MSA Safety Incorporated
Reconciliation of As Reported Financial Measures to Non-GAAP Financial Measures
Constant currency revenue growth (Unaudited)
Organic constant currency revenue growth (Unaudited)

Consolidated

Three Months Ended September 30, 201	Three	Months	Ended	September	30.	2018
--------------------------------------	-------	--------	-------	-----------	-----	------

	Breathing Apparatus	Firefighter Helmets and Protective Apparel ^(a)	Industrial Head Protection	Portable Gas Detection	Fixed Gas and Flame Detection	Fall Protection	Core Sales	Non- Core Sales	Net Sales
GAAP reported sales change	22%	12 %	7%	11%	6%	13%	12%	9%	12%
Plus: Currency translation effects	1%	1 %	4%	2%	1%	2%	2%	3%	2%
Constant currency sales change	23%	13 %	11%	13%	7%	15%	14%	12%	14%
Less: Acquisitions	—%	29 %	—%	—%	—%	—%	1%	—%	1%
Organic constant currency change	23%	(16)%	11%	13%	7%	15%	13%	12%	13%

Nine Months Ended September 30, 2018

	Breathing Apparatus	Firefighter Helmets and Protective Apparel ^(a)	Industrial Head Protection	Portable Gas Detection	Fixed Gas and Flame Detection	Fall Protection	Core Sales	Non- Core Sales	Net Sales
GAAP reported sales change	12 %	110 %	10%	13 %	10 %	10 %	20 %	4 %	17 %
Plus: Currency translation effects	(1)%	(2)%	1%	(1)%	(2)%	(1)%	(2)%	(1)%	(1)%
Constant currency sales change	11 %	108 %	11%	12 %	8 %	9 %	18 %	3 %	16 %
Less: Acquisitions	— %	113 %	—%	— %	— %	— %	9 %	— %	8 %
Organic constant currency change	11 %	(5)%	11%	12 %	8 %	9 %	9 %	3 %	8 %

⁽a) Firefighter helmets and protective apparel includes the impact of the Globe acquisition, completed on July 31, 2017.

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. Organic constant currency revenue growth is defined as constant currency revenue growth excluding acquisitions. Management believes that organic constant currency revenue growth is a useful measure for investors to provide an understanding of MSA's standalone results. There can be no assurances that MSA's definition of constant currency revenue growth or organic 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 these non-GAAP financial measures.

MSA Safety Incorporated
Reconciliation of As Reported Financial Measures to Non-GAAP Financial Measures
Constant currency revenue growth (Unaudited)
Organic constant currency revenue growth (Unaudited)

Americas Segment

Three M	onths	Ended	Septem	ber	30.	2018

	Breathing Apparatus	Firefighter Helmets and Protective Apparel ^(a)	Industrial Head Protection	Portable Gas Detection	Fixed Gas and Flame Detection	Fall Protection	Core Sales	Non-Core Sales	Net Sales
GAAP reported sales change	23%	20 %	5%	12%	4%	20%	14%	(2)%	12%
Plus: Currency translation effects	1%	— %	4%	2%	1%	2%	1%	3 %	2%
Constant currency sales change	24%	20 %	9%	14%	5%	22%	15%	1 %	14%
Less: Acquisitions	—%	32 %	%	-%	—%	%	2%	%	2%
Organic constant currency change	24%	(12)%	9%	14%	5%	22%	13%	1 %	12%

Nine Months Ended September 30, 2018

	Breathing Apparatus	Firefighter Helmets and Protective Apparel ^(a)	Industrial Head Protection	Portable Gas Detection	Fixed Gas and Flame Detection	Fall Protection	Core Sales	Non- Core Sales	Net Sales
GAAP reported sales change	8%	177 %	9%	13%	9%	16%	24%	(5)%	20%
Plus: Currency translation effects	1%	1 %	3%	1%	%	1%	1%	2 %	1%
Constant currency sales change	9%	178 %	12%	14%	9%	17%	25%	(3)%	21%
Less: Acquisitions	%	183 %	—%	—%	—%	—%	15%	— %	12%
Organic constant currency change	9%	(5)%	12%	14%	9%	17%	10%	(3)%	9%

⁽a) Firefighter helmets and protective apparel includes the impact of the Globe acquisition, completed on July 31, 2017.

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. Organic constant currency revenue growth is defined as constant currency revenue growth excluding acquisitions. Management believes that organic constant currency revenue growth is a useful measure for investors to provide an understanding of MSA's standalone results. There can be no assurances that MSA's definition of constant currency revenue growth or organic 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 these non-GAAP financial measures.

MSA Safety Incorporated Reconciliation of As Reported Financial Measures to Non-GAAP Financial Measures Constant currency revenue growth (Unaudited) Organic constant currency revenue growth (Unaudited)

International Segment

	I hree Months Ended September 30, 2018										
	Breathing Apparatus	Firefighter Helmets and Protective Apparel ^(a)	Industrial Head Protection	Portable Gas Detection	Fixed Gas and Flame Detection	Fall Protection	Core Sales	Non-Core Sales	Net Sales		
GAAP reported sales change	19%	(18)%	14%	8%	7%	4%	9%	23%	11%		
Plus: Currency translation effects	4%	1 %	4%	4%	2%	2%	3%	4%	3%		
Constant currency sales change	23%	(17)%	18%	12%	9%	6%	12%	27%	14%		
Less: Acquisitions	%	2 %	—%	—%	—%	—%	1%	%	%		
Organic constant currency change	23%	(19)%	18%	12%	9%	6%	11%	27%	14%		
	Nine Months Ended September 30, 2018										
	Breathing Apparatus	Firefighter Helmets and Protective Apparel ^(a)	Industrial Head Protection	Portable Gas Detection	Fixed Gas and Flame Detection	Fall Protection	Core Sales	Non-Core Sales	Net Sales		
GAAP reported sales change	20 %	3 %	13 %	13 %	11 %	3 %	12 %	14 %	12 %		
Plus: Currency translation effects	(5)%	(6)%	(3)%	(4)%	(5)%	(4)%	(5)%	(4)%	(4)%		
Constant currency sales change	15 %	(3)%	10 %	9 %	6 %	(1)%	7 %	10 %	8 %		
Less: Acquisitions						24	0.4		0.4		
Acquisitions		2 %	<u> </u>	<u> </u>	<u> </u>	— %	<u> </u>	<u> </u>	<u> </u>		

⁽a) Firefighter helmets and protective apparel includes the impact of the Globe acquisition, completed on July 31, 2017.

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. Organic constant currency revenue growth is defined as constant currency revenue growth excluding acquisitions. Management believes that organic constant currency revenue growth is a useful measure for investors to provide an understanding of MSA's standalone results. There can be no assurances that MSA's definition of constant currency revenue growth or organic 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 these non-GAAP financial measures.

MSA Safety Incorporated Reconciliation of As Reported Financial Measures to Non-GAAP Financial Measures Organic constant currency SG&A expense (Unaudited) (In thousands)

		nths Ended nber 30,		Nine Mon Septem		
	2018	2017	% Change	2018	2017	% Change
GAAP reported SG&A expense	\$ 78,013	\$ 72,852	7%	\$240,226	\$223,741	7%
Plus: currency translation effects		(2,041)			209	
Constant currency SG&A expense	78,013	70,811	10%	240,226	223,950	7%
Less: Acquisitions and strategic transaction costs	2,119	2,467		7,876	5,460	
Organic constant currency SG&A expense	\$ 75,852	\$ 68,344	11%	\$232,350	\$218,490	6%

Management believes that organic constant currency SG&A expense is a useful metric for investors to measure the effectiveness of the company's cost reduction programs. Constant currency SG&A expense highlights spending patterns excluding fluctuating foreign currencies. Organic constant currency SG&A expense highlights the impact of acquisitions and strategic transaction costs. These metrics provide investors with a greater level of clarity into spending levels on a year-over-year basis. There can be no assurances that MSA's definition of organic constant currency SG&A expense is consistent with that of other companies. As such, management believes that it is appropriate to consider SG&A expense determined on a GAAP basis in addition to this non-GAAP financial measure.

MSA Safety Incorporated Reconciliation of As Reported Financial Measures to Non-GAAP Financial Measures Adjusted operating income / Adjusted operating margin (Unaudited - In thousands)

					_	_	Canadidatad		
		Americas	<u>In</u>	ternational_		Corporate	Consolidated		
Three months ended September 30, 2018 Sales to external customers Operating income Operating margin % Restructuring charges Currency exchange gains, net Other operating expense Strategic transaction costs	\$	209,343	\$	121,753	\$	_	\$	331,096 40,003 12.1% 2,615 (252) 14,627 56	
Adjusted operating income (loss) Adjusted operating margin %		51,532 24.6%		13,329 10.9%		(7,812)		57,049 17.2%	
Three Months Ended September 30, 2017 Sales to external customers Operating income Operating margin % Restructuring charges Currency exchange losses, net Other operating expense Strategic transaction costs	\$	186,898	\$	109,231	\$	_	\$	296,129 39,878 13.5% 3,214 562 3,346 386	
Adjusted operating income (loss) Adjusted operating margin %		45,365 24.3%		10,229 9.4%		(8,208)		47,386 16.0%	
		A mariana	1	tornational	_	Corporato	C	onsolidated	
		<u>Americas</u>	<u> In</u>	<u>ternational</u>		Corporate	<u> </u>	Moonaatoa	
Nine Months Ended September 30, 2018 Sales to external customers Operating income Operating margin % Restructuring charges Currency exchange losses, net Other operating expense Strategic transaction costs Adjusted operating income (loss)	\$	633,812 151,456	<u>s</u>	362,508 41,960	\$	(23,710)	\$	996,320 131,235 13.2% 10,223 2,571 25,469 208 169,706	
Sales to external customers Operating income Operating margin % Restructuring charges Currency exchange losses, net Other operating expense Strategic transaction costs		633,812		362,508		_	\$	996,320 131,235 13.2% 10,223 2,571 25,469 208	
Sales to external customers Operating income Operating margin % Restructuring charges Currency exchange losses, net Other operating expense Strategic transaction costs Adjusted operating income (loss)		633,812 151,456		362,508 41,960		_	\$	996,320 131,235 13.2% 10,223 2,571 25,469 208 169,706	

The Americas segment is comprised of our operations in the U.S., Canada and Latin America. The International segment is comprised of our operations in all other parts of the world including Europe, Africa, the Middle East, India, China, South East Asia and Australia. Certain global expenses are allocated to each segment in a manner consistent with where the benefits from the expenses are derived.

Adjusted operating income (loss) and adjusted operating margin are the measures used by the chief operating decision maker to evaluate segment performance and allocate resources. As such, management believes that adjusted operating income (loss) and adjusted operating margin are useful metrics for investors. Adjusted operating income (loss) is defined as operating income excluding restructuring charges, currency exchange gains/losses, other operating expense and strategic transaction costs. Adjusted operating margin is defined as adjusted operating income (loss) divided by sales to external customers. Adjusted operating income (loss) and adjusted operating margin are not recognized terms under GAAP and therefore do not purport to be alternatives to operating income or operating margin as a measure of operating performance. The Company's definition of adjusted operating income (loss) and adjusted operating margin may not be comparable to similarly titled measures of other companies. As such, management believes that it is appropriate to consider operating income determined on a GAAP basis in addition to these non-GAAP measures.

MSA Safety Incorporated Reconciliation of As Reported Financial Measures to Non-GAAP Financial Measures Adjusted effective tax rate (Unaudited)

	Three Months Ended September 30,
	2018
GAAP effective tax rate	11.0 %
Less: Tax Benefit associated with U.S. Tax Reform	(3.7)%
Less: Tax benefit associated with other operating expense	(3.7)%
Less: Tax benefit associated with ASU 2016-09: Improvements to employee share-based payment accounting Adjusted effective tax rate	(0.8)% 19.2 %
	Nine Months Ended September 30,
	2018
GAAP effective tax rate	19.1 %
Less: Tax Benefit associated with U.S. Tax Reform	(1.3)%
Less: Tax benefit associated with other	
operating expense	(0.9)%
	(0.9)%

Management believes that adjusted effective tax rate is a useful measure for investors. The adjusted effective tax rate excludes tax benefits that are unrelated to the ongoing operations of the company. There can be no assurances that MSA's metric is consistent with metrics used by other companies. As such, management believes that it is appropriate to consider MSA's effective tax rate determined on a GAAP basis as well as this non-GAAP measure.

MSA Safety Incorporated Reconciliation of As Reported Financial Measures to Non-GAAP Financial Measures Adjusted earnings (Unaudited) Adjusted earnings per diluted share (Unaudited) (In thousands, except per share amounts)

	Three Mon Septem						Nine Mont Septem			
		2018 2017		% Change	2018		2017		% Change	
Net income attributable to MSA Safety Incorporated	\$	33,717	\$	32,066	5%	\$	99,267	\$	59,011	68%
Tax benefit associated with U.S. Tax Reform		(1,956)		_			(1,956)		_	
Tax benefits associated with European reorganization		_		(2,474)			_		(2,474)	
Tax benefit associated with ASU 2016-09: Improvements to employee share-based payment accounting		(430)		(98)			(2,306)		(6,910)	
Subtotal		31,331		29,494	6%		95,005		49,627	91%
Restructuring charges		2,615		3,214			10,223		16,920	
Currency exchange (gains) losses, net		(252)		562			2,571		3,994	
Loss on extinguishment of debt		1,494		_			1,494		_	
Other operating expense		14,627		3,346			25,469		32,956	
Strategic transaction costs		56		386			208		3,365	
Asset related losses (gain) and other, net		(733)		30			415		274	
Income tax expense on adjustments		(4,024)		(1,598)			(9,645)		(16,367)	
Adjusted earnings	\$	45,114	\$	35,434	27%	\$	125,740	\$	90,769	39%
Adjusted earnings per diluted share	\$	1.16	\$	0.92	26%	\$	3.23	\$	2.35	37%

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 income determined on a GAAP basis as well as adjusted earnings.

MSA Safety Incorporated Reconciliation of As Reported Financial Measures to Non-GAAP Financial Measures Adjusted EBITDA / Adjusted EBITDA margin (Unaudited) (In thousands)

	Twelve Mo Septer		
	 2018	2017	% Change
Net income attributable to MSA Safety Incorporated	\$ 66,283	\$ 84,227	(21)%
Provision for income taxes	20,120	25,243	
Interest expense	19,248	14,462	
Depreciation and amortization	38,797	36,287	
Restructuring charges	10,936	18,917	
Currency exchange losses, net	3,704	2,261	
Other operating expense	118,945	32,956	
Strategic transaction costs	1,068	5,075	
Loss on extinguishment of debt	1,494	_	
Other income, net	(9,446)	(5,961)	
Adjusted EBITDA	\$ 271,149	\$ 213,467	27%
Net Sales	1,342,461	1,146,700	17%
Adjusted EBITDA margin	20.2%	18.6%	

Adjusted EBITDA is a non-GAAP financial measure. MSA defines this measure as net income attributable to the Company, excluding interest, taxes, depreciation and amortization, restructuring charges, other operating expense, currency exchange gains/losses, strategic transaction costs and other income. Management believes this information is useful for investors to analyze profitability trends of the Company. Adjusted EBITDA, as defined herein, may not be comparable to similarly titled measures reported by other companies. Furthermore, this performance measure does not take into account certain significant items that directly affect net income. Adjusted EBITDA margin is defined as adjusted EBITDA divided by net sales. Adjusted EBITDA and adjusted EBITDA margin should be considered in addition to GAAP measures such as net income.

.

MSA Safety Incorporated Reconciliation of As Reported Financial Measures to Non-GAAP Financial Measures Debt to adjusted EBITDA / Net debt to adjusted EBITDA (Unaudited) (In thousands)

	Twelve Months Ended September 30,		
		2018	
Net income attributable to MSA Safety Incorporated	\$	66,283	
Provision for income taxes		20,120	
Interest expense		19,248	
Depreciation and amortization		38,797	
Restructuring charges		10,936	
Currency exchange losses, net		3,704	
Other operating expense		118,945	
Strategic transaction costs		1,068	
Loss on extinguishment of debt		1,494	
Other income, net		(9,446)	
Adjusted EBITDA	\$	271,149	
Total end-of-period debt		390,200	
Debt to adjusted EBITDA		1.4	
Total end-of-period debt		390,200	
Total end-of-period cash and cash equivalents		118,161	
Net debt	\$	272,039	
Net debt to adjusted EBITDA		1.0	

Adjusted EBITDA is a non-GAAP financial measure. MSA defines this measure as net income attributable to the Company, excluding interest, taxes, depreciation and amortization, restructuring charges, other operating expense, currency exchange gains/losses, strategic transaction costs and other income. Management believes this information is useful for investors to analyze profitability trends of the Company. Adjusted EBITDA, as defined herein, may not be comparable to similarly titled measures reported by other companies. Furthermore, this performance measure does not take into account certain significant items that directly affect net income. Adjusted EBITDA should be considered in addition to GAAP measures such as net income.

Debt to adjusted EBITDA ratio is a non-GAAP measure defined as total long term debt and debt maturing within one year divided by adjusted EBITDA, as reconciled above. Net debt to adjusted EBITDA is a non-GAAP measure defined as total long term debt and debt maturing within one year, minus cash and cash equivalents divided by adjusted EBITDA, as reconciled above. These ratios are frequently used by investors and credit agencies and management believes this measures provides relevant and useful information.

MSA Safety Incorporated Reconciliation of As Reported Financial Measures to Non-GAAP Financial Measures Free cash flow (Unaudited) (In thousands, except percentages)

	,	Three Months Ended September 30,				Nine Months Ended September 30,			
		2018		2017		2018		2017	
Cash flow from operating activities Capital expenditures	\$	120,815 (9,808)	\$	42,964 (5,603)	\$	186,197 (18,620)	\$	189,246 (11,730)	
Free cash flow	\$	111,007	\$	37,361	\$	167,577	\$	177,516	
Net income attributable to MSA Safety Incorporated	\$	33,717	\$	32,066	\$	99,267	\$	59,011	
Free cash flow conversion		329%		117%		169%		301%	

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 net income attributable to MSA. 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.