



## Manufacturing Update Q3 2018

The Mufson Howe Hunter Manufacturing Update is designed to provide business leaders, investors, and industry professionals an update on current market trends and important developments within the manufacturing sector of the economy. This quarterly overview contains information on select companies in various subsectors within manufacturing emphasizing financial performance, stock performance, and recent news.

### Macro-Economic Trends

	Aug-18	Sep-18	Trend
PMI	61.3	59.8	Negative
Total Unemployment	3.9	3.7	Positive
CPI Monthly Change	0.2	0.1	Positive
PPI Monthly Change	(0.1)	0.2	Negative
Industrial Production	108.2	108.5	Positive
Capacity Utilization	78.1	78.1	Neutral
Manufacturing Production	104.6	104.8	Positive
Manufacturing Utilization	75.8	75.9	Positive

### Primary Mufson Howe Hunter Contacts:

Michael J. Howe  
Managing Director  
215.399.5413  
[mhowe@mhhco.com](mailto:mhowe@mhhco.com)

Michael J. Mufson  
Managing Director  
215.399.5410  
[mmufson@mhhco.com](mailto:mmufson@mhhco.com)

Joseph M. Manko, Jr.  
Managing Director  
215.399.5402  
[jmanko@mhhco.com](mailto:jmanko@mhhco.com)

Anthony J. Lopez-Ona  
Managing Director  
215.399.5405  
[alopezona@mhhco.com](mailto:alopezona@mhhco.com)

Peter J. Hill  
Managing Director  
215.399.5407  
[phill@mhhco.com](mailto:phill@mhhco.com)

Brandon K. Eck  
Managing Director  
215.399.5411  
[beck@mhhco.com](mailto:beck@mhhco.com)

### Sector Index Performance

	3-Year	1-Year	3-Month
Aerospace & Defense	88.7%	20.6%	9.9%
Components & Materials	28.2%	-6.1%	-0.6%
Industrial Equipment	84.1%	5.3%	2.4%
Industrial & Engineering Services and Distribution	34.7%	20.0%	9.1%
NASDAQ	74.2%	23.9%	7.1%
S&P	51.8%	15.7%	7.2%

## MHH Sectors/Sub-sectors

### Aerospace & Defense

- Aerospace
- Defense

### Components & Materials

- Electronic Components
- Specialty Materials
- Vehicle Parts and Supplies

### Industrial Equipment

- Construction Equipment
- Electrical Equipment
- Semiconductor Capital Equipment
- Measurement, Control and Testing Devices

### Industrial & Engineering Services and Distribution

- Industrial and Engineering Services
- Industrial Distribution
- Industrial Recycling Services

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MHH's coverage of the Manufacturing Sector spans companies in the following four sectors for each of which our index has been calculated as follows:

**The MMH Aerospace & Defense Index** is currently comprised of Airbus Group NV, BAE Systems plc, The Boeing Company, Embraer SA, General Dynamics Corp., Honeywell International Inc., Huntington Ingalls Industries, L-3 Communications Holdings Inc., Lockheed Martin Corp., Northrop Grumman Corp., Raytheon Company, Rockwell Collins Inc., Rolls Royce Holdings plc, Textron Inc., Thales SA, and United Technologies Corp.

**The MMH Components & Materials Index** is currently comprised of 3M Company, Akzo Nobel NV, Alps Electric Ltd., Amphenol Corp., Aptiv plc, Autoliv Inc., AVX Corp., BASF SE, Belden Inc., Bosch Ltd., Celanese Corp., Continental AG, Corning Inc., Denso Corp., Delphi Automotive plc, DowDuPont Inc., Encore Wire Corp., Evonik Industries, Ferro Corp., Johnson Controls Inc., Lear Corp., OMRON Corp., PPG Industries Inc., Solvay SA, Stanley Electric Co. Ltd., TE Connectivity Ltd., and Vishay Intertechnology.

**The MHH Industrial Equipment Index** is currently comprised of Ametek Inc., Applied Materials Inc., ASML Holding NV, Axcelis Technologies Inc., Brooks Automation Inc., Caterpillar Inc., Cohu Inc., Cummins Inc., Danaher Corp., Deere & Company, Eaton Corp. plc, Emerson Electric Co., Entegris Inc., FormFactor Inc., Hubbell Inc., Hyundai Heavy Industries Co. Ltd, KLA-Tencor Corp., LamResearch Corp., MKS Instruments Inc., Nanometrics Inc., Navistar International Corp., Nova Measuring Instruments Ltd., Oshkosh Corp., Powell Industries, Inc., Regal Beloit Corp., Rockwell Automation Inc., Rudolph Technologies Inc., Schneider Electric SE, Teradyne Inc., Terex Corp., Tokyo Electron Ltd., Veeco Instruments Inc., and Xcerra Corp.

**The MHH Industrial & Engineering Services and Distribution Index** is currently comprised of AECOM Technology Corp., Aurubis AG, Balfour Beatty plc, Cardno Ltd., Chicago Bridge & Iron Company NV, Clean Harbors Inc., Commercial Metals Company, Dowa Holdings Co. Ltd., Fastenal Company, Fluor Corp., HD Supply Holdings Inc., Jacobs Engineering Group Inc., John Wood Group plc, KBR Inc., Lawson Products Inc., MRC Global Inc., MSC Industrial Direct Co. Inc., Newalta Corp., Primoris Services Corp., Sims Metal Management Ltd., Tetra Tech Inc., Transcat Inc., Veolia Environnement SA, WW Grainger Inc., WESCO International Inc., and Willbros Group Inc.

The companies that comprise each Index can change periodically as a result of a variety of reasons, including mergers, acquisitions, initial public offerings, and other transactions; therefore, comparisons to historical time periods and historical performance for each Index may not entirely correspond and correlate to the Index's current performance. In addition, historical performance is not a guarantee or prediction of future results.

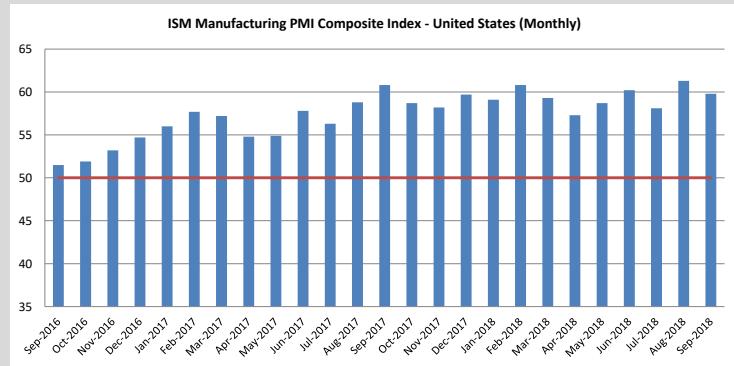
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**Note: Please refer to Page 25 for the Universe components.**

# Major U.S. Economic Indicators

## PMI (Purchase Manager Index)

A PMI reading above 50 percent (red line below) indicates that the manufacturing economy is generally expanding and below 50 percent means it is contracting.



Source: Institute for Supply Management

### Commentary

Economic activity in the manufacturing sector expanded in September, and the overall economy grew for the 113th consecutive month. The index, although down a bit, remains well into expansionary territory. New Orders, Production, and Employment all grew and Prices increased at a slower rate.

## Unemployment Rate

Unemployment rate is traditionally defined as the percentage of the total labor force that is actively looking for gainful employment.



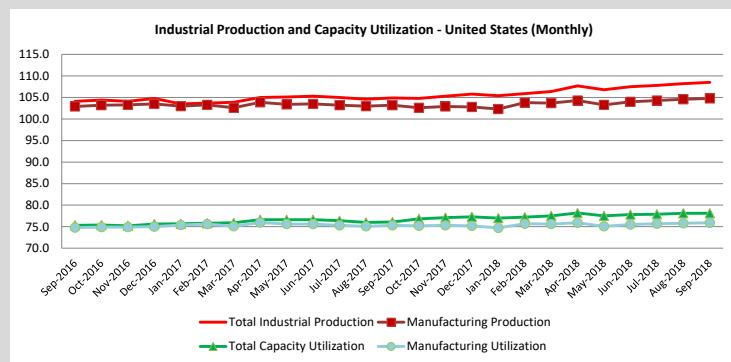
Source: United States Bureau of Labor

### Commentary

In September, the unemployment rate declined to 3.7%. The number of unemployed persons decreased by 270,000 to 6.0 million. Over the year, the number of unemployed persons has declined by 795,000. In September, job growth occurred in business services, health care, and transportation/warehousing.

## Industrial Production and Capacity Utilization

The Production Index (in red below) measures real output and is expressed as a percentage of real output in a base year, currently 2007. The Capacity Index (in green below), which is an estimate of sustainable potential output, is also expressed as a percentage of real output in 2007.



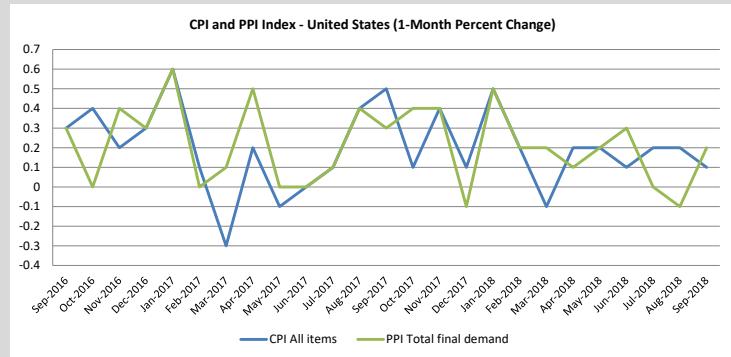
Source: United States Federal Reserve

### Commentary

Industrial production rose 0.3% in September, and manufacturing output increased 0.2%. For the third quarter as a whole, total industrial production advanced at an annual rate of 3.3%. At 108.5% of its 2012 average, total industrial production was 5.1% higher in September than it was a year earlier.

## Producer Price Index (PPI) and Consumer Price Index (CPI)

The PPI measures the average change over time in prices received (price changes) by producers for domestically produced goods, services and construction. The CPI measures changes in the prices paid by urban consumers for a representative basket of goods and services.



Source: United States Bureau of Labor

### Commentary

CPI for all items increased 0.1% in September. The shelter index continued to rise and accounted for over half of the monthly increase in CPI. PPI for final demand increased 0.2% in September. The rise in PPI is attributable to a 0.3% increase in prices for final demand services. In contrast, final demand goods decreased 0.1%.

## Comparative Sector Index Performance (Last Twelve Months)

### Last Twelve Months

Daily from September 29, 2017 to September 28, 2018

Price as Percent of Base (September 29, 2017 = 0%)



## Comparative Sector Index Performance (Last Three Years)

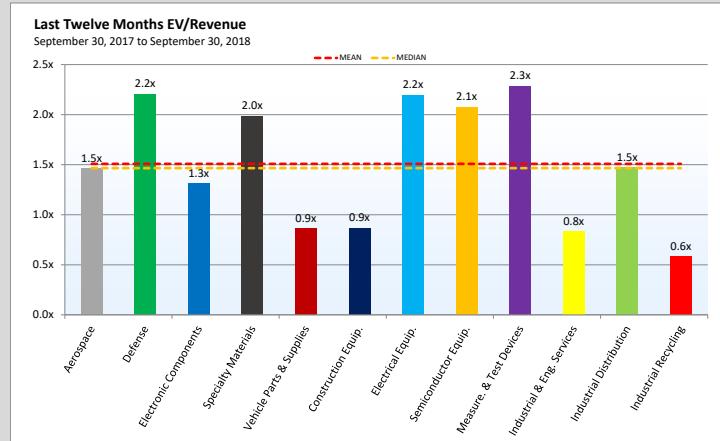
### Last Three Years

Daily from September 30, 2015 to September 28, 2018

Price as Percent of Base (September 30, 2015 = 0%)



## Comparative Subsector LTM EV/Revenue

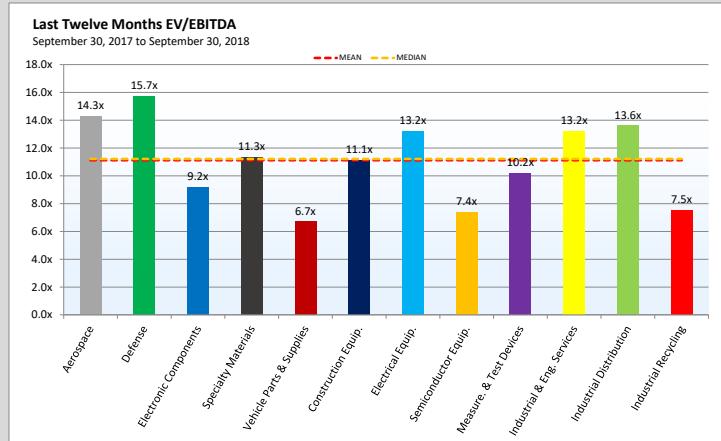


Source: CapitalIQ

### Commentary

During the last twelve months, our subsectors had a mean EV/Revenue of 1.5x and a median of 1.5x. Among the subsectors, Measurement, Control, and Testing Devices was the high multiple at 2.3x and Industrial Recycling was the low multiple at 0.6x.

## Comparative Subsector LTM EV/EBITDA

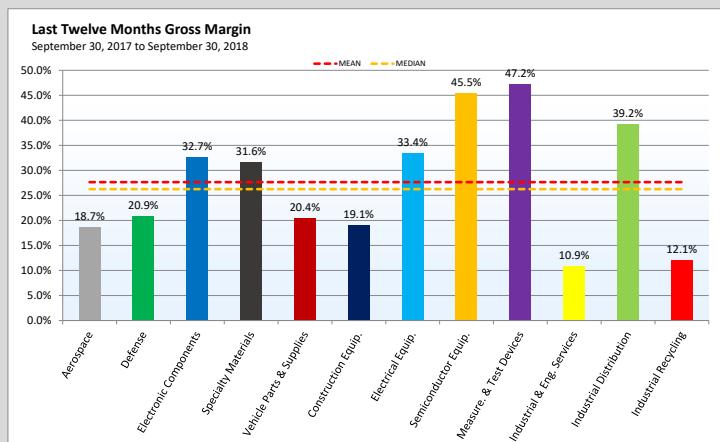


Source: CapitalIQ

### Commentary

During the last twelve months, our subsectors had a mean EV/EBITDA of 11.1x and a median of 11.2x. Among the subsectors, Defense was the high multiple at 15.7x and Vehicle Parts & Supplies was the low multiple at 6.7x.

## Comparative Subsector LTM Gross Margin

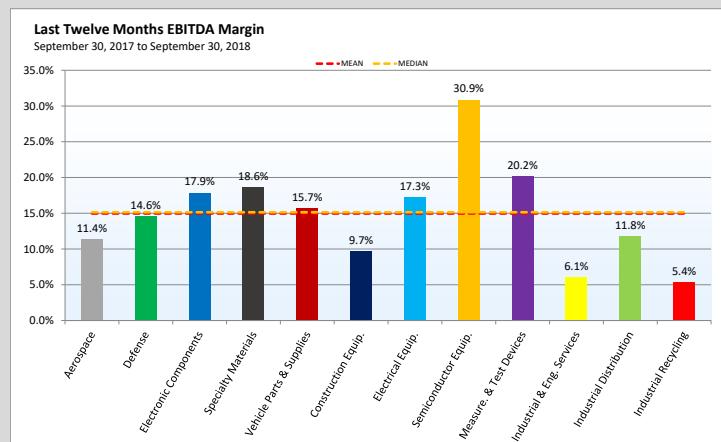


Source: CapitalIQ

### Commentary

During the last twelve months, our subsectors had a mean Gross Margin of 27.6% and a median of 26.3%. Among the subsectors, Measurement, Control, and Testing Devices was the high margin at 47.2% and Industrial & Engineering Services was the low margin at 10.9%.

## Comparative Subsector LTM EBITDA Margin

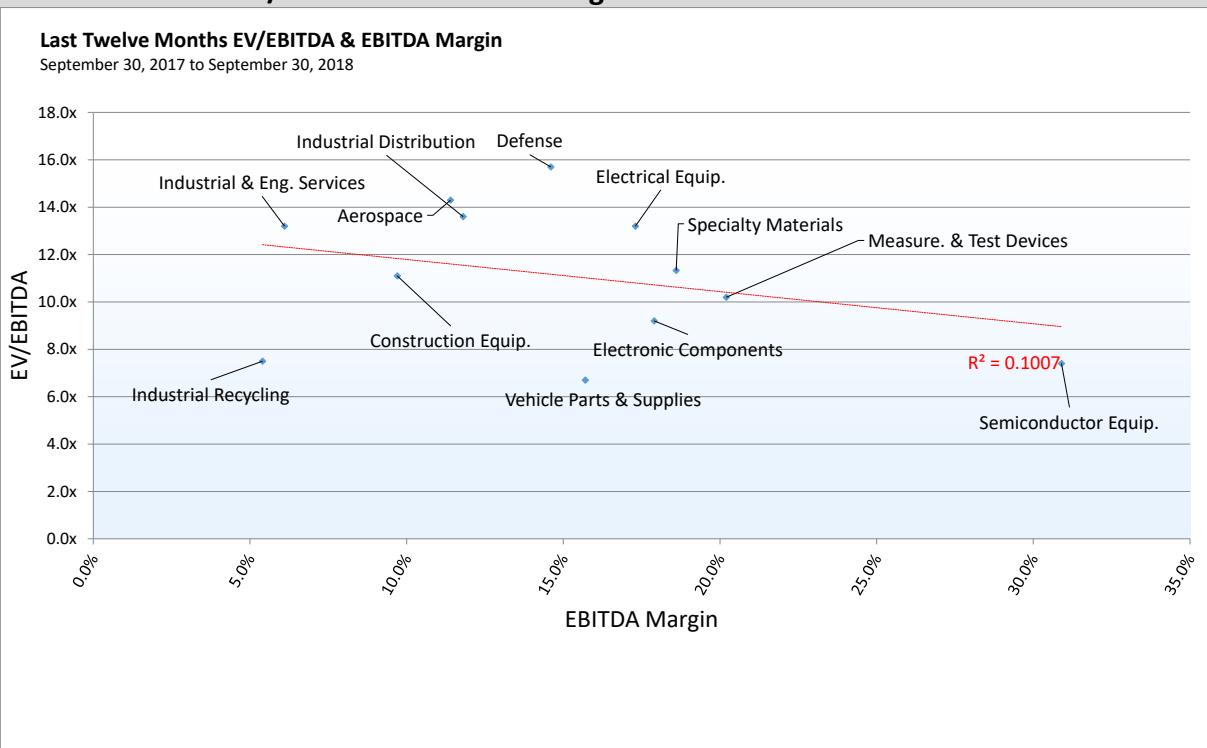


Source: CapitalIQ

### Commentary

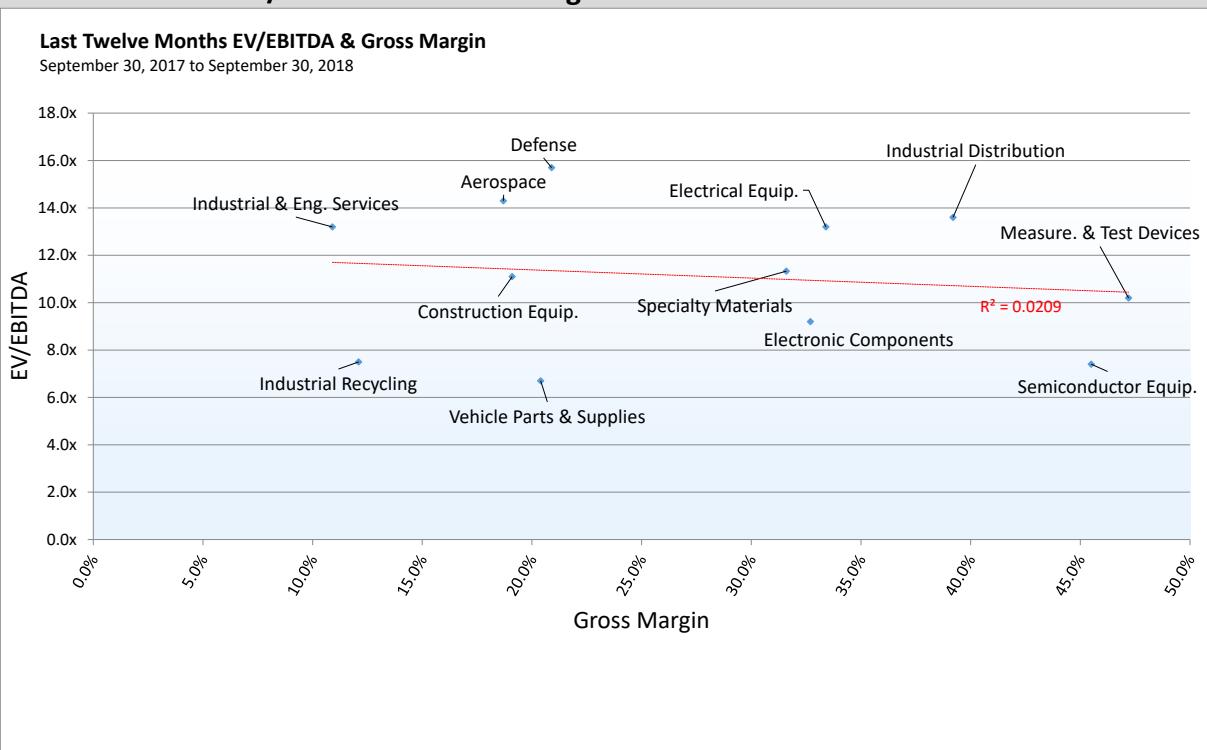
During the last twelve months, our subsectors had a mean EBITDA Margin of 15.0% and a median of 15.2%. Among the subsectors, Semiconductor Capital Equipment was the high margin at 30.9% and Industrial Recycling was the low margin at 5.4%.

## Index Subsector LTM EV/EBITDA vs. EBITDA Margin



Source: CapitalIQ

## Index Subsector LTM EV/EBITDA vs. Gross Margin



Source: CapitalIQ

## Comparative Index Performance

The Mufson Howe Hunter Aerospace & Defense Index<sup>(a)</sup> increased by 9.9% during the three months ending September 30, 2018.



## Price Performance

Mufson Howe Hunter Aerospace & Defense Index<sup>(a)</sup>

3-Year      LTM      3 Month

NASDAQ

88.7%      20.6%      9.9%

S&P 500

74.2%      23.9%      7.1%

51.8%      15.7%      7.2%

(a) Market cap weighted index assuming no dividend reinvestment. Mufson Howe Hunter Aerospace & Defense Index is comprised of all companies listed on the following page.

*Please see Page 14 for sector news*

## Highlighted M&A Transaction – Aerospace and Defense

Target	Acquirer	Value*
		ND
<p>L3 Technologies, Inc. (NYSE:LLL) acquired Autonomous Surface Vehicles Ltd on September 20, 2018. The new company will be known as L3 ASV. Autonomous Surface Vehicles Limited designs, builds, operates, and supplies unmanned and autonomous marine systems. The company offers autonomous surface vehicles (ASVs) in various shapes and sizes to suit military, security, offshore energy, and scientific applications. The company was incorporated in 1998 and is based in Portchester, UK.</p>		

***M&A List continues on Page 13***

\*ND – Not disclosed. Transaction values reported on the basis of enterprise value in USD millions.

# Aerospace & Defense

## Selected Valuation Metrics

Company	Market & Capitalization			LTM Performance <sup>(3)</sup>			Valuation		Margins	
	Price <sup>(1)</sup>	Equity Value	Enterprise Value <sup>(2)</sup>	Revenue	EBITDA <sup>(4)</sup>	EPS	Enterprise Value/Revenue	Price/EBITDA	Gross Profit	EBITDA
<b>Aerospace</b>										
The Boeing Company (BA)	\$371.90	\$213,660	\$216,075	\$96,020	\$13,056	\$11.42	2.25x	16.5x	32.6x	19.1%
United Technologies Corporation (UTX)	139.81	111,861	131,214	62,689	10,535	5.37	2.09x	12.5x	26.0x	26.4%
Honeywell International Inc. (HON)	166.40	123,570	130,982	42,275	8,658	6.02	3.10x	15.1x	27.6x	31.8%
Airbus SE (ENXTPA:AIR)	125.69	97,433	99,158	77,660	5,901	3.12	1.28x	16.8x	NM	12.1%
Thales S.A. (ENXTPA:HO)	142.15	30,210	27,767	18,818	2,268	5.02	1.48x	12.2x	28.3x	25.2%
Rolls-Royce Holdings plc (LSE:RR.)	12.88	24,168	24,290	22,614	2,314	0.58	1.07x	10.5x	22.3x	18.3%
Textron Inc. (TXT)	71.47	17,754	21,088	14,523	1,573	2.33	1.45x	13.4x	30.6x	17.1%
Embraer S.A. (BOVESPA:EMBR3)	4.96	3,636	5,017	4,543	223	0.01	1.10x	22.5x	NM	16.8%
<b>Mean</b>		<b>\$77,786</b>	<b>\$81,949</b>	<b>\$42,393</b>	<b>\$5,566</b>	<b>\$4.23</b>	<b>1.73x</b>	<b>14.9x</b>	<b>27.9x</b>	<b>20.9%</b>
<b>Median</b>		<b>63,821</b>	<b>63,463</b>	<b>32,444</b>	<b>4,108</b>	<b>4.07</b>	<b>1.46x</b>	<b>14.3x</b>	<b>28.0x</b>	<b>18.7%</b>
<b>Defense</b>										
Lockheed Martin Corporation (LMT)	\$345.96	\$99,561	\$112,672	\$52,306	\$6,997	\$12.07	2.15x	16.1x	28.7x	11.5%
General Dynamics Corporation (GD)	204.72	60,655	73,071	32,578	4,708	8.21	2.24x	15.5x	24.9x	19.4%
Northrop Grumman Corporation (NOC)	317.37	55,262	68,854	26,774	4,093	11.40	2.57x	16.8x	27.9x	22.4%
Raytheon Company (RTN)	206.66	58,952	61,422	25,959	3,882	7.09	2.37x	15.8x	29.1x	24.9%
Rockwell Collins, Inc. (COL)	140.47	23,088	29,657	8,592	1,811	4.58	3.45x	16.4x	30.7x	26.5%
BAE Systems plc (BA.)	8.22	26,249	28,784	23,181	2,388	0.33	1.24x	12.1x	24.6x	63.1%
L3 Technologies, Inc. (LLL)	212.62	16,654	19,275	9,821	1,337	7.23	1.96x	14.4x	29.4x	11.9%
Huntington Ingalls Industries, Inc. (HII)	256.08	11,093	11,976	7,753	1,142	11.99	1.54x	10.5x	21.4x	19.2%
<b>Mean</b>		<b>\$43,939</b>	<b>\$50,714</b>	<b>\$23,371</b>	<b>\$3,295</b>	<b>\$7.86</b>	<b>2.19x</b>	<b>14.7x</b>	<b>27.1x</b>	<b>24.8%</b>
<b>Median</b>		<b>40,755</b>	<b>45,540</b>	<b>24,570</b>	<b>3,135</b>	<b>7.72</b>	<b>2.20x</b>	<b>15.7x</b>	<b>28.3x</b>	<b>20.9%</b>

NA = Not Available; NM = Not Meaningful; LTM = Latest Twelve Months

‡ = excluded from Mean and Median calculations

Source: CapitalQ

(1) As of close September 28, 2018.

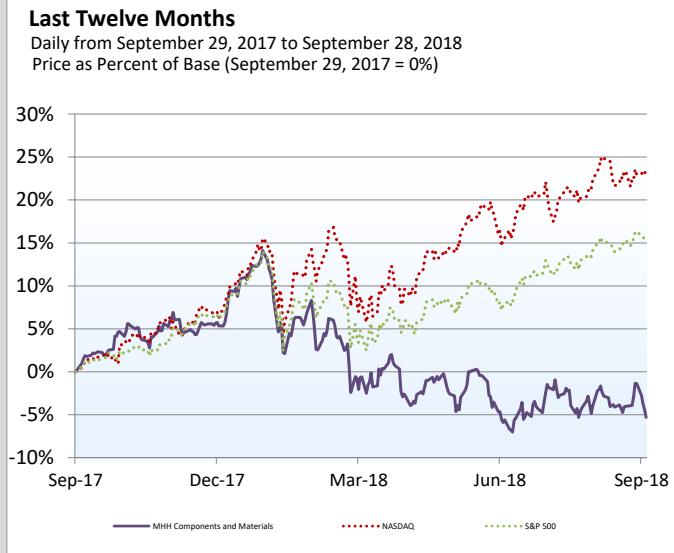
(2) Enterprise value is defined as equity value plus net debt, preferred stock and minority interests. Net Debt includes long term debt, short term debt, post-retirement benefits and unfunded pensions, if applicable, less cash and cash equivalents.

(3) As of June 30, 2018 excluding GD and RTN (July 1, 2018); LLL (June 29, 2018); and LMT (June 24, 2018).

(4) Excludes non-recurring and discontinued operations.

## Comparative Index Performance

The Mufson Howe Hunter Components & Materials Index<sup>(a)</sup> decreased by 0.6% during the three months ending September 30, 2018.



Price Performance	3-Year	LTM	3 Month
Mufson Howe Hunter Components & Materials Index <sup>(a)</sup>	28.2%	-6.1%	-0.6%
NASDAQ	74.2%	23.9%	7.1%
S&P 500	51.8%	15.7%	7.2%

(a) Market cap weighted index assuming no dividend reinvestment. Mufson Howe Hunter Components & Materials Index is comprised of all companies listed on the following page.

*Please see Page 17 for sector news*

## Highlighted M&A Transaction – Components & Materials

Target	Acquirer	Value*
<b>Pioneer</b>	<b>DENSO</b>	\$98.0

DENSO Corporation (TSE:6902) signed an agreement to acquire Tohoku Pioneer Eg Corporation from Tohoku Pioneer Corporation for ¥10.9 billion on September 7, 2018. Tohoku Pioneer EG Corporation manufactures automated assembly lines and inspection systems. It serves the automobile industry, as well as electrical, semiconductor, medical, electronic, food, and information technology markets. The company was founded in 2011 and is based in Tendo, Japan.

***M&A List continues on Page 16***

\*ND – Not disclosed. Transaction values reported on the basis of enterprise value in USD millions.

# Components & Materials

## Selected Valuation Metrics

Company	Market & Capitalization			LTM Performance <sup>(3)</sup>			Valuation			Margins	
	Price <sup>(1)</sup>	Equity Value	Enterprise Value <sup>(2)</sup>	Revenue	EBITDA <sup>(4)</sup>	EPS	Enterprise Value/ Revenue	Price/ EPS	Gross Profit	EBITDA	
<b>Electronic Components</b>											
Corning Inc. (GLW)	\$35.30	\$28,594	\$34,310	\$10,491	\$2,825	\$1.18	3.27x	30.0x	39.3%	26.9%	
TE Connectivity Ltd (TEL)	87.93	30,640	33,985	14,445	3,124	4.18	2.35x	21.0x	33.0%	21.6%	
Amphenol Corp. (APH)	94.02	28,239	30,736	7,633	1,801	2.88	4.03x	17.1x	32.6%	23.6%	
Omron Corp. (TSE:6645)	42.30	8,847	7,898	7,816	1,017	2.19	1.01x	7.8x	19.3x	41.7%	
Alps Electric Ltd (TSE:6770)	25.43	4,982	5,610	7,858	996	1.51	0.71x	5.6x	16.8x	22.0%	
Belden Inc. (BDC)	71.41	2,902	4,124	2,501	449	3.46	1.65x	9.2x	20.6x	40.0%	
Vishay Intertechnology (VSH)	20.35	2,935	2,467	2,833	556	1.55	0.87x	4.4x	13.1x	28.1%	
AVX Corp. (AVX)	18.05	3,046	2,200	1,685	274	0.80	1.31x	8.0x	22.5x	21.0%	
Encore Wire Corp. (WRE)	50.10	1,045	943	1,222	96	2.43	0.77x	9.8x	20.6x	13.4%	
<b>Mean</b>	\$12,359		\$13,586	\$6,276	\$1,237	\$2.24	1.77x	9.4x	21.8x	30.1%	17.7%
<b>Median</b>	4,982		5,610	7,633	996	2.19	1.31x	9.2x	20.6x	32.7%	17.9%
<b>Specialty Materials</b>											
DowDuPont Inc. (DWDP)	\$64.31	\$148,387	\$174,661	\$81,175	\$15,853	\$3.08	2.15x	11.0x	20.9x	26.1%	19.5%
3M Company (MMM)	210.71	123,605	135,018	32,830	8,530	6.69	4.11x	15.8x	31.5x	49.9%	26.0%
BASF SE (DE:BAS)	88.96	81,710	97,375	75,583	14,078	5.69	1.29x	6.9x	15.6x	31.8%	18.6%
PPG Industries, Inc. (PPG)	109.13	26,411	30,495	15,370	2,429	4.60	1.98x	12.6x	23.7x	42.9%	15.8%
Akzo Nobel N.V. (ENXTAM:AKZA)	93.58	23,941	27,827	10,879	1,057	1.46	2.56x	NM	NM	43.0%	9.7%
Evonik Industries AG (DE:EVK)	35.78	17,244	21,218	17,166	3,049	2.40	1.24x	7.0x	14.9x	31.6%	17.8%
Celenese Corp. (CE)	114.00	15,386	18,665	6,854	1,555	6.55	2.72x	12.0x	17.4x	26.8%	22.7%
Solvay SA (ENXTB: SOLB)	134.19	13,865	18,189	12,710	2,382	6.62	1.43x	7.6x	20.3x	27.9%	18.7%
Ferro Corporation (FOE)	23.22	1,954	2,760	1,549	237	1.04	1.78x	11.6x	22.3x	29.3%	15.3%
<b>Mean</b>	\$50,278		\$58,468	\$28,235	\$5,463	\$4.24	2.14x	10.57x	20.83x	34.4%	18.2%
<b>Median</b>	23,941		27,827	15,370	2,429	4.60	1.98x	11.33x	20.59x	31.6%	18.6%
<b>Vehicle Parts and Supplies</b>											
Johnson Controls Inc. (JCI)	\$35.00	\$32,372	\$45,312	\$31,166	\$4,904	\$2.14	1.45x	9.2x	16.3x	30.1%	15.7%
Denso Corp. (TSE:6902)	52.86	41,278	40,973	47,587	6,106	2.89	0.86x	6.7x	18.3x	16.5%	12.8%
Continental AG (DB:CON)	173.70	34,740	38,389	51,760	6,543	15.51	0.74x	5.9x	11.2x	25.7%	12.6%
Aptiv PLC (APTV)	83.90	22,212	25,566	13,902	2,235	3.46	1.84x	11.4x	24.3x	20.0%	16.1%
Lear Corp. (LEA)	145.00	9,499	10,423	21,660	2,284	14.89	0.48x	4.6x	9.7x	11.5%	10.5%
Autoliv, Inc. (ALV)	86.68	7,553	9,342	10,810	1,323	7.22	0.86x	7.1x	12.0x	20.4%	12.2%
Bosch Ltd. (BSE:500530)	273.17	8,337	7,943	1,776	327	6.02	4.47x	24.3x	NM	45.5%	18.4%
Stanley Electric Co. Ltd. (TSE:6923)	34.23	5,622	4,862	4,078	825	1.78	1.19x	5.9x	19.2x	22.7%	20.2%
Delphi Automotive PLC (DLPH)	31.36	2,784	4,103	5,022	807	3.82	0.82x	5.1x	8.2x	19.6%	16.1%
<b>Mean</b>	\$18,266		\$20,768	\$20,862	\$2,817	\$6.41	1.41x	8.9x	14.9x	23.5%	15.0%
<b>Median</b>	9,499		10,423	13,902	2,235	3.82	0.86x	6.7x	14.2x	20.4%	15.7%

NA = Not Available; NM = Not Meaningful; LTM = Latest Twelve Months

(1) As of close September 28, 2018.

‡ = excluded from Mean and Median calculations

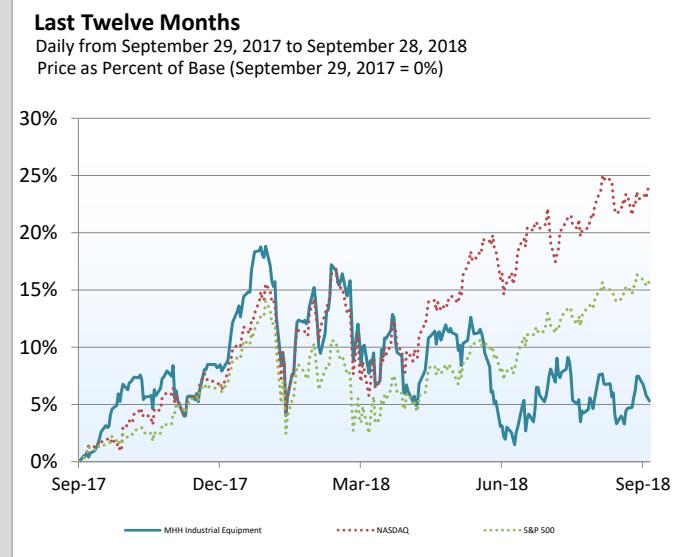
(2) Enterprise value is defined as equity value plus net debt, preferred stock and minority interests. Net Debt includes long term debt, short term debt, post-retirement benefits and unfunded pensions, if applicable, less cash and cash equivalents.

(3) As of June 30, 2018 excluding BDC (July 1, 2018); TEL (June 29, 2018); and 500530 (March 31, 2018).

(4) Excludes non-recurring and discontinued operations.

## Comparative Index Performance

The Mufson Howe Hunter Industrial Equipment Index<sup>(a)</sup> increased by 2.4% during the three months ending September 30, 2018.



## Price Performance

Mufson Howe Hunter Industrial Equipment Index<sup>(a)</sup>

3-Year      LTM      3 Month

NASDAQ

84.1%      5.3%      2.4%

S&P 500

74.2%      23.9%      7.1%

51.8%      15.7%      7.2%

(a) Market cap weighted index assuming no dividend reinvestment. Mufson Howe Hunter Industrial Equipment Index is comprised of all companies listed on the following page.

*Please see Page 20 for sector news*

## Highlighted M&A Transaction – Industrial Equipment

Target	Acquirer	Value*
 <b>GENEWIZ®</b> Solid science. Superior service.	 <b>Brooks</b>	\$450.0

Brooks Automation, Inc. (NasdaqGS:BRKS) entered into a definitive agreement to acquire GENEWIZ, Inc. for \$450 million on September 26, 2018. GENEWIZ, Inc. operates as a contract research organization that provides research services for pharmaceutical, biotechnology, clinical, academic, agricultural, and government institutions. The company was founded in 1999 and is based in South Plainfield, New Jersey.

***M&A List continues on Page 19***

\*ND – Not disclosed. Transaction values reported on the basis of enterprise value in USD millions.

# Industrial Equipment

## Selected Valuation Metrics

Company	Market & Capitalization			LTM Performance <sup>(3)</sup>			Valuation			Margins	
	Price <sup>(1)</sup>	Equity Value	Enterprise Value <sup>(2)</sup>	Revenue	EBITDA <sup>(4)</sup>	EPS	Enterprise Value/Revenue	Price/EBITDA	EPS	Gross Profit	Gross EBITDA
		Value	Value							EPS	EPS
<b>Construction Equipment</b>											
Caterpillar Inc. (CAT)	\$152.49	\$90,629	\$119,078	\$51,179	\$10,407	\$7.47	2.33x	11.4x	20.4x	27.7%	20.3%
Deere & Company (DE)	150.33	48,357	88,195	35,567	5,457	6.90	2.48x	16.2x	21.8x	23.2%	15.3%
Cummins Inc. (CMI)	146.07	23,782	25,607	22,463	2,712	9.36	1.14x	9.4x	15.6x	23.8%	12.1%
Hyundai Heavy Industries Co. Ltd (KOSE:A009540)	121.17	8,374	9,046	11,759	-150	(11.16)	0.77x	NM	NM	1.5%	NM
Navistar International Corp. (NAV)	38.50	3,806	8,329	9,531	716	1.78	0.87x	11.6x	21.7x	17.5%	7.5%
Oshkosh Corp. (OSK)	71.24	5,208	5,654	7,612	738	4.61	0.74x	7.7x	15.4x	17.5%	9.7%
Terex Corp. (TEX)	39.91	2,941	3,662	4,838	341	1.95	0.76x	10.7x	20.4x	19.1%	7.0%
<b>Mean</b>	<b>\$26,157</b>	<b>\$37,082</b>	<b>\$20,421</b>	<b>\$2,889</b>	<b>\$2.99</b>	<b>1.30x</b>	<b>11.2x</b>	<b>19.2x</b>	<b>18.6%</b>	<b>12.0%</b>	
<b>Median</b>	<b>8,374</b>	<b>9,046</b>	<b>11,759</b>	<b>738</b>	<b>4.61</b>	<b>0.87x</b>	<b>11.1x</b>	<b>20.4x</b>	<b>19.1%</b>	<b>10.9%</b>	
<b>Electrical Equipment</b>											
Schneider Electric SE (ENXTPA:SU)	\$80.52	\$44,704	\$53,461	\$29,036	\$4,695	\$4.13	1.84x	11.4x	19.5x	38.6%	16.2%
Emerson Electric Co. (EMR)	76.58	48,128	50,752	16,955	3,565	2.67	2.99x	14.2x	28.7x	42.9%	21.0%
Eaton Corporation plc (ETN)	86.73	37,580	44,860	21,162	3,657	3.55	2.12x	12.3x	24.4x	32.7%	17.3%
Rockwell Automation Inc. (ROK)	187.52	23,096	22,835	6,604	1,361	5.54	3.46x	16.8x	33.9x	42.2%	20.6%
Ametek Inc. (AME)	79.12	18,348	19,936	4,609	1,208	2.42	4.32x	16.5x	32.6x	34.2%	26.2%
Hubbell Inc. (HUBB)	133.57	7,316	9,116	4,026	692	5.65	2.26x	13.2x	23.6x	31.1%	17.2%
Regal Beloit Corporation (RBC)	82.45	3,583	4,774	3,516	495	4.27	1.36x	9.6x	19.3x	26.5%	14.1%
Powell Industries, Inc. (POWL)	36.26	416	362	409	-6	(1.02)	0.89x	NM	NM	12.8%	NM
<b>Mean</b>	<b>\$22,896</b>	<b>\$25,762</b>	<b>\$10,790</b>	<b>\$1,958</b>	<b>\$3.40</b>	<b>2.41x</b>	<b>13.4x</b>	<b>26.0x</b>	<b>32.6%</b>	<b>18.9%</b>	
<b>Median</b>	<b>20,722</b>	<b>21,385</b>	<b>5,607</b>	<b>1,285</b>	<b>3.84</b>	<b>2.19x</b>	<b>13.2x</b>	<b>24.4x</b>	<b>33.4%</b>	<b>17.3%</b>	
<b>Semiconductor Capital Equipment</b>											
ASML Holding NV (ASML)	\$186.94	\$79,508	\$79,598	\$11,868	\$3,785	\$4.89	6.71x ‡	21.0x ‡	38.2x	42.9%	31.9%
Applied Materials, Inc. (AMAT)	38.65	37,993	39,317	17,208	5,319	2.83	2.28x	7.4x	13.6x	45.5%	30.9%
Lam Research Corp. (LRCX)	151.70	23,102	20,593	11,077	3,543	11.07	1.86x	5.8x	13.7x	46.6%	32.0%
Tokyo Electron Ltd (TSE:8035)	137.55	22,574	19,441	10,735	2,895	10.30	1.81x	6.7x	13.4x	42.1%	27.0%
KLA-Tencor Corp. (KLAC)	101.71	15,748	15,105	4,037	1,600	5.78	3.74x	9.4x	17.6x	64.1%	39.6%
Teradyne Inc. (TER)	36.98	6,894	6,075	1,997	559	1.40	3.04x	10.9x	26.4x	57.3%	28.0%
Veeco Instruments Inc. (VECO)	10.25	500	520	594	45	(0.53)	0.87x	11.5x ‡	NM	39.6%	7.6%
<b>Mean</b>	<b>\$26,617</b>	<b>\$25,807</b>	<b>\$8,217</b>	<b>\$2,535</b>	<b>\$5.11</b>	<b>2.27x</b>	<b>8.0x</b>	<b>20.5x</b>	<b>48.3%</b>	<b>28.1%</b>	
<b>Median</b>	<b>22,574</b>	<b>19,441</b>	<b>10,735</b>	<b>2,895</b>	<b>4.89</b>	<b>2.07x</b>	<b>7.4x</b>	<b>15.6x</b>	<b>45.5%</b>	<b>30.9%</b>	
<b>Measurement, Control, and Testing Devices</b>											
Danaher Corporation (DHR)	\$108.66	\$76,035	\$86,464	\$19,290	\$4,782	\$2.95	4.48x	18.1x	36.8x	56.4%	24.8%
Entegris, Inc. (ENTG)	28.95	4,100	4,493	1,446	407	1.15	3.11x	11.0x	25.1x	47.1%	28.1%
MKS Instruments, Inc. (MKS)	80.15	4,392	4,115	2,125	599	5.58	1.94x	6.9x	14.4x	47.2%	28.2%
Brooks Automation, Inc. (BRKS)	35.03	2,474	2,450	802	136	0.88	3.06x	18.1x	39.7x	40.5%	16.9%
FormFactor, Inc. (FORM)	13.75	1,016	957	529	78	0.27	1.81x	12.2x	NM	39.2%	14.8%
FARO Technologies, Inc. (FARO)	64.35	1,093	948	388	32	0.53	2.44x	29.9x	NM	58.2%	8.2%
Nanometrics Incorporated (NANO)	37.52	906	757	306	75	1.66	2.48x	10.1x	22.6x	56.6%	24.4%
Xcerra Corporation (XCRA)	14.27	784	609	473	69	0.68	1.29x	8.8x	20.9x	46.5%	14.7%
Rudolph Technologies, Inc. (RTEC)	24.45	780	597	278	65	1.16	2.15x	9.2x	21.0x	54.6%	23.4%
Cohu, Inc. (COHU)	25.10	725	583	373	57	1.01	1.56x	10.3x	24.8x	41.0%	15.2%
Nova Measuring Instruments Ltd. (NVMI)	26.31	735	567	236	63	1.28	2.40x	9.0x	20.5x	58.1%	26.8%
Axcelis Technologies, Inc. (ACLS)	19.65	636	536	462	68	1.07	1.16x	7.9x	18.4x	37.3%	14.6%
<b>Mean</b>	<b>\$7,806</b>	<b>\$8,590</b>	<b>\$2,226</b>	<b>\$536</b>	<b>\$1.52</b>	<b>2.32x</b>	<b>12.6x</b>	<b>24.4x</b>	<b>48.6%</b>	<b>20.0%</b>	
<b>Median</b>	<b>961</b>	<b>852</b>	<b>468</b>	<b>72</b>	<b>1.11</b>	<b>2.28x</b>	<b>10.2x</b>	<b>21.8x</b>	<b>47.2%</b>	<b>20.2%</b>	

NA = Not Available; NM = Not Meaningful; LTM = Latest Twelve Months

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close September 28, 2018.

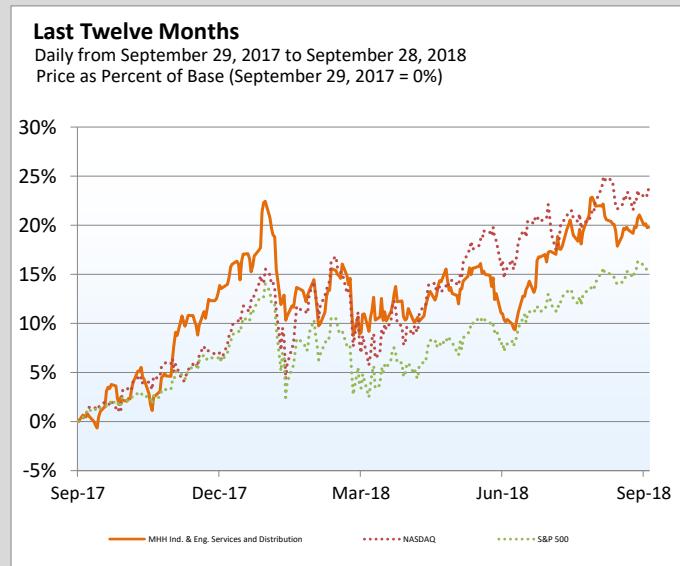
(2) Enterprise value is defined as equity value plus net debt, preferred stock and minority interests. Net Debt includes long term debt, short term debt, post-retirement benefits and unfunded pensions, if applicable, less cash and cash equivalents.

(3) As of June 30, 2018 excluding NAV (July 31, 2018); AMAT and DE (July 29, 2018); ASML, CMI and TER (July 1, 2018); DHR (June 29, 2018); LRCX (June 24, 2018); and XCRA (April 30, 2018).

(4) Excludes non-recurring and discontinued operations.

## Comparative Index Performance

The Mufson Howe Industrial & Engineering Services and Distribution Index<sup>(a)</sup> increased by 9.1% during the three months ending September 30, 2018.



Price Performance	3-Year	LTM	3 Month
Mufson Howe Hunter Industrial & Engineering Services and Distribution Index <sup>(a)</sup>	34.7%	20.0%	9.1%
NASDAQ	74.2%	23.9%	7.1%
S&P 500	51.8%	15.7%	7.2%

(a) Market cap weighted index assuming no dividend reinvestment. Mufson Howe Hunter Industrial & Engineering Services and Distribution Index is comprised of all companies listed on the following page.

*Please see Page 22 for sector news*

## Highlighted M&A Transaction – Industrial & Engineering Services and Distribution

Target	Acquirer	Value*
 (30% Stake)		\$395.0

RETHMANN AG & Co. KG has agreed to acquire 30% stake in Transdev S.A. from Veolia Environnement S.A. (ENXTPA:VIE) for approximately €340 million on September 30, 2018. Transdev provides urban and intercity public transportation services for passengers and local government authorities in Europe and internationally. The company is headquartered in Paris, France.

*M&A List continues on Page 22*

\*ND – Not disclosed. Transaction values reported on the basis of enterprise value in USD millions.

# Industrial & Engineering Services and Distribution

## Selected Valuation Metrics

Company	Market & Capitalization			LTM Performance <sup>(3)</sup>			Valuation		Margins		
	Price <sup>(1)</sup>	Equity Value	Enterprise Value <sup>(2)</sup>	Revenue	EBITDA <sup>(4)</sup>	EPS	Enterprise Value/Revenue	Price/EBITDA	Gross Profit	EPS	EBITDA
<b>Industrial and Engineering Services</b>											
Jacobs Engineering Group Inc. (JEC)	\$76.50	\$10,856	\$12,464	\$13,496	\$946	\$3.26	0.92x	13.2x	23.5x	18.6%	7.0%
AECOM (ACM)	32.66	5,251	8,512	19,706	751	0.96	0.43x	11.3x	33.9x	3.2%	3.8%
John Wood Group PLC (LSE:WG.)	10.07	6,731	8,310	8,367	417	0.18	0.99x	19.9x	NM	11.7%	5.0%
Fluor Corporation (FLR)	58.10	8,170	8,184	19,677	775	1.83	0.42x	10.6x	31.7x	3.6%	3.9%
Tetra Tech, Inc. (TTEK)	68.30	3,779	4,003	2,182	248	2.12	1.83x	16.1x	32.2x	18.2%	11.4%
KBR, Inc. (KBR)	21.13	2,973	3,555	4,276	261	0.91	0.83x	13.6x	23.2x	8.5%	6.1%
Balfour Beatty plc (LSE:BBY)	3.58	2,432	2,622	8,698	131	0.10	0.30x	20.1x	35.6x	5.4%	1.5%
Primoris Services Corporation (PRIM)	24.82	1,279	1,572	2,340	156	0.87	0.67x	10.1x	28.5x	10.9%	6.7%
White Group Public Company Limited (WG)	5.26	94	62	34	5	0.16	1.83x	12.2x	32.5x	24.3%	14.9%
<b>Mean</b>		<b>\$4,618</b>	<b>\$5,476</b>	<b>\$8,753</b>	<b>\$410</b>	<b>\$1.16</b>	<b>0.91x</b>	<b>14.1x</b>	<b>30.1x</b>	<b>11.6%</b>	<b>6.7%</b>
<b>Median</b>		<b>3,779</b>	<b>4,003</b>	<b>8,367</b>	<b>261</b>	<b>0.91</b>	<b>0.83x</b>	<b>13.2x</b>	<b>31.9x</b>	<b>10.9%</b>	<b>6.1%</b>
<b>Industrial Distribution</b>											
W.W. Grainger, Inc. (GWW)	\$357.41	\$20,063	\$22,201	\$10,895	\$1,552	\$12.17	2.04x	14.3x	29.4x	39.0%	14.2%
Fastenal Company (FAST)	58.02	16,649	16,938	4,675	1,067	2.01	3.62x	15.9x	28.9x	48.8%	22.8%
HD Supply Holdings, Inc. (HDS)	42.79	7,864	9,821	5,542	756	1.83	1.77x	13.0x	23.4x	39.4%	13.6%
MSC Industrial Direct Co., Inc. (MSM)	88.11	4,983	5,478	3,120	497	4.64	1.76x	11.0x	19.0x	43.8%	15.9%
WESCO International, Inc. (WCC)	61.45	2,894	4,105	8,095	390	3.50	0.51x	10.5x	17.5x	19.1%	4.8%
MRC Global Inc. (MRC)	18.77	1,695	2,727	3,954	175	0.42	0.69x	15.6x	NM	15.6%	4.4%
Lawson Products, Inc. (LAWS)	33.90	302	318	331	15	0.64	0.96x	20.7x	NM	56.9%	4.6%
Transcat, Inc. (TRNS)	22.85	165	186	156	15	0.71	1.19x	12.0x	32.4x	24.3%	9.9%
<b>Mean</b>		<b>\$6,827</b>	<b>\$7,722</b>	<b>\$4,596</b>	<b>\$559</b>	<b>\$3.24</b>	<b>1.57x</b>	<b>14.1x</b>	<b>25.1x</b>	<b>35.9%</b>	<b>11.3%</b>
<b>Median</b>		<b>3,938</b>	<b>4,791</b>	<b>4,315</b>	<b>443</b>	<b>1.92</b>	<b>1.47x</b>	<b>13.6x</b>	<b>26.1x</b>	<b>39.2%</b>	<b>11.8%</b>
<b>Industrial Recycling Services</b>											
Veolia Environnement S.A. (ENXTPA:VIE)	\$19.97	\$11,041	\$24,539	\$29,755	\$3,396	\$0.96	0.82x	7.2x	20.9x	16.8%	11.4%
Clean Harbors, Inc. (CLH)	71.58	4,015	5,410	3,102	449	0.79	1.74x	12.1x	NM	29.8%	14.5%
Aurubis AG (DE:NDA)	69.99	3,147	3,156	13,433	660	7.00	0.23x	4.8x	10.0x	11.0%	4.9%
Commercial Metals Company (CMC)	20.52	2,401	2,960	5,145	277	0.61	0.58x	10.7x	33.8x	11.3%	5.4%
Dowa Holdings Co., Ltd. (TSE:5714)	31.81	1,883	2,847	4,148	431	3.31	0.69x	6.6x	9.6x	14.4%	10.4%
Sims Metal Management Limited (ASX:SGM)	9.16	1,871	1,647	4,778	219	0.58	0.34x	7.5x	15.8x	12.1%	4.6%
Cardno Limited (ASX:CDD)	0.85	388	403	826	40	0.04	0.49x	10.0x	24.0x	7.7%	4.9%
<b>Mean</b>		<b>\$3,535</b>	<b>\$5,852</b>	<b>\$8,741</b>	<b>\$782</b>	<b>\$1.90</b>	<b>0.70x</b>	<b>8.4x</b>	<b>19.0x</b>	<b>14.7%</b>	<b>8.0%</b>
<b>Median</b>		<b>2,401</b>	<b>2,960</b>	<b>4,778</b>	<b>431</b>	<b>0.79</b>	<b>0.58x</b>	<b>7.5x</b>	<b>18.3x</b>	<b>12.1%</b>	<b>5.4%</b>

NA = Not Available; NM = Not Meaningful; LTM = Latest Twelve Months

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close September 28, 2018.

(2) Enterprise value is defined as equity value plus net debt, preferred stock and minority interests. Net Debt includes long term debt, short term debt, post-retirement benefits and unfunded pensions, if applicable, less cash and cash equivalents.

(3) As of June 30, 2018 excluding HDS (July 29, 2018); TTEK (July 1, 2018); BBY and JEC (June 29, 2018); MSM (June 2, 2018); and CMC (May 31, 2018).

(4) Excludes non-recurring and discontinued operations.

## Selected Highlights

### Selected M&A Transactions – Aerospace and Defense

Announced	Target	Target Description	Acquirer	Value*
Sep 04	Ortloff Engineers, Ltd.	Provides technologies and consulting/engineering services for process plant contractors and operators in the United States and internationally.	Honeywell International Inc. (NYSE:HON)	ND
Aug 21	Predikto, Inc.	Offers monitoring and analytic cloud services to predict asset failures and improve their performance. The company was incorporated in 2013 and is based in Atlanta, Georgia.	United Technologies Corporation (NYSE:UTX)	ND
Aug 16	Millennium Space Systems, Inc.	Designs flight systems, and develops mission and system solutions for the intelligence community, Department Of Defense, national aeronautics and space administrations, civil space, and commercial customers. The company as founded in 2001 and is based in El Segundo, California.	The Boeing Company (NYSE:BA)	ND
Jul 27	SMR Technologies, Inc.	Manufactures, sells and services diversified engineering components for niche aerospace, military, and industrial applications. The company was founded in 1988 and is based in Fenwick, West Virginia.	Undisclosed	ND
Jul 16	Latitude Engineering, LLC	Integration, service, operation, and support of Unmanned Aerial Systems (UAS) both domestically and internationally. The company is based in Tucson, AZ.	L3 Technologies, Inc. (NYSE:LLL)	\$15.0
Jul 11	Azimuth Security / Linchpin Labs	Azimuth Security Pty Ltd provides information security consulting services. Linchpin Labs Inc. provides custom software development, cross-platform and low-level systems development, and information technology (IT) security services. Azimuth Security Pty Ltd is based in Australia. Linchpin Labs Inc. is based in Canada.	L3 Technologies, Inc. (NYSE:LLL)	\$199.7

## Selected Highlights

Jul 05	Commercial Aircraft Operations (80% Stake from Embraer S.A. (BOVESPA:EMBR3)	Comprises the business of manufacturing, marketing, and lifecycle services operations of commercial aircraft. The asset is located in Brazil.	The Boeing Company (NYSE:BA)	\$3,800.0
Jul 02	Applied Defense Solutions, Inc.	Operates as an aerospace engineering, software development, and space situational awareness company. The company was incorporated in 2004 and is based in Columbia, Maryland.	L3 Technologies, Inc. (NYSE:LLL)	\$50.0

\*ND – Not disclosed. Transaction values reported on the basis of enterprise value in USD millions.

### Selected News – Aerospace & Defense

**Airbus SE (ENXTPA:AIR)** has appointed **Christian Scherer**, 56, Chief Commercial Officer (CCO), replacing Eric Schulz, who has decided to leave the company for personal reasons.

**BAE Systems plc (LSE:BA.)** reported second quarter net income of \$310.7 million for fiscal year 2018 as compared to \$369.5 million for the prior year period. Earnings per share were \$0.10 versus \$0.12 for the prior year period. Revenues for the quarter decreased to \$5,384.2 million from \$5,789.1 million for the same period in fiscal year 2017.

**Honeywell International Inc. (NYSE:HON)** the Board of Directors of Honeywell International Inc. appointed **Greg Lewis**, age 50, as Tom Szlosek's successor as Senior Vice President and Chief Financial Officer of the Company, effective as of August 3, 2018.

**Honeywell International Inc. (NYSE:HON)** announced that **Carlos Cardoso** has been appointed as Chairman of the Board for its Transportation Systems business as it prepares to spin into a standalone, publicly traded company, Garrett Motion Inc.

**Huntington Ingalls Industries, Inc. (NYSE:HII)** reported second quarter net income of \$239.0 million for fiscal year 2018 as compared to \$147.0 million for the prior year period. Earnings per share were \$5.40 versus \$3.21 for the prior year period. Revenues for the quarter increased to \$2,020.0 million from \$1,858.0 million for the same period in fiscal year 2017.

**L3 Technologies, Inc. (NYSE:LLL)** announced that **Stephen F. O'Bryan** has been appointed as Senior Vice President and Chief Global Business Development Officer.

**Lockheed Martin Corporation (NYSE:LMT)** has appointed **Robert Mullins** senior vice president, Corporate Strategy and Business Development and a corporate officer.

**Lockheed Martin Corporation (NYSE:LMT)** announced that its board of directors has elected **Vicki Hollub** to the board effective July 2, 2018.

## Selected Highlights

**Northrop Grumman Corporation (NYSE:NOC)** announced that its board of directors has elected **Ann Addison** corporate vice president and chief human resources officer, effective January 1, 2019.

**Northrop Grumman Corporation (NYSE:NOC)** named **Nick Chaffey** as chief executive for the UK and Europe, effective August 28, 2018.

**Raytheon Company (NYSE:RTN)** announced the board of directors has elected **General Ellen M. Pawlikowski, USAF, Retired**, as a director, effective immediately.

**Rolls-Royce Holdings plc (LSE:RR.)** reported second quarter net income of (\$634.7) million for fiscal year 2018 as compared to \$761.1 million for the prior year period. Earnings per share were (\$0.34) versus \$0.41 for the prior year period. Revenues for the quarter increased to \$4,939.6 million from \$4,322.2 million for the same period in fiscal year 2017.

**United Technologies Corporation (NYSE:UTX)** announced it has acquired Predikto Inc. **Mario Montag**, Predikto CEO, will assume the role of Chief Data & Analytics Officer for United Technologies.

*Note: All per share results are reported on a fully-diluted basis.*

# Selected Highlights

## Selected M&A Transactions – Components & Materials

Announced	Target	Target Description	Acquirer	Value*
Sep 25	Electrolytes Business in Europe and America of BASF SE (DB:BAS)	Electrolytes Business in Europe and America of BASF SE comprises electrolyte manufacturing business in Europe and America. The asset is located in the United States.	Shenzhen Capchem Technology Co., Ltd. (SZSE:300037)	\$1.2
Sep 24	Hodij Coatings B.V.	Hodij Coatings B.V. distributes paints and coatings for professional use. The company was founded in 1979 and is based in Hoogeveen, the Netherlands.	PPG Industries, Inc. (NYSE:PPG)	ND
Sep 20	Xylazel, S.A.	Xylazel, S.A. manufactures and markets paints and varnishes, specializing in wood and metal protectors for DIY, professional, and industrial segments. The company was founded in 1975 and is based in Porriño, Spain.	Akzo Nobel N.V. (ENXTAM:AKZA)	\$25.6
Sep 07	Devon Energy Corporation (NYSE:DVN) (Barnett Shale position)	Primarily engages in the exploration, development, and production of oil, natural gas, and natural gas liquids in the United States and Canada.	DowDuPont Inc. (NYSE:DWDP)	\$75.0
Aug 30	Evonik Jayhawk Fine Chemicals Corporation (from Evonik Industries AG (DB:EVK)	Provides custom manufacturing services for fine chemicals and related products for agrochemical, pharmaceutical, polymer, and industrial applications. The company was founded in 1941 and is headquartered in Galena, Kansas.	Permira Advisers Ltd.	ND
Aug 15	Continental Automotive Switzerland AG (from Continental Aktiengesellschaft (DB:CON)	Manufactures and markets transportation systems and operations control which includes bus and train vehicle control and passenger information. The company was founded in 1968 and is based in Rüthi, Switzerland.	RUHAMA Finanz Holding AG	ND
Aug 14	Trade Paints Limited	Supplies decorative and protective coatings in the South-East region. The company was founded in 1964 and is based in St Leonards-on-Sea, UK.	Akzo Nobel N.V. (ENXTAM:AKZA)	ND
Aug 12	Tyre and Auto Pty Ltd.	Dba Kmart Tyre & Auto Service, offers car servicing and repair services. The company was founded in 1992 and is based in Castle Hill, Australia.	Continental Aktiengesellschaft (DB:CON)	\$254.6

## Selected Highlights

Jul 25	All Sensors Corporation	Manufactures MEMS piezoresistive pressure sensors and pressure transducers. The company was founded in 1999 and is based in Morgan Hill, California.	Amphenol Corporation (NYSE:APH)	ND
Jul 23	European Extruded Polystyrene Insulation (XPS) business (from DowDuPont Inc. (NYSE:DWDP)	Comprises a business that manufactures extruded polystyrene insulation material. The asset is located in the UK.	Ravago SA	ND
Jul 20	Polinox Ind. Com. LTDA	Manufactures peroxides and mold release waxes. The company was founded in 1960 and is headquartered in Itupeva, Brazil.	Akzo Nobel N.V. (ENXTAM:AKZA)	ND
Jul 18	Celanese (Nanjing) Acetyl Intermediates Co., Ltd. (from Celanese Corporation (NYSE:CE)	Manufactures and supplies industrial ethanol, ethyl acetate, and related products, as well as provides after-sales service and other related services. The company is based in Nanjing, China.	Chengzhi Shareholding Co., Ltd. (SZSE:000990)	ND
Jul 10	Winchester Interconnect	Designs, develops, and delivers interconnect solutions. The company was founded in 1941 and is headquartered in Middlebury, Connecticut.	Aptiv PLC (NYSE:APTV)	\$650.0
Jul 10	Vuk, Spol. S R.O.	Develops and manufactures penetration coatings, sealants and adhesives. The company is headquartered in Otrokovice, Czech Republic.	Continental Aktiengesellschaft (DB:CON)	ND
Jul 05	Omron Laserfront, Inc. (from OMRON Corporation (TSE:6645)	Engages in the development, design, manufacture, sales, and maintenance of laser and laser processing machines. The company was founded in 2004 and is based in Sagamihara, Japan.	TOWA Corporation (TSE:6315)	ND

\*ND – Not disclosed. Transaction values reported on the basis of enterprise value in USD millions.

### Selected News – Components & Materials

**3M Company (NYSE:MMM)** announced appointment of **Dr. Dambisa F. Moyo** to Board of Directors, effective Aug. 12, 2018.

**Aptiv PLC (NYSE:APTV)** announced on September 13, 2018, the Board of Directors appointed **Robert K. (Kelly) Ortberg** to serve on the Board, effective as of such date.

## Selected Highlights

**Autoliv, Inc. (NYSE:ALV)** announced on September 20, 2018, the Board of Directors elected President and CEO **Mikael Bratt** to become a new member of the Board.

**Belden Inc. (NYSE:BDC)** reported second quarter net income of \$28.9 million for fiscal year 2018 as compared to \$36.0 million for the prior year period. Earnings per share were \$0.49 versus \$0.64 for the prior year period. Revenues for the quarter increase to \$668.6 million from \$610.6 million for the same period in fiscal year 2017.

**Bosch Limited (BSE:500530)** reported net income of \$210.7 million for fiscal year 2018 as compared to \$268.6 million for the prior year. Earnings per share were \$6.90 versus \$8.65 for the prior year. Revenues for the year increase to \$1,776.1 million from \$1,583.3 million for fiscal year 2017.

**Continental Aktiengesellschaft (DB:CON)** reported second quarter net income of \$959.2 million for fiscal year 2018 as compared to \$850.4 million for the prior year period. Earnings per share were \$4.80 versus \$4.26 for the prior year period. Revenues for the quarter increase to \$13,270.1 million from \$12,587.6 million for the same period in fiscal year 2017.

**Corning Incorporated (NYSE:GLW)** announced that **Leslie A. Brun**, chairman and chief executive officer of Sarr Group, LLC to Corning's Board of Directors, effective July 18, 2018.

**Delphi Technologies PLC (NYSE:DLPH)** reported second quarter net income of \$86.0 million for fiscal year 2018 as compared to \$48.0 million for the prior year period. Earnings per share were \$0.97 versus \$0.54 for the prior year period. Revenues for the quarter increase to \$1,232.0 million from \$1,187.0 million for the same period in fiscal year 2017.

**DowDuPont Inc. (NYSE:DWDP)** reported second quarter net income of \$1,768.0 million for fiscal year 2018 as compared to \$1,321.0 million for the prior year period. Earnings per share were \$0.76 versus \$1.07 for the prior year period. Revenues for the quarter increase to \$24,245.0 million from \$13,834.0 million for the same period in fiscal year 2017.

**Evonik Industries AG (DE:EVK)** reported second quarter net income of \$360.5 million for fiscal year 2018 as compared to \$264.7 million for the prior year period. Earnings per share were \$0.77 versus \$0.57 for the prior year period. Revenues for the quarter increase to \$4,515.2 million from \$4,127.8 million for the same period in fiscal year 2017.

**Lear Corporation (NYSE:LEA)** announced that it has hired **Alicia Davis** as Vice President of Investor Relations, effective August 1, 2018.

**PPG Industries, Inc. (NYSE:PPG)** reported the appointment of **Malesia Dunn** as executive director, PPG Foundation and corporate global social responsibility.

**PPG Industries, Inc. (NYSE:PPG)** announced the appointment of **William E. Schaupp**, currently assistant controller and acting controller, as vice president and corporate controller, effective July 19, 2018.

**PPG Industries, Inc. (NYSE:PPG)** appointed **Anne Foulkes** as its senior vice president, general counsel and secretary.

**Vishay Intertechnology, Inc. (NYSE:VSH)** reported second quarter net income of \$103.1 million for fiscal year 2018 as compared to \$56.2 million for the prior year period. Earnings per share were \$0.65 versus \$0.36 for the prior year period. Revenues for the quarter increase to \$761.0 million from \$643.2 million for the same period in fiscal year 2017.

*Note: All per share results are reported on a fully-diluted basis.*

## Selected Highlights

### Selected M&A Transactions – Industrial Equipment

Announced	Target	Target Description	Acquirer	Value*
Sep 27	Small Engine Business of IHI Agri-Tech Corporation	Small Engine Business of IHI Agri-Tech Corporation comprises small engines development and manufacturing business. The business is located in Japan.	Caterpillar Inc. (NYSE:CAT)	ND
Aug 29	Cat Purpose-Built Forestry Business (from Caterpillar Inc. (NYSE:CAT))	Comprises purpose-built forestry products manufacturing. The asset is located in the United States.	Weiler Inc.	ND
Aug 27	Semiconductor Cryogenics business (from Brooks Automation, Inc. (NasdaqGS:BRKS))	Comprises a business division that manufactures, markets, sells, distributes, services, and refurbishes semiconductor cryogenic vacuum pumps, chillers, coolers, compressors, refrigeration systems, and spare parts. The asset is located in the United States.	Edwards Vacuum LLC	\$680.0
Jul 31	Pla S.A.	Develops and distributes farming/spraying equipment and services. The company is based in Las Rosas, Argentina.	Deere & Company (NYSE:DE)	ND
Jul 26	Motec GmbH	Develops and manufactures camera systems for commercial vehicles, construction vehicles, and agricultural machines in Germany and internationally. The company was founded in 1992 and is based in Hadamar, Germany.	AMETEK, Inc. (NYSE:AME)	\$93.0
Jul 16	Opto-Tech Srl	Manufactures and markets optoelectronic products, such as 3D structured light scanning solutions. The company is based in Rezzato, Italy.	FARO Technologies, Inc. (NasdaqGS:FARO)	\$16.9
Jul 09	Lanmark Controls Inc.	Manufactures laser marking control boards and laser marking software that enables integrators and product managers to develop laser marking products. The company was founded in 2005 and is based in Acton, Massachusetts.	FARO Technologies, Inc. (NasdaqGS:FARO)	ND
Jul 02	Efficient Drivetrains, Inc.	Develops and markets plug-in-hybrid electric vehicle (PHEV) architectures and technologies for PHEVs, HEVs, and electric vehicles (EV). The company was founded in 2006 and is based in Palo Alto, California.	Cummins Inc. (NYSE:CMI)	ND

\*ND – Not disclosed. Transaction values reported on the basis of enterprise value in USD millions.

## Selected News – Industrial Equipment

**Applied Materials, Inc. (NasdaqGS:AMAT)** reported third quarter net income of \$1,173.0 million for fiscal year 2018 as compared to \$925.0 million for the prior year period. Earnings per share were \$1.17 versus \$0.85 for the prior year period. Revenues for the quarter increased to \$4,468.0 million from \$3,744.0 million for the same period in fiscal year 2017.

**Axcelis Technologies, Inc. (NasdaqGS:ACLS)** reported second quarter net income of \$14.7 million for fiscal year 2018 as compared to \$13.9 million for the prior year period. Earnings per share were \$0.43 versus \$0.42 for the prior year period. Revenues for the quarter increased to \$119.3 million from \$102.8 million for the same period in fiscal year 2017.

**Brooks Automation, Inc. (NasdaqGS:BRKS)** reported third quarter net income of \$22.7 million for fiscal year 2018 as compared to \$17.4 million for the prior year period. Earnings per share were \$0.32 versus \$0.25 for the prior year period. Revenues for the quarter increased to \$223.5 million from \$181.7 million for the same period in fiscal year 2017.

**Brooks Automation, Inc. (NasdaqGS:BRKS)** announced that **Michael Rosenblatt, M.D.** has been elected to its Board of Directors

**Caterpillar Inc. (NYSE:CAT)** announced that its board of directors has appointed **Ogi Redzic** as a vice president of the company.

**Cohu, Inc. (NasdaqGS:COHU)** reported second quarter net income of \$11.6 million for fiscal year 2018 as compared to \$10.4 million for the prior year period. Earnings per share were \$0.39 versus \$0.36 for the prior year period. Revenues for the quarter increased to \$99.8 million from \$93.9 million for the same period in fiscal year 2017.

**Deere & Company (NYSE:DE)** reported third quarter net income of \$910.3 million for fiscal year 2018 as compared to \$641.8 million for the prior year period. Earnings per share were \$2.78 versus \$1.97 for the prior year period. Revenues for the quarter increased to \$10,308.3 million from \$7,711.8 million for the same period in fiscal year 2017.

**Eaton Corporation plc (NYSE:ETN)** announced that **Ernest W. Marshall Jr.** has joined the company as its Chief Human Resources Officer.

**Emerson Electric Co. (NYSE:EMR)** reported third quarter net income of \$712.0 million for fiscal year 2018 as compared to \$413.0 million for the prior year period. Earnings per share were \$1.12 versus \$0.64 for the prior year period. Revenues for the quarter increased to \$4,456.0 million from \$4,039.0 million for the same period in fiscal year 2017.

**FormFactor, Inc. (NasdaqGS:FORM)** reported second quarter net income of \$9.1 million for fiscal year 2018 as compared to \$17.6 million for the prior year period. Earnings per share were \$0.12 versus \$0.24 for the prior year period. Revenues for the quarter decreased to \$135.5 million from \$144.0 million for the same period in fiscal year 2017.

**KLA-Tencor Corporation (NasdaqGS:KLAC)** announced the appointment of **Ana G. Pinczuk** to its board of directors.

**Navistar International Corporation (NYSE:NAV)** reported third quarter net income of \$170.0 million for fiscal year 2018 as compared to \$37.0 million for the prior year period. Earnings per share were \$1.71 versus \$0.38 for the prior year period. Revenues for the quarter increased to \$2,606.0 million from \$2,213.0 million for the same period in fiscal year 2017.

## Selected Highlights

**Navistar International Corporation (NYSE:NAV)** announced that it has appointed **Julie Ragland** as senior vice president and Chief Information Officer, effective September 17, 2018.

**Navistar International Corporation (NYSE:NAV)** announced that **Christian Schulz** has been named to its board of directors, effective immediately.

**Nova Measuring Instruments Ltd. (NasdaqGS:NVMI)** reported second quarter net income of \$11.8 million for fiscal year 2018 as compared to \$13.3 million for the prior year period. Earnings per share were \$0.41 versus \$0.47 for the prior year period. Revenues for the quarter increased to \$61.9 million from \$56.1 million for the same period in fiscal year 2017.

**Oshkosh Corporation (NYSE:OSK)** announced that its Board of Directors has appointed **Sandra E. "Sandy" Rowland** to join the Company's board effective September 11, 2018.

**Powell Industries, Inc. (NasdaqGS:POWL)** reported third quarter net income of \$0.3 million for fiscal year 2018 as compared to (\$3.2) million for the prior year period. Earnings per share were \$0.03 versus (\$0.28) for the prior year period. Revenues for the quarter increased to \$122.1 million from \$85.9 million for the same period in fiscal year 2017.

**Regal Beloit Corporation (NYSE:RBC)** reported second quarter net income of \$65.9 million for fiscal year 2018 as compared to \$53.0 million for the prior year period. Earnings per share were \$1.50 versus \$1.18 for the prior year period. Revenues for the quarter increased to \$959.7 million from \$869.2 million for the same period in fiscal year 2017.

**Rudolph Technologies, Inc. (NYSE:RTEC)** reported second quarter net income of \$14.7 million for fiscal year 2018 as compared to \$9.2 million for the prior year period. Earnings per share were \$0.45 versus \$0.29 for the prior year period. Revenues for the quarter increased to \$77.5 million from \$67.4 million for the same period in fiscal year 2017.

**Rudolph Technologies, Inc. (NYSE:RTEC)** named **David B. Miller** as Chairman of the Board of Directors, effective August 5, 2018.

**Rudolph Technologies, Inc. (NYSE:RTEC)** announced the appointment of **Vita A. Cassese** to the Rudolph Technologies Board of Directors, effective July 30, 2018.

**Terex Corporation (NYSE:TEX)** announced that **John L. Garrison**, Terex's President and Chief Executive, will also assume the position of Chairman of the Board, effective August 15, 2018.

**Veeco Instruments Inc. (NasdaqGS:VECO)** reported second quarter net income of (\$237.6) million for fiscal year 2018 as compared to (\$20.8) million for the prior year period. Earnings per share were (\$5.02) versus (\$0.49) for the prior year period. Revenues for the quarter increased to \$157.8 million from \$112.2 million for the same period in fiscal year 2017.

**Veeco Instruments Inc. (NasdaqGS:VECO)** announced that **John Peeler**, Chairman and Chief Executive Officer, will transition to the role of Executive Chairman, effective October 1, 2018.

*Note: All per share results are reported on a fully-diluted basis.*

## Selected Highlights

### Selected M&A Transactions – Industrial & Engineering Services and Distribution

Announced	Target	Target Description	Acquirer	Value*
Sep 19	Fife Hospital (50% Stake from Balfour Beatty plc (LSE:BBY))	Project includes the construction of a new hospital wing linked to the existing Victoria Hospital as part of a long-term strategy to transform health services in Fife, Scotland.	Semperian Ppp Investment Partners Limited	\$56.5
Sep 4	Angel's Instrumentation Inc.	Distributes, services, and calibrates metrology and laboratory instruments. The asset is located in the United States.	Transcat, Inc. (NasdaqGM:TRNS)	\$4.7
Aug 16	Voreas Srl (50% Stake from John Wood Group PLC (LSE:WG.))	Operates wind farms that produce electricity. The company was founded in 2009 and is based in Pietramontecorvino, Italy.	Undisclosed	\$27.0
Jul 18	ROSVODOKANAL Group	Provides water-supply and wastewater-disposal utility services in the Russian Federation and Ukraine. The company was founded in 1949 and is based in Moscow, Russia.	Veolia Environnement S.A. (ENXTPA:VIE)	ND
Jul 06	Veolia Stadtwerke Braunschweig Beteiligungs GmbH (from Veolia Environnement S.A. (ENXTPA:VIE))	Distributes electricity, gas, and water to households, commercial, and industrial customers. The company is headquartered in Braunschweig, Germany.	Thüga Aktiengesellschaft	ND
Jul 02	Western Utility and Tetra Tech Utility Construction (from Tetra Tech, Inc. (NasdaqGS:TTEK))	Comprises utility construction business. The assets are located in the United States.	Hylan	ND

\*ND – Not disclosed. Transaction values reported on the basis of enterprise value in USD millions.

### Selected News – Industrial & Engineering Services and Distribution

**AECOM (NYSE:ACM)** reported third quarter net income of \$60.9 million for fiscal year 2018 as compared to \$101.3 million for the prior year period. Earnings per share were \$0.37 versus \$0.64 for the prior year period. Revenues for the quarter increased to \$5,147.9 million from \$4,561.5 million for the same period in fiscal year 2017.

**Aurubis AG (XTRA:NDA)** reported third quarter net income of \$105.5 million for fiscal year 2018 as compared to \$86.9 million for the prior year period. Earnings per share were \$2.37 versus \$1.93 for the prior year period. Revenues for the quarter increased to \$3,069.7 million from \$2,792.2 million for the same period in fiscal year 2017.

## Selected Highlights

**Balfour Beatty plc (LSE:BBY)** announced that **Anne Drinkwater** has been appointed as a Non-executive Director with effect from 1 December 2018.

**Cardno Limited (CDD)** reported net income of (\$10.4) million for fiscal year 2018 as compared to \$6.6 million for the prior year. Earnings per share were (\$0.02) versus \$0.01 for the prior year. Revenues for the year decreased to \$826.2 million from \$907.1 million for fiscal year 2017.

**Cardno Limited (CDD)** announced the appointment of **Ian Ball** as Chief Executive Officer and Managing Director.

**Clean Harbors, Inc. (NYSE:CLH)** reported second quarter net income of \$30.7 million for fiscal year 2018 as compared to \$25.9 million for the prior year period. Earnings per share were \$0.54 versus \$0.45 for the prior year period. Revenues for the quarter increased to \$849.1 million from \$752.8 million for the same period in fiscal year 2017.

**Dowa Holdings Co., Ltd. (TSE:5714)** reported first quarter net income of \$54.3 million for fiscal year 2019 as compared to \$55.0 million for the prior year period. Earnings per share were \$0.92 versus \$0.93 for the prior year period. Revenues for the quarter increased to \$1,038.9 million from \$980.3 million for the same period in fiscal year 2018.

**Fluor Corporation (NYSE:FLR)** reported second quarter net income of \$114.8 million for fiscal year 2018 as compared to (\$24.0) million for the prior year period. Earnings per share were \$0.81 versus (\$0.17) for the prior year period. Revenues for the quarter increased to \$4,883.8 million from \$4,716.1 million for the same period in fiscal year 2017.

**HD Supply Holdings, Inc. (NasdaqGS:HDS)** reported second quarter net income of \$131.0 million for fiscal year 2019 as compared to \$442.0 million for the prior year period. Earnings per share were \$0.72 versus \$2.24 for the prior year period. Revenues for the quarter increased to \$1,600.0 million from \$1,352.0 million for the same period in fiscal year 2018.

**Jacobs Engineering Group Inc. (NYSE:JEC)** reported third quarter net income of \$150.2 million for fiscal year 2018 as compared to \$89.0 million for the prior year period. Earnings per share were \$1.05 versus \$0.74 for the prior year period. Revenues for the quarter increased to \$4,156.7 million from \$2,514.8 million for the same period in fiscal year 2017.

**Jacobs Engineering Group Inc. (NYSE:JEC)** announced effective Oct. 1, 2018, **Terry Hagen** and **Bob Pragada** each have been promoted to the newly created chief operating officer (COO) roles, reflecting expanded leadership responsibilities.

**John Wood Group PLC (LSE:WG.)** reported second quarter net income of (\$26.6) million for fiscal year 2018 as compared to \$2.1 million for the prior year period. Earnings per share were (\$0.04) versus \$0.01 for the prior year period. Revenues for the quarter increased to \$2,458.2 million from \$972.1 million for the same period in fiscal year 2017.

**John Wood Group PLC (LSE:WG.)** announced that, it has appointed **Darren Martin** to the new role of chief technology officer as the firm looks to ramp up its digital offering.

**MRC Global Inc. (NYSE:MRC)** reported second quarter net income of \$22.0 million for fiscal year 2018 as compared to \$6.0 million for the prior year period. Earnings per share were \$0.17 versus (\$0.00) for the prior year period. Revenues for the quarter increased to \$1,082.0 million from \$922.0 million for the same period in fiscal year 2017.

**Primoris Services Corporation (NasdaqGS:PRIM)** reported second quarter net income of \$11.7 million for fiscal year 2018 as compared to \$21.5 million for the prior year period. Earnings per share were \$0.23 versus \$0.42 for the prior

## Selected Highlights

year period. Revenues for the quarter increased to \$648.8 million from \$631.2 million for the same period in fiscal year 2017.

**Sims Metal Management Limited (ASX:SGM)** reported net income of \$150.5 million for fiscal year 2018 as compared to \$156.2 million for the prior year. Earnings per share were \$0.73 versus \$0.78 for the prior year. Revenues for the year increased to \$4,778.1 million from \$3,906.8 million for fiscal year 2017.

**Tetra Tech, Inc. (NasdaqGS:TTEK)** reported third quarter net income of \$33.3 million for fiscal year 2018 as compared to \$30.0 million for the prior year period. Earnings per share were \$0.59 versus \$0.52 for the prior year period. Revenues for the quarter increased to \$570.4 million from \$498.5 million for the same period in fiscal year 2017.

**Tetra Tech, Inc. (NasdaqGS:TTEK)** announced **Gary R. Birkenbeuel** has been elected to the Board of Directors of the Tetra Tech, Inc., effective July 30, 2018.

**Veolia Environnement S.A. (ENXTPA:VIE)** reported second quarter net income of (\$0.0) million for fiscal year 2018 as compared to \$113.2 million for the prior year period. Earnings per share were (\$0.00) versus \$0.13 for the prior year period. Revenues for the quarter decreased to \$0.0 million from \$6,951.8 million for the same period in fiscal year 2017.

**Veolia Environnement S.A. (ENXTPA:VIE)** appointed **Estelle Brachlianoff** to the position of Chief Operating Officer, and **Claude Laruelle** to the position of Chief Financial Officer.

**WESCO International, Inc. (NYSE:WCC)** reported second quarter net income of \$57.9 million for fiscal year 2018 as compared to \$49.5 million for the prior year period. Earnings per share were \$1.22 versus \$1.02 for the prior year period. Revenues for the quarter increased to \$2,104.0 million from \$1,909.6 million for the same period in fiscal year 2017.

**WESCO International, Inc. (NYSE:WCC)** announced the appointment of **Easwaran "Eash" Sundaram** to its Board of Directors effective August 15, 2018.

*Note: All per share results are reported on a fully-diluted basis.*

# MHH Manufacturing Universe Directory

Company	Sector	Company	Sector
<b>3M Company</b>	Components & Materials	<b>Hyundai Heavy Industries Co., Ltd.</b>	Industrial Equipment
<b>AECOM</b>	Ind. & Eng. Services and Distribution	<b>Jacobs Engineering Group Inc.</b>	Ind. & Eng. Services and Distribution
<b>Airbus Group SE</b>	Aerospace & Defense	<b>John Wood Group plc</b>	Ind. & Eng. Services and Distribution
<b>Akzo Nobel N.V.</b>	Components & Materials	<b>Johnson Controls Inc.</b>	Components & Materials
<b>Alps Electric Co. Ltd.</b>	Components & Materials	<b>KBR, Inc.</b>	Ind. & Eng. Services and Distribution
<b>AMETEK, Inc.</b>	Industrial Equipment	<b>KLA-Tencor Corporation</b>	Industrial Equipment
<b>Amphenol Corporation</b>	Components & Materials	<b>L-3 Communications Holdings Inc.</b>	Aerospace & Defense
<b>Applied Materials, Inc.</b>	Industrial Equipment	<b>Lam Research Corporation</b>	Industrial Equipment
<b>Aptiv PLC</b>	Components & Materials	<b>Lawson Products, Inc.</b>	Ind. & Eng. Services and Distribution
<b>ASML Holding N.V.</b>	Industrial Equipment	<b>Lear Corp.</b>	Components & Materials
<b>Aurubis AG</b>	Ind. & Eng. Services and Distribution	<b>Lockheed Martin Corporation</b>	Aerospace & Defense
<b>Autoliv, Inc.</b>	Components & Materials	<b>MKS Instruments, Inc.</b>	Industrial Equipment
<b>AVX Corp.</b>	Components & Materials	<b>MRC Global Inc.</b>	Ind. & Eng. Services and Distribution
<b>Axcelis Technologies, Inc.</b>	Industrial Equipment	<b>MSC Industrial Direct Co., Inc.</b>	Ind. & Eng. Services and Distribution
<b>BAE Systems plc</b>	Aerospace & Defense	<b>Nanometrics Incorporated</b>	Industrial Equipment
<b>Balfour Beatty plc</b>	Ind. & Eng. Services and Distribution	<b>Navistar International Corporation</b>	Industrial Equipment
<b>BASF SE</b>	Components & Materials	<b>Newalta Corporation</b>	Ind. & Eng. Services and Distribution
<b>Belden Inc.</b>	Components & Materials	<b>Northrop Grumman Corporation</b>	Aerospace & Defense
<b>Bosch Ltd</b>	Components & Materials	<b>Nova Measuring Instruments Ltd.</b>	Industrial Equipment
<b>Brooks Automation, Inc.</b>	Industrial Equipment	<b>OMRON Corporation</b>	Components & Materials
<b>Cardno Ltd.</b>	Ind. & Eng. Services and Distribution	<b>Oshkosh Corporation</b>	Industrial Equipment
<b>Caterpillar Inc.</b>	Industrial Equipment	<b>Powell Industries, Inc.</b>	Industrial Equipment
<b>Celanese Corporation</b>	Components & Materials	<b>PPG Industries, Inc.</b>	Components & Materials
<b>Chicago Bridge &amp; Iron Company N.V.</b>	Ind. & Eng. Services and Distribution	<b>Primoris Services Corporation</b>	Ind. & Eng. Services and Distribution
<b>Clean Harbors, Inc.</b>	Ind. & Eng. Services and Distribution	<b>Raytheon Company</b>	Aerospace & Defense
<b>Cohu, Inc.</b>	Industrial Equipment	<b>Regal Beloit Corporation</b>	Industrial Equipment
<b>Commercial Metals Company</b>	Ind. & Eng. Services and Distribution	<b>Rockwell Automation Inc.</b>	Industrial Equipment
<b>Continental Aktiengesellschaft</b>	Components & Materials	<b>Rockwell Collins Inc.</b>	Aerospace & Defense
<b>Corning Inc.</b>	Components & Materials	<b>Rolls Royce Holdings plc</b>	Aerospace & Defense
<b>Cummins Inc.</b>	Industrial Equipment	<b>Rudolph Technologies, Inc.</b>	Industrial Equipment
<b>Danaher Corporation</b>	Industrial Equipment	<b>Schneider Electric S.E.</b>	Industrial Equipment
<b>Deere &amp; Company</b>	Industrial Equipment	<b>Sims Metal Management Limited</b>	Ind. & Eng. Services and Distribution
<b>Delphi Automotive PLC</b>	Components & Materials	<b>Solvay SA</b>	Components & Materials
<b>DENSO Corporation</b>	Components & Materials	<b>Stanley Electric Co. Ltd.</b>	Components & Materials
<b>Dowa Holdings Co., Ltd.</b>	Ind. & Eng. Services and Distribution	<b>TE Connectivity Ltd.</b>	Components & Materials
<b>DowDupont Inc.</b>	Components & Materials	<b>Teradyne, Inc.</b>	Industrial Equipment
<b>Eaton Corporation plc</b>	Industrial Equipment	<b>Terex Corporation</b>	Industrial Equipment
<b>Embraer S.A.</b>	Aerospace & Defense	<b>Tetra Tech, Inc.</b>	Ind. & Eng. Services and Distribution
<b>Emerson Electric Co.</b>	Industrial Equipment	<b>Textron Inc.</b>	Aerospace & Defense
<b>Encore Wire Corp.</b>	Components & Materials	<b>Thales SA</b>	Aerospace & Defense
<b>Entegris, Inc.</b>	Industrial Equipment	<b>The Boeing Company</b>	Aerospace & Defense
<b>Evonik Industries AG</b>	Components & Materials	<b>Tokyo Electron Limited</b>	Industrial Equipment
<b>Fastenal Company</b>	Ind. & Eng. Services and Distribution	<b>Transcat, Inc.</b>	Ind. & Eng. Services and Distribution
<b>Ferro Corporation</b>	Components & Materials	<b>United Technologies Corporation</b>	Aerospace & Defense
<b>Fluor Corporation</b>	Ind. & Eng. Services and Distribution	<b>Veeco Instruments Inc.</b>	Industrial Equipment
<b>FormFactor, Inc.</b>	Industrial Equipment	<b>Veolia Environnement S.A.</b>	Ind. & Eng. Services and Distribution
<b>General Dynamics Corporation</b>	Aerospace & Defense	<b>Vishay Intertechnology Inc.</b>	Components & Materials
<b>HD Supply Holdings, Inc.</b>	Ind. & Eng. Services and Distribution	<b>W.W. Grainger, Inc.</b>	Ind. & Eng. Services and Distribution
<b>Honeywell International Inc.</b>	Aerospace & Defense	<b>WESCO International, Inc.</b>	Ind. & Eng. Services and Distribution
<b>Hubbell Incorporated</b>	Industrial Equipment	<b>Willbros Group, Inc.</b>	Ind. & Eng. Services and Distribution
<b>Huntington Ingalls Industries, Inc.</b>	Aerospace & Defense	<b>Xcerra Corporation</b>	Industrial Equipment

**Mufson Howe Hunter & Company LLC** is an independent investment bank for middle-market companies. We focus on selling businesses, buy-outs, acquisitions, and raising capital. Unique to the middle market, our senior bankers have extensive corporate finance experience and deep knowledge of the capital markets.

## Mergers & Acquisitions

- Advise buyers and sellers (public and private companies)
- Sale of businesses, strategic acquisitions, management buy-outs, and industry build-ups

## Raise Capital

- Equity (control and non-control)
- Mezzanine financing
- Senior and junior debt
- Typically raise capital from banks, finance companies, private investment funds, and private equity groups

## Financial Advisory Services

- Analysis of business strategies and options
- Fairness opinions
- Valuations

### The Mufson Howe Hunter Manufacturing Update Indices

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