022	2023	2022
Net sales	\$ 624.2	\$ 579.1	\$ 1,276.1	\$ 1,102.0
Cost of sales	501.6	509.1	1,029.4	977.2
Gross profit	122.6	70.0	246.7	124.8
Selling, general and administrative expenses	52.8	47.4	107.9	93.9
Operating income	69.8	22.6	138.8	30.9
Interest expense, net	13.0	13.0	25.7	25.6
Other expense, net	1.6	1.9	5.5	5.4
Income (loss) before income taxes	55.2	7.7	107.6	(0.1)
Income tax expense	12.5	1.5	21.0	0.5
Net income (loss)	\$ 42.7	\$ 6.2	\$ 86.6	\$ (0.6)
EARNINGS (LOSS) PER COMMON SHARE:				
Basic	\$ 0.86	\$ 0.13	\$ 1.75	\$ (0.02)
Diluted	\$ 0.85	\$ 0.13	\$ 1.73	\$ (0.02)
WEIGHTED AVERAGE COMMON SHARES OUTSTANDING:				
Basic	49.7	48.8	49.4	48.7
Diluted	50.2	49.0	50.0	48.7

See accompanying notes to consolidated financial statements.

CARPENTER TECHNOLOGY CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)

(\$ in millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2023	2022	2023	2022
Net income (loss)	\$ 42.7	\$ 6.2	\$ 86.6	\$ (0.6)
Other comprehensive income (loss), net of tax:				
Pension and postretirement benefits, net of tax of \$(0.3), \$(0.4), \$(0.6) and \$(0.8), respectively	0.8	1.1	1.6	2.1
Net (loss) gain on derivative instruments, net of tax of \$0.8, \$(2.1), \$1.2 and \$(0.4), respectively	(2.5)	6.5	(3.7)	1.2
Foreign currency translation	4.8	6.9	2.7	3.6
Total other comprehensive income, net of tax	3.1	14.5	0.6	6.9
Comprehensive income, net of tax	<u>\$ 45.8</u>	<u>\$ 20.7</u>	<u>\$ 87.2</u>	<u>\$ 6.3</u>

See accompanying notes to consolidated financial statements.

CARPENTER TECHNOLOGY CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

(\$ in millions)	Six Months Ended December 31,	
	2023	2022
OPERATING ACTIVITIES		
Net income (loss)	\$ 86.6	\$ (0.6)
Adjustments to reconcile net income (loss) to net cash provided from (used for) operating activities:		
Depreciation and amortization	66.7	64.8
Deferred income taxes	(1.0)	(0.9)
Net pension expense	11.8	9.9
Share-based compensation expense	8.5	7.1
Net loss on disposals of property, plant and equipment	1.2	0.6
Changes in working capital and other:		
Accounts receivable	23.9	(58.5)
Inventories	(157.5)	(226.7)
Other current assets	(25.4)	(4.1)
Accounts payable	37.8	62.1
Accrued liabilities	(26.8)	(12.1)
Pension plan contributions	(4.8)	—
Other postretirement plan contributions	(0.7)	(1.5)
Other, net	1.6	(4.6)
Net cash provided from (used for) operating activities	21.9	(164.5)
INVESTING ACTIVITIES		
Purchases of property, plant, equipment and software	(47.3)	(31.0)
Net cash used for investing activities	(47.3)	(31.0)
FINANCING ACTIVITIES		
Short-term credit agreement borrowings, net change	13.9	41.2
Credit agreement borrowings	46.5	60.1
Credit agreement repayments	(46.5)	(20.1)
Dividends paid	(19.8)	(19.7)
Proceeds from stock options exercised	19.4	—
Withholding tax payments on share-based compensation awards	(18.0)	(3.4)
Net cash (used for) provided from financing activities	(4.5)	58.1
Effect of exchange rate changes on cash and cash equivalents	1.1	3.2
DECREASE IN CASH AND CASH EQUIVALENTS	(28.8)	(134.2)
Cash and cash equivalents at beginning of year	44.5	154.2
Cash and cash equivalents at end of period	\$ 15.7	\$ 20.0
SUPPLEMENTAL CASH FLOW INFORMATION:		
Noncash investing activities: Purchase of property, plant, equipment and software	\$ 10.9	\$ 8.1

See accompanying notes to consolidated financial statements.

CARPENTER TECHNOLOGY CORPORATION
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
FOR THE THREE AND SIX MONTHS ENDED DECEMBER 31, 2023 AND 2022
(Unaudited)

(\$ in millions, except per share data)	Common Stock		Reinvested Earnings	Common Stock in Treasury	Accumulated Other Comprehensive (Loss) Income	Total Equity
	Par Value of \$5	Capital in Excess of Par Value				
Balances at September 30, 2023	\$ 282.6	\$ 320.4	\$ 1,262.0	\$ (290.2)	\$ (145.5)	\$ 1,429.3
Net income			42.7			42.7
Pension and postretirement benefits, net of tax					0.8	0.8
Net loss on derivative instruments, net of tax					(2.5)	(2.5)
Foreign currency translation					4.8	4.8
Cash dividends:						
Common @ \$0.20 per share			(9.9)			(9.9)
Share-based compensation plans	0.1	2.5		0.5		3.1
Stock options exercised	0.5	5.0				5.5
Balances at December 31, 2023	\$ 283.2	\$ 327.9	\$ 1,294.8	\$ (289.7)	\$ (142.4)	\$ 1,473.8

(\$ in millions, except per share data)	Common Stock		Reinvested Earnings	Common Stock in Treasury	Accumulated Other Comprehensive (Loss) Income	Total Equity
	Par Value of \$5	Capital in Excess of Par Value				
Balances at September 30, 2022	\$ 280.1	\$ 314.3	\$ 1,194.3	\$ (300.8)	\$ (181.1)	\$ 1,306.8
Net income			6.2			6.2
Pension and postretirement benefits, net of tax					1.1	1.1
Net gain on derivative instruments, net of tax					6.5	6.5
Foreign currency translation					6.9	6.9
Cash dividends:						
Common @ \$0.20 per share			(9.8)			(9.8)
Share-based compensation plans		1.0		2.4		3.4
Balances at December 31, 2022	\$ 280.1	\$ 315.3	\$ 1,190.7	\$ (298.4)	\$ (166.6)	\$ 1,321.1

See accompanying notes to consolidated financial statements.

CARPENTER TECHNOLOGY CORPORATION
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
FOR THE THREE AND SIX MONTHS ENDED DECEMBER 31, 2023 AND 2022
(Unaudited)

(\$ in millions, except per share data)	Common Stock		Reinvested Earnings	Common Stock in Treasury	Accumulated Other Comprehensive (Loss) Income	Total Equity
	Par Value of \$5	Capital in Excess of Par Value				
Balances at June 30, 2023	\$ 280.7	\$ 328.4	\$ 1,228.0	\$ (298.0)	\$ (143.0)	\$ 1,396.1
Net income			86.6			86.6
Pension and postretirement benefits, net of tax					1.6	1.6
Net loss on derivative instruments, net of tax					(3.7)	(3.7)
Foreign currency translation					2.7	2.7
Cash dividends:						
Common @ \$0.40 per share			(19.8)			(19.8)
Share-based compensation plans	0.6	(18.0)		8.3		(9.1)
Stock options exercised	1.9	17.5				19.4
Balances at December 31, 2023	\$ 283.2	\$ 327.9	\$ 1,294.8	\$ (289.7)	\$ (142.4)	\$ 1,473.8

(\$ in millions, except per share data)	Common Stock		Reinvested Earnings	Common Stock in Treasury	Accumulated Other Comprehensive (Loss) Income	Total Equity
	Par Value of \$5	Capital in Excess of Par Value				
Balances at June 30, 2022	\$ 280.1	\$ 320.3	\$ 1,211.0	\$ (307.4)	\$ (173.5)	\$ 1,330.5
Net loss			(0.6)			(0.6)
Pension and postretirement benefits, net of tax					2.1	2.1
Net gain on derivative instruments, net of tax					1.2	1.2
Foreign currency translation					3.6	3.6
Cash dividends:						
Common @ \$0.40 per share			(19.7)			(19.7)
Share-based compensation plans		(5.0)		9.0		4.0
Balances at December 31, 2022	\$ 280.1	\$ 315.3	\$ 1,190.7	\$ (298.4)	\$ (166.6)	\$ 1,321.1

See accompanying notes to consolidated financial statements.

CARPENTER TECHNOLOGY CORPORATION
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Basis of Presentation

The accompanying unaudited consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America ("U.S. GAAP") for complete financial statements. In the opinion of management, all adjustments, consisting of normal and recurring adjustments, considered necessary for a fair statement of the results are reflected in the interim periods presented. The June 30, 2023 consolidated balance sheet data was derived from audited financial statements, but does not include all of the disclosures required by accounting principles generally accepted in the United States of America. These unaudited consolidated financial statements should be read in conjunction with the consolidated financial statements and footnotes thereto included in Carpenter Technology's Annual Report on Form 10-K for the fiscal year ended June 30, 2023 (the "2023 Form 10-K"). Operating results for the three and six months ended December 31, 2023 are not necessarily indicative of the operating results for any future period.

As used throughout this report, unless the context requires otherwise, the terms "Carpenter," "Carpenter Technology," the "Company," "Registrant," "Issuer," "we" and "our" refer to Carpenter Technology Corporation.

2. Recent Accounting Pronouncements

Recently Issued Accounting Pronouncements

In November 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2023-07 Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures. The guidance in ASU 2023-07 seeks to improve reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses. The amendments in this ASU require a public entity to disclose the following: significant segment expenses that are regularly provided to the chief operating decision maker ("CODM") and included within each reported measure of segment profit or loss; an amount for other segment items by reportable segment and a description of its composition; and the title and position of the CODM and how the CODM uses the reported measure(s) of segment profit or loss in assessing segment performance and deciding how to allocate resources. This ASU requires public entities to provide all annual disclosures about a reportable segment's profit or loss and assets currently required by Topic 280 in interim periods. ASU 2023-07 clarifies that if the CODM uses more than one measure of a segment's profit or loss in assessing segment performance and deciding how to allocate resources, a public entity may report one or more of those additional measures of segment profit. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. Early adoption is permitted. ASU 2023-07 is a requirement for additional disclosure and is not expected to materially impact the consolidated financial statements.

In December 2023, the FASB issued ASU 2023-09 Income Taxes (Topic 740): Improvements to Income Tax Disclosures. The guidance in this ASU enhances the transparency and decision functionality of income tax disclosures to provide investors information to better assess how an entity's operations and related tax risks, tax planning and operational opportunities affect its tax rate and prospects for future cash flow. The amendments in this ASU require public entities to disclose the following specific categories in the rate reconciliation by both percentages and reporting currency amounts: the effect of state and local income tax, net of federal (national) income tax, foreign tax effects, effects of changes in tax laws or rates enacted in the current period, effects of cross-border tax laws, tax credits, changes in valuation allowances, nontaxable or nondeductible items and changes in unrecognized tax benefits. The amendments in ASU 2023-09 also require public entities to provide additional information for reconciling items that meet the qualitative threshold (if the effect of those reconciling items is equal to or greater than 5 percent of the amount computed by multiplying pre-tax income (loss) by the applicable statutory income tax rate). The ASU requires reporting entities to annually disclose the year-to-date amount of income taxes paid (net of refunds received) disaggregated by federal, state and foreign localities. The amendments in this ASU should be applied on a prospective basis and retrospective application is permitted. For public business entities, ASU 2023-09 is effective for annual periods beginning after December 15, 2024. Early adoption is permitted for annual financial statements not yet issued. ASU 2023-09 is a requirement for additional disclosure and is not expected to materially impact the consolidated financial statements.

CARPENTER TECHNOLOGY CORPORATION
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

3. Revenue

The Company recognizes revenue in accordance with Topic 606, Revenue from Contracts. The Company applies the five-step model in the FASB's guidance, which requires the Company to: (i) identify the contract with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when, or as, the Company satisfies a performance obligation.

The Company recognizes revenue when performance obligations under the terms of a customer purchase order or contract are satisfied. This occurs when control of the goods and services has transferred to the customer, which is generally determined when title, ownership, and risk of loss pass to the customer, all of which occurs upon shipment or delivery of the product. Consignment transactions are arrangements where the Company transfers product to a customer location but retains ownership and control of such product until it is used by the customer. Revenue for consignment arrangements is recognized upon usage by the customer. Service revenue is recognized as the services are performed.

The Company's standard customer purchase order or contract for goods transferred has a single performance obligation for which revenue is recognized at a point in time. The standard terms and conditions of a customer purchase order include general rights of return and product warranty provisions related to nonconforming product. Depending on the circumstances, the product is either replaced or a quality adjustment is issued. Such warranties do not represent a separate performance obligation.

The Company's standard customer purchase order or contract sets forth the transaction price for the products and services purchased under that arrangement. Some customer arrangements include variable consideration, such as volume rebates, which generally depend upon the Company's customers meeting specified performance criteria, such as a purchasing level over a period of time. The Company exercises judgment to estimate the most likely amount of variable consideration at each reporting date.

Revenue is measured as the amount of consideration the Company expects to receive in exchange for its product. The standard payment terms are 30 days. The Company has elected to use the practical expedient that permits the Company to not adjust for the effects of a significant financing component if it expects that at the contract inception, the period between when the Company transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less.

Amounts billed to customers for shipping and handling activities to fulfill the Company's promise to transfer the goods are included in revenues and costs incurred by the Company for the delivery of goods are classified as cost of sales in the consolidated statements of operations. Shipping terms may vary for products shipped outside the United States depending on the mode of transportation, the country where the material is shipped and any agreements made with the customers.

Contract liabilities are recognized when the Company has received consideration from a customer to transfer goods or services at a future point in time when the Company performs under the purchase order or contract. Contract liabilities were \$13.5 million and \$14.0 million at December 31, 2023 and June 30, 2023, respectively, and are included in accrued liabilities on the consolidated balance sheets. Revenue recognized for the three and six months ended December 31, 2023 and 2022 from amounts included in contract liabilities at the beginning of the period was not significant and substantially all of the Company's contract liabilities are recognized within a twelve-month period.

The Company has elected to use the practical expedient that permits the omission of disclosure for remaining performance obligations which are expected to be satisfied in one year or less.

CARPENTER TECHNOLOGY CORPORATION
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Disaggregation of Revenue

The Company operates in two business segments, Specialty Alloys Operations ("SAO") and Performance Engineered Products ("PEP"). Revenue is disaggregated within these two business segments by diversified end-use markets and by geographical locations. Comparative information of the Company's overall revenues by end-use markets and geographic locations for the three and six months ended December 31, 2023 and 2022 were as follows:

End-Use Market Data (\$ in millions)	Three Months Ended December 31, 2023				Three Months Ended December 31, 2022			
	SAO	PEP	Intersegment	Total	SAO	PEP	Intersegment	Total
Aerospace and Defense	\$ 302.1	\$ 25.7	\$ (6.8)	\$ 321.0	\$ 263.5	\$ 23.0	\$ (6.4)	\$ 280.1
Medical	65.5	32.4	(10.2)	87.7	49.5	32.9	(8.7)	73.7
Transportation	34.9	2.3	—	37.2	40.1	1.6	(0.3)	41.4
Energy	48.4	3.7	—	52.1	32.1	2.7	—	34.8
Industrial and Consumer	98.5	9.6	(3.8)	104.3	110.6	17.0	(7.9)	119.7
Distribution	—	22.0	(0.1)	21.9	—	29.5	(0.1)	29.4
Total net sales	<u>\$ 549.4</u>	<u>\$ 95.7</u>	<u>\$ (20.9)</u>	<u>\$ 624.2</u>	<u>\$ 495.8</u>	<u>\$ 106.7</u>	<u>\$ (23.4)</u>	<u>\$ 579.1</u>

Geographic Data (\$ in millions)	Three Months Ended December 31, 2023				Three Months Ended December 31, 2022			
	SAO	PEP	Intersegment	Total	SAO	PEP	Intersegment	Total
United States	\$ 326.3	\$ 53.9	\$ (6.2)	\$ 374.0	\$ 303.0	\$ 61.0	\$ (10.3)	\$ 353.7
Europe	91.9	18.6	(4.0)	106.5	71.0	19.4	(3.2)	87.2
Asia Pacific	82.3	11.5	(10.8)	83.0	79.0	10.0	(9.8)	79.2
Mexico	26.4	8.3	(0.1)	34.6	22.0	10.2	—	32.2
Canada	11.7	2.4	—	14.1	11.9	3.4	0.1	15.4
Other	10.8	1.0	0.2	12.0	8.9	2.7	(0.2)	11.4
Total net sales	<u>\$ 549.4</u>	<u>\$ 95.7</u>	<u>\$ (20.9)</u>	<u>\$ 624.2</u>	<u>\$ 495.8</u>	<u>\$ 106.7</u>	<u>\$ (23.4)</u>	<u>\$ 579.1</u>

CARPENTER TECHNOLOGY CORPORATION
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

End-Use Market Data (\$ in millions)	Six Months Ended December 31, 2023				Six Months Ended December 31, 2022			
	SAO	PEP	Intersegment	Total	SAO	PEP	Intersegment	Total
Aerospace and Defense	\$ 634.1	\$ 50.9	\$ (11.5)	\$ 673.5	\$ 510.4	\$ 43.8	\$ (12.4)	\$ 541.8
Medical	120.9	68.1	(21.4)	167.6	90.3	57.5	(14.9)	132.9
Transportation	75.0	4.2	—	79.2	76.0	2.7	(0.4)	78.3
Energy	91.5	5.2	0.1	96.8	58.7	4.1	(0.1)	62.7
Industrial and Consumer	197.9	19.3	(7.8)	209.4	207.8	30.1	(13.3)	224.6
Distribution	—	49.7	(0.1)	49.6	—	61.8	(0.1)	61.7
Total net sales	<u>\$ 1,119.4</u>	<u>\$ 197.4</u>	<u>\$ (40.7)</u>	<u>\$ 1,276.1</u>	<u>\$ 943.2</u>	<u>\$ 200.0</u>	<u>\$ (41.2)</u>	<u>\$ 1,102.0</u>

Geographic Data (\$ in millions)	Six Months Ended December 31, 2023				Six Months Ended December 31, 2022			
	SAO	PEP	Intersegment	Total	SAO	PEP	Intersegment	Total
United States	\$ 666.8	\$ 112.0	\$ (11.4)	\$ 767.4	\$ 574.3	\$ 116.6	\$ (17.6)	\$ 673.3
Europe	186.8	35.4	(8.3)	213.9	149.9	35.2	(7.1)	178.0
Asia Pacific	185.0	21.9	(20.8)	186.1	136.6	17.1	(16.4)	137.3
Mexico	40.8	18.0	—	58.8	44.1	21.1	—	65.2
Canada	20.9	6.9	—	27.8	20.7	6.4	—	27.1
Other	19.1	3.2	(0.2)	22.1	17.6	3.6	(0.1)	21.1
Total net sales	<u>\$ 1,119.4</u>	<u>\$ 197.4</u>	<u>\$ (40.7)</u>	<u>\$ 1,276.1</u>	<u>\$ 943.2</u>	<u>\$ 200.0</u>	<u>\$ (41.2)</u>	<u>\$ 1,102.0</u>

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4. Earnings (Loss) per Common Share

The Company calculates basic and diluted earnings (loss) per share using the two class method. Under the two class method, earnings (loss) are allocated to common stock and participating securities (non-vested restricted shares and units that receive non-forfeitable dividends) according to their participation rights in dividends and undistributed earnings. The earnings (loss) available to each class of stock are divided by the weighted average number of outstanding shares for the period in each class. Diluted earnings (loss) per share assumes the issuance of common stock for all potentially dilutive share equivalents outstanding. For the six months ended December 31, 2022, the Company incurred a net loss and accordingly excluded all potentially dilutive securities from the determination of diluted loss per share as their impact was anti-dilutive.

The calculations of basic and diluted earnings (loss) per common share for the three and six months ended December 31, 2023 and 2022 were as follows:

(in millions, except per share data)	Three Months Ended December 31,		Six Months Ended December 31,	
	2023	2022	2023	2022
Net income (loss)	\$ 42.7	\$ 6.2	\$ 86.6	\$ (0.6)
Dividends allocated to participating securities	(0.1)	(0.1)	(0.1)	(0.2)
Earnings (loss) available for common stockholders used in calculation of basic earnings (loss) per common share	<u>\$ 42.6</u>	<u>\$ 6.1</u>	<u>\$ 86.5</u>	<u>\$ (0.8)</u>
Weighted average number of common shares outstanding, basic	<u>49.7</u>	<u>48.8</u>	<u>49.4</u>	<u>48.7</u>
Basic earnings (loss) per common share	<u>\$ 0.86</u>	<u>\$ 0.13</u>	<u>\$ 1.75</u>	<u>\$ (0.02)</u>
Net income (loss)	\$ 42.7	\$ 6.2	\$ 86.6	\$ (0.6)
Dividends allocated to participating securities	(0.1)	(0.1)	(0.1)	(0.2)
Earnings (loss) available for common stockholders used in calculation of diluted earnings (loss) per common share	<u>\$ 42.6</u>	<u>\$ 6.1</u>	<u>\$ 86.5</u>	<u>\$ (0.8)</u>
Weighted average number of common shares outstanding, basic	49.7	48.8	49.4	48.7
Effect of shares issuable under share-based compensation plans	0.5	0.2	0.6	—
Weighted average number of common shares outstanding, diluted	<u>50.2</u>	<u>49.0</u>	<u>50.0</u>	<u>48.7</u>
Diluted earnings (loss) per common share	<u>\$ 0.85</u>	<u>\$ 0.13</u>	<u>\$ 1.73</u>	<u>\$ (0.02)</u>

The following awards issued under share-based compensation plans were excluded from the above calculations of diluted earnings (loss) per share because their effects were anti-dilutive:

(in millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2023	2022	2023	2022
Stock options	<u>—</u>	<u>1.7</u>	<u>—</u>	<u>1.8</u>

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5. Inventories

Inventories consisted of the following components as of December 31, 2023 and June 30, 2023:

(\$ in millions)	December 31, 2023	June 30, 2023
Raw materials and supplies	\$ 223.1	\$ 157.7
Work in process	430.6	370.1
Finished and purchased products	144.1	111.9
Total inventories	<u>\$ 797.8</u>	<u>\$ 639.7</u>

Inventories are valued at the lower of cost or market. Cost for inventories is principally determined using the last-in, first-out ("LIFO") inventory costing method. The Company values other inventory at the lower of cost or net realizable value, determined by the first-in, first-out and average cost methods. As of December 31, 2023 and June 30, 2023, \$155.3 million and \$133.2 million of inventory, respectively, was accounted for using a method other than the LIFO inventory costing method.

6. Accrued Liabilities

Accrued liabilities consisted of the following as of December 31, 2023 and June 30, 2023:

(\$ in millions)	December 31, 2023	June 30, 2023
Accrued compensation and benefits	\$ 68.0	\$ 92.4
Accrued interest expense	18.5	18.5
Accrued postretirement benefits	16.1	16.1
Contract liabilities	13.5	14.0
Derivative financial instruments	10.2	6.4
Current portion of lease liabilities	8.6	9.1
Accrued taxes	4.1	4.9
Accrued pension liabilities	3.3	3.3
Accrued income taxes	1.2	2.5
Other	14.9	14.1
Total accrued liabilities	<u>\$ 158.4</u>	<u>\$ 181.3</u>

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7. Pension and Other Postretirement Benefits

The components of the net periodic pension expense (income) related to the Company's pension and other postretirement benefits for the three and six months ended December 31, 2023 and 2022 were as follows:

(\$ in millions)	Three Months Ended December 31,			
	2023		2022	
	Pension Plans		Other Postretirement Plans	
Service cost	\$	2.0	\$	2.0
Interest cost		11.8		11.5
Expected return on plan assets		(10.1)		(11.2)
Amortization of net loss (gain)		2.2		2.4
Amortization of prior service cost (credits)		0.5		0.5
Net pension expense (income)	\$	6.4	\$	5.2

(\$ in millions)	Six Months Ended December 31,			
	2023		2022	
	Pension Plans		Other Postretirement Plans	
Service cost	\$	4.2	\$	4.0
Interest cost		23.6		23.0
Expected return on plan assets		(20.2)		(22.4)
Amortization of net loss (gain)		4.4		4.8
Amortization of prior service cost (credits)		1.0		1.0
Net pension expense (income)	\$	13.0	\$	10.4

During the six months ended December 31, 2023 and 2022, the Company made \$4.8 million and \$0.0 million, respectively, of contributions to its qualified defined benefit pension plans. The Company currently expects to make \$6.4 million of required cash pension contributions to its qualified defined benefit pension plans during the remainder of fiscal year 2024.

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8. Debt

On April 14, 2023, the Company entered into a Second Amended and Restated Credit Agreement with Bank of America, N.A., as administrative agent, swing line lender and letter of credit issuer and the other lenders, agents and arrangers party thereto (the "Credit Facility"). The Credit Facility amended and restated the Company's then existing Amended and Restated Credit Agreement dated as of March 26, 2021 which had been set to expire on March 31, 2024. The Second Amendment extends the maturity to April 12, 2028.

The Credit Facility is a secured revolving credit facility with a commitment of \$350.0 million subject to the right, from time to time, to request an increase of the commitment by the greater of (i) \$300.0 million or (ii) an amount equal to the consolidated EBITDA; and provides for the issuance of letters of credit subject to a \$40.0 million sub-limit. The Company has the right to voluntarily prepay and re-borrow loans, to terminate or reduce the commitments under the Credit Facility, and, subject to certain lender approvals, to join subsidiaries as subsidiary borrowers.

As of December 31, 2023, the Company had \$1.7 million of issued letters of credit under the Credit Facility and \$13.9 million of short-term borrowings. The balance of \$334.4 million remains available to the Company.

Interest on the borrowings under the Credit Facility accrues at variable rates which are determined based upon the Company's consolidated total leverage ratio. The applicable margin to be added to Alternative Currency Daily Rate, Alternative Currency Term Rate and Term SOFR determined loans ranges from 1.75% to 2.50% (1.75% as of December 31, 2023), and for Base Rate-determined loans, from 0.75% to 1.50% (0.75% as of December 31, 2023). The Company also pays a quarterly commitment fee ranging from 0.250% to 0.375% (0.250% as of December 31, 2023), determined based upon the consolidated total leverage ratio, of the unused portion of the commitment under the Credit Facility. In addition, the Company must pay certain letter of credit fees, ranging from 1.75% to 2.50% (1.75% as of December 31, 2023), with respect to letters of credit issued under the Credit Facility. As of December 31, 2023, the borrowing rate for the Credit Facility was 7.10%.

The Company is subject to certain financial and restrictive covenants under the Credit Facility which requires the maintenance of a minimum interest coverage ratio of 3.00 to 1.00 and a consolidated net leverage ratio of no more than 4.00 to 1.00. The restrictions of these covenants (other than the financial ratio covenants) are subject to certain exceptions or thresholds triggering amounts or events specified in the Credit Facility, and in some cases the restrictions may be waived by the lenders. As of December 31, 2023, the Company was in compliance with all of the covenants of the Credit Facility.

Long-term debt outstanding as of December 31, 2023 and June 30, 2023 consisted of the following:

(\$ in millions)	December 31, 2023	June 30, 2023
Senior unsecured notes, 6.375% due July 2028 (face value of \$400.0 million at December 31, 2023 and June 30, 2023)	\$ 396.9	\$ 396.5
Senior unsecured notes, 7.625% due March 2030 (face value of \$300.0 million at December 31, 2023 and June 30, 2023)	296.7	296.5
Total debt	693.6	693.0
Less: amounts due within one year	—	—
Long-term debt, net of current portion	\$ 693.6	\$ 693.0

For the three months ended December 31, 2023 and 2022, interest costs totaled \$13.3 million and \$13.3 million, respectively, of which \$0.3 million and \$0.3 million, respectively, were capitalized as part of the cost of property, plant, equipment and software. For the six months ended December 31, 2023 and 2022, interest costs totaled \$26.5 million and \$26.1 million, respectively, of which \$0.8 million and \$0.5 million, respectively, were capitalized as part of the cost of property, plant, equipment and software.

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9. Contingencies and Commitments

Environmental

The Company is subject to various federal, state, local and international environmental laws and regulations relating to pollution, protection of public health and the environment, natural resource damages and occupational safety and health. Although compliance with these laws and regulations may affect the costs of the Company's operations, compliance costs to date have not been material. The Company has environmental remediation liabilities at some of its owned operating facilities and has been designated as a potentially responsible party ("PRP") with respect to certain third party Superfund waste-disposal sites and other third party-owned sites. The Company accrues amounts for environmental remediation costs that represent management's best estimate of the probable and reasonably estimable future costs related to environmental remediation.

During the six months ended December 31, 2023, the Company increased the liability for environmental remediation costs by \$0.4 million. The liabilities recorded for environmental remediation costs at Superfund sites, other third party-owned sites and Carpenter-owned current or former operating facilities remaining at December 31, 2023 and June 30, 2023 were \$16.9 million and \$16.5 million, respectively. Additionally, the Company has been notified that it may be a PRP with respect to other Superfund sites as to which no proceedings have been instituted against the Company. Neither the exact amount of remediation costs nor the final method of their allocation among all designated PRPs at these Superfund sites have been determined. Accordingly, at this time the Company cannot reasonably estimate expected costs for such matters. The liability for future environmental remediation costs that can be reasonably estimated is evaluated by management on a quarterly basis. The Company accrues amounts for environmental remediation costs that represent management's best estimate of the probable and reasonably estimable future costs related to environmental remediation.

Estimates of the amount and timing of future costs of environmental remediation requirements are inherently imprecise because of the continuing evolution of environmental laws and regulatory requirements, the availability and application of technology, the identification of currently unknown remediation sites and the allocation of costs among the PRPs. Based upon information currently available, such future costs are not expected to have a material effect on the Company's financial position, results of operations or cash flows over the long-term. However, such costs could be material to the Company's financial position, results of operations or cash flows in a particular future quarter or year.

Other

The Company is defending various routine claims and legal actions that are incidental to its business and common to its operations, including those pertaining to product claims, commercial disputes, patent infringement, employment actions, employee benefits, compliance with domestic and foreign laws and regulations, personal injury claims and tax issues. Like many other manufacturing companies in recent years, the Company, from time to time, has been named as a defendant in lawsuits alleging personal injury as a result of exposure to chemicals and substances in the workplace such as asbestos. The Company provides for costs relating to these matters when a loss is probable and the amount of the loss is reasonably estimable. The effect of the outcome of these matters on the Company's future results of operations and liquidity cannot be predicted because any such effect depends on future results of operations and the amount and timing (both as to recording future charges to operations and cash expenditures) of the resolution of such matters. While it is not feasible to determine the outcome of these matters, management believes that the total liability from these matters will not have a material effect on the Company's financial position, results of operations or cash flows over the long-term. However, there can be no assurance that an increase in the scope of pending matters or that any future lawsuits, claims, proceedings or investigations will not be material to the Company's financial position, results of operations or cash flows in a particular future quarter or year.

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10. Fair Value Measurements

The fair value hierarchy has three levels based on the inputs used to determine fair value. Level 1 refers to quoted prices in active markets for identical assets or liabilities. Level 2 refers to observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data. Level 3 refers to unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs. Currently, the Company does not use Level 1 and 3 inputs.

The following tables present the Company's assets and liabilities that are measured at fair value on a recurring basis and are categorized using the fair value hierarchy:

December 31, 2023 (\$ in millions)		Fair Value Measurements Using Input Type Level 2
Assets:		
Derivative financial instruments	\$	—
Liabilities:		
Derivative financial instruments	\$	11.5
June 30, 2023 (\$ in millions)		Fair Value Measurements Using Input Type Level 2
Assets:		
Derivative financial instruments	\$	3.7
Liabilities:		
Derivative financial instruments	\$	6.8

The Company's derivative financial instruments consist of commodity forward contracts and foreign currency forward contracts. These instruments are measured at fair value using the market method valuation technique. The inputs to this technique utilize information related to commodity prices and foreign exchange rates published by third party leading financial news and data providers. This is observable data; however, the valuation of these instruments is not based on actual transactions for the same instruments and, as such, they are classified as Level 2. The Company's use of derivatives and hedging policies is more fully discussed in Note 11. Derivatives and Hedging Activities.

The Company has currently chosen not to elect the fair value option for any items that are not already required to be measured at fair value in accordance with accounting principles generally accepted in the United States of America.

The carrying amounts of other financial instruments not listed in the table below approximate fair value due to the short-term nature of these items. The carrying amounts and estimated fair values of the Company's financial instruments not recorded at fair value in the financial statements were as follows:

(\$ in millions)	December 31, 2023		June 30, 2023	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Long-term debt	\$ 693.6	\$ 713.5	\$ 693.0	\$ 698.1
Company-owned life insurance	\$ 27.3	\$ 27.3	\$ 26.2	\$ 26.2

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The fair values of long-term debt as of December 31, 2023 and June 30, 2023 were determined by using current interest rates for debt with terms and maturities similar to the Company's existing debt arrangements and accordingly would be classified as Level 2 inputs in the fair value hierarchy.

The carrying amount of company-owned life insurance as of December 31, 2023 and June 30, 2023 reflects cash surrender values based upon the market values of underlying securities, using Level 2 inputs, net of any outstanding policy loans. The carrying value associated with the cash surrender value of these policies is recorded in other assets in the accompanying consolidated balance sheets.

11. Derivatives and Hedging Activities

The Company from time to time uses commodity forwards and foreign currency forwards to manage risks generally associated with commodity price and foreign currency rate fluctuations. The following explains the various types of derivatives and includes a summary of the impact the derivative instruments had on the Company's financial position, results of operations and cash flows.

Cash Flow Hedging — Commodity forward contracts: The Company enters into commodity forward contracts to fix the price of a portion of anticipated future purchases of certain critical raw materials and energy to manage the risk of cash flow variability associated with volatile commodity prices. The commodity forward contracts have been designated as cash flow hedges. The qualifying hedge contracts are marked-to-market at each reporting date and any unrealized gains or losses are included in accumulated other comprehensive (loss) income ("AOCI") to the extent effective, and reclassified to cost of sales in the period during which the hedged transaction affects earnings or it becomes probable that the forecasted transaction will not occur. As of December 31, 2023, the Company had forward contracts to purchase 2.6 million pounds of certain raw materials with settlement dates through December 2025.

Cash Flow Hedging — Foreign currency forward contracts: The Company, from time to time, uses foreign currency forward contracts to hedge a portion of anticipated future sales denominated in foreign currencies, principally the Euro and Pound Sterling, in order to offset the effect of changes in exchange rates. The qualifying hedge contracts are marked-to-market at each reporting date and any unrealized gains or losses are included in AOCI to the extent effective and reclassified to net sales in the period during which the transaction affects earnings or it becomes probable that the forecasted transaction will not occur. The Company had no qualifying foreign currency hedge contracts as of December 31, 2023 and June 30, 2023 or during the six months ended December 31, 2023 and 2022.

The Company also uses foreign currency forward contracts to protect certain short-term asset positions denominated in foreign currencies against the effect of changes in exchange rates. These positions do not qualify for hedge accounting and accordingly are marked-to-market at each reporting date through charges to other expense, net. As of December 31, 2023 and June 30, 2023, the fair value of the outstanding foreign currency forwards not designated as hedging instruments and the charges to income for changes in fair value for these contracts were not material.

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The fair value and location of outstanding derivative contracts recorded in the accompanying consolidated balance sheets were as follows as of December 31, 2023 and June 30, 2023:

December 31, 2023 (\$ in millions)	Foreign Currency Contracts	Commodity Contracts	Total Derivatives
Asset Derivatives:			
Other current assets	\$ —	\$ —	\$ —
Other assets	—	—	—
Total asset derivatives	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>
Liability Derivatives:			
Accrued liabilities	\$ 0.1	\$ 10.1	\$ 10.2
Other liabilities	0.6	0.7	1.3
Total liability derivatives	<u>\$ 0.7</u>	<u>\$ 10.8</u>	<u>\$ 11.5</u>
 June 30, 2023 (\$ in millions)	 Foreign Currency Contracts	 Commodity Contracts	 Total Derivatives
Asset Derivatives:			
Other current assets	\$ 2.1	\$ 1.6	\$ 3.7
Other assets	—	—	—
Total asset derivatives	<u>\$ 2.1</u>	<u>\$ 1.6</u>	<u>\$ 3.7</u>
Liability Derivatives:			
Accrued liabilities	\$ —	\$ 6.4	\$ 6.4
Other liabilities	—	0.4	0.4
Total liability derivatives	<u>\$ —</u>	<u>\$ 6.8</u>	<u>\$ 6.8</u>

Substantially all of the Company's derivative contracts are subject to master netting arrangements, or similar agreements with each counterparty, which provide for the option to settle contracts on a net basis when they settle on the same day and in the same currency. In addition, these arrangements provide for a net settlement of all contracts with a given counterparty in the event that the arrangement is terminated due to the occurrence of default or a termination event. The Company presents the outstanding derivative contracts on a net basis by counterparty in the consolidated balance sheets. If the Company had chosen to present the derivative contracts on a gross basis, the total asset derivatives and total liability derivatives would have remained unchanged at \$0.0 million and \$11.5 million, respectively, as of December 31, 2023.

According to the provisions of the Company's derivative arrangements, in the event that the fair value of outstanding derivative positions with certain counterparties exceeds certain thresholds, the Company may be required to issue cash collateral to the counterparties. As of December 31, 2023 and June 30, 2023, the Company had no cash collateral held by counterparties.

The Company is exposed to credit loss in the event of nonperformance by counterparties on its derivative instruments as well as credit or performance risk with respect to its customer commitments to perform. Although nonperformance is possible, the Company does not anticipate nonperformance by any of the parties. In addition, various master netting arrangements are in place with counterparties to facilitate settlements of gains and losses on these contracts.

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Cash Flow Hedges

For derivative instruments that are designated and qualify as cash flow hedges, the gain or loss on the derivative is reported as a component of AOCI and reclassified into earnings in the same period or periods during which the hedged transactions affect earnings or it becomes probable the forecasted transactions will not occur. The following is a summary of the (losses) gains on cash flow hedges recognized during the three and six months ended December 31, 2023 and 2022:

(\$ in millions)	Amount of (Loss) Gain Recognized in AOCI on Derivatives			
	Three Months Ended December 31,		Six Months Ended December 31,	
	2023	2022	2023	2022
Derivatives in Cash Flow Hedging Relationship:				
Commodity contracts	\$ (5.1)	\$ 9.8	\$ (8.1)	\$ 9.6
Total	\$ (5.1)	\$ 9.8	\$ (8.1)	\$ 9.6

(\$ in millions)	Location of (Loss) Gain Reclassified from AOCI into Income	Amount of (Loss) Gain Reclassified from AOCI into Income	
		Three Months Ended December 31,	
		2023	2022
Derivatives in Cash Flow Hedging Relationship:			
Commodity contracts	Cost of sales	\$ (1.8)	\$ 1.2
Total		\$ (1.8)	\$ 1.2

(\$ in millions)	Location of (Loss) Gain Reclassified from AOCI into Income	Amount of (Loss) Gain Reclassified from AOCI into Income	
		Six Months Ended December 31,	
		2023	2022
Derivatives in Cash Flow Hedging Relationship:			
Commodity contracts	Cost of sales	\$ (3.2)	\$ 7.9
Total		\$ (3.2)	\$ 7.9

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The following is a summary of total amounts presented in the consolidated statements of operations in which the effects of cash flow and fair value hedges are recorded during the three and six months ended December 31, 2023 and 2022:

(\$ in millions)	Three Months Ended December 31, 2023	Three Months Ended December 31, 2022
	Cost of Sales	Cost of Sales
Total amounts presented in the consolidated statement of operations in which the effects of cash flow and fair value hedges are recorded	\$ 501.6	\$ 509.1
(Loss) Gain on Derivatives in Cash Flow Hedging Relationship:		
Commodity contracts		
Amount of (loss) gain reclassified from AOCI to income	\$ (1.8)	\$ 1.2
Total (loss) gain	\$ (1.8)	\$ 1.2

(\$ in millions)	Six Months Ended December 31, 2023	Six Months Ended December 31, 2022
	Cost of Sales	Cost of Sales
Total amounts presented in the consolidated statement of operations in which the effects of cash flow and fair value hedges are recorded	\$ 1,029.4	\$ 977.2
(Loss) Gain on Derivatives in Cash Flow Hedging Relationship:		
Commodity contracts		
Amount of (loss) gain reclassified from AOCI to income	\$ (3.2)	\$ 7.9
Total (loss) gain	\$ (3.2)	\$ 7.9

The Company estimates that \$5.2 million of net derivative losses included in AOCI as of December 31, 2023 will be reclassified into income within the next 12 months. No significant cash flow hedges were discontinued during the three and six months ended December 31, 2023.

As of December 31, 2023 and June 30, 2023, there were no amounts recorded on the consolidated balance sheets related to cumulative basis adjustments for fair value hedges of interest rate risk.

12. Other Expense, Net

Other expense, net consisted of the following:

(\$ in millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2023	2022	2023	2022
Unrealized gains on company-owned life insurance contracts and investments held in rabbi trusts	\$ (2.9)	\$ (1.6)	\$ (2.5)	\$ (0.6)
Interest income	(0.2)	(0.1)	(0.3)	(0.2)
Foreign exchange losses	1.2	1.2	1.5	1.2
Pension earnings, interest and deferrals	3.5	2.5	6.9	4.9
Other	—	(0.1)	(0.1)	0.1
Total other expense, net	\$ 1.6	\$ 1.9	\$ 5.5	\$ 5.4

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13. Income Taxes

The effective tax rate used for interim periods is the estimated annual effective consolidated tax rate, based on the current estimate of full year results, except that taxes related to specific events, if any, are recorded in the interim period in which they occur. The annual effective tax rate is based upon a number of significant estimates and judgments, including the estimated annual pre-tax income, or loss, of the Company in each tax jurisdiction in which it operates, and the development of tax planning strategies during the year. In addition, the Company's tax expense or benefit can be impacted by changes in tax rates or laws, the finalization of tax audits, and other factors that cannot be predicted with certainty. As such, there can be significant volatility in interim tax provisions.

Income tax expense was \$12.5 million, or 22.6 percent of pre-tax income for the three months ended December 31, 2023, as compared with income tax expense of \$1.5 million, or 19.5 percent of pre-tax income for the three months ended December 31, 2022. Income tax expense for the six months ended December 31, 2023 was \$21.0 million, or 19.5 percent of pre-tax income as compared with income tax expense of \$0.5 million, or negative 500.0 percent of pre-tax loss for the six months ended December 31, 2022.

Income tax expense for the three months ended December 31, 2022 included a discrete tax benefit of \$0.6 million for anticipated interest on IRS income tax refund claims. Also included was the unfavorable impact of losses in certain foreign jurisdictions for which no tax benefit can be recognized.

Income tax expense for the six months ended December 31, 2023 includes discrete tax benefits of \$4.7 million attributable to employee share-based compensation. Income tax expense for the six months ended December 31, 2022, included the unfavorable impact of losses in certain foreign jurisdictions for which no tax benefit can be recognized. Also included was a discrete tax benefit of \$0.6 million for anticipated interest on IRS income tax refund claims as well as a discrete tax charge of \$0.6 million for the impact of a state tax legislative change. The effective tax rate for the six months ended December 31, 2022 of negative 500.0 percent was due primarily to the near breakeven year-to-date pre-tax loss of \$0.1 million for the six months ended December 31, 2022 in relation to permanent tax adjustments and discrete items during the period.

14. Business Segments

The Company has two reportable segments, Specialty Alloys Operations ("SAO") and Performance Engineered Products ("PEP").

The SAO segment is comprised of the Company's major premium alloy and stainless steel manufacturing operations. This includes operations performed at mills primarily in Reading and Latrobe, Pennsylvania and surrounding areas as well as South Carolina and Alabama. The combined assets of the SAO operations are managed in an integrated manner to optimize efficiency and profitability across the total system.

The PEP segment is comprised of the Company's differentiated operations. This segment includes the Dynamet titanium business, the Carpenter Additive business and the Latrobe and Mexico distribution businesses. The businesses in the PEP segment are managed with an entrepreneurial structure to promote flexibility and agility to quickly respond to market dynamics.

The Company's executive management evaluates the performance of these operating segments based on sales, operating income and cash flow generation. Segment operating results exclude general corporate costs, which include executive and director compensation and other corporate facilities and administrative expenses not allocated to the segments. Also excluded are items that management considers not representative of ongoing operations, such as restructuring charges and other specifically-identified income or expense items.

On a consolidated basis, no single customer accounted for 10 percent or more of net sales for the three and six months ended December 31, 2023 and December 31, 2022. On a consolidated basis, no single customer accounted for 10 percent or more of accounts receivable outstanding at December 31, 2023 and June 30, 2023.

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Net Sales (\$ in millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2023	2022	2023	2022
Specialty Alloys Operations	\$ 549.4	\$ 495.8	\$ 1,119.4	\$ 943.2
Performance Engineered Products	95.7	106.7	197.4	200.0
Intersegment	(20.9)	(23.4)	(40.7)	(41.2)
Consolidated net sales	\$ 624.2	\$ 579.1	\$ 1,276.1	\$ 1,102.0

Operating Income (Loss) (\$ in millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2023	2022	2023	2022
Specialty Alloys Operations	\$ 83.3	\$ 30.3	\$ 164.1	\$ 50.2
Performance Engineered Products	7.1	9.3	16.2	15.6
Corporate	(20.7)	(16.4)	(42.0)	(33.5)
Intersegment	0.1	(0.6)	0.5	(1.4)
Consolidated operating income	\$ 69.8	\$ 22.6	\$ 138.8	\$ 30.9

Depreciation and Amortization (\$ in millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2023	2022	2023	2022
Specialty Alloys Operations	\$ 28.4	\$ 27.3	\$ 56.2	\$ 54.4
Performance Engineered Products	4.0	3.8	8.0	7.7
Corporate	1.2	1.4	2.5	2.7
Consolidated depreciation and amortization	\$ 33.6	\$ 32.5	\$ 66.7	\$ 64.8

Capital Expenditures (\$ in millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2023	2022	2023	2022
Specialty Alloys Operations	\$ 20.3	\$ 16.0	\$ 39.0	\$ 27.4
Performance Engineered Products	2.9	1.2	6.2	3.1
Corporate	2.0	0.3	2.2	0.5
Intersegment	0.1	—	(0.1)	—
Consolidated capital expenditures	\$ 25.3	\$ 17.5	\$ 47.3	\$ 31.0

Total Assets (\$ in millions)	December 31, 2023	June 30, 2023
Specialty Alloys Operations	\$ 2,551.3	\$ 2,461.2
Performance Engineered Products	470.6	451.6
Corporate	152.8	159.0
Intersegment	(15.5)	(17.9)
Consolidated total assets	\$ 3,159.2	\$ 3,053.9

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15. Reclassifications from Accumulated Other Comprehensive Loss

The changes in AOCI by component, net of tax, for the three months ended December 31, 2023 and 2022 were as follows:

Three Months Ended December 31, 2023 (\$ in millions) (a)	Cash flow hedging items	Pension and other postretirement benefit plan items	Foreign currency items	Total
Balances at September 30, 2023	\$ (8.2)	\$ (94.7)	\$ (42.6)	\$ (145.5)
Other comprehensive (loss) income before reclassifications	(3.9)	—	4.8	0.9
Amounts reclassified from AOCI (b)	1.4	0.8	—	2.2
Net other comprehensive (loss) income	(2.5)	0.8	4.8	3.1
Balances at December 31, 2023	\$ (10.7)	\$ (93.9)	\$ (37.8)	\$ (142.4)

Three Months Ended December 31, 2022 (\$ in millions) (a)	Cash flow hedging items	Pension and other postretirement benefit plan items	Foreign currency items	Total
Balances at September 30, 2022	\$ 0.2	\$ (131.9)	\$ (49.4)	\$ (181.1)
Other comprehensive income before reclassifications	7.4	—	6.9	14.3
Amounts reclassified from AOCI (b)	(0.9)	1.1	—	0.2
Net other comprehensive income	6.5	1.1	6.9	14.5
Balances at December 31, 2022	\$ 6.7	\$ (130.8)	\$ (42.5)	\$ (166.6)

(a) All amounts are net of tax. Amounts in parentheses indicate debits.

(b) See separate table below for further details.

The changes in AOCI by component, net of tax, for the six months ended December 31, 2023 and 2022 were as follows:

Six Months Ended December 31, 2023 (\$ in millions) (a)	Cash flow hedging items	Pension and other postretirement benefit plan items	Foreign currency items	Total
Balances at June 30, 2023	\$ (7.0)	\$ (95.5)	\$ (40.5)	\$ (143.0)
Other comprehensive (loss) income before reclassifications	(6.2)	—	2.7	(3.5)
Amounts reclassified from AOCI (b)	2.5	1.6	—	4.1
Net other comprehensive (loss) income	(3.7)	1.6	2.7	0.6
Balances at December 31, 2023	\$ (10.7)	\$ (93.9)	\$ (37.8)	\$ (142.4)

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Six Months Ended December 31, 2022 (\$ in millions) (a)	Cash flow hedging items	Pension and other postretirement benefit plan items	Foreign currency items	Total
Balances at June 30, 2022	\$ 5.5	\$ (132.9)	\$ (46.1)	\$ (173.5)
Other comprehensive income before reclassifications	7.2	—	3.6	10.8
Amounts reclassified from AOCI (b)	(6.0)	2.1	—	(3.9)
Net other comprehensive income	1.2	2.1	3.6	6.9
Balances at December 31, 2022	\$ 6.7	\$ (130.8)	\$ (42.5)	\$ (166.6)

(a) All amounts are net of tax. Amounts in parentheses indicate debits.

(b) See separate table below for further details.

The following is a summary of amounts reclassified from AOCI for the three and six months ended December 31, 2023 and 2022:

Details about AOCI Components (\$ in millions) (a)	Location of (loss) gain	Amount Reclassified from AOCI Three Months Ended December 31,		Amount Reclassified from AOCI Six Months Ended December 31,	
		2023	2022	2023	2022
Cash flow hedging items:					
Commodity contracts	Cost of sales	\$ (1.8)	\$ 1.2	\$ (3.2)	\$ 7.9
Total before tax		(1.8)	1.2	(3.2)	7.9
Tax benefit (expense)		0.4	(0.3)	0.7	(1.9)
Net of tax		\$ (1.4)	\$ 0.9	\$ (2.5)	\$ 6.0

Details about AOCI Components (\$ in millions) (a)	Location of (loss) gain	Amount Reclassified from AOCI Three Months Ended December 31,		Amount Reclassified from AOCI Six Months Ended December 31,	
		2023	2022	2023	2022
Amortization of pension and other postretirement benefit plan items:					
Net actuarial loss	(b)	\$ (1.6)	\$ (2.0)	\$ (3.2)	\$ (4.0)
Prior service benefit	(b)	0.5	0.5	1.0	1.1
Total before tax		(1.1)	(1.5)	(2.2)	(2.9)
Tax benefit		0.3	0.4	0.6	0.8
Net of tax		\$ (0.8)	\$ (1.1)	\$ (1.6)	\$ (2.1)

(a) Amounts in parentheses indicate debits to income/loss.

(b) These AOCI components are included in the computation of net periodic benefit cost (see Note 7. Pension and Other Postretirement Benefits for additional details).

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Background and General

We are a producer and distributor of premium specialty alloys, including titanium alloys, powder metals, stainless steels, alloy steels and tool steels. We are a recognized leader in high-performance specialty alloy-based materials and process solutions for critical applications in the aerospace, defense, medical, transportation, energy, industrial and consumer electronics markets. We have evolved to become a pioneer in premium specialty alloys, including titanium, nickel, and cobalt, as well as alloys specifically engineered for additive manufacturing processes and soft magnetics applications. We primarily process basic raw materials such as nickel, cobalt, titanium, manganese, chromium, molybdenum, iron scrap and other metal alloying elements through various melting, hot forming and cold working facilities to produce finished products in the form of billet, bar, rod, wire and narrow strip in many sizes and finishes. We also produce certain metal powders and parts. Our sales are distributed directly from our production plants and distribution network as well as through independent distributors. Unlike many other specialty steel producers, we operate our own worldwide network of service and distribution centers. These service centers, located in the United States, Canada, Mexico, Europe and Asia allow us to work more closely with customers and to offer various just-in-time stocking programs.

As part of our overall business strategy, we have sought out and considered opportunities related to strategic acquisitions and joint collaborations as well as possible business unit dispositions aimed at broadening our offering to the marketplace. We have participated with other companies to explore potential terms and structures of such opportunities and expect that we will continue to evaluate these opportunities.

Our discussions below in this Item 2 are based upon the more detailed discussions about our business, operations and financial condition included in Item 7 of our 2023 Form 10-K. Our discussions here focus on our results during or as of the three and six-month periods ended December 31, 2023 and the comparable periods of fiscal year 2023, and to the extent applicable, on material changes from information discussed in the 2023 Form 10-K and other important intervening developments or information that we have reported on Form 8-K. These discussions should be read in conjunction with the 2023 Form 10-K for detailed background information and with any such intervening Form 8-K.

Impact of Raw Material Prices and Product Mix

We value most of our inventory utilizing the LIFO inventory costing methodology. Under the LIFO inventory costing method, changes in the cost of raw materials and production activities are recognized in cost of sales in the current period even though these materials may have been acquired at potentially significantly different values due to the length of time from the acquisition of the raw materials to the sale of the processed finished goods to the customers. In a period of rising raw material costs, the LIFO inventory valuation normally results in higher cost of sales. Conversely, in a period of decreasing raw material costs, the LIFO inventory valuation normally results in lower cost of sales.

The volatility of the costs of raw materials has impacted our operations over the past several years. We, and others in our industry, generally have been able to pass cost increases on major raw materials through to our customers using surcharges that are structured to recover increases in raw material costs. Generally, the formula used to calculate a surcharge is based on published prices of the respective raw materials for the previous month which correlates to the prices we pay for our raw material purchases. However, a portion of our surcharges to customers may be calculated using a different surcharge formula or may be based on the raw material prices at the time of order, which creates a lag between surcharge revenue and corresponding raw material costs recognized in cost of sales. The surcharge mechanism protects our net income on such sales except for the lag effect discussed above. However, surcharges have had a dilutive effect on our gross margin and operating margin percentages as described later in this report.

Approximately 40 percent of our net sales are sales to customers under firm price sales arrangements. Firm price sales arrangements involve a risk of profit margin fluctuations, particularly when raw material prices are volatile. In order to reduce the risk of fluctuating profit margins on these sales, we enter into commodity forward contracts to purchase certain critical raw materials necessary to produce the related products sold. Firm price sales arrangements generally include certain annual purchasing commitments and consumption schedules agreed to by the customers at selling prices based on raw material prices at the time the arrangements are established. If a customer fails to meet the volume commitments (or the consumption schedule deviates from the agreed-upon terms of the firm price sales arrangements), we may need to absorb the gains or losses associated with the commodity forward contracts on a temporary basis. Gains or losses associated with commodity forward contracts are reclassified to earnings/loss when earnings are impacted by the hedged transaction. Because we value most of our inventory under the LIFO costing methodology, changes in the cost of raw materials and production activities are recognized in cost of sales in the current period attempting to match the most recently incurred costs with revenues. Gains and/or losses on the commodity forward contracts are reclassified from accumulated other comprehensive income (loss) ("AOCI") together with the actual purchase price of the underlying commodities when the underlying commodities are purchased and recorded in inventory. To the extent that the total purchase price of the commodities, inclusive of the gains or losses on the commodity forward contracts, are higher or lower relative to the beginning of year costs, our cost of goods sold reflects such amounts. Accordingly, the gains and/or losses associated with commodity forward contracts may not impact the same period that the firm price sales arrangements revenue is recognized, and comparisons of gross profit from period to period may be impacted. These firm price sales arrangements are expected to continue as we look to strengthen our long-term customer relationships by expanding, renewing and in certain cases extending to a longer-term, our customer long-term arrangements.

We produce hundreds of grades of materials with a wide range of pricing and profit levels depending on the grade. In addition, our product mix within a period is subject to the fluctuating order patterns of our customers as well as decisions we may make on participation in certain products based on available capacity, including the impacts of capacity commitments we may have under existing customer agreements. While we expect to see positive contribution from a more favorable product mix in our margin performance over time, the impact by period may fluctuate and period-to-period comparisons may vary.

Impact of Inflation and Supply Chain Disruption

Recent inflationary pressures affecting the general economy have impacted our operating costs including increased costs for raw materials, energy, key operating supplies and labor.

Additionally, global supply chain disruptions have affected our operations, including the availability and cost of labor, as well as the supply of industrial goods. As a result, we are experiencing higher labor rates, extended lead times for supplies, as well as delayed capital expenditures due to the availability of equipment and outside contractors. These disruptions have resulted in increased direct costs and certain inefficiencies in our operations.

We have taken steps that we believe are necessary to mitigate inflationary pressures and supply chain disruptions. As discussed above, we have certain mechanisms in place to reduce the impact for the most significant of these items and have been able to recover these increases through our raw material surcharge and other pricing strategies. We have long-term relationships with major suppliers who provide availability of material at competitive prices along with arrangements with certain vendors to provide consigned materials at our manufacturing facilities available for our consumption as necessary. We also continue to execute on targeted initiatives to maximize productivity and achieve capacity gains.

While these inflation and supply chain factors could negatively impact our business in the near-term, we do not currently expect them to materially impact our business outlook or operational goals over the long-term.

Net Pension Benefit

Net pension benefit, as we define it below, includes the net periodic benefit costs related to both our pension and other postretirement plans. The net periodic benefit costs are determined annually based on beginning of year balances and are recorded ratably throughout the fiscal year, unless a significant remeasurement event occurs. We currently expect the total net pension expense for fiscal year 2024 will be \$23.5 million as compared with total net pension expense of \$19.9 million in fiscal year 2023.

The following is the net pension expense for the three and six months ended December 31, 2023 and December 31, 2022:

(\$ in millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2023	2022	2023	2022
Pension plans	\$ 6.4	\$ 5.2	\$ 13.0	\$ 10.4
Other postretirement plans	(0.5)	(0.2)	(1.2)	(0.5)
Net pension expense	\$ 5.9	\$ 5.0	\$ 11.8	\$ 9.9

Net pension expense is recorded in accounts that are included in cost of sales and selling, general and administrative expenses based on the function of the associated employees and in other expense, net. The following is a summary of the classification of net pension expense for the three and six months ended December 31, 2023 and 2022:

(\$ in millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2023	2022	2023	2022
Service cost included in Cost of sales	\$ 2.1	\$ 2.2	\$ 4.3	\$ 4.3
Service cost included in Selling, general and administrative expenses	0.3	0.3	0.6	0.7
Pension earnings, interest and deferrals included in Other expense, net	3.5	2.5	6.9	4.9
Net pension expense	\$ 5.9	\$ 5.0	\$ 11.8	\$ 9.9

As of December 31, 2023 and June 30, 2023, service cost amounts related to the net pension expense capitalized in gross inventory were \$1.3 million and \$2.8 million, respectively.

Operating Performance Overview and Outlook

In the quarter ended December 31, 2023 we reported operating income of \$69.8 million, an improvement of \$47.2 million compared to the prior year same quarter. Notably, the SAO segment demonstrated improvement, reaching \$83.3 million of operating income with an adjusted operating margin of 20.0 percent, a meaningful increase over the prior year same quarter of 8.8 percent adjusted operating margin. Further, our operating income in the six months ended December 31, 2023, was \$138.8 million, an improvement of \$107.9 million as compared with operating income of \$30.9 million in the six months ended December 31, 2022. In addition to the strong operating performance, we generated \$21.9 million of cash from operating activities in the six months ended December 31, 2023, as compared with cash used for operating activities of \$164.5 million in the six months ended December 31, 2022.

Looking ahead, we anticipate an even stronger second half of fiscal year 2024, which if obtained, would result in the most profitable fiscal year on record. Further, our fiscal year 2024 projection would be a meaningful step towards our fiscal year 2027 goal of doubling our fiscal year 2019 operating income. And with improving productivity and expanding margins, we see opportunity to accelerate the attainment of our fiscal year 2027 goal.

We are well-positioned to realize our target by increasing our productivity across facilities, realizing higher prices and improving our product mix. With the backdrop of strong market demand for our broad portfolio of specialized solutions, we have leading capabilities and capacity with a difficult-to-replicate system of assets, and we continue to drive improved productivity to capture the demand.

Results of Operations — Three Months Ended December 31, 2023 vs. Three Months Ended December 31, 2022

For the three months ended December 31, 2023, we reported net income of \$42.7 million, or \$0.85 per diluted share. This compares with net income for the three months ended December 31, 2022 of \$6.2 million, or \$0.13 per diluted share. The results for the three months ended December 31, 2023 reflect higher prices, improving product mix and increased productivity, partially offset by inflationary cost increases compared to the three months ended December 31, 2022.

Net Sales

Net sales for the three months ended December 31, 2023 were \$624.2 million, which was an 8 percent increase over the three months ended December 31, 2022. Excluding surcharge revenue, sales increased 15 percent on a 3 percent decrease in shipment volume from the three months ended December 31, 2022. The results reflect realized price increases, improving product mix as well as higher demand in the key end-use markets of Aerospace and Defense, Medical and Energy during the three months ended December 31, 2023, compared to the three months ended December 31, 2022. Net sales in the Aerospace and Defense end-use market increased 15 percent compared to the three months ended December 31, 2022.

Geographically, sales in the United States increased 6 percent from the three months ended December 31, 2022, to \$374.0 million. The increase in domestic sales is driven by higher demand in the key end-use markets of Aerospace and Defense, Medical and Energy. Sales outside the United States increased 11 percent from the three months ended December 31, 2022, to \$250.2 million for the three months ended December 31, 2023. The results reflect higher demand in key end-use markets of Aerospace and Defense, Medical and Energy in the European region compared to the three months ended December 31, 2022. A portion of our sales outside the United States are denominated in foreign currencies. The fluctuations in foreign currency exchange rates resulted in a \$0.6 million increase in sales during the three months ended December 31, 2023, compared to the three months ended December 31, 2022. Net sales outside the United States represented 40 percent and 39 percent of total net sales for the three months ended December 31, 2023 and 2022, respectively.

Sales by End-Use Markets

We sell to customers across diversified end-use markets. We believe that net sales by principal end-use markets is helpful supplemental information in analyzing the performance of the business from period to period. The following table includes comparative information for our net sales, which includes surcharge revenue, by principal end-use markets:

(\$ in millions)	Three Months Ended December 31,		\$ Increase (Decrease)	% Increase (Decrease)
	2023	2022		
Aerospace and Defense	\$ 321.0	\$ 280.1	\$ 40.9	15 %
Medical	87.7	73.7	14.0	19 %
Transportation	37.2	41.4	(4.2)	(10)%
Energy	52.1	34.8	17.3	50 %
Industrial and Consumer	104.3	119.7	(15.4)	(13)%
Distribution	21.9	29.4	(7.5)	(26)%
Total net sales	\$ 624.2	\$ 579.1	\$ 45.1	8 %

The following table includes comparative information for our net sales by the same principal end-use markets, but excluding surcharge revenue:

(\$ in millions)	Three Months Ended December 31,		\$ Increase (Decrease)	% Increase (Decrease)
	2023	2022		
Aerospace and Defense	\$ 246.7	\$ 200.4	\$ 46.3	23 %
Medical	73.0	62.7	10.3	16 %
Transportation	26.8	27.3	(0.5)	(2)%
Energy	36.8	22.6	14.2	63 %
Industrial and Consumer	80.2	78.6	1.6	2 %
Distribution	21.8	29.2	(7.4)	(25)%
Total net sales excluding surcharge revenue	\$ 485.3	\$ 420.8	\$ 64.5	15 %

Sales to the Aerospace and Defense end-use market increased 15 percent from the three months ended December 31, 2022, to \$321.0 million. Excluding surcharge revenue, sales increased 23 percent from the three months ended December 31, 2022, on a 9 percent increase in shipment volume. The results for the three months ended December 31, 2023 reflect increasing activity levels across the aerospace supply chain due to higher aircraft build rates to replace aging fleets and meet increasing passenger travel demand. The three months ended December 31, 2023, also reflect higher sales in the Defense end-use market in response to global threats.

Medical end-use market sales increased 19 percent from the three months ended December 31, 2022, to \$87.7 million. Excluding surcharge revenue, sales increased 16 percent on 22 percent higher shipment volume from the three months ended December 31, 2022. For the three months ended December 31, 2023, results reflect stronger demand as a result of the medical supply chain replenishing inventory levels and meeting increased demand for elective medical procedures particularly in the orthopedic, cardiology and dental sub-markets compared to the three months ended December 31, 2022.

Transportation end-use market sales decreased 10 percent from the three months ended December 31, 2022, to \$37.2 million. Excluding surcharge revenue, sales decreased 2 percent on a 19 percent decrease in shipment volume from the three months ended December 31, 2022. The results reflect the negative impact of employee union strikes in North America during the three months ended December 31, 2023, which did not occur in the three months ended December 31, 2022.

Sales to the Energy end-use market of \$52.1 million in the three months ended December 31, 2023 reflect a 50 percent increase from the three months ended December 31, 2022. Excluding surcharge revenue, sales increased 63 percent on a 41 percent increase in shipment volume from the three months ended December 31, 2022. The results reflect higher global oil consumption benefiting the oil and gas sub-market and stronger demand for power generation materials compared to the three months ended December 31, 2022.

Industrial and Consumer end-use market sales decreased 13 percent from the three months ended December 31, 2022, to \$104.3 million. Excluding surcharge revenue, sales increased 2 percent on 27 percent lower shipment volume from the three months ended December 31, 2022. The results reflect lower demand for Industrial materials used in fluid control and tooling applications as well as lower demand for Consumer materials compared to the three months ended December 31, 2022.

Gross Profit

Our gross profit in the three months ended December 31, 2023, increased to \$122.6 million, or 19.6 percent of net sales, as compared with \$70.0 million, or 12.1 percent of net sales in the three months ended December 31, 2022. Excluding the impact of surcharge revenue, our adjusted gross margin in the three months ended December 31, 2023, was 25.3 percent as compared to 16.6 percent in the three months ended December 31, 2022. The increased gross profit for the three months ended December 31, 2023 reflects 8 percent increased sales driven by a stronger product mix, higher prices and significant productivity gains, partially offset by inflationary cost increases.

While the surcharge generally protects the absolute gross profit dollars, it does have a dilutive effect on gross margin as a percent of sales. The following represents a summary of the dilutive impact of the surcharge on gross margin for the comparative three-month periods. See the section "Non-GAAP Financial Measures" below for further discussion of these financial measures.

(\$ in millions)	Three Months Ended December 31,	
	2023	2022
Net sales	\$ 624.2	\$ 579.1
Less: surcharge revenue	138.9	158.3
Net sales excluding surcharge revenue	\$ 485.3	\$ 420.8
Gross profit	\$ 122.6	\$ 70.0
Gross margin	19.6 %	12.1 %
Gross margin excluding surcharge revenue	25.3 %	16.6 %

Selling, General and Administrative Expenses

Selling, general and administrative expenses in the three months ended December 31, 2023, were \$52.8 million or 8.5 percent of net sales (10.9 percent of net sales excluding surcharge) as compared with \$47.4 million and 8.2 percent of net sales (11.3 percent of net sales excluding surcharge) in the three months ended December 31, 2022. The selling, general and administrative expenses for the three months ended December 31, 2023 reflect higher salary, benefit and variable compensation costs compared to the three months ended December 31, 2022.

Operating Income

Our operating income in the three months ended December 31, 2023, was \$69.8 million, or 11.2 percent of net sales, as compared with operating income of \$22.6 million or 3.9 percent of net sales in the three months ended December 31, 2022. Excluding surcharge revenue, adjusted operating margin was 14.4 percent for the three months ended December 31, 2023, as compared with 5.4 percent in the three months ended December 31, 2022. The operating results for the three months ended December 31, 2023 reflect stronger product mix, higher prices and improved operational efficiencies, partially offset by inflationary cost increases compared to the three months ended December 31, 2022.

The following presents our operating income and operating margin, in each case excluding the impact of surcharge revenue on net sales. We present and discuss these financial measures because management believes removing these items provides a more consistent and meaningful basis for comparing ongoing results of operations from period to period. See the section "Non-GAAP Financial Measures" below for further discussion of these financial measures.

(\$ in millions)	Three Months Ended December 31,	
	2023	2022
Net sales	\$ 624.2	\$ 579.1
Less: surcharge revenue	138.9	158.3
Net sales excluding surcharge revenue	\$ 485.3	\$ 420.8
Operating income	\$ 69.8	\$ 22.6
Operating margin	11.2 %	3.9 %
Adjusted operating margin excluding surcharge revenue	14.4 %	5.4 %

Interest Expense, Net

Interest expense, net for the three months ended December 31, 2023, was \$13.0 million compared with \$13.0 million in the three months ended December 31, 2022. Capitalized interest reduced interest expense by \$0.3 million for the three months ended December 31, 2023, and \$0.3 million for the three months ended December 31, 2022.

Other Expense, Net

Other expense, net for the three months ended December 31, 2023, was \$1.6 million as compared with \$1.9 million of other expense, net for the three months ended December 31, 2022. The three months ended December 31, 2023, reflects \$3.5 million of expense from pension earnings, interest and deferrals compared to \$2.5 million of expense from pension earnings, interest and deferrals in the three months ended December 31, 2022, driven by lower expected returns on plan assets.

Income Taxes

Income tax expense was \$12.5 million, or 22.6 percent of pre-tax income for the three months ended December 31, 2023, as compared with income tax expense of \$1.5 million, or 19.5 percent of pre-tax income for the three months ended December 31, 2022. Income tax expense for the three months ended December 31, 2022 included a discrete tax benefit of \$0.6 million for anticipated interest on IRS income tax refund claims. Also included was the unfavorable impact of losses in certain foreign jurisdictions for which no tax benefit can be recognized.

On October 8, 2021, the Organization for Economic Co-operation and Development ("OECD") released a statement on the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting, which agreed to a two-pillar solution to address tax challenges of the digital economy. On December 20, 2021, the OECD released Pillar Two model rules defining a 15 percent global minimum tax rate for large multinational corporations. The OECD continues to release additional guidance and countries are implementing legislation with widespread adoption of the Pillar Two Framework expected by calendar year 2024. We are continuing to evaluate the Pillar Two Framework and its potential impact on future periods.

Business Segment Results

We have two reportable business segments: SAO and PEP.

The following table includes comparative information for volumes by business segment:

(Pounds sold, in thousands)	Three Months Ended December 31,		Increase (Decrease)	% Increase (Decrease)
	2023	2022		
Specialty Alloys Operations	50,114	49,442	672	1 %
Performance Engineered Products *	2,318	2,978	(660)	(22)%
Intersegment	(3,350)	(1,920)	(1,430)	(74)%
Total pounds sold	49,082	50,500	(1,418)	(3)%

* Pounds sold data for PEP segment includes Dynamet and Additive businesses only.

The following table includes comparative information for net sales by business segment:

Net sales (\$ in millions)	Three Months Ended December 31,		\$ Increase (Decrease)	% Increase (Decrease)
	2023	2022		
Specialty Alloys Operations	\$ 549.4	\$ 495.8	\$ 53.6	11 %
Performance Engineered Products	95.7	106.7	(11.0)	(10)%
Intersegment	(20.9)	(23.4)	2.5	11 %
Total net sales	\$ 624.2	\$ 579.1	\$ 45.1	8 %

The following table includes comparative information for our net sales by business segment, but excluding surcharge revenue:

Net sales excluding surcharge revenue (\$ in millions)	Three Months Ended December 31,		\$ Increase (Decrease)	% Increase (Decrease)
	2023	2022		
Specialty Alloys Operations	\$ 416.2	\$ 346.2	\$ 70.0	20 %
Performance Engineered Products	87.9	98.0	(10.1)	(10)%
Intersegment	(18.8)	(23.4)	4.6	20 %
Total net sales excluding surcharge revenue	\$ 485.3	\$ 420.8	\$ 64.5	15 %

Specialty Alloys Operations Segment

Net sales for the three months ended December 31, 2023 for the SAO segment increased 11 percent to \$549.4 million, as compared with \$495.8 million in the three months ended December 31, 2022. Excluding surcharge revenue, net sales for the three months ended December 31, 2023 increased 20 percent on 1 percent higher shipment volume compared to the three months ended December 31, 2022. The higher sales excluding surcharge revenue in the SAO segment reflect double-digit percentage growth in key end-use markets of Aerospace and Defense, Medical and Energy driven by higher shipment volume from productivity gains, stronger product mix and price increases compared to the three months ended December 31, 2022.

Operating income for the SAO segment was \$83.3 million or 15.2 percent of net sales (20.0 percent of net sales excluding surcharge revenue) in the three months ended December 31, 2023, as compared with operating income of \$30.3 million or 6.1 percent of net sales (8.8 percent of net sales excluding surcharge revenue) in the three months ended December 31, 2022. The operating income for the three months ended December 31, 2023 reflects higher volume in key end-use markets, stronger product mix and improved operational efficiencies, partially offset by inflationary cost increases compared to the three months ended December 31, 2022.

Performance Engineered Products Segment

Net sales for the three months ended December 31, 2023 for the PEP segment decreased 10 percent to \$95.7 million, as compared with \$106.7 million in the three months ended December 31, 2022. Excluding surcharge revenue, net sales for the three months ended December 31, 2023 decreased 10 percent on 22 percent lower shipment volume compared to the three months ended December 31, 2022. The results reflect lower sales in the Industrial and Consumer and Distribution end-use markets partially offset by higher demand for titanium materials in the Aerospace fastener sub-market.

Operating income for the PEP segment was \$7.1 million or 7.4 percent of net sales (8.1 percent of net sales excluding surcharge revenue) in the three months ended December 31, 2023, compared with operating income of \$9.3 million or 8.7 percent of net sales (9.5 percent of net sales excluding surcharge revenue) in the three months ended December 31, 2022. The lower results for the three months ended December 31, 2023 reflect weaker demand conditions and lower margins compared to the three months ended December 31, 2022.

Results of Operations — Six Months Ended December 31, 2023 vs. Six Months Ended December 31, 2022

Net Sales

Net sales for the six months ended December 31, 2023 were \$1,276.1 million, which was a 16 percent increase over the six months ended December 31, 2022. Excluding surcharge revenue, sales increased 23 percent on 4 percent higher shipment volume from the six months ended December 31, 2022. The results reflect the impact of price increases and stronger product demand for materials used in the key end-use markets of Aerospace and Defense, Medical and Energy, compared to the six months ended December 31, 2022.

Geographically, sales in the United States increased 14 percent from the six months ended December 31, 2022, to \$767.4 million. The increase in domestic sales is driven by higher demand in the key end-use markets of Aerospace and Defense, Medical and Energy. Sales outside the United States increased 19 percent from the six months ended December 31, 2022, to \$508.7 million for the six months ended December 31, 2023. The results reflect higher demand in the key end-use markets of Aerospace and Defense, Medical and Energy in the European and Asia Pacific regions compared to the six months ended December 31, 2022. A portion of our sales outside the United States are denominated in foreign currencies. The impact of fluctuations in foreign currency exchange rates resulted in a \$1.4 million increase in sales during the six months ended December 31, 2023, compared to the six months ended December 31, 2022. Net sales outside the United States represented 40 percent and 39 percent of total net sales for the six months ended December 31, 2023 and 2022, respectively.

Sales by End-Use Markets

We sell to customers across diversified end-use markets. We believe that net sales by principal end-use markets is helpful supplemental information in analyzing the performance of the business from period to period. The following table includes comparative information for our net sales, which includes surcharge revenue, by principal end-use markets:

(\$ in millions)	Six Months Ended December 31,		\$ Increase (Decrease)	% Increase (Decrease)
	2023	2022		
Aerospace and Defense	\$ 673.5	\$ 541.8	\$ 131.7	24 %
Medical	167.6	132.9	34.7	26 %
Transportation	79.2	78.3	0.9	1 %
Energy	96.8	62.7	34.1	54 %
Industrial and Consumer	209.4	224.6	(15.2)	(7)%
Distribution	49.6	61.7	(12.1)	(20)%
Total net sales	\$ 1,276.1	\$ 1,102.0	\$ 174.1	16 %

The following table includes comparative information for our net sales by the same principal end-use markets, but excluding surcharge revenue:

(\$ in millions)	Six Months Ended December 31,		\$ Increase (Decrease)	% Increase (Decrease)
	2023	2022		
Aerospace and Defense	\$ 507.8	\$ 383.8	\$ 124.0	32 %
Medical	139.5	112.5	27.0	24 %
Transportation	56.0	51.0	5.0	10 %
Energy	66.0	40.9	25.1	61 %
Industrial and Consumer	159.6	147.0	12.6	9 %
Distribution	49.2	61.3	(12.1)	(20)%
Total net sales excluding surcharge revenue	\$ 978.1	\$ 796.5	\$ 181.6	23 %

Sales to the Aerospace and Defense end-use market increased 24 percent from the six months ended December 31, 2022, to \$673.5 million. Excluding surcharge revenue, sales increased 32 percent from the six months ended December 31, 2022, on 14 percent higher shipment volume. The results for the six months ended December 31, 2023 reflect increases across all Aerospace end-use sub-markets driven by ramping activity levels across the aerospace supply chain due to higher aircraft build rates to replace aging fleets and meet increasing passenger travel compared to the six months ended December 31, 2022. The six months ended December 31, 2023 also reflect higher sales in the Defense end-use market in response to global threats.

Medical end-use market sales increased 26 percent from the six months ended December 31, 2022, to \$167.6 million. Excluding surcharge revenue, sales increased 24 percent on 25 percent higher shipment volume from the six months ended December 31, 2022. The results for the six months ended December 31, 2023 reflect realized price increases and higher demand across all applications as the medical supply chain replenished inventory levels to meet higher patient demand for elective medical procedures compared to the six months ended December 31, 2022.

Transportation end-use market sales increased 1 percent from the six months ended December 31, 2022, to \$79.2 million. Excluding surcharge revenue, sales increased 10 percent on 8 percent lower shipment volume from the six months ended December 31, 2022. The results for the six months ended December 31, 2023 reflect an improved mix from recent price increases, particularly in light-duty vehicle and specialty transportation applications, offset by reduced demand for materials used in medium and heavy-duty truck applications compared to the six months ended December 31, 2022. The six months ended December 31, 2023 also reflect the negative impact of employee union strikes in North America which did not occur in the six months ended December 31, 2022.

Sales to the Energy end-use market of \$96.8 million reflect a 54 percent increase from the six months ended December 31, 2022. Excluding surcharge revenue, sales increased 61 percent on 42 percent higher shipment volume from the six months ended December 31, 2022. The results reflect increasing global oil consumption benefiting the oil and gas sub-market along with slightly higher demand for power generation materials compared to the six months ended December 31, 2022.

Industrial and Consumer end-use market sales decreased 7 percent from the six months ended December 31, 2022, to \$209.4 million. Excluding surcharge revenue, sales increased 9 percent on 17 percent lower shipment volume from the six months ended December 31, 2022. The results reflect realized price increases offset by lower demand in both Industrial and Consumer end-use markets compared to the six months ended December 31, 2022.

Gross Profit

Our gross profit in the six months ended December 31, 2023 increased \$121.9 million to \$246.7 million, or 19.3 percent of net sales, as compared with \$124.8 million, or 11.3 percent of net sales in the six months ended December 31, 2022. Excluding the impact of surcharge revenue, our gross margin in the six months ended December 31, 2023, was 25.2 percent as compared to 15.7 percent in the six months ended December 31, 2022. The increased gross profit for the six months ended December 31, 2023 reflects 16 percent increased sales with a stronger product mix driven by higher prices and improved operational efficiencies, partially offset by inflationary cost increases compared to the six months ended December 31, 2022.

While the surcharge generally protects the absolute gross profit dollars, it does have a dilutive effect on gross margin as a percent of sales. The following represents a summary of the dilutive impact of the surcharge on gross margin for the comparative periods. See the section "Non-GAAP Financial Measures" below for further discussion of these financial measures.

(\$ in millions)	Six Months Ended December 31,	
	2023	2022
Net sales	\$ 1,276.1	\$ 1,102.0
Less: surcharge revenue	298.0	305.5
Net sales excluding surcharge revenue	\$ 978.1	\$ 796.5
Gross profit	\$ 246.7	\$ 124.8
Gross margin	19.3 %	11.3 %
Gross margin excluding surcharge revenue	25.2 %	15.7 %

Selling, General and Administrative Expenses

Selling, general and administrative expenses of \$107.9 million were 8.5 percent of net sales (11.0 percent of net sales excluding surcharge) for the six months ended December 31, 2023, as compared with \$93.9 million or 8.5 percent of net sales (11.8 percent of net sales excluding surcharge) in the six months ended December 31, 2022. The selling, general and administrative expenses for the six months ended December 31, 2023 reflect higher salary, benefit and variable compensation costs compared to the six months ended December 31, 2022.

Operating Income

Our operating income in the six months ended December 31, 2023 was \$138.8 million, or 10.9 percent of net sales, as compared with operating income of \$30.9 million, or 2.8 percent of net sales in the six months ended December 31, 2022. Excluding surcharge revenue, operating margin was 14.2 percent for the six months ended December 31, 2023, and 3.9 percent for the six months ended December 31, 2022. The operating results for the six months ended December 31, 2023 reflect increased sales with a stronger product mix driven by higher prices and improved operational efficiencies, partially offset by inflationary cost increases compared to the six months ended December 31, 2022.

The following presents our operating income and operating margin, in each case excluding the impact of surcharge revenue on net sales. We present and discuss these financial measures because management believes removing these items provides a more consistent and meaningful basis for comparing ongoing results of operations from period to period. See the section "Non-GAAP Financial Measures" below for further discussion of these financial measures.

(\$ in millions)	Six Months Ended December 31,	
	2023	2022
Net sales	\$ 1,276.1	\$ 1,102.0
Less: surcharge revenue	298.0	305.5
Net sales excluding surcharge revenue	\$ 978.1	\$ 796.5
Operating income	\$ 138.8	\$ 30.9
Operating margin	10.9 %	2.8 %
Operating margin excluding surcharge revenue	14.2 %	3.9 %

Interest Expense, Net

Interest expense, net for the six months ended December 31, 2023, was \$25.7 million compared with \$25.6 million in the six months ended December 31, 2022. Capitalized interest reduced interest expense by \$0.8 million for the six months ended December 31, 2023, and \$0.5 million for the six months ended December 31, 2022.

Other Expense, Net

Other expense, net was \$5.5 million for the recent six months ended December 31, 2023 compared to other expense, net of \$5.4 million in the six months ended December 31, 2022. The six months ended December 31, 2023 includes \$6.9 million of expense from pension earnings, interest and deferrals compared to \$4.9 million of expense from pension earnings, interest and deferrals in the six months ended December 31, 2022 driven by lower expected returns on plan assets.

Income Taxes

Income tax expense for the six months ended December 31, 2023 was \$21.0 million, or 19.5 percent of pre-tax income as compared with income tax expense of \$0.5 million, or negative 500.0 percent of pre-tax loss for the six months ended December 31, 2022.

Income tax expense for the six months ended December 31, 2023 includes discrete tax benefits of \$4.7 million attributable to employee share-based compensation. Income tax expense for the six months ended December 31, 2022, included the unfavorable impact of losses in certain foreign jurisdictions for which no tax benefit can be recognized. Also included was a discrete tax benefit of \$0.6 million for anticipated interest on IRS income tax refund claims as well as a discrete tax charge of \$0.6 million for the impact of a state tax legislative change. The effective tax rate for the six months ended December 31, 2022 of negative 500.0 percent was due primarily to the near breakeven year-to-date pre-tax loss of \$0.1 million for the six months ended December 31, 2022 in relation to permanent tax adjustments and discrete items during the period.

On October 8, 2021, the Organization for Economic Co-operation and Development ("OECD") released a statement on the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting, which agreed to a two-pillar solution to address tax challenges of the digital economy. On December 20, 2021, the OECD released Pillar Two model rules defining a 15 percent global minimum tax rate for large multinational corporations. The OECD continues to release additional guidance and countries are implementing legislation with widespread adoption of the Pillar Two Framework expected by calendar year 2024. We are continuing to evaluate the Pillar Two Framework and its potential impact on future periods.

Business Segment Results

We have two reportable business segments: SAO and PEP.

The following table includes comparative information for volumes by business segment:

(Pounds sold, in thousands)	Six Months Ended December 31,		Increase (Decrease)	% Increase (Decrease)
	2023	2022		
Specialty Alloys Operations	100,104	94,006	6,098	6 %
Performance Engineered Products *	4,620	5,304	(684)	(13)%
Intersegment	(5,414)	(3,920)	(1,494)	(38)%
Total pounds sold	99,310	95,390	3,920	4 %

* Pounds sold data for PEP segment includes Dynamet and Additive businesses only.

The following table includes comparative information for net sales by business segment:

Net sales (\$ in millions)	Six Months Ended December 31,		\$ Increase (Decrease)	% Increase (Decrease)
	2023	2022		
Specialty Alloys Operations	\$ 1,119.4	\$ 943.2	\$ 176.2	19 %
Performance Engineered Products	197.4	200.0	(2.6)	(1)%
Intersegment	(40.7)	(41.2)	0.5	1 %
Total net sales	\$ 1,276.1	\$ 1,102.0	\$ 174.1	16 %

The following table includes comparative information for our net sales by business segment, but excluding surcharge revenue:

Net sales excluding surcharge revenue (\$ in millions)	Six Months Ended December 31,		\$ Increase (Decrease)	% Increase (Decrease)
	2023	2022		
Specialty Alloys Operations	\$ 833.4	\$ 651.9	\$ 181.5	28 %
Performance Engineered Products	181.0	185.6	(4.6)	(2)%
Intersegment	(36.3)	(41.0)	4.7	11 %
Total net sales excluding surcharge revenue	\$ 978.1	\$ 796.5	\$ 181.6	23 %

Specialty Alloys Operations Segment

Net sales for the six months ended December 31, 2023 for the SAO segment increased 19 percent to \$1,119.4 million, as compared with \$943.2 million in the six months ended December 31, 2022. Excluding surcharge revenue, net sales increased 28 percent on 6 percent higher shipment volume from the six months ended December 31, 2022. The SAO segment results reflect higher sales excluding surcharge revenue in all end-use markets compared to the six months ended December 31, 2022. In particular, the Aerospace and Defense end-use market net sales excluding surcharge increased 34 percent in the six months ended December 31, 2023, reflecting stronger demand and higher prices compared to the six months ended December 31, 2022.

Operating income for the SAO segment was \$164.1 million or 14.7 percent of net sales (19.7 percent of net sales excluding surcharge revenue) in the six months ended December 31, 2023, as compared with operating income of \$50.2 million or 5.3 percent of net sales (7.7 percent of net sales excluding surcharge revenue) in the six months ended December 31, 2022. The operating income for the six months ended December 31, 2023 reflects higher volume in key end-use markets and operational efficiency gains, partially offset by inflationary cost increases compared to the six months ended December 31, 2022.

Performance Engineered Products Segment

Net sales for the six months ended December 31, 2023 for the PEP segment decreased 1 percent to \$197.4 million, as compared with \$200.0 million in the six months ended December 31, 2022. Excluding surcharge revenue, net sales decreased 2 percent from the six months ended December 31, 2022. The results for the six months ended December 31, 2023 reflect realized price increases offset by lower demand compared to the six months ended December 31, 2022.

Operating income for the PEP segment was \$16.2 million or 8.2 percent of net sales (9.0 percent of net sales excluding surcharge revenue) in the recent six months ended December 31, 2023, compared with operating income of \$15.6 million or 7.8 percent of net sales (8.4 percent of net sales excluding surcharge revenue) in the six months ended December 31, 2022. The results for the six months ended December 31, 2023 reflect flat sales slightly offset by operating efficiencies compared to the six months ended December 31, 2022.

Liquidity and Financial Resources

During the six months ended December 31, 2023, we generated cash from operating activities of \$21.9 million as compared to cash used for operating activities of \$164.5 million in the six months ended December 31, 2022. Our adjusted free cash flow, which we define under "Non-GAAP Financial Measures" below, was negative \$25.4 million as compared to negative \$195.5 million for the six months ended December 31, 2022. The improvement in cash from operating activities and adjusted free cash flow for the six months ended December 31, 2023 resulted from higher net income, lower use of cash for inventory and improvements in working capital compared to the same period a year ago. Cash used to build inventory was \$157.5 million in the six month period ended December 31, 2023, compared to \$226.7 million in the six month period ended December 31, 2022. During the six months ended December 31, 2023, we generated \$23.9 million of cash from accounts receivable compared to cash used for accounts receivable of \$58.5 million in the six months ended December 31, 2022.

Capital expenditures for property, plant, equipment and software were \$47.3 million for the six months ended December 31, 2023, as compared to \$31.0 million for the six months ended December 31, 2022. In fiscal year 2024, we expect capital expenditures to be approximately \$125.0 million.

Dividends during the six months ended December 31, 2023 and 2022 were \$19.8 million and \$19.7 million, respectively, and were paid at the same quarterly rate of \$0.20 per share of common stock in both periods.

During the six months ended December 31, 2023, we made pension contributions of \$4.8 million to our qualified defined benefit pension plans. We currently expect to contribute \$6.4 million to our qualified defined benefit pension plans during the remainder of fiscal year 2024.

We have demonstrated the ability to generate cash to meet our needs through cash flows from operations, management of working capital and the ability to access capital markets to supplement internally generated funds. We target minimum liquidity of \$150.0 million, consisting of cash and cash equivalents added to available borrowing capacity under our Credit Facility.

On April 14, 2023, we entered into a Second Amended and Restated Credit Agreement with Bank of America, N.A., as administrative agent, swing line lender and letter of credit issuer and the other lenders, agents and arrangers party thereto. The Credit Facility amended and restated our then existing Amended and Restated Credit Agreement dated as of March 26, 2021, which had been set to expire on March 31, 2024. The Credit Facility extends the maturity to April 12, 2028.

The Credit Facility is a secured revolving credit facility with a commitment of \$350.0 million subject to our right, from time to time, to request an increase of the commitment by the greater of (i) \$300.0 million or (ii) an amount equal to our consolidated EBITDA; and provides for the issuance of letters of credit subject to a \$40.0 million sub-limit. We have the right to voluntarily prepay and re-borrow loans, to terminate or reduce the commitments under the Credit Facility, and, subject to certain lender approvals, to join subsidiaries as subsidiary borrowers.

As of December 31, 2023, we had \$1.7 million of issued letters of credit under the Credit Facility and \$13.9 million of short-term borrowings. The balance of the Credit Facility, \$334.4 million, remains available to us. From time to time during the six months ended December 31, 2023, we borrowed under our Credit Facility. The weighted average daily borrowing under the Credit Facility during the six months ended December 31, 2023, was approximately \$23.7 million with daily outstanding borrowings ranging from \$0.0 million to \$67.8 million. As of December 31, 2023, the borrowing rate for the Credit Facility was 7.10%.

We believe that our total liquidity of \$350.1 million as of December 31, 2023, which includes total cash and cash equivalents of \$15.7 million and available borrowing capacity of \$334.4 million under our Credit Facility, will be sufficient to fund our cash needs over the foreseeable future.

As of December 31, 2023, we had cash and cash equivalents of approximately \$15.4 million held at various foreign subsidiaries. Our global cash deployment considers, among other things, the geographic and institutional location of our subsidiaries' cash balances, the locations of our anticipated liquidity needs and the cost to access international cash balances, as necessary. During the six months ended December 31, 2023, we repatriated cash of approximately \$1.3 million from foreign jurisdictions. From time to time, we may make short-term intercompany borrowings against our cash held outside the United States in order to reduce or eliminate any required borrowing under our Credit Facility.

We are subject to certain financial and restrictive covenants under the Credit Facility which requires the maintenance of a minimum interest coverage ratio of 3.00 to 1.00 and a consolidated net leverage ratio of no more than 4.00 to 1.00. The restrictions of these covenants (other than the financial ratio covenants) are subject to certain exceptions or thresholds triggering amounts or events specified in the Credit Facility, and in some cases the restrictions may be waived by the lenders. As of December 31, 2023, we were in compliance with all of the covenants of the Credit Facility.

The following table shows our actual ratio performance with respect to the financial covenants as of December 31, 2023:

Covenant	Covenant Requirement	Actual Ratio
Consolidated interest coverage ratio	3.00 to 1.00 (minimum)	7.39 to 1.00
Consolidated net leverage ratio	4.00 to 1.00 (maximum)	1.73 to 1.00

To the extent that we do not comply with the current or modified covenants under the Credit Facility, this could reduce our liquidity and flexibility due to potential restrictions on borrowings available to us unless we are able to obtain waivers or modifications of the covenants.

Non-GAAP Financial Measures

The following provides additional information regarding certain non-GAAP financial measures that we use in this report. Our definitions and calculations of these items may not necessarily be the same as those used by other companies.

Net Sales and Gross Margin Excluding Surcharge Revenue

This report includes discussions of net sales as adjusted to exclude the impact of raw material surcharge and the resulting impact on gross margins, which represent financial measures that have not been determined in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). We present and discuss these financial measures because management believes removing the impact of raw material surcharge from net sales provides a more consistent basis for comparing results of operations from period to period for the reasons discussed earlier in this report. Management uses its results excluding these amounts to evaluate its operating performance and to discuss its business with investment institutions, our board of directors and others. See our earlier discussion of "Gross Profit" for a reconciliation of net sales and gross margin, excluding surcharge revenue, to net sales as determined in accordance with U.S. GAAP. Net sales and gross margin excluding surcharge revenue is not a U.S. GAAP financial measure and should not be considered in isolation of, or as a substitute for, net sales and gross margin calculated in accordance with U.S. GAAP.

Adjusted Operating Margin Excluding Surcharge Revenue

This report includes discussions of operating margin as adjusted to exclude the impact of raw material surcharge revenue which represent financial measures that have not been determined in accordance with U.S. GAAP. We present and discuss this financial measure because management believes removing the impact of raw material surcharge from net sales provides a more consistent and meaningful basis for comparing results of operations from period to period for the reasons discussed earlier in this report. Management uses its results excluding these amounts to evaluate its operating performance and to discuss its business with investment institutions, our board of directors and others. See our earlier discussion of operating income for a reconciliation of operating income and operating margin excluding surcharge revenue to operating income and operating margin determined in accordance with U.S. GAAP. Operating margin excluding surcharge revenue is not a U.S. GAAP financial measure and should not be considered in isolation of, or as a substitute for, operating margin calculated in accordance with U.S. GAAP.

Adjusted Free Cash Flow

This report includes discussions of adjusted free cash flow which is a non-GAAP financial measure and may not be comparable to adjusted free cash flow reported by other companies. Historically, our presentation of this non-GAAP financial measure included cash used for dividends paid on outstanding common stock and participating securities. Management believes that excluding cash dividends paid from adjusted free cash flow will provide a more direct comparison to operating cash flow, a GAAP-defined financial measure. The six months ended December 31, 2022 have been updated to conform to the current presentation. The following provides a reconciliation of adjusted free cash flow, as used in this report, to its most directly comparable U.S. GAAP financial measure:

(\$ in millions)	Six Months Ended December 31,	
	2023	2022
Net cash provided from (used for) operating activities	\$ 21.9	\$ (164.5)
Purchases of property, plant, equipment and software	(47.3)	(31.0)
Adjusted free cash flow	<u>\$ (25.4)</u>	<u>\$ (195.5)</u>

Management believes that the presentation of adjusted free cash flow provides useful information to investors regarding our financial condition because it is a measure of cash generated which management evaluates for alternative uses. It is management's current intention to use excess cash to fund investments in capital equipment, acquisition opportunities and consistent dividend payments. Adjusted free cash flow is not a U.S. GAAP financial measure and should not be considered in isolation of, or as a substitute for, cash flows calculated in accordance with U.S. GAAP.

Contingencies

Environmental

We are subject to various federal, state, local and international environmental laws and regulations relating to pollution, protection of public health and the environment, natural resource damages and occupational safety and health. Although compliance with these laws and regulations may affect the costs of our operations, compliance costs to date have not been material. We have environmental remediation liabilities at some of our owned operating facilities and have been designated as a PRP with respect to certain third party Superfund waste-disposal sites and other third party-owned sites. We accrue amounts for environmental remediation costs that represent our best estimate of the probable and reasonably estimable future costs related to environmental remediation. During the six months ended December 31, 2023, we increased the liability for environmental remediation costs by \$0.4 million. The liabilities recorded for environmental remediation costs at Superfund sites, other third party-owned sites and Carpenter-owned current or former operating facilities remaining at December 31, 2023 and June 30, 2023 were \$16.9 million and \$16.5 million, respectively. Additionally, we have been notified that we may be a PRP with respect to other Superfund sites as to which no proceedings have been instituted against us. Neither the exact amount of remediation costs nor the final method of their allocation among all designated PRPs at these Superfund sites have been determined. Accordingly, at this time, we cannot reasonably estimate expected costs for such matters. The liability for future environmental remediation costs that can be reasonably estimated is evaluated on a quarterly basis.

Estimates of the amount and timing of future costs of environmental remediation requirements are inherently imprecise because of the continuing evolution of environmental laws and regulatory requirements, the availability and application of technology, the identification of currently unknown remediation sites and the allocation of costs among the PRPs. Based upon information currently available, such future costs are not expected to have a material effect on our financial position, results of operations or cash flows over the long-term. However, such costs could be material to our financial position, results of operations or cash flows in a particular future quarter or year.

Other

We are defending various routine claims and legal actions that are incidental to our business, and that are common to our operations, including those pertaining to product claims, commercial disputes, patent infringement, employment actions, employee benefits, compliance with domestic and foreign laws and regulations, personal injury claims and tax issues. Like many other manufacturing companies in recent years we, from time to time, have been named as a defendant in lawsuits alleging personal injury as a result of exposure to chemicals and substances in the workplace such as asbestos. We provide for costs relating to these matters when a loss is probable and the amount of the loss is reasonably estimable. The effect of the outcome of these matters on our future results of operations and liquidity cannot be predicted because any such effect depends on future results of operations and the amount and timing (both as to recording future charges to operations and cash expenditures) of the resolution of such matters. While it is not feasible to determine the outcome of these matters, we believe that the total liability from these matters will not have a material effect on our financial position, results of operations or cash flows over the long-term. However, there can be no assurance that an increase in the scope of pending matters or that any future lawsuits, claims, proceedings or investigations will not be material to our financial position, results of operations or cash flows in a particular future quarter or year.

Critical Accounting Policies and Estimates

A summary of other significant accounting policies is discussed in our 2023 Form 10-K Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations," and in Note 1, Summary of Significant Accounting Policies, of the Notes to our consolidated financial statements included in Part II, Item 8 thereto.

Long-Lived Assets

Long-lived assets are reviewed for impairment and written down to fair value whenever events or changes in circumstances indicate that the carrying value may not be recoverable through estimated future undiscounted cash flows. The amount of the impairment loss is the excess of the carrying amount of the impaired assets over the fair value of the assets based upon estimated future discounted cash flows. We evaluate long-lived assets for impairment by individual business unit. Changes in estimated cash flows could have a significant impact on whether or not an asset is impaired and the amount of the impairment.

Goodwill

Goodwill is not amortized but instead is tested at least annually for impairment as of June 1, or more frequently if events or circumstances indicate that the carrying amount of goodwill may be impaired. Potential impairment is identified by comparing the fair value of a reporting unit to its carrying value. If the carrying value of the reporting unit exceeds its fair value, any impairment loss is measured by the difference between the carrying value of the reporting unit and its fair value, not to exceed the carrying amount of goodwill. The discounted cash flow analysis for each reporting unit tested requires significant estimates and assumptions related to cash flow forecasts, discount rates, terminal values and income tax rates. The cash flow forecasts include significant judgments and assumptions related to revenue growth rates, which include perpetual growth rates, gross margin and weighted average cost of capital. The cash flow forecasts are developed based on assumptions about each reporting unit's markets, product offerings, pricing, capital expenditure and working capital requirements as well as cost performance.

The discount rates used in the discounted cash flow are estimated based on a market participant's perspective of each reporting unit's weighted average cost of capital. The terminal value, which represents the value attributed to the reporting unit beyond the forecast period, is estimated using a perpetuity growth rate assumption. The income tax rates used in the discounted cash flow analysis represent estimates of the long-term statutory income tax rates for each reporting unit based on the jurisdictions in which the reporting units operate.

As of December 31, 2023, we have three reporting units with goodwill recorded. Goodwill associated with the SAO reporting unit as of December 31, 2023 was \$195.5 million and represents approximately 81 percent of total goodwill. The remaining goodwill is associated with the PEP segment, which includes two reporting units, Dynamet and Latrobe Distribution, with goodwill recorded as of December 31, 2023 of \$31.9 million and \$14.0 million, respectively. The fair value for all three reporting units is estimated using a weighting of discounted cash flows and the use of market multiples valuation techniques.

Goodwill associated with the SAO reporting unit is tested at the SAO segment level. As of June 1, 2023, the fair value of the SAO reporting unit exceeded the carrying value by approximately 60 percent. The discounted cash flows analysis for the SAO reporting unit includes assumptions related to our ability to increase volume, improve mix, expand product offerings and continue to implement opportunities to reduce costs over the next several years. For purposes of the discounted cash flow analysis for SAO's fair value, a weighted average cost capital of 11.0 percent and a terminal growth rate assumption of 2.5 percent were used. If the long-term growth rate for this reporting unit had been hypothetically reduced by 0.5 percent at June 1, 2023, the SAO reporting unit would have a fair value that exceeded the carrying value by approximately 57 percent.

Goodwill associated with the PEP segment is tested at the Dynamet and Latrobe Distribution reporting unit level. As of June 1, 2023, the fair value of the Dynamet reporting unit exceeded the carrying value by approximately 106 percent. For purposes of the discounted cash flow analysis for Dynamet's fair value, a weighted average cost capital of 14.0 percent and a terminal growth rate assumption of 2.5 percent were used. If the long-term growth rate for this reporting unit had been hypothetically reduced by 0.5 percent at June 1, 2023, the Dynamet reporting unit would have a fair value that exceeded the carrying value by approximately 104 percent.

As of June 1, 2023, the fair value of the Latrobe Distribution reporting unit exceeded the carrying value by approximately 11 percent. Adverse changes in the business or in the macroeconomic environment could reduce the underlying cash flows used to estimate the fair value of the Latrobe Distribution reporting unit and trigger a future impairment charge. We concluded that no triggering event has occurred during the quarter ended December 31, 2023. For purposes of the most recent discounted cash flow analysis as of June 1, 2023 for Latrobe Distribution's fair value, a weighted average cost capital of 13.0 percent and a terminal growth rate assumption of 2.5 percent were used. If the long-term growth rate for this reporting unit had been hypothetically reduced by 0.5 percent at June 1, 2023, the Latrobe Distribution reporting unit would have a fair value that exceeded the carrying value by approximately 10 percent.

The estimate of fair value requires significant judgment. We based our fair value estimates on assumptions that we believe to be reasonable but that are unpredictable and inherently uncertain, including estimates of future growth rates and operating margins and assumptions about the overall economic climate and the competitive environment for our business units. There can be no assurance that our estimates and assumptions made for purposes of our goodwill and identifiable intangible asset testing as of the time of testing will prove to be accurate predictions of the future. If our assumptions regarding business projections, competitive environments or anticipated growth rates are not correct, we may be required to record goodwill and/or intangible asset impairment charges in future periods, whether in connection with our next annual impairment testing or earlier, if an indicator of an impairment is present before our next annual evaluation. We continuously monitor for events and changes in circumstances, such as changes in market conditions and other relevant factors, that could indicate that the fair value of our reporting units may more likely than not have fallen below its respective carrying value. The ongoing uncertainty and the unpredictable nature of the macroeconomic environment could impact our estimates and assumptions utilized in our impairment tests, which may result in future impairments that could be material and negatively impact our results of operations.

New Accounting Pronouncements

For information with respect to new accounting pronouncements and the impact of these pronouncements on our consolidated financial statements, see Note 2 to Notes to Consolidated Financial Statements included in Item 1.

Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the Private Securities Litigation Act of 1995. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ from those projected, anticipated or implied. The most significant of these uncertainties are described in Carpenter Technology's filings with the Securities and Exchange Commission, including its report on Form 10-K for the fiscal year ended June 30, 2023, Form 10-Q for the fiscal quarter ended September 30, 2023, and the exhibits attached to such filings. They include but are not limited to: (1) the cyclical nature of the specialty materials business and certain end-use markets, including aerospace, defense, medical, transportation, energy, industrial and consumer, or other influences on Carpenter Technology's business such as new competitors, the consolidation of competitors, customers, and suppliers or the transfer of manufacturing capacity from the United States to foreign countries; (2) the ability of Carpenter Technology to achieve cash generation, growth, earnings, profitability, operating income, cost savings and reductions, qualifications, productivity improvements or process changes; (3) the ability to recoup increases in the cost of energy, raw materials, freight or other factors; (4) domestic and foreign excess manufacturing capacity for certain metals; (5) fluctuations in currency exchange and interest rates; (6) the effect of government trade actions; (7) the valuation of the assets and liabilities in Carpenter Technology's pension trusts and the accounting for pension plans; (8) possible labor disputes or work stoppages; (9) the potential that our customers may substitute alternate materials or adopt different manufacturing practices that replace or limit the suitability of our products; (10) the ability to successfully acquire and integrate acquisitions; (11) the availability of credit facilities to Carpenter Technology, its customers or other members of the supply chain; (12) the ability to obtain energy or raw materials, especially from suppliers located in countries that may be subject to unstable political or economic conditions; (13) Carpenter Technology's manufacturing processes are dependent upon highly specialized equipment located primarily in facilities in Reading and Latrobe, Pennsylvania and Athens, Alabama for which there may be limited alternatives if there are significant equipment failures or a catastrophic event; (14) the ability to hire and retain a qualified workforce and key personnel, including members of the executive management team, management, metallurgists and other skilled personnel; (15) fluctuations in oil and gas prices and production; (16) the impact of potential cyber attacks and information technology or data security breaches; (17) the inability of suppliers to meet obligations due to supply chain disruptions or otherwise; (18) the inability to meet increased demand, production targets or commitments; (19) the ability to manage the impacts of natural disasters, climate change, pandemics and outbreaks of contagious diseases and other adverse public health developments; and (20) geopolitical, economic, and regulatory risks relating to our global business, including geopolitical and diplomatic tensions, instabilities and conflicts, such as the war in Ukraine and the war between Israel and HAMAS, and Houthi attacks on commercial shipping vessels and other naval vessels as well as compliance with U.S. and foreign trade and tax laws, sanctions, embargoes and other regulations. Any of these factors could have an adverse and/or fluctuating effect on Carpenter Technology's results of operations. The forward-looking statements in this document are intended to be subject to the safe harbor protection provided by Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended. We caution you not to place undue reliance on forward-looking statements, which speak only as of the date of this Form 10-Q or as of the dates otherwise indicated in such forward-looking statements. Carpenter Technology undertakes no obligation to update or revise any forward-looking statements.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

We use derivative financial instruments to reduce certain types of financial risk. Firm price sales arrangements involve a risk of profit margin fluctuations particularly as raw material prices have been volatile. As discussed in Note 11 to the consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q, "Financial Statements," in order to reduce the risk of fluctuating profit margins on these sales, we enter into commodity forward contracts to purchase certain critical raw materials necessary to produce the products sold under the firm price sales arrangements. If a customer fails to perform its obligations under the firm price sales arrangements, we may realize losses as a result of the related commodity forward contracts. As of December 31, 2023, we had approximately \$6.8 million of net deferred losses related to commodity forward contracts to purchase certain raw materials. A large portion of this balance is related to commodity forward contracts to support firm price sales arrangements associated with many customers in addition to credit already extended to these customers in connection with outstanding trade receivables. Our customers have historically performed under these arrangements, and we believe that they will honor such obligations in the future.

We are actively involved in managing risks associated with energy resources. Risk containment strategies include interaction with primary and secondary energy suppliers as well as obtaining adequate insurance coverage to compensate us for potential business interruption related to lack of availability of energy resources. In addition, we have used forwards to fix the price of a portion of our anticipated future purchases of certain energy requirements to protect against the impact of significant increases in energy costs. We also use surcharge mechanisms to offset a portion of these charges where appropriate.

Fluctuations in foreign currency exchange rates could subject us to risk of losses on anticipated future cash flows from our international operations or customers. Foreign currency forward contracts are used to hedge certain foreign exchange risk.

Historically, we have used interest rate swaps to achieve a level of floating rate debt relative to fixed rate debt where appropriate. From time to time, we have entered into forward interest rate swap contracts to manage the risk of cash flow variability associated with fixed interest debt expected to be issued.

All hedging strategies are reviewed and approved by senior financial management before being implemented. Senior financial management has established policies regarding the use of derivative instruments that prohibit the use of speculative or leveraged derivatives.

Based on the current funding level, the benchmark allocation policy for the Company's largest pension plan assets is to have approximately 75 percent in return seeking assets and 25 percent in liability-hedging assets. Return seeking assets include global equities, diversified credit and real assets. Liability-hedging assets include bond funds and cash. When the funding level of the plan reaches 95 percent and improves to fully or over-funded status in increments of 5 percent, assets will be shifted from return seeking to liability-hedging assets in accordance with the glidepath policy outlined in the pension plan's Investment Policy Statement.

The status of our financial instruments as of December 31, 2023 is provided in Note 11 to the consolidated financial statements included in Part I, Item 1, "Financial Statements" of this Quarterly Report on Form 10-Q. Assuming either of the following occurred on December 31, 2023, (a) an instantaneous 10 percent decrease in the price of raw materials and energy for which we have commodity forward contracts, or (b) a 10 percent strengthening of the U.S. dollar versus foreign currencies for which foreign exchange forward contracts existed, our results of operations would not have been materially affected in either scenario.

Item 4. Controls and Procedures

(a) Evaluation of Effectiveness of Disclosure Controls and Procedures

The Company's management, with the participation of the Company's President and Chief Executive Officer and Senior Vice President and Chief Financial Officer, evaluated the effectiveness of the Company's disclosure controls and procedures as defined in Rules 13a—15(e) and 15d—15(e) of the Securities Exchange Act of 1934, as amended, (the "Exchange Act") as of December 31, 2023. Based on that evaluation, the President and Chief Executive Officer and Senior Vice President and Chief Financial Officer, concluded that the Company's disclosure controls and procedures as of December 31, 2023 were effective in providing a reasonable level of assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods required under the Securities and Exchange Commission's rules and forms, including a reasonable level of assurance that information required to be disclosed by us in such reports is accumulated and communicated to the Company's management, including the Company's President and Chief Executive Officer and Senior Vice President and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

(b) Changes in Internal Control over Financial Reporting

There have been no changes in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended December 31, 2023, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

Pending legal proceedings involve ordinary routine litigation incidental to our business, which we do not believe would have a material adverse effect on our business regardless of their outcome. See "Management's Discussion and Analysis of Financial Condition and Results of Operations — Contingencies."

Item 1A. Risk Factors

We have evaluated the risks associated with our business and operations and determined that those risk factors included in Part 1, Item 1A of our 2023 Annual Report on Form 10-K adequately disclose the material risks that we face.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

There were no reportable purchases during the quarter ended December 31, 2023, however employees surrendered 1,792 shares to the Company, at an average purchase price of \$68.07, during such quarter for the payment of the minimum tax liability withholding obligations upon the vesting of shares of restricted stock. We do not consider this a share buyback program.

Item 5. Other Information

During the three months ended December 31, 2023, none of our directors or officers (as defined in Rule 16a-1(f) of the Exchange Act) adopted or terminated a Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement (as such terms are defined in Item 408 of Regulation S-K of the Securities Act).

Item 6. Exhibits

Exhibit No.	Description
<u>31(A)</u>	Certification of President and Chief Executive Officer pursuant to Rule 13a—14(a) and Rule 15d—14(a) of the Securities Exchange Act, as amended (filed herewith).
<u>31(B)</u>	Certification of Senior Vice President and Chief Financial Officer pursuant to Rule 13a—14(a) and Rule 15d—14(a) of the Securities Exchange Act, as amended (filed herewith).
<u>32</u>	Certification of President and Chief Executive Officer and Senior Vice President and Chief Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith).
101	The following financial information from this Quarterly Report on Form 10-Q for the fiscal quarter ended December 31, 2023, formatted in Inline XBRL (Extensible Business Reporting Language) and filed electronically herewith: (i) the Consolidated Balance Sheets; (ii) the Consolidated Statements of Operations; (iii) the Consolidated Statements of Comprehensive Income; (iv) the Consolidated Statements of Cash Flows; (v) the Consolidated Statements of Changes in Equity; and (vi) the Notes to the Consolidated Financial Statements.

SIGNATURE

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 officer.

Carpenter Technology Corporation

(Registrant)

Date: January 25, 2024

/s/ Timothy Lain

Timothy Lain

Senior Vice President and Chief Financial Officer

(Principal Financial Officer)

**CERTIFICATIONS OF PERIODIC REPORTS PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Tony R. Thene, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q (the "Report") of Carpenter Technology Corporation (the "Registrant");
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 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 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 25, 2024

/s/ Tony R. Thene

Tony R. Thene

President and Chief Executive Officer

**CERTIFICATIONS OF PERIODIC REPORTS PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Timothy Lain, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q (the “Report”) of Carpenter Technology Corporation (the “Registrant”);
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 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 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 25, 2024

/s/ Timothy Lain

Timothy Lain
Senior Vice President and Chief Financial Officer

**CERTIFICATION OF PERIODIC FINANCIAL REPORTS 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 Carpenter Technology Corporation (the “Issuer”) on Form 10-Q for the quarter ended December 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the “Periodic Report”), I, Tony R. Thene, and I, Timothy Lain, each hereby certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Periodic Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and that information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Issuer.

Date: January 25, 2024

/s/ Tony R. Thene

Tony R. Thene

President and Chief Executive Officer

/s/ Timothy Lain

Timothy Lain

Senior Vice President and Chief Financial Officer