

Safe Harbor for Forward-Looking Statements

This presentation contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 regarding the future financial performance, business prospects and growth of MKS Instruments, Inc. ("MKS", the "Company", "our", or "we"). These statements are only predictions based on current assumptions and expectations. Any statements that are not statements of historical fact (including statements containing the words "will," "projects," "intends," "believes," "plans," "anticipates," "expects," "estimates," "forecasts," "continues" and similar expressions) should be considered to be forward-looking statements. Actual events or results may differ materially from those in the forward-looking statements set forth herein. Among the important factors that could cause actual events to differ materially from those in the forward-looking statements that we make are the need to generate sufficient cash flows to service and repay the substantial indebtedness we incurred in connection with our acquisition of Atotech Limited ("Atotech" and such transaction, the "Atotech Acquisition"), which we completed in August 2022; the terms of our existing credit facilities under which we incurred such debt; our entry into the chemicals technology business through the Atotech Acquisition, in which we do not have experience and which may expose us to significant additional liabilities; the risk that we are unable to integrate the Atotech Acquisition successfully or realize the anticipated synergies, cost savings and other benefits of the Atotech Acquisition; the ongoing assessment of the ransomware incident we identified on February 3, 2023, including legal, reputational, financial and contractual risks resulting from the incident, and other risks related to cybersecurity, data privacy and intellectual property; competition from larger, more advanced or more established companies in our markets; the ability to successfully grow our business and the businesses of Atotech and Electro Scientific Industries, Inc., which we acquired in February 2019, and financial risks associated with those and potential future acquisitions, including goodwill and intangible asset impairments; manufacturing and sourcing risks, including those associated with limited and sole source suppliers and the impact and duration of supply chain disruptions, component shortages, and price increases; changes in global demand and the impact of COVID-19 or any other pandemic, including with respect to such supply chain disruptions, component shortages and price increases; risks associated with doing business internationally, including trade compliance, regulatory restrictions on our products, components or markets, particularly the semiconductor market, and unfavorable currency exchange and tax rate fluctuations, which risks become more significant as we grow our business internationally and in China specifically; conditions affecting the markets in which we operate, including fluctuations in capital spending in the semiconductor, electronics manufacturing and automotive industries, and fluctuations in sales to our major customers; disruptions or delays from third-party service providers upon which our operations may rely; the ability to anticipate and meet customer demand; the challenges, risks and costs involved with integrating or transitioning local and international operations of the companies we have acquired; risks associated with the attraction and retention of key personnel; potential fluctuations in quarterly results; dependence on new product development; rapid technological and market change; acquisition strategy; volatility of stock price; risks associated with chemical manufacturing and environmental regulation compliance; risks related to defective products; financial and legal risk management; and the other important factors described in MKS' Annual Report on Form 10-K for the year ended December 31, 2022 and any subsequent Quarterly Reports on Form 10-Q, as filed with the U.S. Securities and Exchange Commission. MKS is under no obligation to, and expressly disclaims any obligation to, update or alter these forward-looking statements, whether as a result of new information, future events or otherwise after the date of this presentation. Amounts reported in this presentation are preliminary and subject to finalization prior to the filing of our Quarterly Report on Form 10-Q for the quarter ended June 30, 2023.



Notes on Presentation

Use of Non-GAAP Financial Measures

This presentation includes financial measures that are not in accordance with U.S. generally accepted accounting principles ("Non-GAAP financial measures"). These Non-GAAP financial measures should be viewed in addition to, and not as a substitute for, MKS' reported results under U.S. generally accepted accounting principles ("GAAP"), and may be different from Non-GAAP financial measures used by other companies. In addition, these Non-GAAP financial measures are not based on any comprehensive set of accounting rules or principles. MKS management believes the presentation of these Non-GAAP financial measures is useful to investors for comparing prior periods and analyzing ongoing business trends and operating results.

MKS is not providing a quantitative reconciliation of forward-looking Non-GAAP gross margin, operating expenses, operating income, operating margin, interest expense, net, income tax rate, net earnings, net earnings per diluted share and Adjusted EBITDA to their most directly comparable GAAP financial measures because it is unable to estimate with reasonable certainty the ultimate timing or amount of certain significant items without unreasonable efforts. These items include, but are not limited to, acquisition and integration costs, amortization of intangible assets, ransomware remediation costs, restructuring and other expense, goodwill and intangible asset impairments or other asset impairments, debt refinancing, prepayments of term loan principal, and the income tax effect of these items. These items are uncertain, depend on various factors, including, but not limited to, our acquisition of Atotech Limited ("Atotech") in August 2022 (the "Atotech Acquisition"), timing of ransomware remediation, and interest rate and refinancing environment, and could have a material impact on GAAP reported results for the relevant period.

Combined Company Financial Information

All references to "combined company" financial measures reflect the combined results of MKS and Atotech but are not calculated in accordance with Article 11 of Regulation S-X. In addition, except as otherwise indicated, Atotech financial information for periods up until the Atotech Acquisition has been adjusted from International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS") to GAAP and includes adjustments to conform to the accounting policies of MKS.

MKS has not identified material differences in Atotech's net revenue under GAAP and Atotech's historical reported net revenue under IFRS. Net revenues by end market for Atotech are based on MKS' understanding of end market uses for Atotech products and services.

For further information regarding Non-GAAP financial measures and the calculation of certain combined company financial information, please refer to the appendix at the end of this presentation. In addition, for a detailed breakout of reported and combined company revenues by end-market, please visit the Net Revenues by End Market presentation available under Events & Presentation on the Investor Relations section of MKS' website at investor.mks.com.



Q2'23 Market Highlights



- Recovery of approximately \$90 million of approximately \$110 million in revenue impacted by ransomware event in Q1'23.
- Demand for our critical vacuum subsystems for deposition and etch applications declined considerably compared to a year ago, consistent with capital equipment spending trends
- Photonics demand remained resilient for lithography, metrology and inspection and 1H'23 grew considerably year-over-year

Electronics & P	ackaging
REVENUE	\$225M
Q/Q GROWTH	1%
Y/Y GROWTH ⁽¹⁾	-21%

- Revenue consistent with demand weakness for global electronics production such as PCs and smartphones
- Demand for chemistry improved modestly on sequential basis, offset by continued softness in capital equipment spending
- MKS strongly positioned for Advanced Packaging – which will continue to be an area of focus and investment

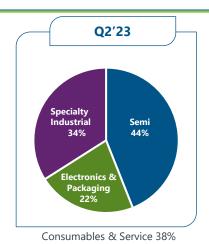
Specialty Indus	trial
REVENUE	\$338M
Q/Q GROWTH	29%
Y/Y GROWTH ⁽¹⁾	4%

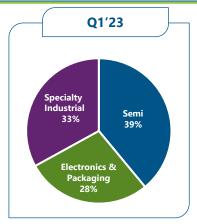
- Recovery of approximately \$30 million of approximately \$45 million in revenue impacted by ransomware event in Q1'23
- Stable demand for chemistry solutions for the automotive market

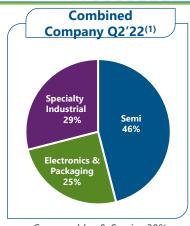
⁽¹⁾ See Slide 3 for additional information regarding the calculation of combined company results of MKS and Atotech. Year-over-year percentages compare the net revenue of MKS for Q2'23 with the combined company net revenue of MKS and Atotech for Q2'22.



Revenue







Consumables & Service 43%

Consumables & Service 38%

A2122 ... A2122(1)

							Q2*23 Vs Q2*22(1)							
											Change			
							Total			Excluding		Excluding FX, Pd		
	Q	2'23	Q1	l '23	Q2'22 ⁽¹⁾		Q2'22 ⁽¹⁾		Change	FX	Pd	FX & Pd	Ransomware	& Ransomware
Semiconductor	\$	440	\$	309	\$	515	-14%	-1%	0%	-14%	17%	-31%		
Electronics & Packaging		225		222		284	-21%	-3%	-3%	-15%	1%	-16%		
Specialty Industrial		338		263		324	4%	-1%	0%	6%	9%	-3%		
	\$	1,003	\$	794	\$	1,123	-11%	-1%	-1%	-8%	11%	-19%		

¹ For comparability, figures for Q2'22 combine the revenue of MKS and Atotech for the full period. See Slide 3 for additional information regarding the calculation of combined company results of MKS and Atotech.

"Total Change" represents the percentage change in net revenues. "FX", "Pd" and "Ransomware" reflect the estimated impact of foreign exchange rates, palladium prices and the ransomware incident identified in Q1'23, on net revenues, respectively. "Change Excluding FX & Pd" is the difference between "Total Change" and "FX" and "Ransomware."



Revenue & Select Financial Measures

	Q2′23	Q1′23	Q2′22
Semiconductor	\$440M	\$309M	\$515M
Electronics & Packaging	\$225M	\$222M	\$49M
Specialty Industrial	\$338M	\$263M	\$201M
Revenue	\$1,003M	\$794M	\$765M
Non-GAAP Financial Measures			
Gross Margin	46.9%	42.2%	44.2%
Operating Margin	22.6%	12.1%	24.1%
Interest Expense, Net	\$79M	\$76M	\$6M
Income Tax Rate	35.5%	-46.8%	18.0%
Net Earnings	\$88M	\$32M	\$145M
Net Earnings per Diluted Share	\$1.32	\$0.48	\$2.59
Adjusted EBITDA	\$254M	\$142M	\$208M
GAAP Financial Measures			
Gross Margin	46.9%	42.2%	44.2%
Operating Margin	(169.1)%	0.1%	21.5%
Interest Expense, net	\$84M	\$82M	\$6M
Income Tax Rate	1.2%	46.6%	17.0%
Net (Loss) Income	\$(1,769M)	\$(42M)	\$130M
Net (Loss) Income per Diluted Share	\$(26.47)	\$(0.64)	\$2.32

Q2'23 SUMMARY

- Recovered estimated \$120 million of the approximately \$160 million in revenue impacted by the ransomware incident
- Non-GAAP gross margin exceeded high end of guidance range due to higher volumes, increased factory utilization, disciplined cost management and favorable product mix.
- Non-GAAP operating margin and adjusted EBITDA margin exceeded expectations due to strong operating leverage in the model.
- Non-GAAP interest expense, net was favorable to guidance due to higher interest income and slightly favorable interest rate to forecast on term loans.
- Atotech cost synergies reached annualized rate of just over \$30 million exiting the second quarter.

Amounts for Q2'22 are reported actuals rather than Combined Company.



Balance Sheet & Cash Flow

	Q2′23	Q1′23
Cash & Short-Term Investments	\$758M	\$880M
Accounts Receivable	\$631M	\$572M
Inventories	\$1,036M	\$1,058M
Total Current Assets	\$2,728M	\$2,748M
Total Assets	\$9,230M	\$11,366M
Term Loan Principal	\$5,086M	\$5,111M
Total Liabilities	\$6,735M	\$6,915M
Stockholders' Equity	\$2,495M	\$4,451M
Operating Cash Flow	\$(59M)	\$37M
Free Cash Flow	\$(77M)	\$20M

Q2'23 SUMMARY

- Negative cash flow due to lingering effects of the ransomware incident on working capital needs and timing of income tax payments
- Net leverage ratio of 4.3x at June 30, 2023, calculated on a combined company basis
- Expect cash conversion cycle to improve in Q3 and free cash flow to return to more normalized levels
- Issued cash dividend of \$15 million or \$0.22 per share
- Noncash goodwill and intangibles impairment totaling \$1.8 billion, primarily due to:
 - Current market environment, particularly wellpublicized weakness in PCs and smartphones
 - Higher market interest rates impacting Atotech impairment analysis as well



Q3'23 Guidance

	Q3′23	Q2′23
Revenue	\$930M +/- \$50M	\$1,003M
Non-GAAP Financial Measures		
Gross Margin	45.0% +/- 100 bps	46.9%
Operating Expenses	\$245M +/- \$5M	\$243M
Operating Income	\$174M +/- \$26M	\$227M
Operating Margin	18.7% +/- 170 bps	22.6%
Interest Expense, Net	\$85M	\$79M
Income Tax Rate	26.0%	35.5%
Net Earnings	\$66M +/- \$19M	\$88M
Net Earnings per Diluted Share	\$0.98 +/- \$0.29	\$1.32
Adjusted EBITDA	\$210M +/- \$26M	\$254M
Diluted Share Count	67.0M	67.0M

Q3'23 SUMMARY

- Revenue guidance includes approximately \$30 million from first quarter delays due to the ransomware incident, with expectations by end market as follows:
 - Semiconductor \$370M +/- \$20M
 - Electronics & Packaging \$225M +/- \$10M
 - Specialty Industrial \$335M +/- \$20M
- Non-GAAP gross margin reflects anticipated product mix and revenue levels
- Operating expenses relatively in-line with second quarter levels





Appendix – GAAP to Non-GAAP Reconciliations

	Q2'23	Q1	'23	Q2	'22		Q2'23	c	Q1'23	Q2'	'22
Net (loss) income	\$ (1,769)	\$	(42)	\$	130	(Loss) income from operations	\$ (1,696	5) \$	1	\$	164
Acquisition and integration costs (Note 1)	5		6		2	Operating margin	-169.19	%	0.1%	2	1.5%
Restructuring (Note 2)	11		1		3	Acquisition and integration costs (Note 1)		5	6		2
Goodwill and intangible asset impairments (Note 3)	1,827		_		_	Restructuring (Note 2)	1	1	1		3
Amortization of debt issuance costs (Note 4)	5		6		_	Goodwill and intangible asset impairments (Note 3)	1,82	7	_		_
Ransomware incident (Note 5)	4		7		_	Ransomware incident (Note 5)		4	7		_
Windfall tax benefit on stock-based compensation (Note 6)	1		_		_	Amortization of intangible assets	7	6	81		15
Foreign tax rate adjustment (Note 7)	_		(3)		_	Non-GAAP income from operations	\$ 22	7 9	96	\$	184
Amortization of intangible assets	76		81		15	Non-GAAP operating margin	22.69	%	12.1%	2.	4.1%
Tax effect of Non-GAAP adjustments (Note 8)	(72)		(24)		(5)	•					
Non-GAAP net earnings	\$ 88	\$	32	\$	145	Interest expense, net	\$ 8	4 9	82	\$	6
Non-GAAP net earnings per diluted share	\$ 1.32	\$	0.48	\$	2.59	Amortization of debt issuance costs (Note 4)		5	6		_
Weighted average diluted shares outstanding	67.0		66.8		55.8	Non-GAAP interest expense, net	\$ 7	9 9	76	\$	6
GAAP and Non-GAAP gross profit	\$ 470	\$	335	\$	338	Net (loss) income	\$ (1,769	9) \$	(42)	\$	130
Non-GAAP gross margin	46.9%	4	2.2%	2	14.2%	Interest expense, net	8	4	82		6
						(Benefit) provision for income taxes	(22	2)	(37)		26
Operating expenses	\$ 2,166	\$	334	\$	174	Depreciation	2	5	26		13
Acquisition and integration costs (Note 1)	5		6		2	Amortization of intangible assets	7	6	81		15
Restructuring (Note 2)	11		1		3	EBITDA	\$ (1,606	5) 9	110	\$	190
Goodwill and intangible asset impairments (Note 3)	1,827		_		_	Stock-based compensation	1	3	18		13
Ransomware incident (Note 5)	4		7		_	Acquisition and integration costs (Note 1)		5	6		2
Amortization of intangible assets	76		81		15	Restructuring (Note 2)	1	1	1		3
Non-GAAP operating expenses	\$ 243	\$	240	\$	154	Goodwill and intangible asset impairments (Note 3)	1,82	7	_		_
						Ransomware incident (Note 5)		4	7		_
Net cash provided by operating activities	\$ (59)	\$	37	\$	105	Adjusted EBITDA	\$ 25	4 9	142	\$	208
Purchases of property, plant and equipment	(18)		(17)		(64)	Adjusted EBITDA margin	25.39	%	17.8%	2	7.2%
Free cash flow	\$ (77)	\$	20	\$	41						

in millions other than per diluted share amounts



Appendix – GAAP to Non-GAAP Reconciliations

GAAP

Acquisition and integration costs (Note 1)

Restructuring (Note 2)

Goodwill and intangible asset impairments (Note 3)

Amortization of debt issuance costs (Note 4)

Ransomware incident (Note 5)

Windfall tax benefit on stock-based compensation (Note 6)

Amortization of intangible assets

Foreign tax rate adjustment (Note 7)

Tax effect of Non-GAAP adjustments (Note 8)

Non-GAAP

GAAP

Acquisition and integration costs (Note 1)

Restructuring (Note 2)

Amortization of intangible assets

Tax effect of Non-GAAP adjustments (Note 8)

Non-GAAP

Q2'23												
(Loss)	Income	(Bene	efit)									
Ве	efore	Provision	on for	Effective Tax								
Inco	me Tax	Income	Taxes	Rate								
\$	(1,791)	\$	(22)	1.2%								
	5											
	11		_									
	1,827											
	5		_									
	4		_									
	_		(1)									
	76		_									
	_		_									
	_		72									
<u>¢</u>	137	\$	49	35.5%								
<u> </u>	131	Ψ	+3	33.370								

Q1'23										
(Loss) I	ncome	(Bei	nefit)							
Bef	ore	Provis	ion for	Effective Tax						
Incom	e Tax	Incom	e Taxes	Rate						
\$	(79)	\$	(37)	46.6%						
	6		_							
	1		_							
			_							
	6		_							
	7		_							
	_		_							
	81		_							
	_		3							
	_		24							
\$	23	\$	(10)	-46.8%						

Q2'22

Income			
Before	Pro	vision for	Effective Tax
ncome Tax	Inco	me Taxes	Rate
\$ 156	\$	26	17.0%
2		_	
3		_	
15		_	
_		5	
\$ 176	\$	31	18.0%
	ncome Tax \$ 156 2 3 15 —	ncome Tax Inco \$ 156 \$ 2 3 15 —	2 — 3 — 15 — 5





Appendix – GAAP to Non-GAAP Reconciliations

Non-GAAP financial measures adjust GAAP financial measures for the items listed below. These Non-GAAP financial measures should be viewed in addition to, and not as a substitute for, MKS' reported GAAP results, and may be different from Non-GAAP financial measures used by other companies. In addition, these Non-GAAP financial measures are not based on any comprehensive set of accounting rules or principles. MKS management believes the presentation of these Non-GAAP financial measures is useful to investors for comparing prior periods and analyzing ongoing business trends and operating results. Totals presented may not sum and percentages may not recalculate using figures presented due to rounding.

Note 1: Acquisition and integration costs primarily related to the Atotech Acquisition.

Note 2: Restructuring costs during the three months ended June 30, 2023 and the three months ended March 31, 2023, primarily related to severance costs due to global cost-saving initiatives. Restructuring costs during the three months ended June 30, 2022 primarily related to severance costs due to a global cost-saving initiative and the closure of two facilities in Europe.

Note 3: During the three months ended June 30, 2023, we noted softer industry demand, particularly in the personal computer and smartphone markets and concluded there was a triggering event at our Materials Solutions Division, which represents the former Atotech business, and Equipment Solutions Business, which represents the former Electro Scientific Industries business and is a reporting unit of our Photonics Solutions Division. We performed a quantitative assessment which resulted in an impairment of \$1.3 billion for our Materials Solutions Division and \$0.5 billion for our Equipment Solutions Business.

Note 4: We recorded additional interest expense related to the amortization of debt issuance costs associated with our term loan facility.

Note 5: We recorded costs, net of recoveries, associated with the ransomware incident we identified on February 3, 2023. These costs were primarily comprised of various third-party consulting services, including forensic experts, restoration experts, legal counsel, and other information technology and accounting professional expenses, enhancements to our cybersecurity measures, and costs to restore our systems and access our data.

Note 6: We recorded windfall tax benefits on the vesting of stock-based compensation.

Note 7: We recorded a reduction in benefit for income taxes for a retrospective approval of an income tax rate reduction from a foreign jurisdiction.

Note 8: Non-GAAP adjustments are tax effected at applicable statutory rates resulting in a difference between the GAAP and Non-GAAP tax rates.



Appendix – Reconciliation of Net Leverage Ratio

Combined Company	Q2'23	Q1	1'23	Q4	'22	Q3	'22	Total	MKS	Q3	'22
Net (loss) income	\$ (1,769)	\$	(42)	\$	54	\$	(12)	\$ (1,769)	Net income	\$	54
Interest expense, net	84		82		83		105	354	Interest expense, net		79
(Benefit) provision for income taxes	(22)		(37)		11		33	(15)	Provision for income taxes		44
Depreciation and amortization	101		107		96		73	377	Depreciation and amortization		28
Stock-based compensation	13		18		13		13	57	Stock-based compensation		10
Acquisition and integration costs	5		6		11		71	93	Acquisition and integration costs		30
Acquisition inventory step-up	_		_		13		39	52	Adjusted EBITDA	\$	245
Restructuring	11		1		1		5	18			
Goodwill and intangible asset impairments	1,827		_		_		_	1,827	Atotech		
Ransomware incident	4		7		_		_	11	Net loss	\$	(67)
Adjusted EBITDA	\$ 254	\$	142	\$	282	\$	327	\$ 1,005	Interest expense, net		25
•									Benefit for income taxes		(12)
June 30, 2023									Depreciation and amortization		49
Principal outstanding on New Credit Agreement								\$ 5,086	Stock-based compensation		3
Less: Cash & short-term investments								758	Acquisition and integration costs		41
Net debt							_	\$ 4,328	Acquisition inventory step-up		39
Net leverage ratio							_	4.3x	Restructuring		5
-									Adjusted EBITDA	\$	82

Combined Company combines the results of MKS (excluding Atotech/MSD for Q3'22) and the results of Atotech/MSD (including full quarter results for Q3'22) in millions

