



Manufacturing Update

December 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 monthly report contains information on select companies in various subsectors within manufacturing emphasizing financial performance, stock performance, and recent news.

Macro-Economic Trends

	Oct-18	Nov-18	Trend
PMI	57.7	59.3	Positive
Total Unemployment	3.7	3.7	Neutral
CPI Monthly Change	0.3	0.0	Positive
PPI Monthly Change	0.6	0.1	Positive
Industrial Production	108.7	109.4	Positive
Capacity Utilization	78.1	78.5	Positive
Manufacturing Production	104.9	104.9	Neutral
Manufacturing Utilization	75.8	75.7	Neutral

Sector Index Performance

	3-Year	1-Year	3-Month
Aerospace & Defense	50.8%	1.4%	-7.3%
Components & Materials	4.0%	-20.2%	-12.2%
Industrial Equipment	54.8%	-6.5%	-6.8%
Industrial & Engineering			
Services and Distribution	17.0%	0.3%	-8.8%
NASDAQ	43.5%	6.6%	-9.6%
S&P	32.7%	4.3%	-4.9%

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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

Note: Please refer to Page 19 for the Universe components.

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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 MMH 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 MMH 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.

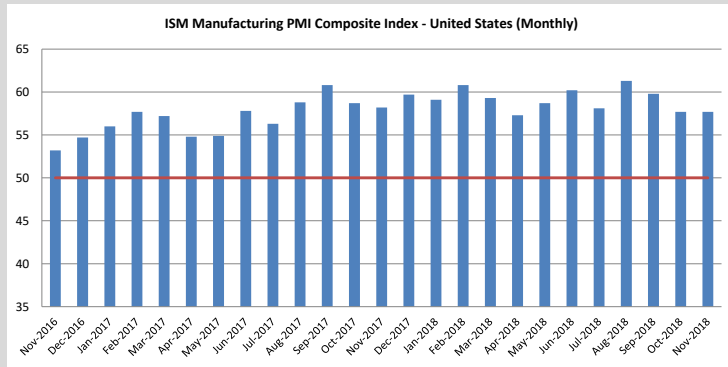
The companies that comprise each Index can change periodically as a result of a variety of reasons, including mergers, acquisitions, initial public offerings, and other transactions; therefore, comparisons to historical time periods and historical performance for each Index may not entirely correspond 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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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 November as the economy grew for the 115th consecutive month. New Orders, Production, Employment, and Backlog all grew. Supplier Deliveries, however, slowed as Raw Materials Inventories continued to expand 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.



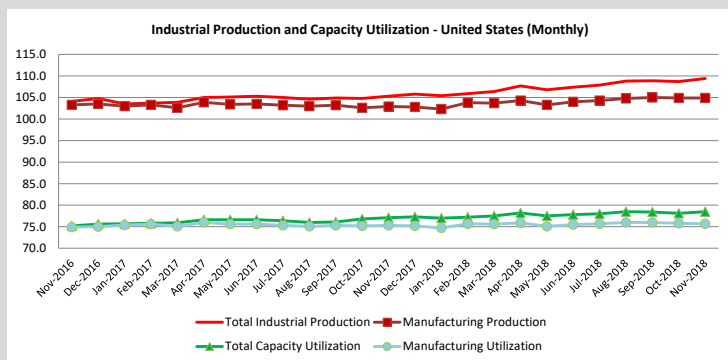
Source: United States Bureau of Labor

Commentary

In November, the unemployment rate remained at 3.7%. Total nonfarm payroll employment increased by 155,000 with gains in healthcare, manufacturing, transportation and warehousing. Manufacturing jobs increased by 27,000 in November; 288,000 manufacturing jobs have been created this year.

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.



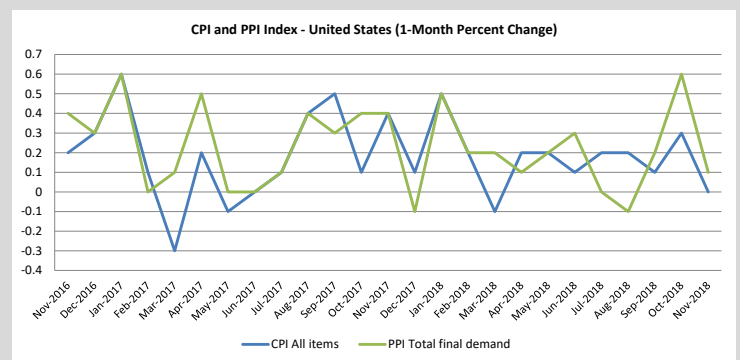
Source: United States Federal Reserve

Commentary

Industrial production rose 0.6% in November. In November, manufacturing production was unchanged, the output of mining increased 1.7%, and the index for utilities gained 3.3%. At 109.4% of its 2012 average, total industrial production was 3.9% higher in November 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 was unchanged in November. The gasoline index declined 4.2%, offsetting increases in multiple indices. PPI for final demand increased 0.1% in November. The modest rise in the index can be traced to an increase in prices for final demand services. Conversely, the final demand goods decreased 0.4%.

Sector Index Performance

Comparative Sector Index Performance (Last Three Years)

Last Three Years

Daily from November 30, 2015 to November 30, 2018

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



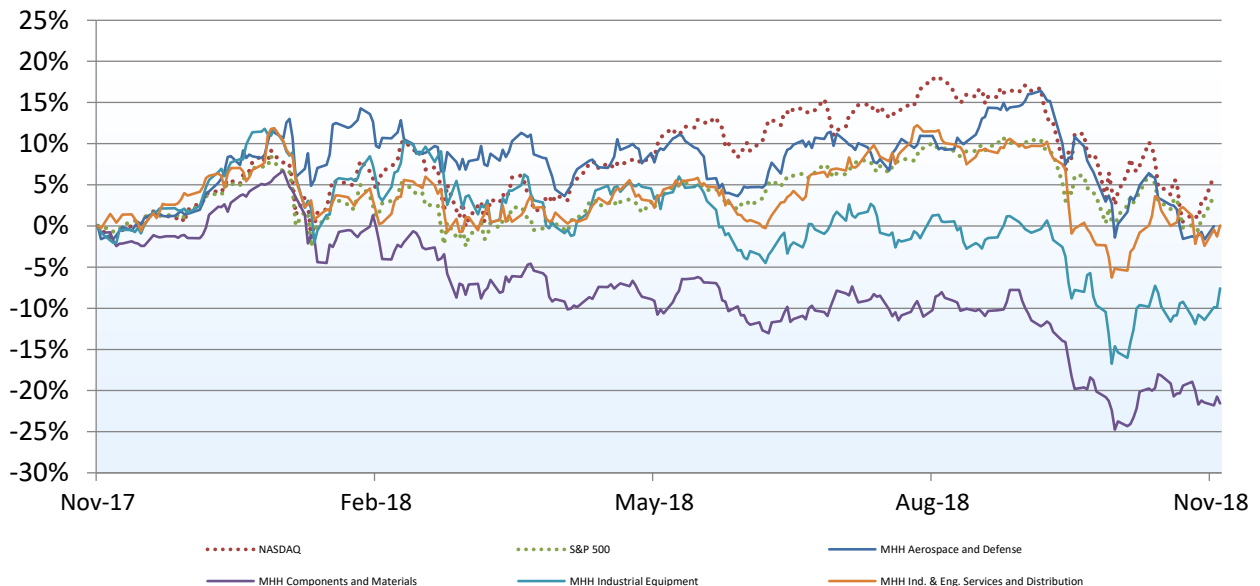
Source: CapitalIQ

Comparative Sector Index Performance (Last Twelve Months)

Last Twelve Months

Daily from November 30, 2017 to November 30, 2018

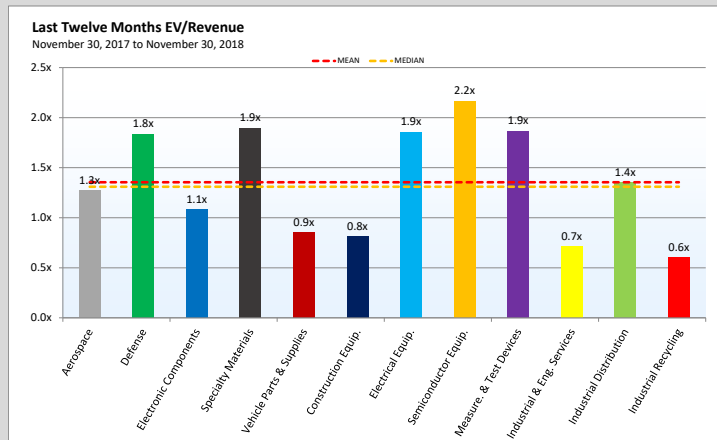
Price as Percent of Base (November 30, 2017 = 0%)



Source: CapitalIQ

Subsector Trading Multiples & Margins

Comparative Subsector LTM EV/Revenue

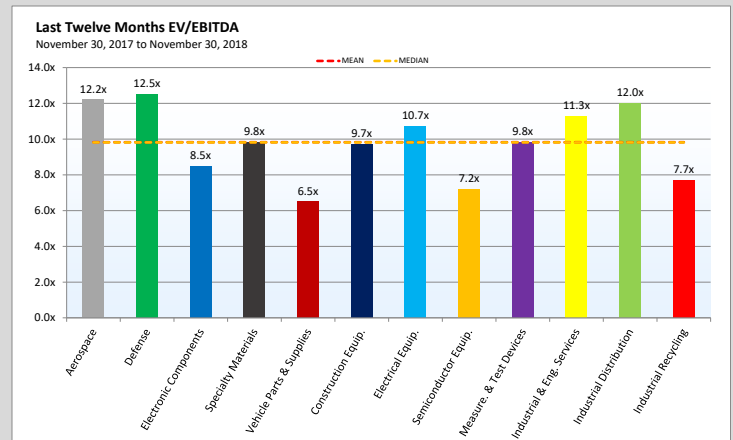


Source: CapitalIQ

Commentary

During the last twelve months, our index subsectors had a mean EV/Revenue of 1.4x and a median of 1.3x. Of the subsectors, Semiconductor Capital Equipment had the high multiple at 2.2x and Industrial Recycling had the low multiple at 0.6x.

Comparative Subsector LTM EV/EBITDA

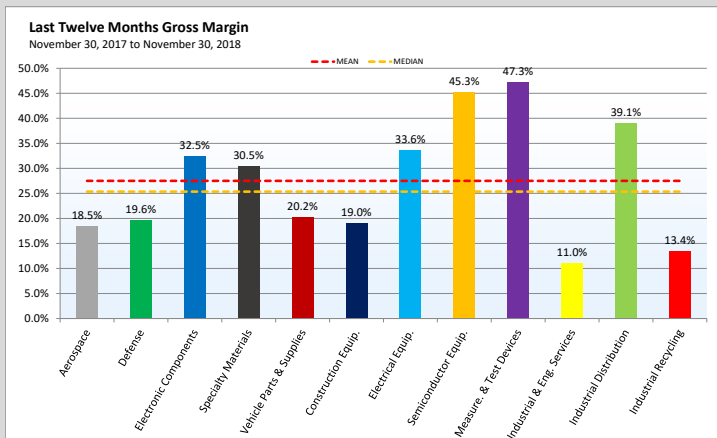


Source: CapitalIQ

Commentary

During the last twelve months, our index subsectors had a mean EV/EBITDA of 9.8x and a median of 9.8x. Of the subsectors, Defense had the high multiple at 12.5x and Vehicle Parts & Supplies had the low multiple at 6.5x.

Comparative Subsector LTM Gross Margin

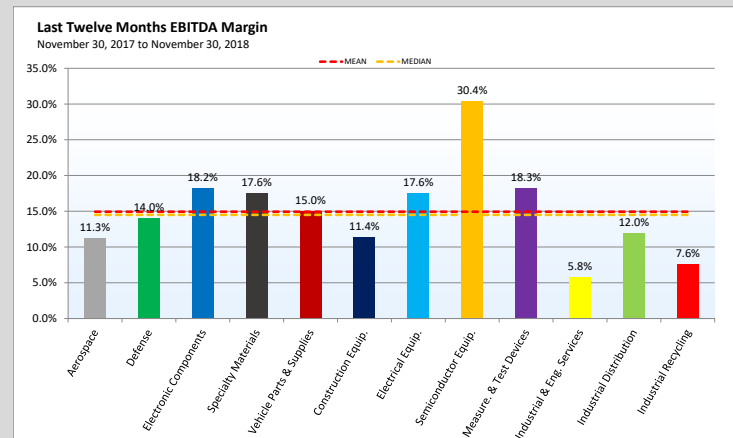


Source: CapitalIQ

Commentary

During the last twelve months, our index subsectors had a mean Gross Margin of 27.5% and a median of 25.4%. Of the subsectors, Measurement, Control, and Testing Devices had the high margin at 47.3% and Industrial & Engineering Services had the low margin at 11.0%.

Comparative Subsector LTM EBITDA Margin

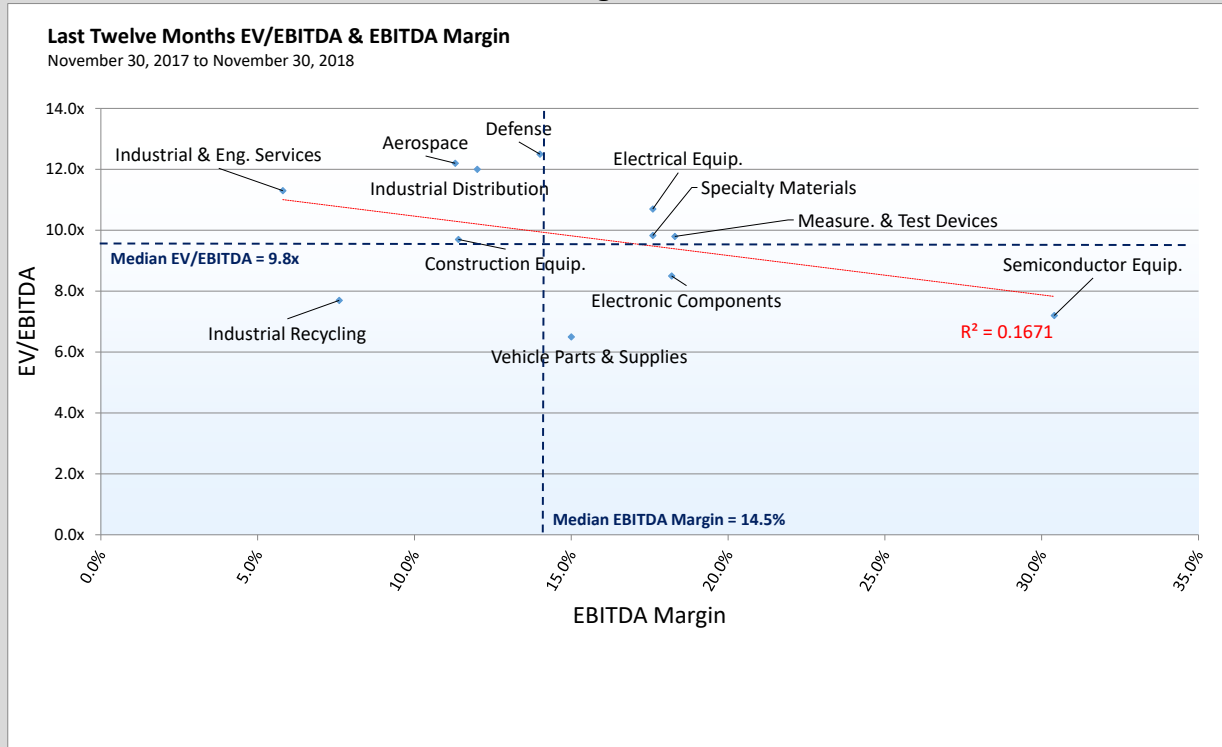


Source: CapitalIQ

Commentary

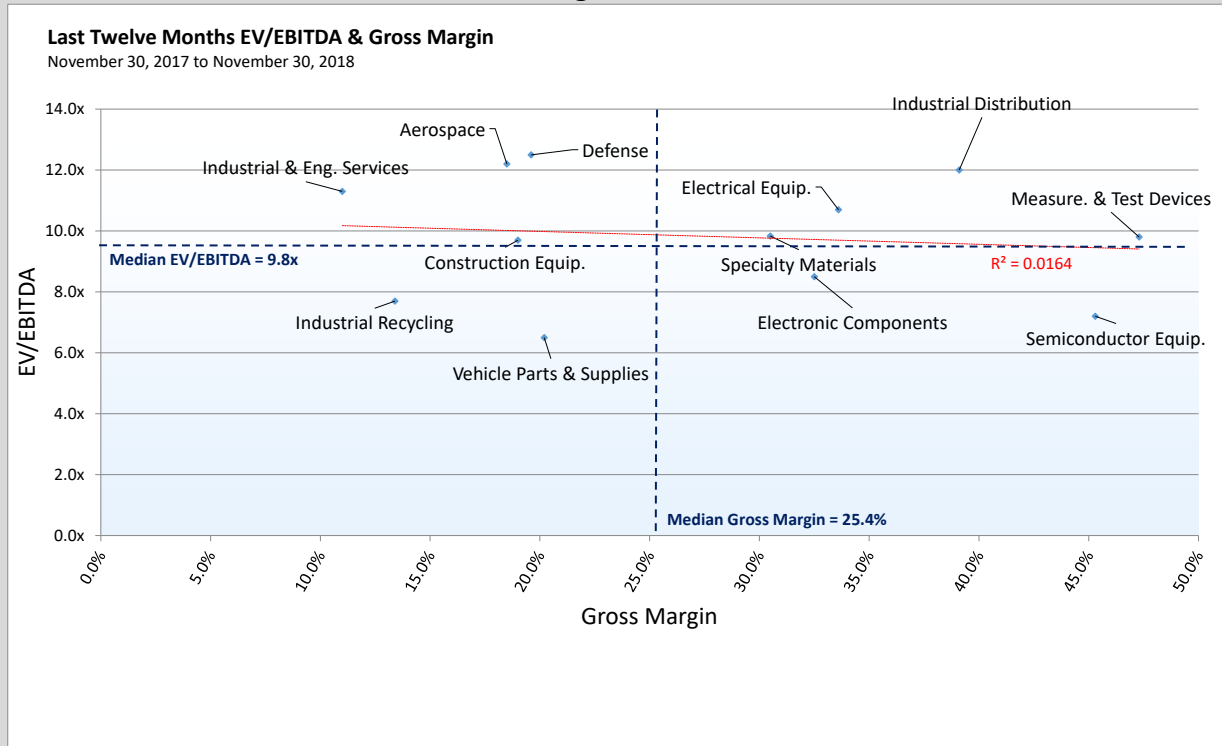
During the last twelve months, our index subsectors had a mean EBITDA Margin of 14.9% and a median of 14.5%. Of the subsectors, Semiconductor Capital Equipment had the high margin at 30.4% and Industrial & Engineering Services had the low margin at 5.8%.

Index Subsector LTM EV/EBITDA vs. EBITDA Margin



Source: CapitalIQ

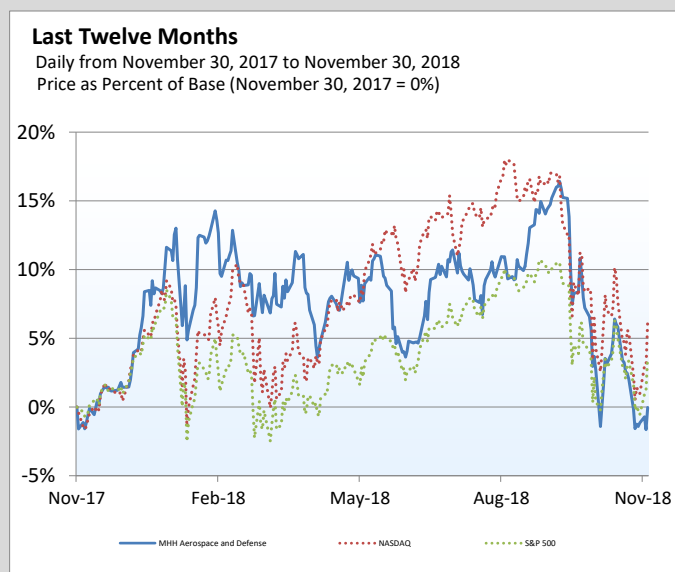
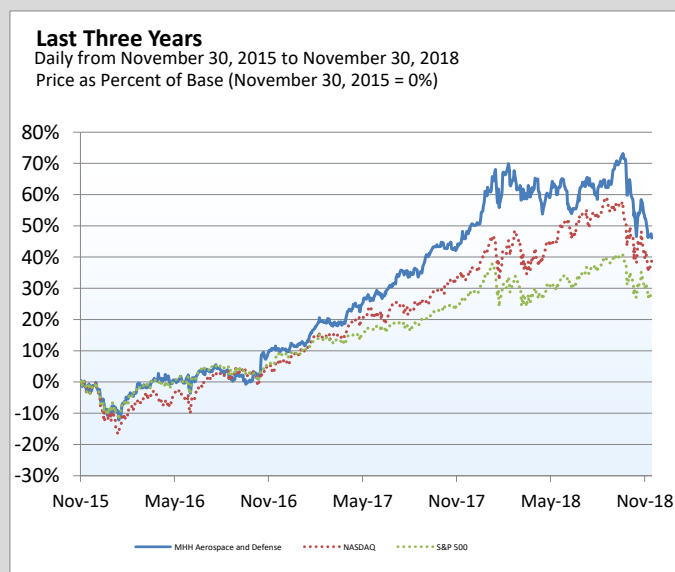
Index Subsector LTM EV/EBITDA vs. Gross Margin



Source: CapitalIQ

Comparative Index Performance

The Mufson Howe Hunter Aerospace & Defense Index^(a) decreased by 7.3% during the three months ending November 30, 2018.



Price Performance

Mufson Howe Hunter Aerospace & Defense Index^(a)
NASDAQ
S&P 500

3-Year	LTM	3 Month
50.8%	1.4%	-7.3%
43.5%	6.6%	-9.6%
32.7%	4.3%	-4.9%

(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 13 for sector news

Highlighted M&A Transaction – Aerospace and Defense

Target	Acquirer	Value*
transnorm your best move	Honeywell	\$492.0
Honeywell International Inc. (NYSE:HON) signed an agreement to acquire Transnorm Beteiligungen GmbH from IK Investment Partners for approximately €430 million on October 1, 2018. Transnorm Beteiligungen GmbH manufactures conveyor modules for use in bin and box conveyor systems, and parcel and airport baggage handling systems. The company was founded in 1957 and is based in Hildesheim, Germany.		
*ND – Not disclosed. Transaction values reported on the basis of enterprise value in USD millions.		

Selected Valuation Metrics

(\$ in USD millions, except per share data)

Company	Market & Capitalization			LTM Performance ⁽³⁾			Valuation			Margins	
	Price ⁽¹⁾	Equity Value	Enterprise Value ⁽²⁾	Revenue	EBITDA ⁽⁴⁾	EPS	Enterprise Value/Revenue	EBITDA	Price/EPS	Gross Profit	EBITDA
Aerospace											
The Boeing Company (BA)	\$346.76	\$196,920	\$198,886	\$96,943	\$12,600	\$11.00	2.05x	15.8x	31.5x	18.8%	13.0%
United Technologies Corporation (UTX)	121.84	105,195	133,608	64,137	10,616	5.36	2.08x	12.6x	22.7x	25.9%	16.6%
Honeywell International Inc. (HON)	146.75	108,637	115,419	42,916	8,960	6.20	2.69x	12.9x	23.7x	31.7%	20.9%
Airbus SE (ENXTPA:AIR)	107.13	83,102	85,555	80,378	7,278	4.01	1.06x	11.8x	26.7x	13.5%	9.1%
Thales S.A. (ENXTPA:HO)	122.62	26,063	23,683	18,818	2,268	5.02	1.26x	10.4x	24.4x	25.2%	12.1%
Rolls-Royce Holdings plc (LSE:RR.)	10.84	20,344	20,464	22,614	2,314	0.58	0.90x	8.8x	18.8x	18.3%	10.2%
Textron Inc. (TXT)	56.14	13,640	16,356	14,239	1,516	2.27	1.15x	10.8x	24.8x	16.8%	10.6%
Embraer S.A. (BOVESPA:EMBR3)	5.64	4,140	5,775	4,482	202	-0.03	1.29x	28.6x	NM	16.6%	4.5%
Mean		\$69,755	\$74,968	\$43,066	\$5,719	\$4.30	1.56x	14.0x	24.7x	20.8%	12.1%
Median		54,582	54,619	32,765	4,796	4.51	1.27x	12.2x	24.4x	18.5%	11.3%
Defense											
Lockheed Martin Corporation (LMT)	\$300.43	\$85,450	\$99,338	\$54,283	\$7,308	\$12.71	1.83x	13.6x	23.6x	11.6%	13.5%
General Dynamics Corporation (GD)	184.89	54,755	66,826	34,092	4,889	8.30	1.96x	13.7x	22.3x	19.0%	14.3%
Northrop Grumman Corporation (NOC)	259.88	45,120	58,797	28,290	4,710	13.02	2.08x	12.5x	20.0x	22.9%	16.6%
Raytheon Company (RTN)	175.34	49,898	53,438	26,481	3,696	6.72	2.02x	14.5x	26.1x	24.8%	14.0%
BAE Systems plc (BA.)	6.27	20,023	22,503	23,181	2,388	0.33	0.97x	9.4x	18.8x	63.1%	10.3%
L3 Technologies, Inc. (LLL)	183.29	14,424	17,344	10,047	1,398	7.64	1.73x	12.4x	24.0x	12.2%	13.9%
Huntington Ingalls Industries, Inc. (HII)	215.50	9,257	10,471	7,973	1,216	13.20	1.31x	8.6x	16.3x	19.6%	15.3%
Mean		\$39,847	\$46,960	\$26,335	\$3,658	\$8.85	1.70x	12.1x	21.6x	24.8%	14.0%
Median		45,120	53,438	26,481	3,696	8.30	1.83x	12.5x	22.3x	19.6%	14.0%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close November 30, 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 September 30, 2018 excluding TXT (September 29, 2018); LLL (September 28, 2018); and BA, HO and RR (June 30, 2018).

(4) Excludes non-recurring and discontinued operations.

Comparative Index Performance

The Mufson Howe Hunter Components & Materials Index^(a) decreased by 12.2% during the three months ending November 30, 2018.

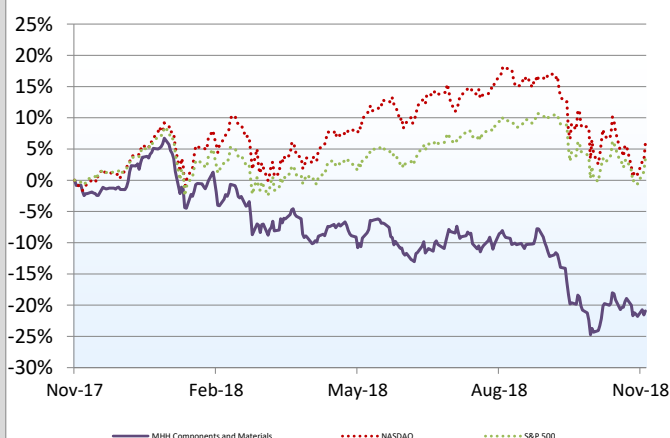
Last Three Years

Daily from November 30, 2015 to November 30, 2018
Price as Percent of Base (November 30, 2015 = 0%)



Last Twelve Months

Daily from November 30, 2017 to November 30, 2018
Price as Percent of Base (November 30, 2017 = 0%)





Price Performance

	3-Year	LTM	3 Month
Mufson Howe Hunter Components & Materials Index ^(a)	4.0%	-20.2%	-12.2%
NASDAQ	43.5%	6.6%	-9.6%
S&P 500	32.7%	4.3%	-4.9%

(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 15 for sector news

Highlighted M&A Transaction – Components & Materials

Target	Acquirer	Value*
 (Power Solutions Business)	 	\$13,244.0
Brookfield Business Partners L.P. (NYSE:BBU) and Caisse de dépôt et placement du Québec (CDPQ), together with institutional partners, entered into a stock and purchase agreement to acquire the Power Solutions business of Johnson Controls International plc (NYSE:JCI) for approximately \$13.2 bn on November 13, 2018. The transaction price represents a multiple of 7.9x LTM EBITDA. In FY 2018, the Power Solutions business generated \$8 bn in revenue and \$1.68 bn in EBITDA.		
*ND – Not disclosed. Transaction values reported on the basis of enterprise value in USD millions.		

Components & Materials

Selected Valuation Metrics

(\$ in USD millions, except per share data)

Company	Market & Capitalization			LTM Performance ⁽³⁾			Valuation			Margins	
	Price ⁽¹⁾	Equity Value	Enterprise Value ⁽²⁾	Revenue	EBITDA ⁽⁴⁾	EPS	Enterprise Value/Revenue	EBITDA	Price/EPS	Gross Profit	EBITDA
Electronic Components											
Corning Inc. (GLW)	\$32.22	\$25,789	\$31,583	\$10,892	\$2,812	\$1.31	2.90x	11.2x	24.7x	39.5%	25.8%
TE Connectivity Ltd (TEL)	76.93	26,390	29,642	13,988	3,153	4.24	2.12x	9.4x	18.2x	33.9%	22.5%
Amphenol Corp. (APH)	87.94	26,499	28,782	7,921	1,888	3.01	3.63x	15.2x	29.2x	32.5%	23.8%
Omron Corp. (TSE:6645)	43.96	9,159	8,265	7,628	965	2.03	1.08x	8.6x	21.6x	41.7%	12.6%
Alps Electric Ltd (TSE:6770)	23.18	4,540	5,194	7,680	997	1.43	0.68x	5.2x	16.2x	21.6%	13.0%
Belden Inc. (BDC)	55.78	2,248	3,423	2,535	452	3.65	1.35x	7.6x	15.3x	39.9%	17.8%
Vishay Intertechnology (VSH)	20.85	3,007	2,534	2,936	595	1.72	0.86x	4.3x	12.1x	28.7%	20.3%
AVX Corp. (AVX)	16.49	2,783	1,939	1,789	325	0.95	1.08x	6.0x	17.4x	22.5%	18.2%
Encore Wire Corp. (WMRE)	49.96	1,043	909	1,270	107	2.75	0.72x	8.5x	18.2x	14.1%	8.4%
Mean		\$11,273	\$12,475	\$6,293	\$1,255	\$2.34	1.60x	8.4x	19.2x	30.5%	18.1%
Median		4,540	5,194	7,628	965	2.03	1.08x	8.5x	18.2x	32.5%	18.2%
Specialty Materials											
DowDuPont Inc. (DWDP)	\$57.85	\$132,722	\$162,370	\$85,944	\$16,875	\$2.83	1.89x	9.6x	20.5x	26.1%	19.6%
3M Company (MMM)	207.92	121,069	132,471	32,810	8,514	6.70	4.04x	15.6x	31.0x	49.5%	25.9%
BASF SE (DE:BAS)	72.93	66,983	88,481	76,185	12,544	5.11	1.16x	7.1x	14.3x	30.5%	16.5%
PPG Industries, Inc. (PPG)	109.33	26,227	30,208	15,411	2,331	4.46	1.96x	13.0x	24.5x	42.0%	15.1%
Akzo Nobel N.V. (ENXTAM:AKZA)	83.90	21,465	25,005	10,725	1,071	1.55	2.33x	23.3x	NM	42.9%	10.0%
Celene Corp. (CE)	100.93	13,500	16,620	7,059	1,691	7.31	2.35x	9.8x	13.8x	27.9%	24.0%
Evonik Industries AG (DE:EVK)	27.15	12,640	16,189	17,372	3,101	2.42	0.93x	5.2x	11.2x	31.4%	17.9%
Solvay SA (ENXTBR:SOLB)	108.15	11,174	15,275	12,890	2,267	6.97	1.19x	6.7x	15.5x	27.7%	17.6%
Ferro Corporation (FOE)	19.30	1,607	2,424	1,594	239	1.00	1.52x	10.1x	19.4x	28.6%	15.0%
Mean		\$45,265	\$54,338	\$28,888	\$5,404	\$4.26	1.93x	11.16x	18.77x	34.1%	17.9%
Median		21,465	25,005	15,411	2,331	4.46	1.89x	9.83x	17.46x	30.5%	17.6%
Vehicle Parts and Supplies											
Johnson Controls Inc. (JCI)	\$34.78	\$32,139	\$44,228	\$31,400	\$4,716	\$2.00	1.41x	9.4x	17.4x	29.9%	15.0%
Denso Corp. (TSE:6902)	46.22	35,810	36,139	47,317	5,571	2.46	0.76x	6.5x	18.8x	16.1%	11.8%
Continental AG (DB:CON)	150.19	30,039	33,635	51,654	5,803	14.85	0.65x	5.8x	10.1x	25.4%	11.2%
Aptiv PLC (APTIV)	71.90	18,944	22,482	14,239	2,275	3.54	1.58x	9.9x	20.3x	19.5%	16.0%
Lear Corp. (LEA)	136.25	8,744	9,805	21,570	2,291	14.94	0.45x	4.3x	9.1x	11.5%	10.6%
Autoliv, Inc. (ALV)	85.91	7,486	9,216	10,890	1,309	7.22	0.85x	7.0x	11.9x	20.2%	12.0%
Bosch Ltd. (BSE:500530)	271.28	8,280	7,869	1,776	327	6.02	4.43x	24.1x	NM	45.5%	18.4%
Stanley Electric Co. Ltd. (TSE:6923)	29.11	4,747	3,994	3,949	796	1.76	1.01x	5.0x	16.5x	22.9%	20.1%
Delphi Automotive PLC (DLPH)	17.09	1,512	2,871	4,976	777	3.41	0.58x	3.7x	5.0x	19.0%	15.6%
Mean		\$16,411	\$18,915	\$20,863	\$2,652	\$6.25	1.30x	8.4x	13.6x	23.3%	14.5%
Median		8,744	9,805	14,239	2,275	3.54	0.85x	6.5x	14.2x	20.2%	15.0%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close November 30, 2018.

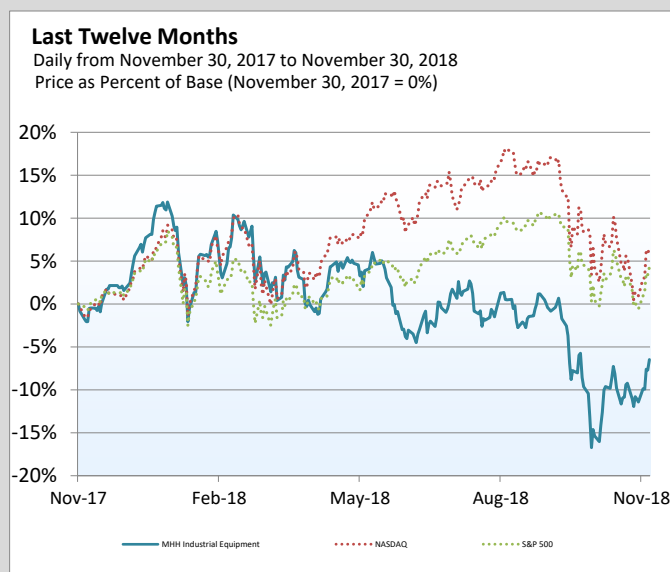
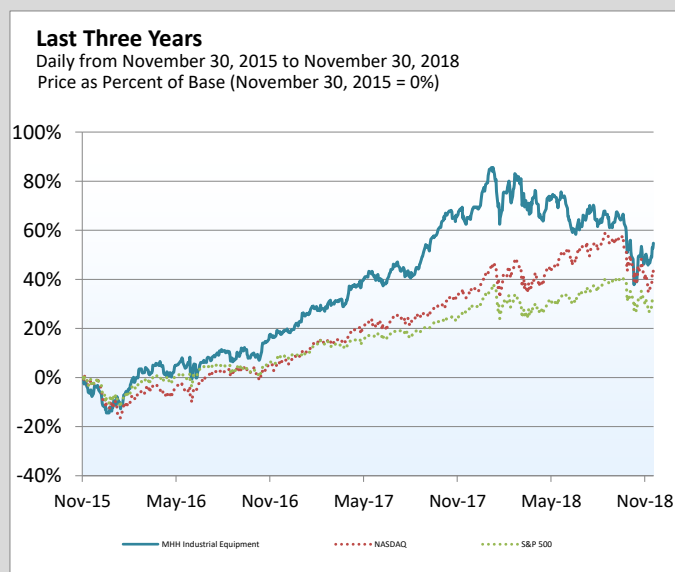
(2) Enterprise value is defined as equity value plus net debt, preferred stock and minority interests. Net Debt includes long term debt, short term debt, post-retirement benefits and unfunded pensions, if applicable, less cash and cash equivalents.

(3) As of September 30, 2018 excluding LEA and VSH (September 29, 2018); TEL (September 28, 2018); and 500530 (March 31, 2018).

(4) Excludes non-recurring and discontinued operations.

Comparative Index Performance

The Mufson Howe Hunter Industrial Equipment Index^(a) decreased by 6.8% during the three months ending November 30, 2018.



Price Performance

	3-Year	LTM	3 Month
Mufson Howe Hunter Industrial Equipment Index ^(a)	54.8%	-6.5%	-6.8%
NASDAQ	43.5%	6.6%	-9.6%
S&P 500	32.7%	4.3%	-4.9%

(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 16 for sector news

Highlighted M&A Transaction – Industrial Equipment

Target	Acquirer	Value*
 TELULAR FORZA	 AMETEK	\$565.0

AMETEK, Inc. (NYSE:AME) acquired Telular Corporation and Forza Silicon Corporation for approximately \$570 mm on November 1, 2018. Telular was acquired for approximately \$525 mm and Forza Silicon for \$40 mm. Both companies will join AMETEK's Electronic Instruments Group. Telular develops and distributes products and services that utilize wireless networks to provide data connectivity among people and machines. Forza Silicon, a fabless semiconductor company, engages in the design and production of custom integrated circuits. The companies are based in the United States.

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

Industrial Equipment

Selected Valuation Metrics

(\$ in USD millions, except per share data)

Company	Market & Capitalization			LTM Performance ⁽³⁾			Valuation			Margins	
	Price ⁽¹⁾	Equity Value	Enterprise Value ⁽²⁾	Revenue	EBITDA ⁽⁴⁾	EPS	Enterprise Value/Revenue	EBITDA	Price/EPS	Gross Profit	EBITDA
Construction Equipment											
Caterpillar Inc. (CAT)	\$135.67	\$80,060	\$108,687	\$53,276	\$10,982	\$8.16	2.04x	9.9x	16.6x	27.9%	20.6%
Deere & Company (DE)	154.88	49,821	88,891	36,706	5,613	7.82	2.42x	15.8x	19.8x	22.8%	15.3%
Cummins Inc. (CMI)	151.06	24,179	26,106	23,121	2,938	10.18	1.13x	8.9x	14.8x	24.0%	12.7%
Hyundai Heavy Industries Co. Ltd (KOSDAQ009540)	117.81	8,142	9,450	11,619	-199	(9.81)	0.81x	NM	NM	1.0%	NM
Navistar International Corp. (NAV)	32.04	3,168	7,691	9,531	716	1.78	0.81x	10.7x	18.0x	17.5%	7.5%
Oshkosh Corp. (OSK)	71.33	5,128	5,492	7,706	778	5.02	0.71x	7.1x	14.2x	17.7%	10.1%
Terex Corp. (TEX)	33.06	2,437	3,245	4,956	343	1.69	0.65x	9.5x	19.5x	19.0%	6.9%
Mean		\$24,705	\$35,651	\$20,988	\$3,024	\$3.55	1.23x	10.3x	17.2x	18.6%	12.2%
Median		8,142	9,450	11,619	778	5.02	0.81x	9.7x	17.3x	19.0%	11.4%
Electrical Equipment											
Schneider Electric SE (ENXTPA:SU)	\$72.78	\$39,980	\$48,514	\$29,036	\$4,695	\$4.13	1.67x	10.3x	17.6x	38.6%	16.2%
Emerson Electric Co. (EMR)	67.52	42,278	45,988	17,408	3,561	2.65	2.64x	12.9x	25.4x	42.9%	20.5%
Eaton Corporation plc (ETN)	76.94	33,346	40,183	21,363	3,750	3.71	1.88x	10.7x	20.7x	32.7%	17.6%
Rockwell Automation Inc. (ROK)	174.34	21,040	21,931	6,666	1,444	6.11	3.29x	15.2x	28.5x	43.1%	21.7%
Amelec Inc. (AME)	73.43	17,044	18,427	4,718	1,239	2.53	3.91x	14.9x	29.0x	34.4%	26.3%
Hubbell Inc. (HUBB)	110.16	6,026	7,726	4,255	727	5.90	1.82x	10.6x	18.7x	30.5%	17.1%
Regal Beloit Corporation (RBC)	78.18	3,373	4,494	3,585	484	4.22	1.25x	9.3x	18.5x	26.4%	13.5%
Powell Industries, Inc. (POWL)	30.57	351	297	409	-6	(1.02)	0.73x	NM	NM	12.8%	NM
Mean		\$20,430	\$23,445	\$10,930	\$1,987	\$3.53	2.15x	12.0x	22.7x	32.7%	19.0%
Median		19,042	20,179	5,692	1,341	3.92	1.85x	10.7x	20.7x	33.6%	17.6%
Semiconductor Capital Equipment											
ASML Holding NV (ASML)	\$168.82	\$71,738	\$71,781	\$12,039	\$3,831	\$4.94	5.96x	18.7x	34.2x	43.5%	31.8%
Applied Materials, Inc. (AMAT)	37.28	36,646	37,925	17,253	5,253	2.84	2.20x	7.2x	13.1x	45.3%	30.4%
Lam Research Corp. (LRCX)	156.96	24,357	23,123	10,930	3,442	11.02	2.12x	6.7x	14.2x	46.4%	31.5%
Tokyo Electron Ltd (TSE:8035)	139.84	22,923	19,190	11,497	3,138	11.33	1.67x	6.1x	12.3x	41.7%	27.3%
KLA-Tencor Corp. (KLAC)	98.56	15,087	14,545	4,160	1,682	6.16	3.50x	8.6x	16.0x	64.5%	40.4%
Teradyne Inc. (TER)	35.69	6,397	5,541	2,061	581	1.47	2.69x	9.5x	24.2x	57.5%	28.2%
Veeco Instruments Inc. (VECO)	8.76	419	437	592	51	(0.34)	0.74x	8.5x	NM	39.1%	8.7%
Mean		\$25,367	\$24,649	\$8,362	\$2,568	\$5.35	2.15x	7.6x	19.0x	48.3%	28.3%
Median		22,923	19,190	10,930	3,138	4.94	2.16x	7.2x	15.1x	45.3%	30.4%
Measurement, Control, and Testing Devices											
Danaher Corporation (DHR)	\$109.54	\$76,777	\$86,630	\$19,615	\$4,864	\$3.01	4.42x	17.8x	36.4x	56.2%	24.8%
Xcerra Corporation (XCRA)	28.08	22,633	32,383	29,534	3,648	1.57	1.10x	8.9x	17.9x	32.6%	12.4%
Entegris, Inc. (ENTG)	29.40	4,155	4,511	1,499	423	1.17	3.01x	10.7x	25.1x	47.2%	28.2%
MKS Instruments, Inc. (MKSI)	78.46	4,236	3,965	2,126	604	5.72	1.86x	6.6x	13.7x	47.4%	28.4%
Brooks Automation, Inc. (BRKS)	30.36	2,080	2,032	632	73	0.23	3.22x	27.8x	NM	39.3%	11.6%
FormFactor, Inc. (FORM)	16.49	1,222	1,152	521	74	0.23	2.21x	15.6x	NM	39.0%	14.1%
FARO Technologies, Inc. (FARO)	49.72	858	723	397	28	0.36	1.82x	26.1x	NM	56.9%	7.0%
Cohu, Inc. (COHU)	19.60	798	634	365	53	0.93	1.74x	12.0x	21.0x	41.0%	14.5%
Nanometrics Incorporated (NANO)	32.12	778	605	326	81	1.86	1.86x	7.4x	17.3x	57.2%	25.0%
Axcelis Technologies, Inc. (ACLS)	19.92	646	545	453	65	1.00	1.20x	8.4x	20.0x	38.1%	14.3%
Nova Measuring Instruments Ltd. (NVMI)	24.77	692	522	245	65	1.31	2.13x	8.1x	18.9x	57.7%	26.4%
Rudolph Technologies, Inc. (RTEC)	21.22	677	483	271	60	1.07	1.78x	8.0x	19.8x	54.5%	22.2%
Mean		\$9,629	\$11,182	\$4,665	\$836	\$1.54	2.19x	13.1x	21.1x	47.3%	19.1%
Median		1,040	937	487	73	1.12	1.86x	9.8x	19.8x	47.3%	18.3%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close November 30, 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 September 30, 2018 excluding AMAT and DE (October 28, 2018); COHU, ENTG, FORM, NANO, RBC (September 29, 2018); DHR (September 28, 2018); LRCX (September 23, 2018); NAV (July 31, 2018); and POWL, SU and XCRA (June 30, 2018).

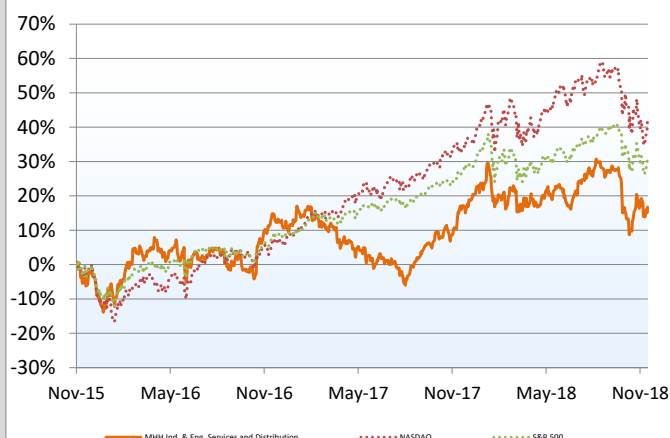
(4) Excludes non-recurring and discontinued operations.

Comparative Index Performance

The Mufson Howe Industrial & Engineering Services and Distribution Index^(a) decreased by 8.8% during the three months ending November 30, 2018.

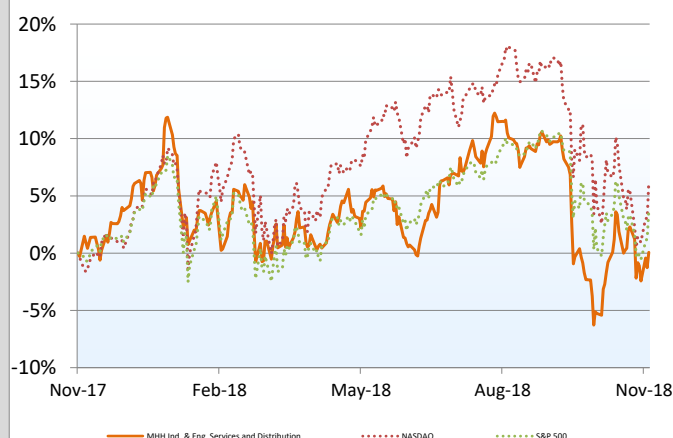
Last Three Years

Daily from November 30, 2015 to November 30, 2018
Price as Percent of Base (November 30, 2015 = 0%)



Last Twelve Months

Daily from November 30, 2017 to November 30, 2018
Price as Percent of Base (November 30, 2017 = 0%)



Price Performance

	3-Year	LTM	3 Month
Mufson Howe Hunter Industrial & Engineering Services and Distribution Index ^(a)	17.0%	0.3%	-8.8%
NASDAQ	43.5%	6.6%	-9.6%
S&P 500	32.7%	4.3%	-4.9%

(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 18 for sector news

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

Target	Acquirer	Value*
		\$12.46

Cardno Limited (ASX:CDD) agreed to acquire TGM Group Pty Ltd for AUD 21.6 million on December 6, 2018. TGM Group Pty Ltd provides engineering and surveying consulting services, as well as offers approval, design and completion of urban development, building and infrastructure projects. The company was founded in 1995 and is based in Hawthorn, Australia.

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

Selected Valuation Metrics

(\$ in USD millions, except per share data)

Company	Market & Capitalization			LTM Performance ⁽³⁾			Valuation		Margins		
	Price ⁽¹⁾	Equity Value	Enterprise Value ⁽²⁾	Revenue	EBITDA ⁽⁴⁾	EPS	Enterprise Value/Revenue	EBITDA	Price/EPS	Gross Profit	EBITDA
Industrial and Engineering Services											
Jacobs Engineering Group Inc. (JEC)	\$65.67	\$9,342	\$10,791	\$14,985	\$876	\$2.60	0.72x	12.3x	25.3x	18.9%	5.8%
AECOM (ACM)	32.16	5,028	7,954	20,156	764	0.97	0.39x	10.4x	33.2x	3.2%	3.8%
John Wood Group PLC (LSE:WG.)	8.10	5,450	6,995	8,367	417	0.18	0.84x	16.8x	NM	11.7%	5.0%
Fluor Corporation (FLR)	40.93	5,758	5,716	19,393	757	1.75	0.29x	7.5x	23.4x	3.7%	3.9%
Tetra Tech, Inc. (TTEK)	60.96	3,375	3,505	2,201	234	1.99	1.59x	14.9x	30.6x	17.5%	10.7%
KBR, Inc. (KBR)	18.57	2,616	3,228	4,520	302	1.00	0.71x	10.7x	18.5x	8.8%	6.7%
Balfour Beatty plc (LSE:BBY)	3.20	2,179	2,365	8,698	131	0.10	0.27x	18.1x	31.9x	5.4%	1.5%
Primoris Services Corporation (PRIM)	24.15	1,237	1,552	2,641	186	1.07	0.59x	8.3x	22.7x	11.0%	7.0%
White Group Public Company Limited (WG)	5.41	97	63	35	6	0.18	1.83x	11.3x	29.4x	24.4%	16.3%
Mean		\$3,898	\$4,685	\$8,999	\$408	\$1.09	0.80x	12.3x	26.9x	11.6%	6.7%
Median		3,375	3,505	8,367	302	1.00	0.71x	11.3x	27.3x	11.0%	5.8%
Industrial Distribution											
W.W. Grainger, Inc. (GWW)	\$314.04	\$17,687	\$19,567	\$11,091	\$1,596	\$12.74	1.76x	12.3x	24.7x	38.9%	14.4%
Fastenal Company (FAST)	59.26	17,011	17,271	4,822	1,103	2.08	3.58x	15.7x	28.5x	48.6%	22.9%
HD Supply Holdings, Inc. (HDS)	39.90	7,333	9,290	5,784	788	1.94	1.61x	11.8x	20.6x	39.3%	13.6%
MSC Industrial Direct Co., Inc. (MSM)	88.59	4,941	5,430	3,204	514	4.81	1.69x	10.6x	18.4x	43.5%	16.0%
WESCO International, Inc. (WCC)	53.41	2,494	3,637	8,162	398	3.61	0.45x	9.1x	14.8x	19.1%	4.9%
MRC Global Inc. (MRC)	15.73	1,421	2,466	4,066	185	0.56	0.61x	13.3x	28.1x	15.6%	4.5%
Lawson Products, Inc. (LAWS)	30.80	275	283	344	12	0.36	0.82x	23.2x	NM	55.4%	3.5%
Transcat, Inc. (TRNS)	20.73	149	174	158	16	0.79	1.10x	10.6x	26.2x	24.5%	10.4%
Mean		\$6,414	\$7,265	\$4,704	\$577	\$3.36	1.45x	13.3x	23.0x	35.6%	11.3%
Median		3,717	4,534	4,444	456	2.01	1.35x	12.0x	24.7x	39.1%	12.0%
Industrial Recycling Services											
Veolia Environnement S.A. (ENXTPA:VIE)	\$21.26	\$11,746	\$24,901	\$29,407	\$3,313	\$1.04	0.85x	7.5x	20.5x	13.9%	11.3%
Clean Harbors, Inc. (CLH)	64.53	3,614	4,985	3,190	467	1.00	1.56x	10.7x	NM	29.9%	14.7%
Dowa Holdings Co., Ltd. (TSE:5714)	32.94	1,950	2,977	4,029	388	2.96	0.74x	7.7x	11.1x	13.8%	9.6%
Commercial Metals Company (CMC)	19.27	2,267	2,803	4,644	352	0.95	0.60x	8.0x	20.3x	13.4%	7.6%
Aurubis AG (DE:NDA)	54.44	2,447	2,456	13,433	660	7.00	0.18x	3.7x	7.8x	11.0%	4.9%
Sims Metal Management Limited (ASX:SGM)	7.81	1,589	1,363	4,778	219	0.58	0.29x	6.2x	13.4x	12.1%	4.6%
Cardno Limited (ASX:CDD)	0.79	358	372	826	40	0.04	0.45x	9.3x	22.3x	7.7%	4.9%
Mean		\$3,424	\$5,694	\$8,615	\$777	\$1.94	0.67x	7.6x	15.9x	14.5%	8.2%
Median		2,267	2,803	4,644	388	1.00	0.60x	7.7x	16.9x	13.4%	7.6%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close November 30, 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 September 30, 2018 excluding HDS (October 28, 2018); TRNS (September 29, 2018); JEC (September 28, 2018); MSM (September 1, 2018); CMC (August 31, 2018); CDD, NDA, SGM and WG (June 30, 2018); and BBY (June 29, 2018).

(4) Excludes non-recurring and discontinued operations.

Selected News – Aerospace & Defense

Airbus SE (ENXTPA:AIR) reported third quarter net income of \$1,111.9 million for fiscal year 2018 as compared to \$362.8 million for the prior year period. Earnings per share were \$1.43 versus \$0.47 for the prior year period. Revenues for the quarter increased to \$17,951.7 million from \$15,166.1 million for the same period in fiscal year 2017.

Airbus SE (ENXTPA:AIR) announced its Board of Directors has appointed **Dominik Asam**, to succeed Harald Wilhelm, as Chief Financial Officer (CFO) in April 2019.

Embraer S.A. (NYSE:ERJ) reported third quarter net income of (\$20.9) million for fiscal year 2018 as compared to \$105.1 million for the prior year period. Earnings per share were (\$0.03) versus \$0.14 for the prior year period. Revenues for the quarter decreased to \$1,144.8 million from \$1,303.8 million for the same period in fiscal year 2017.

General Dynamics Corporation (NYSE:GD) reported third quarter net income of \$851.0 million for fiscal year 2018 as compared to \$764.0 million for the prior year period. Earnings per share were \$2.85 versus \$2.52 for the prior year period. Revenues for the quarter increased to \$9,094.0 million from \$7,580.0 million for the same period in fiscal year 2017.

Honeywell International Inc. (NYSE:HON) reported third quarter net income of \$2,338.0 million for fiscal year 2018 as compared to \$1,345.0 million for the prior year period. Earnings per share were \$3.11 versus \$1.74 for the prior year period. Revenues for the quarter increased to \$10,762.0 million from \$10,121.0 million for the same period in fiscal year 2017.

Huntington Ingalls Industries, Inc. (NYSE:HII) reported third quarter net income of \$229.0 million for fiscal year 2018 as compared to \$149.0 million for the prior year period. Earnings per share were \$5.29 versus \$3.27 for the prior year period. Revenues for the quarter increased to \$2,083.0 million from \$1,863.0 million for the same period in fiscal year 2017.

L3 Technologies, Inc. (NYSE:LLL) reported third quarter net income of \$202.0 million for fiscal year 2018 as compared to \$22.0 million for the prior year period. Earnings per share were \$2.54 versus \$0.27 for the prior year period. Revenues for the quarter increased to \$2,519.0 million from \$2,293.0 million for the same period in fiscal year 2017.

Lockheed Martin Corporation (NYSE:LMT) reported third quarter net income of \$1,473.0 million for fiscal year 2018 as compared to \$963.0 million for the prior year period. Earnings per share were \$5.14 versus \$3.32 for the prior year period. Revenues for the quarter increased to \$14,318.0 million from \$12,341.0 million for the same period in fiscal year 2017.

Northrop Grumman Corporation (NYSE:NOC) reported third quarter net income of \$1,144.0 million for fiscal year 2018 as compared to \$643.0 million for the prior year period. Earnings per share were \$6.54 versus \$3.67 for the prior year period. Revenues for the quarter increased to \$8,085.0 million from \$6,569.0 million for the same period in fiscal year 2017.

Raytheon Company (NYSE:RTN) reported third quarter net income of \$644.0 million for fiscal year 2018 as compared to \$572.0 million for the prior year period. Earnings per share were \$2.25 versus \$1.97 for the prior year period. Revenues for the quarter increased to \$6,806.0 million from \$6,284.0 million for the same period in fiscal year 2017.

Textron Inc. (NYSE:TXT) reported third quarter net income of \$563.0 million for fiscal year 2018 as compared to \$159.0 million for the prior year period. Earnings per share were \$2.26 versus \$0.60 for the prior year period. Revenues for the quarter decreased to \$3,200.0 million from \$3,484.0 million for the same period in fiscal year 2017.

Selected Highlights

Thales S.A. (ENXTPA:HO) reported second quarter net income of \$266.7 million for fiscal year 2018 as compared to \$170.8 million for the prior year period. Earnings per share were \$1.25 versus \$0.80 for the prior year period. Revenues for the quarter increased to \$4,347.3 million from \$4,060.7 million for the same period in fiscal year 2017.

The Boeing Company (NYSE:BA) reported third quarter net income of \$2,363.0 million for fiscal year 2018 as compared to \$1,810.0 million for the prior year period. Earnings per share were \$4.07 versus \$2.99 for the prior year period. Revenues for the quarter increased to \$25,146.0 million from \$24,223.0 million for the same period in fiscal year 2017.

United Technologies Corporation (NYSE:UTX) reported third quarter net income of \$1,238.0 million for fiscal year 2018 as compared to \$1,330.0 million for the prior year period. Earnings per share were \$1.54 versus \$1.67 for the prior year period. Revenues for the quarter increased to \$16,510.0 million from \$15,062.0 million for the same period in fiscal year 2017.

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

Selected News – Components & Materials

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.

Bosch Limited (BSE:500530) announced its board of directors approved the appointment of **Mr. Rajesh Parte** as Company Secretary & Compliance Officer with effect from November 05, 2018.

Continental Aktiengesellschaft (DB:CON) reported third quarter net income of \$727.4 million for fiscal year 2018 as compared to \$861.7 million for the prior year period. Earnings per share were \$3.64 versus \$4.30 for the prior year period. Revenues for the quarter decrease to \$12,533.8 million from \$12,637.6 million for the same period in fiscal year 2017.

Delphi Technologies PLC (NYSE:DLPH) reported third quarter net income of \$39.0 million for fiscal year 2018 as compared to \$78.0 million for the prior year period. Earnings per share were \$0.44 versus \$0.88 for the prior year period. Revenues for the quarter decrease to \$1,159.0 million from \$1,205.0 million for the same period in fiscal year 2017.

DowDuPont Inc. (NYSE:DWDP) reported third quarter net income of \$497.0 million for fiscal year 2018 as compared to \$514.0 million for the prior year period. Earnings per share were \$0.21 versus \$0.32 for the prior year period. Revenues for the quarter increase to \$20,123.0 million from \$15,354.0 million for the same period in fiscal year 2017.

Evonik Industries AG (DE:EVK) reported third quarter net income of \$382.2 million for fiscal year 2018 as compared to \$268.3 million for the prior year period. Earnings per share were \$0.82 versus \$0.58 for the prior year period. Revenues for the quarter increase to \$4,408.0 million from \$4,202.8 million for the same period in fiscal year 2017.

Ferro Corporation (NYSE:FOE) reported third quarter net income of \$16.1 million for fiscal year 2018 as compared to \$22.8 million for the prior year period. Earnings per share were \$0.19 versus \$0.27 for the prior year period. Revenues for the quarter increase to \$395.2 million from \$350.0 million for the same period in fiscal year 2017.

Johnson Controls International plc (NYSE:JCI) reported net income of \$2,162.0 million for fiscal year 2018 as compared to \$1,611.0 million for the prior year. Earnings per share were \$2.32 versus \$1.70 for the prior year. Revenues for the year increase to \$31,400.0 million from \$30,172.0 million for fiscal year 2017.

Solvay SA (ENXTBR:SOLB) reported third quarter net income of \$321.8 million for fiscal year 2018 as compared to \$211.6 million for the prior year period. Earnings per share were \$3.10 versus \$2.02 for the prior year period. Revenues for the quarter increase to \$3,299.6 million from \$3,120.2 million for the same period in fiscal year 2017.

Vishay Intertechnology, Inc. (NYSE:VSH) announced the appointment of **Michael J. Cody** as a new independent member to its Board of Director, effective November 27, 2018.

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

Selected News – Industrial Equipment

AMETEK, Inc. (NYSE:AME) reported third quarter net income of \$191.2 million for fiscal year 2018 as compared to \$153.5 million for the prior year period. Earnings per share were \$0.82 versus \$0.66 for the prior year period. Revenues for the quarter increased to \$1,193.0 million from \$1,084.8 million for the same period in fiscal year 2017.

Applied Materials, Inc. (NasdaqGS:AMAT) reported net income of \$3,313.0 million for fiscal year 2018 as compared to \$3,434.0 million for the prior year. Earnings per share were \$3.23 versus \$3.17 for the prior year. Revenues for the year increased to \$17,253.0 million from \$14,537.0 million for fiscal year 2017.

Axcelis Technologies, Inc. (NasdaqGS:ACLS) reported third quarter net income of \$8.8 million for fiscal year 2018 as compared to \$11.8 million for the prior year period. Earnings per share were \$0.26 versus \$0.35 for the prior year period. Revenues for the quarter decreased to \$95.4 million from \$104.5 million for the same period in fiscal year 2017.

Brooks Automation, Inc. (NasdaqGS:BRKS) reported net income of \$116.6 million for fiscal year 2018 as compared to \$62.6 million for the prior year. Earnings per share were \$1.64 versus \$0.89 for the prior year. Revenues for the year increased to \$631.6 million from \$527.5 million for fiscal year 2017.

Cohu, Inc. (NasdaqGS:COHU) reported third quarter net income of \$4.8 million for fiscal year 2018 as compared to \$8.8 million for the prior year period. Earnings per share were \$0.16 versus \$0.30 for the prior year period. Revenues for the quarter decreased to \$86.2 million from \$93.7 million for the same period in fiscal year 2017.

Danaher Corporation (NYSE:DHR) announced effective January 1, 2019, **Matthew McGrew** will succeed Daniel Comas as Executive Vice President - Chief Financial Officer. Mr. McGrew is currently a Danaher Group CFO with responsibility for the Company's Diagnostics and Dental platforms.

Deere & Company (NYSE:DE) reported net income of \$2,368.4 million for fiscal year 2018 as compared to \$2,159.1 million for the prior year. Earnings per share were \$7.24 versus \$6.68 for the prior year. Revenues for the year increased to \$36,705.9 million from \$29,070.7 million for fiscal year 2017.

Emerson Electric Co. (NYSE:EMR) reported net income of \$2,203.0 million for fiscal year 2018 as compared to \$1,518.0 million for the prior year. Earnings per share were \$3.46 versus \$2.35 for the prior year. Revenues for the year increased to \$17,408.0 million from \$15,264.0 million for fiscal year 2017.

Nova Measuring Instruments Ltd. (NasdaqGS:NVMII) reported third quarter net income of \$13.3 million for fiscal year 2018 as compared to \$11.5 million for the prior year period. Earnings per share were \$0.46 versus \$0.40 for the prior year period. Revenues for the quarter increased to \$63.6 million from \$54.1 million for the same period in fiscal year 2017.

Oshkosh Corporation (NYSE:OSK) reported net income of \$471.9 million for fiscal year 2018 as compared to \$285.6 million for the prior year. Earnings per share were \$6.29 versus \$3.77 for the prior year. Revenues for the year increased to \$7,705.5 million from \$6,829.6 million for fiscal year 2017.

Regal Beloit Corporation (NYSE:RBC) reported third quarter net income of \$51.3 million for fiscal year 2018 as compared to \$62.2 million for the prior year period. Earnings per share were \$1.17 versus \$1.39 for the prior year period. Revenues for the quarter increased to \$925.4 million from \$856.9 million for the same period in fiscal year 2017.

Selected Highlights

Rockwell Automation, Inc. (NYSE:ROK) reported net income of \$535.5 million for fiscal year 2018 as compared to \$825.7 million for the prior year. Earnings per share were \$4.21 versus \$6.35 for the prior year. Revenues for the year increased to \$6,666.0 million from \$6,311.3 million for fiscal year 2017.

Rudolph Technologies, Inc. (NYSE:RTEC) reported third quarter net income of \$7.2 million for fiscal year 2018 as compared to \$17.4 million for the prior year period. Earnings per share were \$0.22 versus \$0.54 for the prior year period. Revenues for the quarter decreased to \$60.4 million from \$66.9 million for the same period in fiscal year 2017.

Terex Corporation (NYSE:TEX) reported third quarter net income of \$38.6 million for fiscal year 2018 as compared to \$59.2 million for the prior year period. Earnings per share were \$0.51 versus \$0.66 for the prior year period. Revenues for the quarter increased to \$1,228.5 million from \$1,111.2 million for the same period in fiscal year 2017.

Veeco Instruments Inc. (NasdaqGS:VECO) reported third quarter net income of (\$9.0) million for fiscal year 2018 as compared to (\$23.7) million for the prior year period. Earnings per share were (\$0.19) versus (\$0.51) for the prior year period. Revenues for the quarter decreased to \$126.8 million from \$129.3 million for the same period in fiscal year 2017.

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

Selected News – Industrial & Engineering Services and Distribution

AECOM (NYSE:ACM) reported net income of \$136.5 million for fiscal year 2018 as compared to \$339.4 million for the prior year. Earnings per share were \$0.84 versus \$2.13 for the prior year. Revenues for the year increased to \$20,155.5 million from \$18,203.4 million for fiscal year 2017.

Dowa Holdings Co., Ltd. (TSE:5714) reported second quarter net income of \$25.3 million for fiscal year 2019 as compared to \$49.4 million for the prior year period. Earnings per share were \$0.43 versus \$0.83 for the prior year period. Revenues for the quarter decreased to \$940.0 million from \$969.5 million for the same period in fiscal year 2018.

Fluor Corporation (NYSE:FLR) reported third quarter net income of \$77.3 million for fiscal year 2018 as compared to \$94.5 million for the prior year period. Earnings per share were \$0.55 versus \$0.67 for the prior year period. Revenues for the quarter decreased to \$4,658.0 million from \$4,941.6 million for the same period in fiscal year 2017.

Jacobs Engineering Group Inc. (NYSE:JEC) reported net income of \$163.4 million for fiscal year 2018 as compared to \$293.7 million for the prior year. Earnings per share were \$1.17 versus \$2.42 for the prior year. Revenues for the year increased to \$14,984.6 million from \$10,022.8 million for fiscal year 2017.

Jacobs Engineering Group Inc. (NYSE:JEC) announced that **Terence D. Hagen** and **Robert V. Pragada** will each be promoted to Chief Operating Officer effective October 1, 2018.

Primoris Services Corporation (NasdaqGS:PRIM) reported third quarter net income of \$32.7 million for fiscal year 2018 as compared to \$20.6 million for the prior year period. Earnings per share were \$0.63 versus \$0.40 for the prior year period. Revenues for the quarter increased to \$908.9 million from \$608.3 million for the same period in fiscal year 2017.

Sims Metal Management Limited (ASX:SGM) announced that **Mr. Hiroyuki Kato** has been appointed a Non-Independent, Non-Executive Director of the Company and will replace Mr. Tamotsu Sato, who has retired, both effective November 8, 2018.

Tetra Tech, Inc. (NasdaqGS:TTEK) reported net income of \$136.9 million for fiscal year 2018 as compared to \$117.9 million for the prior year. Earnings per share were \$2.42 versus \$2.04 for the prior year. Revenues for the year increased to \$2,200.7 million from \$2,034.0 million for fiscal year 2017.

Veolia Environnement S.A. (ENXTPA:VIE) reported third quarter net income of \$269.5 million for fiscal year 2018 as compared to \$116.4 million for the prior year period. Earnings per share were \$0.63 versus \$0.21 for the prior year period. Revenues for the quarter decreased to \$7,199.8 million from \$7,551.2 million for the same period in fiscal year 2017.

WESCO International, Inc. (NYSE:WCC) reported third quarter net income of \$66.8 million for fiscal year 2018 as compared to \$53.7 million for the prior year period. Earnings per share were \$1.41 versus \$1.12 for the prior year period. Revenues for the quarter increased to \$2,067.2 million from \$2,000.2 million for the same period in fiscal year 2017.

W.W. Grainger, Inc. (NYSE:GWW) announced it has appointed **Kathleen S. Carroll** as Senior Vice President and Chief Human Resources Officer, effective December 3, 2018.

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

MHH Manufacturing Universe Directory

Company	Sector
3M Company	Components & Materials
AECOM	Ind. & Eng. Services and Distribution
Airbus Group SE	Aerospace & Defense
Akzo Nobel N.V.	Components & Materials
Alps Electric Co. Ltd.	Components & Materials
AMETEK, Inc.	Industrial Equipment
Amphenol Corporation	Components & Materials
Applied Materials, Inc.	Industrial Equipment
Aptiv PLC	Components & Materials
ASML Holding N.V.	Industrial Equipment
Aurubis AG	Ind. & Eng. Services and Distribution
Autoliv, Inc.	Components & Materials
AVX Corp.	Components & Materials
Axcelis Technologies, Inc.	Industrial Equipment
BAE Systems plc	Aerospace & Defense
Balfour Beatty plc	Ind. & Eng. Services and Distribution
BASF SE	Components & Materials
Belden Inc.	Components & Materials
Bosch Ltd	Components & Materials
Brooks Automation, Inc.	Industrial Equipment
Cardno Ltd.	Ind. & Eng. Services and Distribution
Caterpillar Inc.	Industrial Equipment
Celanese Corporation	Components & Materials
Chicago Bridge & Iron Company N.V.	Ind. & Eng. Services and Distribution
Clean Harbors, Inc.	Ind. & Eng. Services and Distribution
Cohu, Inc.	Industrial Equipment
Commercial Metals Company	Ind. & Eng. Services and Distribution
Continental Aktiengesellschaft	Components & Materials
Corning Inc.	Components & Materials
Cummins Inc.	Industrial Equipment
Danaher Corporation	Industrial Equipment
Deere & Company	Industrial Equipment
Delphi Automotive PLC	Components & Materials
DENSO Corporation	Components & Materials
Dowa Holdings Co., Ltd.	Ind. & Eng. Services and Distribution
DowDupont Inc.	Components & Materials
Eaton Corporation plc	Industrial Equipment
Embraer S.A.	Aerospace & Defense
Emerson Electric Co.	Industrial Equipment
Encore Wire Corp.	Components & Materials
Entegris, Inc.	Industrial Equipment
Evonik Industries AG	Components & Materials
Fastenal Company	Ind. & Eng. Services and Distribution
Ferro Corporation	Components & Materials
Fluor Corporation	Ind. & Eng. Services and Distribution
FormFactor, Inc.	Industrial Equipment
General Dynamics Corporation	Aerospace & Defense
HD Supply Holdings, Inc.	Ind. & Eng. Services and Distribution
Honeywell International Inc.	Aerospace & Defense
Hubbell Incorporated	Industrial Equipment
Huntington Ingalls Industries, Inc.	Aerospace & Defense

Company	Sector
Hyundai Heavy Industries Co., Ltd.	Industrial Equipment
Jacobs Engineering Group Inc.	Ind. & Eng. Services and Distribution
John Wood Group plc	Ind. & Eng. Services and Distribution
Johnson Controls Inc.	Components & Materials
KBR, Inc.	Ind. & Eng. Services and Distribution
KLA-Tencor Corporation	Industrial Equipment
L-3 Communications Holdings Inc.	Aerospace & Defense
Lam Research Corporation	Industrial Equipment
Lawson Products, Inc.	Ind. & Eng. Services and Distribution
Lear Corp.	Components & Materials
Lockheed Martin Corporation	Aerospace & Defense
MKS Instruments, Inc.	Industrial Equipment
MRC Global Inc.	Ind. & Eng. Services and Distribution
MSC Industrial Direct Co., Inc.	Ind. & Eng. Services and Distribution
Nanometrics Incorporated	Industrial Equipment
Navistar International Corporation	Industrial Equipment
Newalta Corporation	Ind. & Eng. Services and Distribution
Northrop Grumman Corporation	Aerospace & Defense
Nova Measuring Instruments Ltd.	Industrial Equipment
OMRON Corporation	Components & Materials
Oshkosh Corporation	Industrial Equipment
Powell Industries, Inc.	Industrial Equipment
PPG Industries, Inc.	Components & Materials
Primoris Services Corporation	Ind. & Eng. Services and Distribution
Raytheon Company	Aerospace & Defense
Regal Beloit Corporation	Industrial Equipment
Rockwell Automation Inc.	Industrial Equipment
Rockwell Collins Inc.	Aerospace & Defense
Rolls Royce Holdings plc	Aerospace & Defense
Rudolph Technologies, Inc.	Industrial Equipment
Schneider Electric S.E.	Industrial Equipment
Sims Metal Management Limited	Ind. & Eng. Services and Distribution
Solvay SA	Components & Materials
Stanley Electric Co. Ltd.	Components & Materials
TE Connectivity Ltd.	Components & Materials
Teradyne, Inc.	Industrial Equipment
Terex Corporation	Industrial Equipment
Tetra Tech, Inc.	Ind. & Eng. Services and Distribution
Textron Inc.	Aerospace & Defense
Thales SA	Aerospace & Defense
The Boeing Company	Aerospace & Defense
Tokyo Electron Limited	Industrial Equipment
Transcat, Inc.	Ind. & Eng. Services and Distribution
United Technologies Corporation	Aerospace & Defense
Veeco Instruments Inc.	Industrial Equipment
Veolia Environnement S.A.	Ind. & Eng. Services and Distribution
Vishay Intertechnology Inc.	Components & Materials
W.W. Grainger, Inc.	Ind. & Eng. Services and Distribution
WESCO International, Inc.	Ind. & Eng. Services and Distribution
Willbros Group, Inc.	Ind. & Eng. Services and Distribution
Xcerra Corporation	Industrial Equipment

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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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