

Second Quarter 2024
Earnings Presentation

July 25, 2024



Cautionary Statements Regarding Forward-looking Statements

This presentation may contain (and verbal statements made by MSA® Safety Incorporated ("MSA Safety") may contain) "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements relate to future events or our future financial performance and involve various assumptions, known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. These risks and other factors include, but are not limited to, statements in this presentation regarding our expectations of future results, performance or financial condition we express or imply in any forward-looking statements. In some cases, you can identify forward-looking statements by words such as "may," "will," "should," "expects," "intends," "plans," "objectives," "anticipates," "believes," "estimates," "predicts," "potential" or other comparable words. Actual results, performance or outcomes may differ materially from those expressed or implied by these forward-looking statements and may not align with historical performance and events due to a number of factors, including those discussed in the sections of our annual report on Form 10-K entitled "Cautionary Statement Regarding Forward-Looking Statements" and "Risk Factors," and those discussed in our Form 10-Q quarterly reports filed after such annual report. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements, and caution should be exercised against placing undue reliance upon such statements, which are based only on information currently available to us and speak only as of the date hereof. We are under no duty to update publicly any of the forward-looking statements after the date of this presentation, whether as a result of new information, future events or otherwise, except as required by law.



Non-GAAP Financials

To supplement our Consolidated Financial Statements presented in accordance with generally accepted accounting principles ("GAAP"), we use, and this presentation includes, certain non-GAAP financial measures. These financial measures include constant currency revenue growth, adjusted operating income, adjusted operating margin, adjusted EBITDA, adjusted EBITDA margin, adjusted earnings per diluted share, R&D investment, net debt, debt to adjusted EBITDA, net debt to adjusted EBITDA, free cash flow and free cash flow conversion. These metrics are consistent with how the Company's chief operating decision maker ("CODM") evaluates segment results and makes strategic decisions about the business. Additionally, these non-GAAP financial measures provide information useful to investors in understanding our operating performance and trends, and to facilitate comparisons with the performance of our peers. Management also uses these measures internally to assess and better understand our underlying business performance and trends related to core business activities. The non-GAAP financial measures and key performance indicators we use, and computational methods with respect thereto, may differ from the non-GAAP financial measures and key performance indicators, and computational methods, that our peers use to assess their performance and trends.

The presentation of these non-GAAP financial measures does not comply with U.S. GAAP. These non-GAAP financial measures should be viewed as supplemental in nature, and not as a substitute for, or superior to, our reported results prepared in accordance with GAAP. When non-GAAP financial measures are disclosed, the Securities and Exchange Commission's Regulation G requires: (i) the presentation of the most directly comparable financial measure calculated and presented in accordance with GAAP and (ii) a reconciliation of the differences between the non-GAAP financial measure presented and the most directly comparable financial measure calculated and presented in accordance with GAAP. For an explanation of these measures, together with a reconciliation to the most directly comparable GAAP financial measure, see the appendix of this presentation.



Second Quarter 2024 Highlights

Solid Execution Underpinned by MSA Business System

DRIVEN BY OUR PURPOSE

OUR MISSION

That men and women may work in safety and that they, their families, and their communities may live in health throughout the world

OUR VISION

To be the world's leading provider of safety solutions that protect workers when life is on the line

We pursue this vision with an unsurpassed commitment to integrity, customer service, and product innovation that creates exceptional value for all MSA stakeholders

OUR VALUES

Embracing change and encouraging innovation in a culture of safety



BUSINESS HIGHLIGHTS

- Introduced next phase of long-term strategy and 2028 financial targets at Investor Day
- Executed solid operational and commercial performance in dynamic operating environment
 - Positive customer reception to new product launches
 - Reduced backlog to normalized levels with improved supply chain
- Delivered healthy financial results and capital returns to shareholders
 - Achieved net sales of \$462MM,+3% reported,
 +4% organic constant currency
 - Generated adjusted diluted EPS of \$2.01, +10%
 - Delivered margin expansion at both the gross and operating levels
 - Increased dividend and began share repurchases under new program



2023 Impact Report

Driving Business Growth and Societal Impact Through Our Singular Mission of Safety

OUR PRODUCTS AND SOLUTIONS

OUR PEOPLE

OUR PLANET

- Support worker safety and sustainability with what we make and how we make it
- Serve end markets supported by sustainability trends
- Integrate sustainability and inclusivity principles into new product development process
 - **Strong customer** value proposition

- Energize our diverse workforce around mission of safety
- Leverage continuous improvement mindset supported by MSA Business System (MBS)
- Attract and retain top talent, enabling industryleading product innovation
- Mission-driven culture dedicated to keeping workers safe

- Committed to being a good steward of our environment
- Progressed Scope 1 and 2 emissions targets, on track to meet 2030 goal
- Identifying sustainability and cost synergies through waste and carbon reduction efforts

Efficient organization aligned to global sustainability trends



GENERATING VALUE FOR STAKEHOLDERS THROUGH OUR IMPACT PILLARS



Long-Term Strategy and Targets

Delivering Innovative Safety Solutions to Protect Workers and Generate Shareholder Value

EXECUTING OUR STRATEGY...



Continue To Be the Leader In **Premium Safety Solutions**



Implement Targeted Growth Accelerators



Apply MSA Business System To Enable Excellence



Allocate Capital Effectively

...TO ACHIEVE OUR 2028 FINANCIAL TARGETS



Resilient Organic Revenue Growth \$2.1B - \$2.3B



Operating Margin¹ Expansion 23.5% - 25.0%



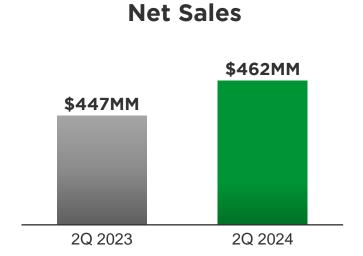
Continued EPS¹ Compounding \$10.00 - \$11.00



Capital Deployment Optionality \$1.5B+2

2Q 2024 Financial Summary

Healthy Sales Growth and Margin Improvement



3% NET SALES GROWTH

- +4% organic, -1% currency
- Balanced contributions from pricing and volume
- Growth in Detection and Fire Service partially offset by Industrial PPE contraction
- Backlog normalization



23.4% ADJUSTED OPERATING MARGIN

- MSA Business System evolution continues to support/enhance margin rates
- Incremental operating margin of 29%
- Adjusted EBITDA margin of 26.4%, up 40 bps year-over-year



10% ADJUSTED EPS GROWTH

 Driven by sales growth, higher operating profit and lower non-operating expenses

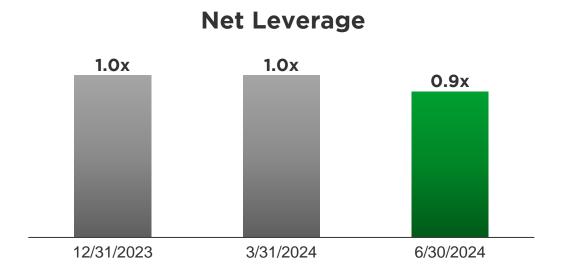
2Q 2024 Free Cash Flow and Financial Leverage

Strong Financial Position Enables Increased Capital Returns to Shareholders and Debt Reduction



CASH FLOW GENERATION AND CAPITAL DEPLOYMENT

- Free cash flow conversion rate of 49%⁽¹⁾, due to inventory investments and increased capital expenditures
- Capital expenditures totaled \$14MM
- Dividends to shareholders totaled \$20MM
- Share repurchases totaled \$10MM



ROBUST BALANCE SHEET WITH 0.9X NET LEVERAGE AND AMPLE LIQUIDITY

- \$441MM of net debt at June 30th
- Debt repayment totaled \$8MM
- Profitable growth and improved working capital management continue to support debt reduction and balanced capital allocation



2024 Outlook

Maintaining Mid-Single Digit Growth Outlook; Reflecting Solid 1H and Product End Market and Geographic Diversity

FIRE SERVICE

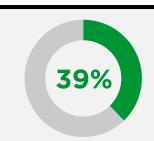
- SCBA
- Helmets
- Protective apparel and boots

DETECTION

- Fixed gas and flame detection
- Refrigerant detection and identification
- Portable gas detection

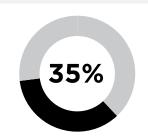
INDUSTRIAL PPE and OTHER

- Industrial head protection
- Fall protection
- APR and other PPE



% NET SALES⁽¹⁾

- **DIVERSE END MARKETS**
- Government fire service
- Municipal fire service
- First responder



- Energy and utilities
- HVAC-R
- Water and wastewater
- Food retail
- Industrial



- Energy and utilities
- Construction
- Manufacturing
- Industrial
- · Healthcare and pharma

OPERATING ENVIRONMENT UPDATE

POSITIVES

- + Growing global demand for safety products and solutions
- + Stable funding environment for firefighter safety
- + Supportive market dynamics in detection
- + Infrastructure stimulus in key regions
- + Leveraging MBS to enhance commercial excellence and drive productivity

CHALLENGES

- Timing of AFG funding release and large orders
- Industrial end market demand mixed
- Macroeconomic and geopolitical uncertainty impacts near-term visibility
- Supply chain has improved, but remains dynamic

Key Takeaways



Strong execution

in 2Q resulting in mid single-digit growth, margin expansion, and increased capital returns to shareholders 2

Mission-driven
culture and
unwavering
commitment to
the safety of our
customers and our
employees

3

Reliable,
diversified base
business drives
organic growth
and margin
expansion
opportunities
across economic
cycles



Reinvestment in innovation and technology, including strategic M&A, enables leading positions in attractive end markets



sheet supports
growth
investments and
increased return of
capital to
shareholders while
deleveraging

FOCUSED ON DELIVERING PROFITABLE GROWTH AND VALUE CREATION OVER THE LONG-TERM







MSA Safety (NYSE: MSA) Snapshot

Driven by Our Purpose

OUR MISSION

That men and women may work in safety and that they, their families, and their communities may live in health throughout the world

OUR VISION

To be the world's leading provider of safety solutions that protect workers when life is on the line

subject to change.

We pursue this vision with an unsurpassed commitment to integrity, customer service, and product innovation that creates exceptional value for all MSA stakeholders

OUR VALUES

Embracing change and encouraging innovation in a culture of safety



\$1.8B

Net Sales

48.2%

Gross Profit Margin

22.7%

Adj. Operating Margin

4.5%

R&D Investment(2)

40+

Million Workers Protected⁽³⁾

50+

Consecutive Years of **Dividend Increases**

1914

Year Founded

~5,000

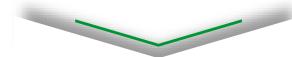
Employees

Forefront of Safety Innovation

Steady end market demand, with resilient organic growth and extensive installed base



Innovation and new customer solutions augmented by disciplined and highly strategic inorganic growth



Solidifying status as the leading safety technology company for Firefighter Safety, Detection, and Industrial PPE



CUSTUMEN FUCUS

& AGILITY

MSA Safety | Diverse End Markets







Energy



Utilities



Construction



Food & Beverage



Industrial



Government



Water



Transportation



Mining



PROTECTING WORKERS AROUND THE WORLD ACROSS WIDE VARIETY OF END MARKETS



MSA Safety | Product Categories and Markets

	DETEC	CTION	FIRE S	ERVICE	INDUSTRIAL PI	PPE AND OTHER		
PRODUCT CATEGORY	Fixed Gas & Flame Detection	Portable Gas Detection	SCBA & Connected Firefighter	Protective Apparel & Helmets	Industrial Head Protection	Fall Protection		
GLOBAL TAM ¹	~\$4	.OB	~\$2	2.5B	~\$3.5B ⁴			
MARKET CAGR ^{1,2}	4% -	- 5%	2%	- 3%	3% - 4% ⁴			
MSA % OF NET SALES ³	35	%	39	9%	26%			
EXPECTED MSA CAGR ^{2,3}	5% -	5% - 7% 3% - 5%			2% - 4%			
SECULAR	Focus on Regulatory & Compliance	Energy Transition & Decarbonization	Evolving Safety Standards	Resilient Funding for Firefighter Safety	Increased Focus on Proactive Prevention	Sustainability & ESG		
TRENDS	Global Infrastructure Spend	Digital Transformation	Adoption of Connected Solutions	Increasing Turnout Gear Demand	Nearshoring & Infrastructure Spend	Higher Standards in Emerging Economies		

TARGETING 3% - 5% ORGANIC REVENUE GROWTH + CAPITAL DEPLOYMENT OPTIONALITY



MSA Safety | Our Strategy

CONTINUE TO BE THE LEADER IN PREMIUM SAFETY SOLUTIONS

IMPLEMENT TARGETED GROWTH ACCELERATORS

APPLY MSA BUSINESS SYSTEM TO ENABLE EXCELLENCE

ALLOCATE CAPITAL EFFECTIVELY







- Leverage scale, market leadership, and customer-centric innovation to drive above-market profitable growth
- Deliver excellence in customer experience and commercial execution
- Enhance diversification across end markets, geographies, and product portfolio to fortify resilient organic growth
- Continue to evolve from hardware supplier to system solutions provider, improving customer safety outcomes and generating recurring revenue
- Lean into high-growth end markets and distinct safety megatrends around connectivity and productivity solutions
- Enhance portfolio through strategic acquisitions

- Drive excellence in pricing, operations, resource allocation, and balance sheet efficiency
- Set foundation for digital automation
- Empower high-performance teams and leaders
- Win as a team with consistent tools, processes, and behaviors

- Leverage premier financial profile to deliver sustainable long-term growth
- Maintain disciplined approach with growth bias
- Return value to shareholders through an increasing dividend, share repurchases to offset dilution, and opportunistic reinvestment

DRIVEN BY OUR MISSION AND CULTURE OF SAFETY



MSA Safety | Our Business System (MBS)



BEHAVIORS

The way we act and react to changes and challenges

 Relentless focus on improving our performance on new product development, SG&A, project management, and global business service

PROCESSES

How we work with others and apply tools

 Working Capital: SIOP¹ to forecast supply and demand and apply global best practices in transaction processing

TOOLS

Ways to identify and eliminate waste, standardize work, and problem solve

 Manufacturing Execution System (MES): gaining greater visibility and real-time data from our manufacturing plants through technology

FOUNDATION TO ACHIEVE SUPERIOR AND SUSTAINABLE RESULTS



MSA Safety | 2028 Financial Targets

MISSION-DRIVEN REINVESTMENT



OUR STRATEGY FUELS PROVEN SHAREHOLDER VALUE CREATION

Continue performance of 20%+ Adj. ROCE³





Constant Currency Sales Growth (Unaudited)

Consolidated	Thre	e Months End	ed June 30,	2024	Siz	Six Months Ended June 30, 2024				
	Fire Service ^(a)	Detection ^(b)	Industrial PPE and Other (c)	Net Sales	Fire Service ^{(a}	Detection ^(b)	Industrial PPE and Other ^(c)	Net Sales		
GAAP reported sales change	3%	8%	(3%)	3%	109	% 2%	(2%)	4%		
Plus: Currency translation effects	1%	— %	1%	1%		%	— %	— %		
Organic constant currency sales change	4%	8%	(2%)	4%	109	% 2%	(2%)	4%		

Α	m	eı	rı	ca	Ś

	Fire Service ^(a)	Detection ^(b)	Industrial PPE and Other (c)	Net Sales	
GAAP reported sales change	(2%)	7%	2%	2%	
Plus: Currency translation effects	— %	— %	2%	— %	
Organic constant currency sales change	(2%)	7%	4%	2%	

Fire Service ^(a)	Detection ^(b)	Industrial PPE and Other ^(c)	Net Sales		
8%	2%	— %	4%		
— %	— %	— %	— %		
8%	2%	— %	4%		

International

	Fire Service ^(a)	Detection ^(b)	Industrial PPE and Other ^(c)	Net Sales	
GAAP reported sales change	19%	10%	(13%)	6%	
Plus: Currency translation effects	1%	1%	1%	1%	
Organic constant currency sales change	20%	11%	(12%)	7%	

Fire Service ^(a)	Detection ^(b)	Industrial PPE and Other ^(c)	Net Sales		
15%	1%	(7%)	3%		
%	1%	— %	— %		
15%	2%	(7%)	3%		

Management believes that constant currency revenue growth is a useful metric for investors, as foreign currency translation can have a material impact on revenue growth trends. Constant currency revenue growth highlights ongoing business performance excluding the impact of fluctuating foreign currencies, which is outside of management's control. There can be no assurances that MSA's definition of constant currency revenue growth is consistent with that of other companies. As such, management believes that it is appropriate to consider revenue growth determined on a GAAP basis in addition to this non-GAAP financial measure.



⁽a) Fire Service includes Breathing Apparatus and Firefighter Helmets and Protective Apparel.

⁽b) Detection includes Fixed Gas and Flame Detection and Portable Gas Detection.

⁽c) Industrial PPE and Other includes Industrial Head Protection, Fall Protection and Non-Core.

Segment Information (Unaudited)

(In thousands, except percentage amounts)	Americas			International		Corporate		Consolidated	
Three Months Ended June 30, 2024		<u> </u>				_			
Net sales to external customers	\$	314,711	\$	147,752	\$	-	\$	462,463	
Operating income								99,944	
Operating margin %								21.6%	
Restructuring charges								1,543	
Currency exchange gains, net								(603)	
Net cost for product related legal matter								5,000	
Amortization of acquisition-related intangible assets								2,306	
Adjusted operating income (loss)		98,468		24,285		(14,563)		108,190	
Adjusted operating margin %		31.3%		16.4%				23.4%	
Depreciation and amortization								13,741	
Adjusted EBITDA		108,230		28,052		(14,351)		121,931	
Adjusted EBITDA margin %		34.4%		19.0%				26.4%	
Three Months Ended June 30, 2023									
Net sales to external customers	\$	308,378	\$	138,921	\$	-	\$	447,299	
Operating Income								95,008	
Operating margin %								21.2%	
Restructuring charges								3,350	
Currency exchange losses, net								3,110	
Amortization of acquisition-related intangible assets								2,315	
Adjusted operating income (loss)		94,816		21,743		(12,776)		103,783	
Adjusted operating margin %		30.7%		15.7%				23.2%	
Depreciation and amortization								12,574	
Adjusted EBITDA		103,977		24,949		(12,569)		116,357	
Adjusted EBITDA margin %		33.7%		18.0%				26.0%	

The Americas segment is comprised of our operations in Northern North American and Latin American geographies. The International segment is comprised of our operations in all geographies outside of the Americas. Certain global expenses are allocated to each segment in a manner consistent with where the benefits from the expenses are derived.



Segment Information (Unaudited)

(In thousands, except percentage amounts)		ricas	International		Corporate		Consolidated	
Six Months Ended June 30, 2024 Net sales to external customers	\$	610,249	\$	265,516	\$	-	\$	875,765
Operating income Operating margin %								180,056 20.6%
Restructuring charges								4,560
Currency exchange losses, net								1,730
Net cost for product related legal matter								5,000
Amortization of acquisition-related intangible assets Transaction costs (a)								4,620 234
Adjusted operating income (loss)		184,688		37,770		(26,258)		196,200
Adjusted operating margin % Depreciation and amortization		30.3%		14.2%				22.4% 26,985
Adjusted EBITDA		203,923		45,097		(25,835)		223,185
Adjusted EBITDA margin %		33.4%		17.0%				25.5%
Six Months Ended June 30, 2023								
Net sales to external customers	\$	588,645	\$	256,916	\$	-	\$	845,561
Operating Income								34,947
Operating margin %								4.1%
Restructuring charges								5,097
Currency exchange losses, net Loss on divestiture of MSA LLC								7,285 129,211
Product liability expense								3
Amortization of acquisition-related intangible assets								4,620
Adjusted operating income (loss)		166,510		37,522		(22,869)		181,163
Adjusted operating margin %		28.3%		14.6%		,		21.4%
Depreciation and amortization								24,841
Adjusted EBITDA		184,471		44,007		(22,474)		206,004
Adjusted EBITDA margin %		31.3%		17.1%				24.4%

⁽a) Transaction costs include advisory, legal, accounting, valuation, and other professional or consulting fees incurred during acquisitions and divestitures. These costs are included in selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Income.

The Americas segment is comprised of our operations in Northern North American and Latin American geographies. The International segment is comprised of our operations in all geographies outside of the Americas. Certain global expenses are allocated to each segment in a manner consistent with where the benefits from the expenses are derived.



Adjusted Operating Income and Adjusted Operating Margin (Unaudited)

				1	Trailing Twelve Months		Twelve Months Ended	
	 Six Months E	nded Ju	ine 30,		Ended June 30,	December 31,		
	2024		2023		2024		2023	
Net sales to external customers	\$ 875,765	\$	845,561	\$	1,817,851	\$	1,787,647	
Operating income	180,056		34,947		376,429		231,320	
Restructuring charges	4,560		5,097		9,355		9,892	
Currency exchange losses, net	1,730		7,285		11,524		17,079	
Loss on divestiture of MSA LLC	-		129,211		-		129,211	
Product liability expense	-		3		-		3	
Net cost for product related legal matter	5,000		-		5,000		-	
Amortization of acquisition-related intangible assets	4,620		4,620		9,246		9,246	
Transaction costs ^(a)	 234				1,199		965	
Adjusted operating income	\$ 196,200	\$	181,163	\$	412,753	\$	397,716	
Adjusted operating margin %	 22.4%		21.4%		22.7%		22.2%	



⁽a) Transaction costs include advisory, legal, accounting, valuation, and other professional or consulting fees incurred during acquisitions and divestitures. These costs are included in selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Income.

Adjusted Earnings and Adjusted Earnings per Diluted Share (Unaudited)

(In thousands, except per share amounts)	Three Months Ended June 30,				Six Months Ended June 30,				
	2024 2023		% Change	 2024	2023		% Change		
Net income (loss)	\$	72,234	\$	67,090	8%	\$ 130,373	\$	(83,083)	n/m*
Restructuring charges		1,543		3,350		4,560		5,097	
Currency exchange (gains) losses, net		(603)		3,110		1,730		7,285	
Net cost for product related legal matter		5,000		_		5,000		_	
Amortization of acquisition-related intangible assets		2,306		2,315		4,620		4,620	
Pension settlement		1,308		_		1,308		_	
Asset related losses (gains)		701		(1,452)		752		(713)	
Transaction costs (a)		_		_		234			
Loss on divestiture of MSA LLC		_		_		_		129,211	
Deferred tax asset write-off related to divestiture of MSA LLC		_		_		_		70,366	
Product liability expense		_		_		_		3	
Income tax expense on adjustments		(2,827)		(2,276)		 (5,417)		(6,921)	
Adjusted earnings	\$	79,662	\$	72,137	10%	\$ 143,160	\$	125,865	14%
Adjusted earnings per diluted share	\$	2.01	\$	1.83	10%	\$ 3.62	\$	3.19	13%

Management believes that adjusted earnings and adjusted earnings per diluted share are useful measures for investors, as management uses these measures to internally assess the company's performance and ongoing operating trends. There can be no assurances that additional special items will not occur in future periods, nor that MSA's definition of adjusted earnings is consistent with that of other companies. As such, management believes that it is appropriate to consider both net (loss) income determined on a GAAP basis as well as adjusted earnings.



⁽a) Transaction costs include advisory, legal, accounting, valuation, and other professional or consulting fees incurred during acquisitions and divestitures. These costs are included in selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Income. *Not meaningful

Free Cash Flow (Unaudited)

(In thousands, except percentage amounts)	Three Months Ended June 30,							
(iii iiiousanus, except percentage amounts)	_	2024	2023					
Cash flow from operating activities Capital expenditures	\$	53,302 (14,341)	\$	95,068 (9,920)				
Free cash flow	\$	38,961	\$	85,148				
Adjusted earnings		79,662		72,137				
Free cash flow conversion		49%		118%				

Management believes that free cash flow is a meaningful measure for investors. Management reviews cash from operations after deducting capital expenditures because these expenditures are necessary to promote growth of MSA's business and are likely to produce cash from operations in future periods. It is important to note that free cash flow does not reflect the residual cash balance of the company for discretionary spending since other items, including debt and dividend payments, are deducted from free cash flow before arriving at the company's ending cash balance. Management defines free cash flow conversion as free cash flow divided by adjusted earnings. There can be no assurances that MSA's definition of free cash flow is consistent with that of other companies. As such, management believes that it is appropriate to consider cash from operating activities determined on a GAAP basis as well as free cash flow.

Debt to Adjusted EBITDA and Net Debt to Adjusted EBITDA (Unaudited)

(In thousands)	Twelve Months Ended June 30,			
		2024		
Operating income	\$	376,429		
Depreciation and amortization		53,671		
Restructuring charges		9,355		
Currency exchange losses, net		11,524		
Net cost for product related legal matter		5,000		
Amortization of acquisition-related intangible assets		9,246		
Transaction costs (a)		1,199		
Adjusted EBITDA	\$	466,424		
Total end-of-period debt		588,243		
Debt to adjusted EBITDA		1.3		
Total end-of-period debt	\$	588,243		
Total end-of-period cash and cash equivalents		146,830		
Net debt	\$	441,413		
Net debt to adjusted EBITDA		0.9		

Management believes that Debt to adjusted EBITDA and Net debt to adjusted EBITDA are useful measures for investors, as management uses these measures to internally assess the company's liquidity and balance sheet strength. There can be no assurances that that MSA's definition of Debt to adjusted EBITDA and Net debt to adjusted EBITDA is consistent with that of other companies.



⁽a) Transaction costs include advisory, legal, accounting, valuation, and other professional or consulting fees incurred during acquisitions and divestitures. These costs are included in Selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Operations.

R&D Investment (Unaudited)

(In thousands)	Six Months Ended June 30,				Trailing Twelve Months Ended June 30,		Twelve Months Ended December 31,	
	2024		2023		2024		2023	
Research and development expense	\$	32,988	\$	31,224	\$	69,752	\$	67,988
Capitalized software development costs		6,796		6,083		12,773		12,060
Total R&D investment	\$	39,784	\$	37,307	\$	82,525	\$	80,048
Netsales	\$	875,765	\$	845,561	\$	1,817,851	\$	1,787,647
R&D investment (% net sales)		4.5%		4.4%		4.5%		4.5%

Management believes that total R&D investment is a meaningful measure for investors. Management includes capitalized software development costs when evaluating total research and development expenditures as it believes it better represents its overall spend. Management defines R&D investment as research and development expense plus capitalized software development cost. As such, management believes that it is appropriate to consider research and development expense determined on a GAAP basis as well as total R&D investment.



