



Manufacturing Update

June 2019

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

	Apr-19	May-19	Trend
PMI	52.8	52.1	Negative
Total Unemployment	3.6	3.6	Neutral
CPI Monthly Change	0.3	0.1	Positive
PPI Monthly Change	0.2	0.1	Positive
Industrial Production	109.2	109.6	Positive
Capacity Utilization	77.9	78.1	Positive
Manufacturing Production	104.6	104.8	Positive
Manufacturing Utilization	75.6	75.7	Positive

Sector Index Performance

	3-Year	1-Year	3-Month
Aerospace & Defense	57.2%	-1.7%	-5.7%
Components & Materials*	-12.6%	-26.9%	-18.4%
Industrial Equipment	49.7%	-6.7%	-4.4%
Engineering & Industrial Services	5.7%	-8.7%	-7.0%
NASDAQ	50.6%	0.2%	-1.1%
S&P	31.2%	1.7%	-1.2%

Primary Mufson Howe Hunter Contacts:

Michael J. Howe
Managing Director
215.399.5413
mhowe@mhco.com

Michael J. Mufson
Managing Director
215.399.5410
mmufson@mhco.com

Joseph M. Manko, Jr.
Managing Director
215.399.5402
jmanko@mhco.com

Anthony J. Lopez-Ona
Managing Director
215.399.5405
alopezona@mhco.com

Brandon K. Eck
Managing Director
215.399.5411
beck@mhco.com

*Note: The weak 3-month performance of the Components & Materials index was driven primarily by lagging performance for 3 of the 4 largest market cap companies in the sector (3M, DuPont and Dow).

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

Engineering & Industrial Services

- Technical Services
- Industrial Distribution
- Industrial Recycling

Note: Please refer to Page 20 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, 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, Dow Inc., DuPont de Nemours 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., FARO Technologies 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 Engineering & Industrial Services Index is currently comprised of AECOM Technology Corp., Aurubis AG, Balfour Beatty plc, Cardno Ltd., 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., NV5 Global Inc., Primoris Services Corp., Sims Metal Management Ltd., Tetra Tech Inc., Transcat Inc., Veolia Environnement SA, WW Grainger Inc., and WESCO International Inc.

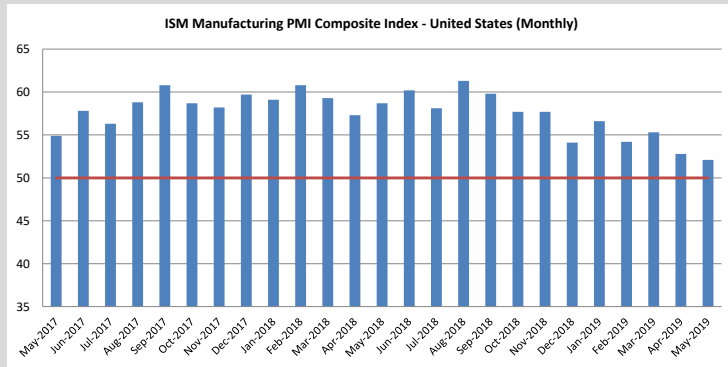
The companies that comprise each Index can change periodically as a result of a variety of reasons, including mergers, acquisitions, initial public offerings, and other transactions; therefore, comparisons to historical time periods and historical performance for each Index may not entirely correspond 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 May as the economy grew for the 121st consecutive month. New Orders, Production, and Employment. Backlog contracted, Supplier Deliveries slowed, and Prices increased. The PMI fell in May but remains in expansionary territory.

Unemployment Rate

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



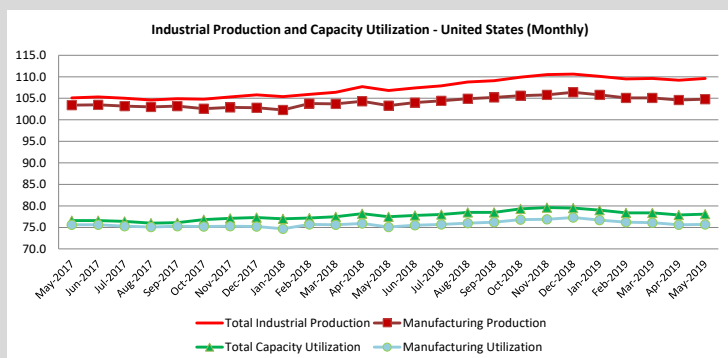
Source: United States Bureau of Labor

Commentary

In May, the unemployment rate remained at 3.6% and the number of unemployed persons was little changed at 5.9 million. Total nonfarm payroll employment increased by 75,000 with gains in business services and healthcare. Manufacturing employment changed little in May.

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.



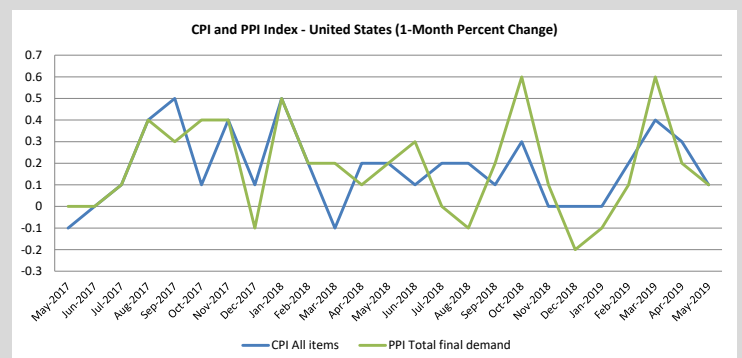
Source: United States Federal Reserve

Commentary

Industrial production rose 0.4% in May. At 109.6% of its 2012 average, total industrial production was 2.0% higher in May than it was a year earlier. Manufacturing production increased 0.2% and capacity utilization for manufacturing edged up 0.1% driven primarily by an uptick in the production of durable goods.

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 May. The food index rose 0.3% after declining in April, accounting for nearly half of the May all items monthly increase. PPI for final demand rose 0.1% in May. The rise in the index can be traced to an increase of 0.3% in prices for final demand services. Final demand goods declined 0.2%.

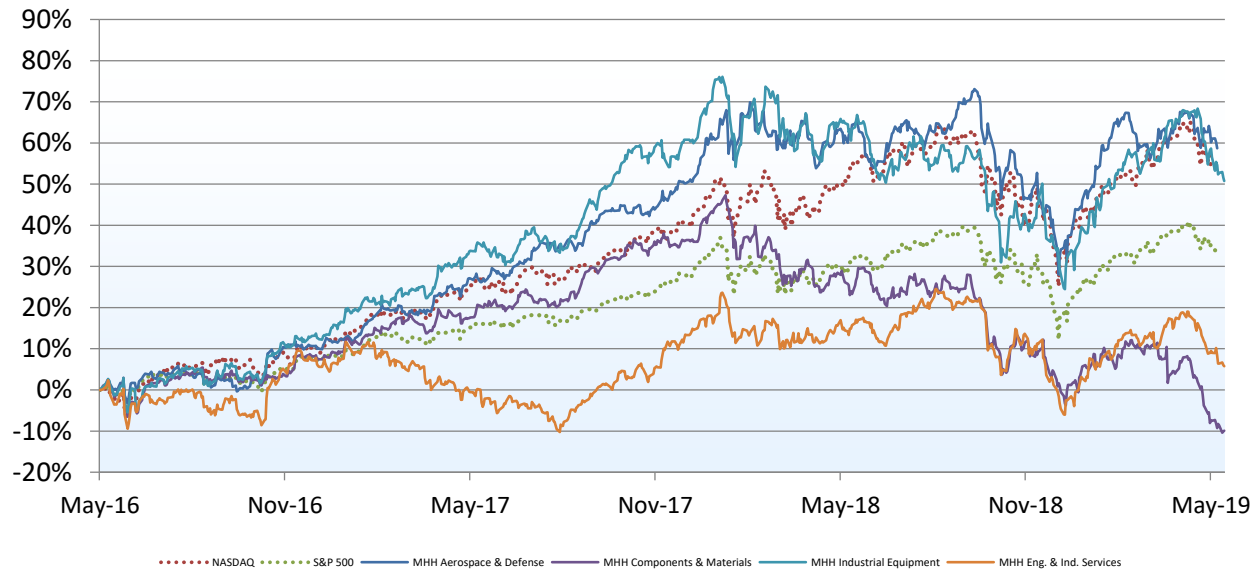
Sector Index Performance

Comparative Sector Index Performance (Last Three Years)

Last Three Years

Daily from May 31, 2016 to May 31, 2019

Price as Percent of Base (May 31, 2016 = 0%)



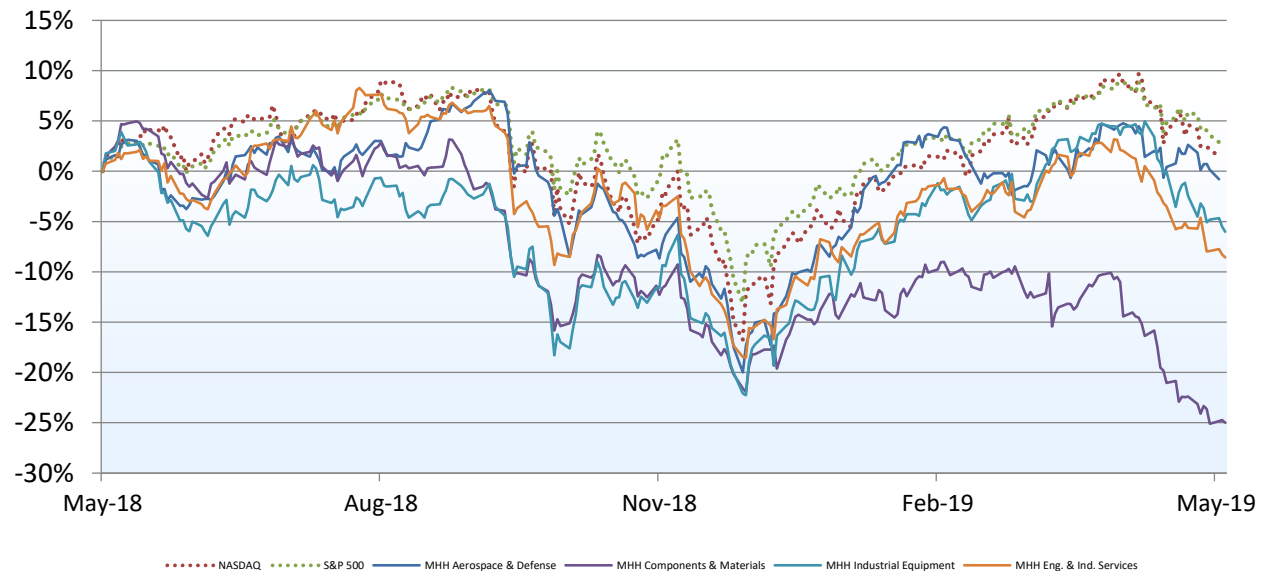
Source: CapitalIQ

Comparative Sector Index Performance (Last Twelve Months)

Last Twelve Months

Daily from May 31, 2018 to May 31, 2019

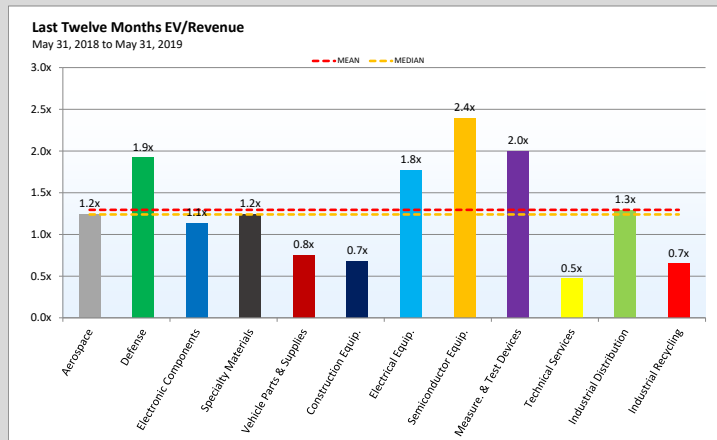
Price as Percent of Base (May 31, 2018 = 0%)



Source: CapitalIQ

Subsector Trading Multiples & Margins

Comparative Subsector LTM EV/Revenue

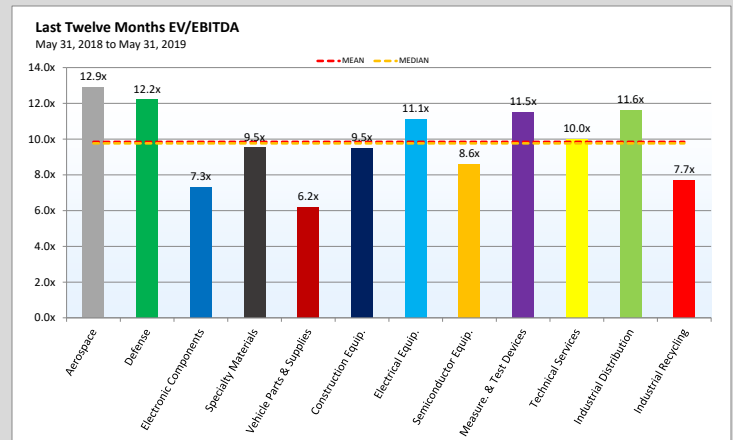


Source: CapitalIQ

Commentary

During the last twelve months, our index subsectors had a mean EV/Revenue of 1.3x and a median of 1.2x. Of the subsectors, Semiconductor Capital Equipment had the high multiple at 2.4x and Technical Services had the low multiple at 0.5x.

Comparative Subsector LTM EV/EBTIDA

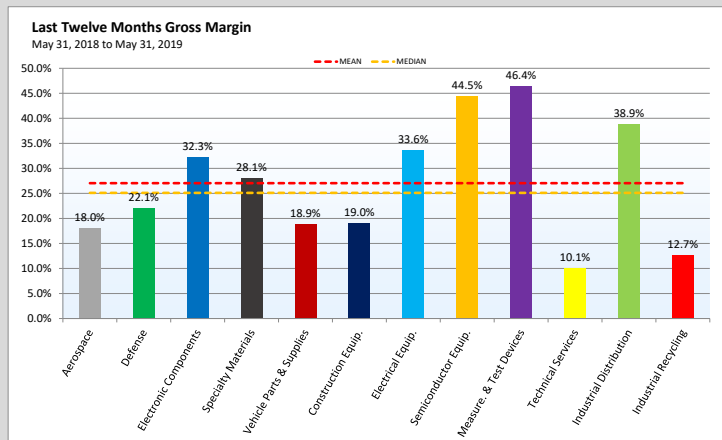


Source: CapitalIQ

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, Aerospace had the high multiple at 12.9x and Vehicle Parts & Supplies had the low multiple at 6.2x.

Comparative Subsector LTM Gross Margin

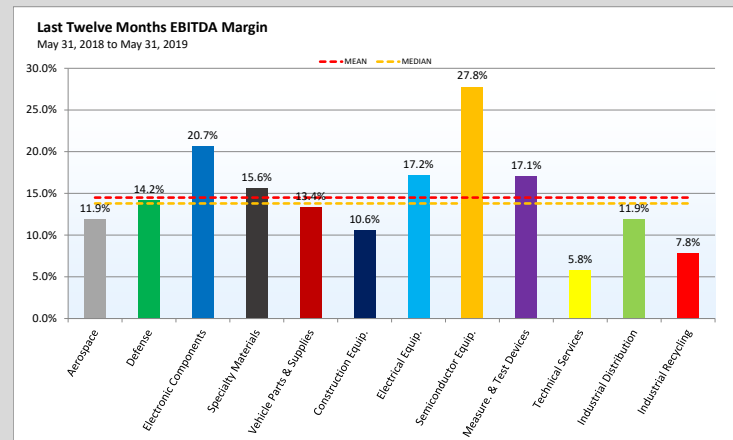


Source: CapitalIQ

Commentary

During the last twelve months, our index subsectors had a mean Gross Margin of 27.1% and a median of 25.1%. Of the subsectors, Measurement, Control, and Testing Devices had the high margin at 46.4% and Technical Services had the low margin at 10.1%.

Comparative Subsector LTM EBITDA Margin

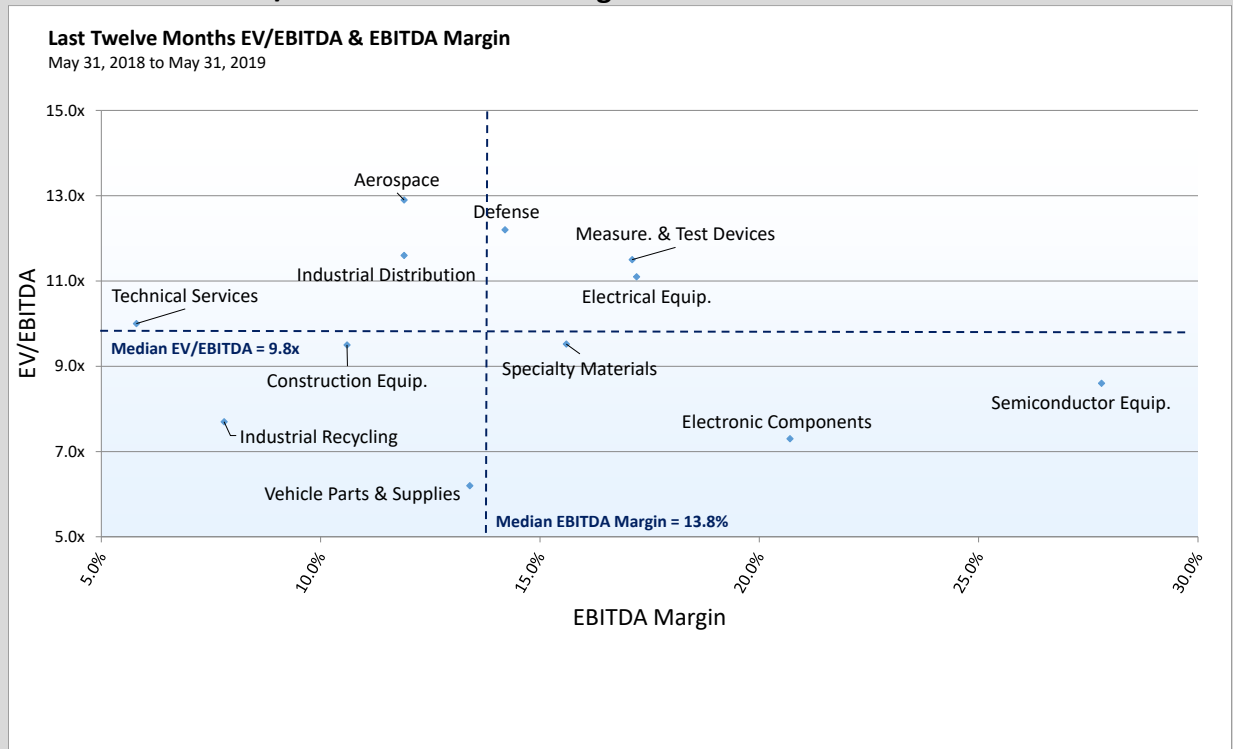


Source: CapitalIQ

Commentary

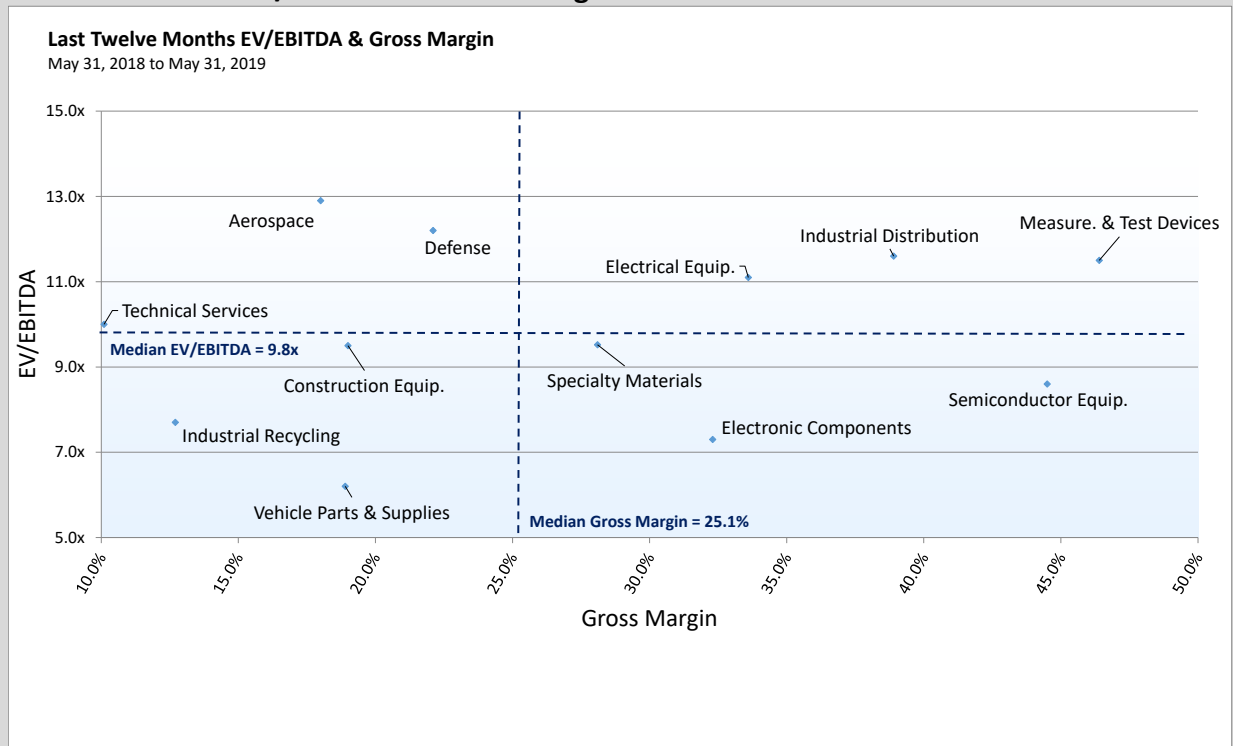
During the last twelve months, our index subsectors had a mean EBITDA Margin of 14.5% and a median of 13.8%. Of the subsectors, Semiconductor Capital Equipment had the high margin at 27.8% and Technical Services had the low margin at 5.8%.

Index Subsector LTM EV/EBITDA vs. EBITDA Margin



Source: CapitalIQ

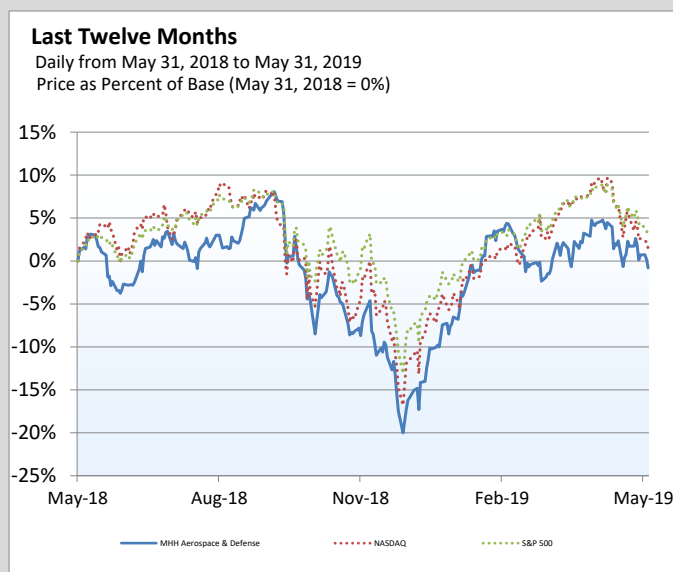
Index Subsector LTM EV/EBITDA vs. Gross Margin



Source: CapitalIQ

Comparative Index Performance

The Mufson Howe Hunter Aerospace & Defense Index^(a) decreased by 5.7% during the three months ending May 31, 2019.




Price Performance

	3-Year	LTM	3 Month
Mufson Howe Hunter Aerospace & Defense Index ^(a)	57.2%	-1.7%	-5.7%
NASDAQ	50.6%	0.2%	-1.1%
S&P 500	31.2%	1.7%	-1.2%

(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 13 for sector news

Highlighted M&A Transaction – Aerospace and Defense

Target	Acquirer	Value*
Raytheon	 United Technologies	\$90,971.2
<p>United Technologies Corporation (NYSE:UTX) entered into an agreement to acquire Raytheon Company (NYSE:RTN) in a merger of equals transaction for \$86.8 billion on June 9, 2019. Raytheon will operate as a wholly owned subsidiary of UTX. The combined company will be named Raytheon Technologies Corporation and will be listed on NYSE with ticker RTX. The combined Board of Directors will be comprised of 15 members, consisting of 8 directors from UTX and 7 from Raytheon. RTX will be headquartered in the greater Boston metro area, and will retain a corporate presence in existing locations.</p>		
<p><i>*ND – Not disclosed. Transaction values reported on the basis of enterprise value in USD millions.</i></p>		

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)	\$341.61	\$192,200	\$200,386	\$100,662	\$13,450	\$11.87	1.99x	14.9x	28.8x	19.2%	13.4%
United Technologies Corporation (UTX)	126.30	108,907	152,772	69,624	11,875	5.52	2.19x	12.9x	22.9x	25.0%	17.1%
Honeywell International Inc. (HON)	164.31	119,575	125,903	40,294	8,779	6.29	3.12x	14.3x	26.1x	31.2%	21.8%
Airbus SE (ENXTPA:AIR)	128.03	99,547	101,345	74,228	6,587	3.97	1.37x	15.4x	32.3x	14.0%	8.9%
Rolls-Royce Holdings plc (LSE:RR.)	10.85	20,565	20,228	20,047	-232	-0.37	1.01x	NM	NM	7.6%	NM
Thales S.A. (ENXTPA:HO)	109.87	23,346	20,090	18,153	2,153	4.72	1.11x	9.3x	23.3x	25.8%	11.9%
Textron Inc. (TXT)	45.30	10,544	14,088	13,785	1,577	2.55	1.02x	8.9x	17.7x	16.8%	11.4%
Embraer S.A. (BOVESPA:EMBR3)	4.84	3,564	2,403	4,843	242	-0.03	0.50x	9.9x	NM	15.6%	5.0%
Mean		\$72,281	\$79,652	\$42,704	\$5,554	\$4.32	1.54x	12.2x	25.2x	19.4%	12.8%
Median		61,446	60,786	30,170	4,370	4.34	1.24x	12.9x	24.7x	18.0%	11.9%
Defense											
Lockheed Martin Corporation (LMT)	\$338.54	\$95,651	\$108,638	\$56,463	\$8,879	\$14.14	1.92x	12.2x	23.9x	14.0%	15.7%
Northrop Grumman Corporation (NOC)	303.25	51,492	67,221	31,549	5,149	13.72	2.13x	13.1x	22.1x	22.1%	16.3%
General Dynamics Corporation (GD)	160.82	46,346	60,605	37,919	5,380	8.58	1.60x	11.3x	18.8x	17.9%	14.2%
Raytheon Company (RTN)	174.50	48,837	52,884	27,520	3,936	7.34	1.92x	13.4x	23.8x	27.6%	14.3%
L3 Technologies, Inc. (LLL)	242.06	19,232	22,180	10,573	1,402	7.78	2.10x	15.8x	31.1x	25.9%	13.3%
BAE Systems plc (BA.)	5.71	18,270	19,622	21,439	2,299	0.33	0.92x	8.5x	17.2x	64.8%	10.7%
Huntington Ingalls Industries, Inc. (HII)	205.12	8,523	10,152	8,382	1,165	13.46	1.21x	8.7x	15.2x	20.8%	13.9%
Mean		\$41,193	\$48,757	\$27,692	\$4,030	\$9.34	1.69x	11.9x	21.7x	27.6%	14.1%
Median		46,346	52,884	27,520	3,936	8.58	1.92x	12.2x	22.1x	22.1%	14.2%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close May 31, 2019.

(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 March 31, 2019 excluding TXT (March 30, 2019); LLL (March 29, 2019); and BA, HO and RR (December 31, 2018).

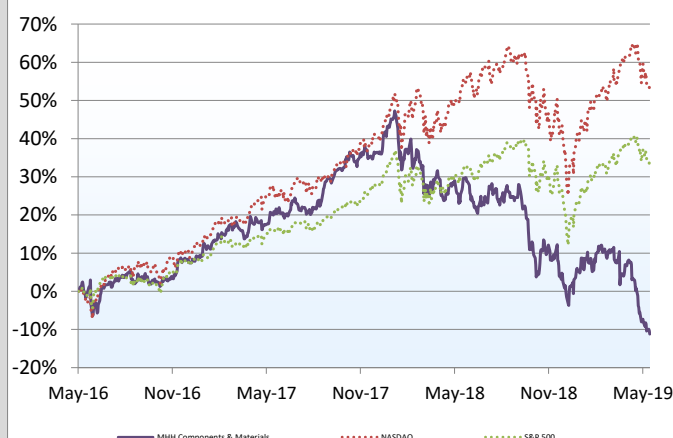
(4) Excludes non-recurring and discontinued operations.

Comparative Index Performance

The Mufson Howe Hunter Components & Materials Index^(a) decreased by 18.4% during the three months ending May 31, 2019.

Last Three Years

Daily from May 31, 2016 to May 31, 2019
Price as Percent of Base (May 31, 2016 = 0%)



Last Twelve Months

Daily from May 31, 2018 to May 31, 2019
Price as Percent of Base (May 31, 2018 = 0%)





Price Performance

	3-Year	LTM	3 Month
Mufson Howe Hunter Components & Materials Index ^(a)	-12.6%	-26.9%	-18.4%
NASDAQ	50.6%	0.2%	-1.1%
S&P 500	31.2%	1.7%	-1.2%

(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 14 for sector news

Highlighted M&A Transaction – Components & Materials

Target	Acquirer	Value*
		\$6,725.0

3M Company (NYSE:MMM) entered into a definitive agreement to acquire Acelity Inc. for approximately \$6.7 billion on May 1, 2019. Acelity, a medical technology company, develops and commercializes advanced wound care and regenerative medicine solutions worldwide. It is also involved in the rental and sale of its products in the U.S. and internationally. The company was formerly known as Centaur Guernsey and changed its name in September 2014. Acelity was founded in 1976 and is headquartered in San Antonio, Texas.

*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											
TE Connectivity Ltd (TEL)	\$84.23	\$28,374	\$31,821	\$13,849	\$3,050	\$4.13	2.30x	10.4x	20.4x	33.2%	22.0%
Corning Inc. (GLW)	28.84	22,632	30,075	11,602	2,983	1.59	2.59x	10.1x	18.2x	39.7%	25.7%
Amphenol Corp. (APH)	87.00	25,990	28,790	8,294	2,029	3.20	3.47x	14.2x	27.2x	32.3%	24.5%
Omron Corp. (TSE:6645)	47.47	9,749	8,754	7,756	966	1.95	1.13x	9.1x	24.3x	41.2%	12.5%
Alps Electric Ltd (TSE:6770)	16.56	3,413	3,564	7,683	847	0.91	0.46x	4.2x	18.2x	19.0%	11.0%
Belden Inc. (BDC)	51.20	2,020	3,219	2,567	448	3.77	1.25x	7.2x	13.6x	39.9%	17.5%
Vishay Intertechnology (VSH)	15.24	2,201	2,040	3,063	635	1.85	0.67x	3.2x	8.3x	29.2%	20.7%
AVX Corp. (AVX)	14.79	2,501	1,687	1,792	396	1.18	0.94x	4.3x	12.5x	26.9%	22.1%
Encore Wire Corp. (WRE)	49.91	1,043	865	1,312	118	3.11	0.66x	7.3x	16.0x	14.8%	9.0%
Mean		\$10,880	\$12,313	\$6,435	\$1,275	\$2.41	1.50x	7.8x	17.6x	30.7%	18.3%
Median		3,413	3,564	7,683	847	1.95	1.13x	7.3x	18.2x	32.3%	20.7%
Specialty Materials											
3M Company (MMM)	\$159.75	\$92,084	\$105,949	\$32,350	\$9,061	\$7.61	3.28x	11.7x	21.0x	49.0%	28.0%
DuPont de Nemours (DD)	91.56	68,560	104,013	84,116	16,259	7.85	1.24x	6.4x	11.7x	25.6%	19.3%
BASF SE (DE:BAS)	66.10	60,713	83,643	70,878	9,117	3.26	1.18x	9.2x	20.3x	28.6%	12.9%
Dow Inc. (DOW)	46.76	35,013	50,925	49,697	5,938	0.00	1.02x	8.6x	NA	17.2%	11.9%
PPG Industries, Inc. (PPG)	104.65	24,704	29,980	15,217	2,235	4.51	1.97x	13.4x	23.2x	41.6%	14.7%
Akzo Nobel N.V. (ENXTAM:AKZA)	84.18	17,643	16,477	10,398	967	1.40	1.58x	17.0x	NM	42.3%	9.3%
Evonik Industries AG (DE:EVK)	26.15	12,168	15,988	16,907	2,790	2.07	0.95x	5.7x	12.7x	30.4%	16.5%
Celene Corp. (CE)	94.93	12,019	15,865	6,991	1,556	6.79	2.27x	10.2x	14.0x	27.3%	22.3%
Solvay SA (ENXTBR:SOLB)	93.72	9,668	13,486	12,737	2,412	6.91	1.06x	5.6x	13.6x	27.0%	18.9%
Ferro Corporation (FOE)	13.54	1,109	1,968	1,594	200	0.75	1.23x	9.9x	18.1x	27.5%	12.5%
Mean		\$33,368	\$43,829	\$30,089	\$5,053	\$4.12	1.58x	9.77x	16.80x	31.6%	16.6%
Median		21,173	23,228	16,062	2,601	3.89	1.24x	9.52x	16.03x	28.1%	15.6%
Vehicle Parts and Supplies											
Johnson Controls Inc. (JCI)	\$38.52	\$34,600	\$48,012	\$31,708	\$4,666	\$2.01	1.51x	10.3x	19.1x	29.7%	14.7%
Continental AG (DB:CON)	134.88	26,977	32,429	49,875	4,954	12.43	0.65x	6.5x	10.9x	24.8%	9.9%
Denso Corp. (TSE:6902)	38.66	30,022	30,144	48,396	5,446	2.29	0.62x	5.5x	16.9x	15.5%	11.3%
Aptiv PLC (APTIV)	64.04	16,512	21,388	14,380	2,188	3.29	1.49x	9.8x	19.5x	18.5%	15.2%
Lear Corp. (LEA)	119.03	7,411	8,920	20,575	2,114	13.35	0.43x	4.2x	8.9x	11.1%	10.3%
Bosch Ltd. (BSE:500530)	253.94	7,490	7,145	1,769	321	6.94	4.04x	22.2x	36.6x	44.7%	18.2%
Autoliv, Inc. (ALV)	61.57	5,370	7,131	8,611	1,144	5.33	0.83x	6.2x	11.6x	18.9%	13.3%
Stanley Electric Co. Ltd. (TSE:6923)	22.87	3,730	2,920	3,918	789	1.78	0.75x	3.7x	12.8x	22.9%	20.1%
Delphi Automotive PLC (DLPH)	15.26	1,342	2,910	4,713	633	2.44	0.62x	4.6x	6.3x	17.4%	13.4%
Mean		\$14,828	\$17,889	\$20,438	\$2,473	\$5.54	1.22x	8.1x	15.8x	22.6%	14.0%
Median		7,490	8,920	14,380	2,114	3.29	0.75x	6.2x	12.8x	18.9%	13.4%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close May 31, 2019.

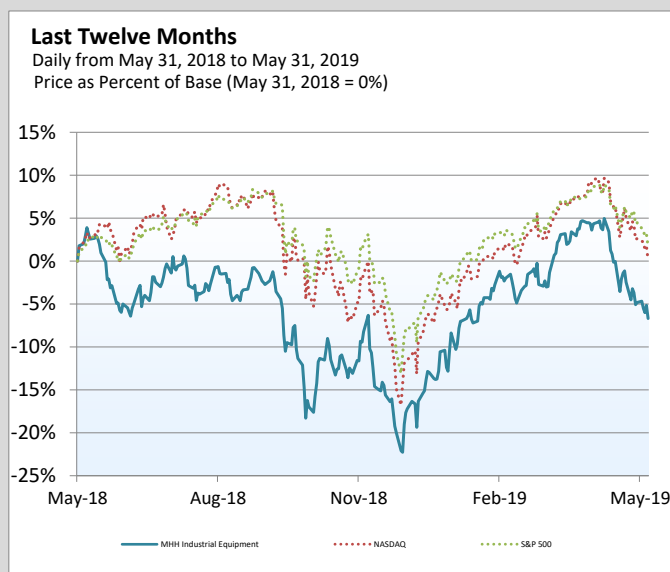
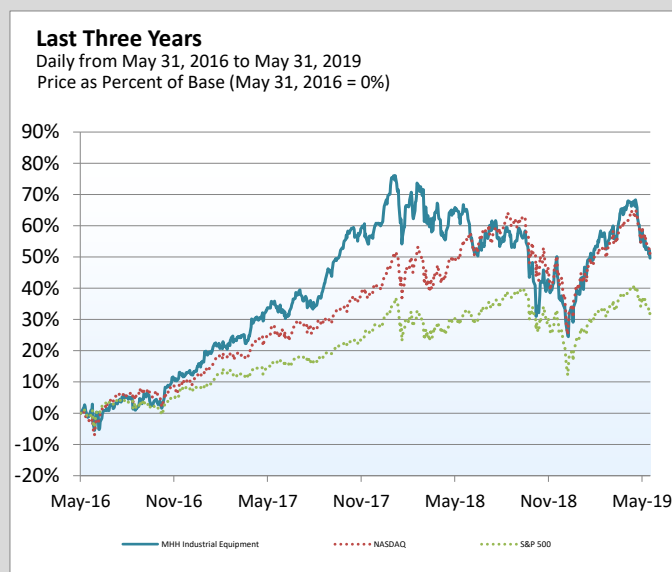
(2) Enterprise value is defined as equity value plus net debt, preferred stock and minority interests. Net Debt includes long term debt, short term debt, post-retirement benefits and unfunded pensions, if applicable, less cash and cash equivalents.

(3) As of March 31, 2019 excluding LEA and VSH (March 30, 2019); TEL (March 29, 2019); and DOW (December 31, 2018).

(4) Excludes non-recurring and discontinued operations.

Comparative Index Performance

The Mufson Howe Hunter Industrial Equipment Index^(a) decreased by 4.4% during the three months ending May 31, 2019.





Price Performance

	3-Year	LTM	3 Month
Mufson Howe Hunter Industrial Equipment Index ^(a)	49.7%	-6.7%	-4.4%
NASDAQ	50.6%	0.2%	-1.1%
S&P 500	31.2%	1.7%	-1.2%

(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 16 for sector news

Highlighted M&A Transaction – Industrial Equipment

Target	Acquirer	Value*
		ND

Luminance Brands acquired Air Comfort Products business from Emerson Electric Co. (NYSE:EMR) on May 7, 2019. American De Rosa Lamparts, LLC, dba Luminance, manufactures and distributes lighting solutions for residential and commercial customers. The company was founded in 1951 and is based in Commerce, California. Air Comfort Products Business of Emerson Electric Co. comprises ceiling fan manufacturing business. The asset is located 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)	\$119.81	\$68,516	\$98,740	\$55,329	\$11,133	\$8.58	1.78x	8.9x	14.0x	27.3%	20.1%
Deere & Company (DE)	140.17	44,433	86,297	39,011	6,044	8.44	2.21x	14.3x	16.6x	23.9%	15.5%
Cummins Inc. (CMI)	150.76	23,742	25,923	24,205	3,365	11.65	1.07x	7.7x	12.9x	25.1%	13.9%
Hyundai Heavy Industries Co. Ltd (KOSE:A009540)	98.74	6,983	7,612	11,735	11	(5.54)	0.65x	NM	NM	3.2%	0.1%
Navistar International Corp. (NAV)	31.11	3,082	7,389	11,352	732	2.11	0.65x	10.1x	14.8x	16.8%	6.4%
Oshkosh Corp. (OSK)	71.19	4,977	5,474	8,026	853	5.85	0.68x	6.4x	12.2x	18.0%	10.6%
Terex Corp. (TEX)	26.77	1,906	3,207	5,145	295	1.30	0.62x	10.9x	20.5x	19.0%	5.7%
Mean		\$21,948	\$33,520	\$22,115	\$3,205	\$4.63	1.10x	9.7x	15.2x	19.0%	10.3%
Median		6,983	7,612	11,735	853	5.85	0.68x	9.5x	14.4x	19.0%	10.6%
Electrical Equipment											
Schneider Electric SE (ENXTPA:SU)	\$78.92	\$42,998	\$50,342	\$29,448	\$4,808	\$4.21	1.71x	10.5x	18.7x	39.0%	16.3%
Emerson Electric Co. (EMR)	60.24	37,025	42,024	18,061	3,717	2.79	2.33x	11.3x	21.6x	42.7%	20.6%
Eaton Corporation plc (ETN)	74.49	31,517	39,128	21,663	3,906	3.96	1.81x	10.0x	18.8x	33.0%	18.0%
Amelec Inc. (AME)	81.89	18,658	20,951	4,961	1,330	2.72	4.22x	15.7x	30.1x	34.3%	26.8%
Rockwell Automation Inc. (ROK)	148.85	17,618	18,947	6,728	1,482	6.49	2.82x	12.8x	22.9x	43.3%	22.0%
Hubbell Inc. (HUBB)	114.54	6,240	7,959	4,578	733	5.65	1.74x	10.9x	20.3x	29.1%	16.0%
Regal Beloit Corporation (RBC)	72.70	3,113	4,184	3,621	527	4.52	1.16x	7.9x	16.1x	26.7%	14.6%
Powell Industries, Inc. (POWL)	34.42	398	326	490	15	0.17	0.67x	21.1x	NM	15.7%	3.2%
Mean		\$19,696	\$22,983	\$11,194	\$2,065	\$3.81	2.06x	12.5x	21.2x	33.0%	17.2%
Median		18,138	19,949	5,844	1,406	4.09	1.77x	11.1x	20.3x	33.6%	17.2%
Semiconductor Capital Equipment											
ASML Holding NV (ASML)	\$188.72	\$79,440	\$79,225	\$12,220	\$3,363	\$4.40	6.48x ‡	23.6x ‡	NM	44.5%	27.5%
Applied Materials, Inc. (AMAT)	38.69	36,218	37,906	15,761	4,385	2.46	2.41x	8.6x	15.7x	44.5%	27.8%
Lam Research Corp. (LRCX)	174.61	26,179	24,815	10,418	3,131	10.61	2.38x	7.9x	16.5x	45.7%	30.1%
Tokyo Electron Ltd (TSE:8035)	136.08	22,311	18,698	11,535	3,025	11.02	1.62x	6.2x	12.4x	41.2%	26.2%
KLA-Tencor Corp. (KLAC)	103.07	16,658	18,220	4,380	1,662	5.91	4.16x	11.0x	17.4x	62.2%	37.9%
Teradyne Inc. (TER)	42.14	7,223	6,757	2,107	609	1.63	3.21x	11.1x	25.8x	58.8%	28.9%
Veeco Instruments Inc. (VECO)	11.49	559	626	483	7	(0.69)	1.30x	NM ‡	NM	35.6%	1.4%
Mean		\$26,941	\$26,607	\$8,129	\$2,312	\$5.05	2.51x	9.0x	17.6x	47.5%	25.7%
Median		22,311	18,698	10,418	3,025	4.40	2.39x	8.6x	16.5x	44.5%	27.8%
Measurement, Control, and Testing Devices											
Danaher Corporation (DHR)	\$132.01	\$94,510	\$102,693	\$20,078	\$4,840	\$2.99	5.11x	21.2x	NM	55.8%	24.1%
Xcerra Corporation (XCRA)	31.43	25,090	33,506	30,673	3,831	1.64	1.09x	8.7x	19.2x	32.4%	12.5%
Entegris, Inc. (ENTG)	34.34	4,654	5,299	1,574	439	1.18	3.37x	12.1x	29.1x	46.4%	27.9%
MKS Instruments, Inc. (MKSI)	71.46	3,884	4,478	1,984	519	4.76	2.26x	8.6x	15.0x	46.4%	26.2%
Brooks Automation, Inc. (BRKS)	35.49	2,490	2,899	710	90	0.24	4.08x	NM	NM	39.9%	12.7%
FormFactor, Inc. (FORM)	14.36	1,071	1,007	544	84	0.33	1.85x	11.9x	NM	40.1%	15.5%
Cohu, Inc. (COHU)	14.55	597	817	504	41	(0.06)	1.62x	20.1x	NM	42.3%	8.1%
FARO Technologies, Inc. (FARO)	44.10	764	649	404	24	0.15	1.61x	26.9x	NM	56.8%	6.0%
Nanometrics Incorporated (NANO)	28.45	698	561	309	59	1.26	1.82x	9.6x	22.5x	55.6%	19.0%
Rudolph Technologies, Inc. (RTEC)	23.07	716	560	262	49	0.88	2.14x	11.5x	26.1x	52.7%	18.6%
Nova Measuring Instruments Ltd. (NVMI)	25.35	709	546	245	62	1.23	2.23x	8.8x	20.7x	57.4%	25.3%
Axcelis Technologies, Inc. (ACLS)	14.83	489	381	412	52	0.80	0.93x	7.4x	18.4x	41.3%	12.6%
Mean		\$11,306	\$12,783	\$4,808	\$841	\$1.28	2.34x	13.3x	21.6x	47.2%	17.4%
Median		918	912	524	73	1.03	2.00x	11.5x	20.7x	46.4%	17.1%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close May 31, 2019.

(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 March 31, 2019 excluding NAV (April 30, 2019); AMAT and DE (April 28, 2019); COHU, ENTG, FORM, NANO and RBC (March 30, 2019); and SU and XCRA (December 31, 2018).

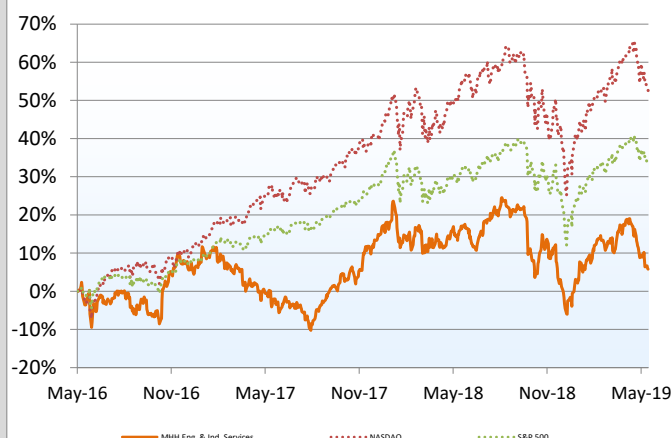
(4) Excludes non-recurring and discontinued operations.

Comparative Index Performance

The Mufson Howe Hunter Engineering & Industrial Services Index^(a) decreased by 7.0% during the three months ending May 31, 2019.

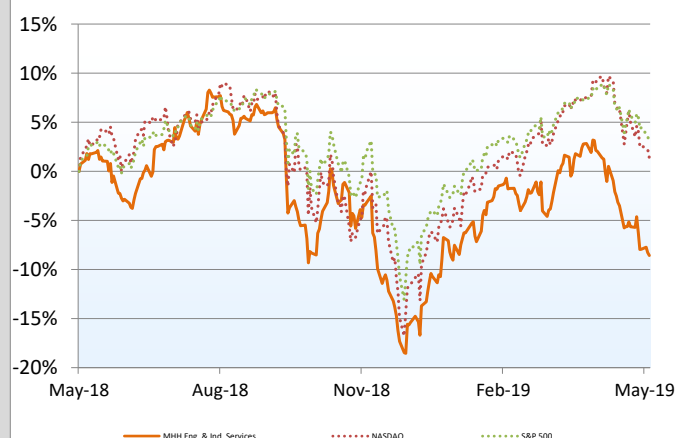
Last Three Years

Daily from May 31, 2016 to May 31, 2019
Price as Percent of Base (May 31, 2016 = 0%)



Last Twelve Months

Daily from May 31, 2018 to May 31, 2019
Price as Percent of Base (May 31, 2018 = 0%)



Price Performance

	3-Year	LTM	3 Month
Mufson Howe Hunter Engineering & Industrial Services Index ^(a)	5.7%	-8.7%	-7.0%
NASDAQ	50.6%	0.2%	-1.1%
S&P 500	31.2%	1.7%	-1.2%

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

Please see Page 18 for sector news

Highlighted M&A Transaction – Engineering & Industrial Services

Target	Acquirer	Value*
		\$423.8
<p>Aurubis AG (XTRA:NDA) entered into a share purchase agreement to acquire Metallo Group from Metallo Holdings 3 B.V for an enterprise value of €380 million on May 22, 2019. Metallo Group generated revenues of approximately €985 million as of December 31, 2018. Metallo Group Holding provides non-ferrous multi-metal recycling and refining services. The company was founded in 1919 and is based in Beerse, Belgium.</p>		
<p><i>*ND – Not disclosed. Transaction values reported on the basis of enterprise value in USD millions.</i></p>		

Engineering & Industrial Services

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
Technical Services											
Jacobs Engineering Group Inc. (JEC)	\$75.29	\$10,285	\$12,542	\$16,506	\$1,032	\$3.09	0.76x	12.1x	24.4x	18.6%	6.3%
AECOM (ACM)	31.90	5,019	8,279	20,531	838	1.37	0.40x	9.9x	23.2x	3.6%	4.1%
John Wood Group PLC (LSE:WG.)	4.94	3,309	4,896	10,014	529	0.22	0.49x	9.3x	22.7x	11.9%	5.3%
Fluor Corporation (FLR)	27.72	3,879	4,149	18,536	742	1.64	0.22x	5.6x	16.9x	3.6%	4.0%
KBR, Inc. (KBR)	22.22	3,143	3,981	5,215	394	1.08	0.76x	10.1x	20.5x	9.5%	7.6%
Tetra Tech, Inc. (TTEK)	67.52	3,705	3,848	2,262	239	2.13	1.70x	16.1x	31.8x	17.4%	10.6%
Balfour Beatty plc (LSE:BBY)	3.00	2,051	2,222	8,455	163	0.10	0.26x	13.6x	29.4x	5.7%	1.9%
Primoris Services Corporation (PRIM)	18.24	929	1,395	3,097	230	1.37	0.45x	6.1x	13.3x	10.8%	7.4%
NV5 Global, Inc. (NVEE)	77.75	977	1,014	441	58	1.93	2.30x	17.4x	NM	47.7%	13.2%
Cardno Limited (ASX:CDD)	0.63	282	359	827	37	0.03	0.43x	9.7x	22.7x	7.5%	4.5%
Mean		\$3,358	\$4,269	\$8,588	\$426	\$1.30	0.78x	11.0x	22.8x	13.6%	6.5%
Median		3,226	3,915	6,835	316	1.37	0.47x	10.0x	22.7x	10.1%	5.8%
Industrial Distribution											
Fastenal Company (FAST)	\$30.59	\$17,517	\$18,043	\$5,089	\$1,166	\$1.10	3.55x	15.5x	27.8x	48.1%	22.9%
W.W. Grainger, Inc. (GWW)	261.69	14,509	16,704	11,254	1,635	13.73	1.48x	10.2x	19.1x	38.7%	14.5%
HD Supply Holdings, Inc. (HDS)	41.49	7,085	9,294	6,151	829	2.17	1.51x	11.2x	19.1x	39.1%	13.5%
MSC Industrial Direct Co., Inc. (MSM)	70.66	3,898	4,439	3,321	527	4.97	1.34x	8.4x	14.2x	43.1%	15.9%
WESCO International, Inc. (WCC)	46.83	2,101	3,432	8,144	404	3.79	0.42x	8.5x	12.4x	19.3%	5.0%
MRC Global Inc. (MRC)	14.80	1,229	2,508	4,132	202	0.67	0.61x	12.4x	22.0x	16.8%	4.9%
Lawson Products, Inc. (LAWS)	36.68	329	354	357	19	0.75	0.99x	18.8x	NM	53.9%	5.3%
Transcat, Inc. (TRNS)	24.80	179	199	161	17	0.77	1.24x	12.0x	32.3x	24.5%	10.3%
Mean		\$5,856	\$6,872	\$4,826	\$600	\$3.49	1.39x	12.1x	21.0x	35.4%	11.5%
Median		2,999	3,936	4,610	466	1.64	1.29x	11.6x	19.1x	38.9%	11.9%
Industrial Recycling											
Veolia Environnement S.A. (ENXTPA:VIE)	\$23.09	\$12,773	\$24,819	\$29,470	\$3,248	\$0.84	0.84x	7.6x	27.5x	16.2%	11.0%
Clean Harbors, Inc. (CLH)	64.12	3,582	5,102	3,331	490	1.22	1.53x	10.4x	NM	30.3%	14.7%
Dowa Holdings Co., Ltd. (TSE:5714)	31.19	1,846	2,987	4,087	341	2.30	0.73x	8.8x	13.6x	12.5%	8.3%
Commercial Metals Company (CMC)	13.35	1,574	2,907	5,193	377	1.09	0.56x	7.7x	12.2x	12.9%	7.3%
Aurubis AG (DE:NDA)	43.71	1,965	2,256	11,634	428	3.91	0.19x	5.3x	11.2x	8.7%	3.7%
Sims Metal Management Limited (ASX:SGM)	6.57	1,332	1,215	4,805	201	0.52	0.25x	6.0x	12.7x	11.3%	4.2%
Mean		\$3,846	\$6,548	\$9,754	\$848	\$1.65	0.69x	7.6x	15.4x	15.3%	8.2%
Median		1,905	2,947	4,999	402	1.15	0.65x	7.7x	12.7x	12.7%	7.8%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close May 31, 2019.

(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 March 31, 2019 excluding HDS (May 5, 2019); NVEE and TRANS (March 30, 2019); JEC (March 29, 2019); MSM (March 2, 2019); CMC (February 28, 2019); and BBY, CDD, SGM and WG (December 31, 2018).

(4) Excludes non-recurring and discontinued operations.

Selected News – Aerospace & Defense

Embraer S.A. (NYSE:ERJ) reported first quarter net income of (\$41.3) million for fiscal year 2019 as compared to (\$39.4) million for the prior year period. Earnings per share were (\$0.06) versus (\$0.05) for the prior year period. Revenues for the quarter decreased to \$388.5 million from \$419.3 million for the same period in fiscal year 2018.

Huntington Ingalls Industries, Inc. (NYSE:HII) reported first quarter net income of \$118.0 million for fiscal year 2019 as compared to \$156.0 million for the prior year period. Earnings per share were \$2.85 versus \$3.48 for the prior year period. Revenues for the quarter increased to \$2,080.0 million from \$1,874.0 million for the same period in fiscal year 2018.

L3 Technologies, Inc. (NYSE:LLL) reported first quarter net income of \$217.0 million for fiscal year 2019 as compared to \$203.0 million for the prior year period. Earnings per share were \$2.71 versus \$2.54 for the prior year period. Revenues for the quarter increased to \$2,700.0 million from \$2,371.0 million for the same period in fiscal year 2018.

The Boeing Company (NYSE:BA) named **J. Michael Luttig** to the newly-created position of counselor and senior advisor to Boeing Chairman, President and CEO Dennis Muilenburg and the Boeing board of directors.

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

Selected News – Components & Materials

Aptiv PLC (NYSE:APTIV) reported first quarter net income of \$240.0 million for fiscal year 2019 as compared to \$307.0 million for the prior year period. Earnings per share were \$0.92 versus \$1.15 for the prior year period. Revenues for the quarter decrease to \$3,575.0 million from \$3,630.0 million for the same period in fiscal year 2018.

Autoliv, Inc. (NYSE:ALV) approved the election of **Min Liu** as director of the Board at the Annual General Meeting of Stockholders held on May 7, 2019.

BASF SE (DE:BAS) reported first quarter net income of \$1,578.0 million for fiscal year 2019 as compared to \$2,068.5 million for the prior year period. Earnings per share were \$1.72 versus \$2.25 for the prior year period. Revenues for the quarter decrease to \$18,156.0 million from \$19,342.1 million for the same period in fiscal year 2018.

Belden Inc. (NYSE:BDC) reported first quarter net income of \$25.2 million for fiscal year 2019 as compared to \$2.6 million for the prior year period. Earnings per share were \$0.42 versus (\$0.15) for the prior year period. Revenues for the quarter decrease to \$587.2 million from \$605.6 million for the same period in fiscal year 2018.

Bosch Limited (BSE:500530) reported net income of \$230.7 million for fiscal year 2019 as compared to \$210.7 million for the prior year. Earnings per share were \$7.58 versus \$6.90 for the prior year. Revenues for the year decrease to \$1,769.2 million from \$1,776.1 million for fiscal year 2018.

Continental Aktiengesellschaft (DB:CON) reported first quarter net income of \$645.6 million for fiscal year 2019 as compared to \$908.7 million for the prior year period. Earnings per share were \$3.23 versus \$4.55 for the prior year period. Revenues for the quarter decrease to \$12,398.1 million from \$13,567.5 million for the same period in fiscal year 2018.

Delphi Technologies PLC (NYSE:DLPH) reported first quarter net income of \$16.0 million for fiscal year 2019 as compared to \$98.0 million for the prior year period. Earnings per share were \$0.18 versus \$1.10 for the prior year period. Revenues for the quarter decrease to \$1,151.0 million from \$1,296.0 million for the same period in fiscal year 2018.

DuPont de Nemours, Inc. (NYSE:DD) reported first quarter net income of \$520.0 million for fiscal year 2019 as compared to \$1,104.0 million for the prior year period. Earnings per share were \$0.69 versus \$1.40 for the prior year period. Revenues for the quarter decrease to \$19,649.0 million from \$21,510.0 million for the same period in fiscal year 2018.

Dow Inc. (NYSE:DOW) reported net income of \$2,932.0 million for fiscal year 2018 as compared to (\$761.0) million for the prior year. Earnings per share were (\$0.00) versus (\$0.00) for the prior year. Revenues for the year increase to \$49,697.0 million from \$44,770.0 million for fiscal year 2017.

Evonik Industries AG (DE:EVK) reported first quarter net income of \$279.5 million for fiscal year 2019 as compared to \$358.5 million for the prior year period. Earnings per share were \$0.59 versus \$0.76 for the prior year period. Revenues for the quarter decrease to \$3,689.1 million from \$4,000.2 million for the same period in fiscal year 2018.

Ferro Corporation (NYSE:FOE) reported first quarter net income of \$13.6 million for fiscal year 2019 as compared to \$23.4 million for the prior year period. Earnings per share were \$0.16 versus \$0.27 for the prior year period. Revenues for the quarter decrease to \$387.5 million from \$405.5 million for the same period in fiscal year 2018.

Selected Highlights

Johnson Controls International plc (NYSE:JCI) reported second quarter net income of \$515.0 million for fiscal year 2019 as compared to \$438.0 million for the prior year period. Earnings per share were \$0.56 versus \$0.47 for the prior year period. Revenues for the quarter increase to \$5,779.0 million from \$5,630.0 million for the same period in fiscal year 2018.

Solvay SA (ENXTBR:SOLB) reported first quarter net income of \$255.9 million for fiscal year 2019 as compared to \$134.3 million for the prior year period. Earnings per share were \$2.48 versus \$1.28 for the prior year period. Revenues for the quarter decrease to \$3,208.8 million from \$3,460.6 million for the same period in fiscal year 2018.

Vishay Intertechnology, Inc. (NYSE:VSH) reported first quarter net income of \$75.5 million for fiscal year 2019 as compared to \$62.4 million for the prior year period. Earnings per share were \$0.52 versus \$0.39 for the prior year period. Revenues for the quarter increase to \$745.2 million from \$716.8 million for the same period in fiscal year 2018.

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

Selected News – Industrial Equipment

AMETEK, Inc. (NYSE:AME) reported first quarter net income of \$204.3 million for fiscal year 2019 as compared to \$181.3 million for the prior year period. Earnings per share were \$0.89 versus \$0.78 for the prior year period. Revenues for the quarter increased to \$1,287.7 million from \$1,172.6 million for the same period in fiscal year 2018.

Applied Materials, Inc. (NasdaqGS:AMAT) reported second quarter net income of \$666.0 million for fiscal year 2019 as compared to \$1,100.0 million for the prior year period. Earnings per share were \$0.70 versus \$1.06 for the prior year period. Revenues for the quarter decreased to \$3,539.0 million from \$4,579.0 million for the same period in fiscal year 2018.

Axcelis Technologies, Inc. (NasdaqGS:ACLS) reported first quarter net income of \$6.1 million for fiscal year 2019 as compared to \$13.9 million for the prior year period. Earnings per share were \$0.18 versus \$0.41 for the prior year period. Revenues for the quarter decreased to \$91.5 million from \$122.2 million for the same period in fiscal year 2018.

Cohu, Inc. (NasdaqGS:COHU) reported first quarter net income of (\$22.6) million for fiscal year 2019 as compared to \$8.1 million for the prior year period. Earnings per share were (\$0.56) versus \$0.28 for the prior year period. Revenues for the quarter increased to \$147.8 million from \$95.2 million for the same period in fiscal year 2018.

Deere & Company (NYSE:DE) reported second quarter net income of \$1,134.9 million for fiscal year 2019 as compared to \$1,208.3 million for the prior year period. Earnings per share were \$3.52 versus \$3.67 for the prior year period. Revenues for the quarter increased to \$11,342.4 million from \$10,719.0 million for the same period in fiscal year 2018.

Emerson Electric Co. (NYSE:EMR) reported second quarter net income of \$520.0 million for fiscal year 2019 as compared to \$482.0 million for the prior year period. Earnings per share were \$0.84 versus \$0.76 for the prior year period. Revenues for the quarter increased to \$4,570.0 million from \$4,248.0 million for the same period in fiscal year 2018.

FARO Technologies, Inc. (NasdaqGS:FARO) reported first quarter net income of \$0.2 million for fiscal year 2019 as compared to \$0.5 million for the prior year period. Earnings per share were \$0.01 versus \$0.03 for the prior year period. Revenues for the quarter increased to \$93.6 million from \$92.8 million for the same period in fiscal year 2018.

FormFactor, Inc. (NasdaqGS:FORM) reported first quarter net income of \$5.5 million for fiscal year 2019 as compared to \$2.1 million for the prior year period. Earnings per share were \$0.07 versus \$0.03 for the prior year period. Revenues for the quarter increased to \$132.2 million from \$118.3 million for the same period in fiscal year 2018.

Korea Shipbuilding & Offshore Engineering Co.,Ltd. (KOSE:A009540) reported first quarter net income of \$2.5 million for fiscal year 2019 as compared to \$11.7 million for the prior year period. Earnings per share were (\$0.03) versus \$0.14 for the prior year period. Revenues for the quarter increased to \$2,874.0 million from \$2,866.2 million for the same period in fiscal year 2018.

KLA-Tencor Corporation (NasdaqGS:KLAC) reported third quarter net income of \$192.7 million for fiscal year 2019 as compared to \$306.9 million for the prior year period. Earnings per share were \$1.23 versus \$1.95 for the prior year period. Revenues for the quarter increased to \$1,097.3 million from \$1,021.3 million for the same period in fiscal year 2018.

Lam Research Corporation (NasdaqGS:LRCX) announced that **Bethany Mayer** and **Leslie Varon** have joined the company's board of directors effective as of May 9, 2019.

MKS Instruments, Inc. (NasdaqGS:MKSI) announced the retirement of **Gerald G. Colella** as Chief Executive Officer effective January 1, 2020. Mr. Colella will continue to serve as a member of the Board of Directors of the Company after his retirement was appointed Chairman of the Board. The Board appointed **John T.C. Lee**, the Company's President and Chief Operating Officer, as Chief Executive Officer of the Company, effective January 1, 2020.

Nova Measuring Instruments Ltd. (NasdaqGS:NVMI) reported first quarter net income of \$7.8 million for fiscal year 2019 as compared to \$14.1 million for the prior year period. Earnings per share were \$0.27 versus \$0.49 for the prior year period. Revenues for the quarter decreased to \$56.7 million from \$62.6 million for the same period in fiscal year 2018.

Powell Industries, Inc. (NasdaqGS:POWL) reported second quarter net income of \$1.0 million for fiscal year 2019 as compared to (\$3.3) million for the prior year period. Earnings per share were \$0.08 versus (\$0.29) for the prior year period. Revenues for the quarter increased to \$123.7 million from \$101.5 million for the same period in fiscal year 2018.

Regal Beloit Corporation (NYSE:RBC) announced that on April 30, 2019, following the Annual Meeting, the Board elected **Louis Pinkham** to serve as a director of the Company, effective immediately, with an initial term continuing until the 2020 annual meeting of shareholders (the 2020 Annual Meeting), and appointed **Rakesh Sachdev** to serve as Chairman of the Board.

Regal Beloit Corporation (NYSE:RBC) reported first quarter net income of \$85.9 million for fiscal year 2019 as compared to \$58.4 million for the prior year period. Earnings per share were \$1.99 versus \$1.31 for the prior year period. Revenues for the quarter decreased to \$853.8 million from \$878.8 million for the same period in fiscal year 2018.

Rudolph Technologies, Inc. (NYSE:RTEC) reported first quarter net income of \$7.6 million for fiscal year 2019 as compared to \$15.1 million for the prior year period. Earnings per share were \$0.24 versus \$0.47 for the prior year period. Revenues for the quarter decreased to \$60.9 million from \$73.1 million for the same period in fiscal year 2018.

Veeco Instruments Inc. (NasdaqGS:VECO) reported first quarter net income of (\$18.5) million for fiscal year 2019 as compared to (\$15.8) million for the prior year period. Earnings per share were (\$0.40) versus (\$0.34) for the prior year period. Revenues for the quarter decreased to \$99.4 million from \$158.6 million for the same period in fiscal year 2018.

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

Selected News – Engineering & Industrial Services

AECOM (NYSE:ACM) reported second quarter net income of \$77.8 million for fiscal year 2019 as compared to (\$119.7) million for the prior year period. Earnings per share were \$0.49 versus (\$0.75) for the prior year period. Revenues for the quarter increased to \$5,040.0 million from \$4,790.9 million for the same period in fiscal year 2018.

Aurubis AG (XTRA:NDA) reported second quarter net income of \$125.5 million for fiscal year 2019 as compared to (\$0.0) million for the prior year period. Earnings per share were \$2.83 versus (\$0.00) for the prior year period. Revenues for the quarter increased to \$3,080.4 million from \$0.0 million for the same period in fiscal year 2018.

Clean Harbors, Inc. (NYSE:CLH) reported first quarter net income of \$1.0 million for fiscal year 2019 as compared to (\$12.6) million for the prior year period. Earnings per share were \$0.02 versus (\$0.22) for the prior year period. Revenues for the quarter increased to \$780.8 million from \$749.8 million for the same period in fiscal year 2018.

Dowa Holdings Co., Ltd. (TSE:5714) reported net income of \$135.2 million for fiscal year 2019 as compared to \$232.5 million for the prior year. Earnings per share were \$2.29 versus \$3.93 for the prior year. Revenues for the year decreased to \$4,087.4 million from \$4,281.9 million for fiscal year 2018.

Fluor Corporation (NYSE:FLR) announced **Alan L. Boeckmann** has been named executive chairman of the board.

Fluor Corporation (NYSE:FLR) announced that its board of directors has confirmed the appointment of **Carlos M. Hernandez** as chief executive officer (CEO) and named him a member of the board of the company. The board of directors also named **John R. Reynolds** as the new chief legal officer of the company.

Fluor Corporation (NYSE:FLR) announced **D. Michael Steuert** has been appointed chief financial officer (CFO) effective June 1, 2019.

Fluor Corporation (NYSE:FLR) reported first quarter net income of (\$58.4) million for fiscal year 2019 as compared to (\$17.6) million for the prior year period. Earnings per share were (\$0.42) versus (\$0.13) for the prior year period. Revenues for the quarter decreased to \$4,192.7 million from \$4,823.8 million for the same period in fiscal year 2018.

Jacobs Engineering Group Inc. (NYSE:JEC) announced the election of **Georgette D. Kiser** and **Barbara (Barb) Loughran** to its Board of Directors.

Jacobs Engineering Group Inc. (NYSE:JEC) reported second quarter net income of \$56.9 million for fiscal year 2019 as compared to \$48.6 million for the prior year period. Earnings per share were \$0.40 versus \$0.34 for the prior year period. Revenues for the quarter increased to \$3,091.6 million from \$2,870.3 million for the same period in fiscal year 2018.

John Wood Group PLC (LSE:WG.) announced that **Roy Franklin** has been appointed as Chair of the Board of Directors with effect from 1 September 2019.

KBR, Inc. (NYSE:KBR) reported first quarter net income of \$40.0 million for fiscal year 2019 as compared to \$138.0 million for the prior year period. Earnings per share were \$0.28 versus \$0.98 for the prior year period. Revenues for the quarter increased to \$1,340.0 million from \$1,038.0 million for the same period in fiscal year 2018.

MRC Global Inc. (NYSE:MRC) reported first quarter net income of \$18.0 million for fiscal year 2019 as compared to \$18.0 million for the prior year period. Earnings per share were \$0.14 versus \$0.13 for the prior year period. Revenues for the quarter decreased to \$970.0 million from \$1,010.0 million for the same period in fiscal year 2018.

Primoris Services Corporation (NasdaqGS:PRIM) announced on May 3, 2019, the Board unanimously approved the appointment of **David L. King** as the new Executive Chairman of the Board.

Primoris Services Corporation (NasdaqGS:PRIM) reported first quarter net income of \$1.9 million for fiscal year 2019 as compared to \$0.7 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 \$661.6 million from \$504.1 million for the same period in fiscal year 2018.

Tetra Tech, Inc. (NasdaqGS:TTEK) reported second quarter net income of \$55.9 million for fiscal year 2019 as compared to \$28.7 million for the prior year period. Earnings per share were \$1.00 versus \$0.51 for the prior year period. Revenues for the quarter increased to \$585.4 million from \$532.8 million for the same period in fiscal year 2018.

Transcat, Inc. (NasdaqGM:TRNS) reported net income of \$7.1 million for fiscal year 2019 as compared to \$5.9 million for the prior year. Earnings per share were \$0.95 versus \$0.81 for the prior year. Revenues for the year increased to \$160.9 million from \$155.1 million for fiscal year 2018.

Veolia Environnement S.A. (ENXTPA:VIE) reported first quarter net income of \$234.6 million for fiscal year 2019 as compared to \$237.8 million for the prior year period. Earnings per share were \$0.42 versus (\$0.00) for the prior year period. Revenues for the quarter decreased to \$7,615.0 million from \$7,908.1 million for the same period in fiscal year 2018.

WESCO International, Inc. (NYSE:WCC) reported first quarter net income of \$42.4 million for fiscal year 2019 as compared to \$44.4 million for the prior year period. Earnings per share were \$0.93 versus \$0.93 for the prior year period. Revenues for the quarter decreased to \$1,961.3 million from \$1,993.9 million for the same period in fiscal year 2018.

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

MHH Manufacturing Universe Directory

Company	Sector
3M Company	Components & Materials
AECOM	Eng. & Ind. Services
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	Eng. & Ind. Services
Autoliv, Inc.	Components & Materials
AVX Corp.	Components & Materials
Axcelis Technologies, Inc.	Industrial Equipment
BAE Systems plc	Aerospace & Defense
Balfour Beatty plc	Eng. & Ind. Services
BASF SE	Components & Materials
Belden Inc.	Components & Materials
Bosch Ltd	Components & Materials
Brooks Automation, Inc.	Industrial Equipment
Cardno Ltd.	Eng. & Ind. Services
Caterpillar Inc.	Industrial Equipment
Celanese Corporation	Components & Materials
Clean Harbors, Inc.	Eng. & Ind. Services
Cohu, Inc.	Industrial Equipment
Commercial Metals Company	Eng. & Ind. Services
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.	Eng. & Ind. Services
Dow Inc.	Components & Materials
DuPont de Nemours, 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
FARO Technologies, Inc.	Industrial Equipment
Fastenal Company	Eng. & Ind. Services
Ferro Corporation	Components & Materials
Fluor Corporation	Eng. & Ind. Services
FormFactor, Inc.	Industrial Equipment
General Dynamics Corporation	Aerospace & Defense
HD Supply Holdings, Inc.	Eng. & Ind. Services
Honeywell International Inc.	Aerospace & Defense
Hubbell Incorporated	Industrial Equipment

Company	Sector
Huntington Ingalls Industries, Inc.	Aerospace & Defense
Jacobs Engineering Group Inc.	Eng. & Ind. Services
John Wood Group plc	Eng. & Ind. Services
Johnson Controls Inc.	Components & Materials
KBR, Inc.	Eng. & Ind. Services
KLA-Tencor Corporation	Industrial Equipment
Korea Shipbuilding Co. Ltd.	Industrial Equipment
L-3 Communications Holdings Inc.	Aerospace & Defense
Lam Research Corporation	Industrial Equipment
Lawson Products, Inc.	Eng. & Ind. Services
Lear Corp.	Components & Materials
Lockheed Martin Corporation	Aerospace & Defense
MKS Instruments, Inc.	Industrial Equipment
MRC Global Inc.	Eng. & Ind. Services
MSC Industrial Direct Co., Inc.	Eng. & Ind. Services
Nanometrics Incorporated	Industrial Equipment
Navistar International Corporation	Industrial Equipment
Northrop Grumman Corporation	Aerospace & Defense
Nova Measuring Instruments Ltd.	Industrial Equipment
NV5 Global, Inc.	Eng. & Ind. Services
OMRON Corporation	Components & Materials
Oshkosh Corporation	Industrial Equipment
Powell Industries, Inc.	Industrial Equipment
PPG Industries, Inc.	Components & Materials
Primoris Services Corporation	Eng. & Ind. Services
Raytheon Company	Aerospace & Defense
Regal Beloit Corporation	Industrial Equipment
Rockwell Automation Inc.	Industrial Equipment
Rockwell Automation Inc.	Industrial Equipment
Rolls Royce Holdings plc	Aerospace & Defense
Rudolph Technologies, Inc.	Industrial Equipment
Schneider Electric S.E.	Industrial Equipment
Sims Metal Management Limited	Eng. & Ind. Services
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.	Eng. & Ind. Services
Textron Inc.	Aerospace & Defense
Thales SA	Aerospace & Defense
The Boeing Company	Aerospace & Defense
Tokyo Electron Limited	Industrial Equipment
Transcat, Inc.	Eng. & Ind. Services
United Technologies Corporation	Aerospace & Defense
Veeco Instruments Inc.	Industrial Equipment
Veolia Environnement S.A.	Eng. & Ind. Services
Vishay Intertechnology Inc.	Components & Materials
W.W. Grainger, Inc.	Eng. & Ind. Services
WESCO International, Inc.	Eng. & Ind. Services
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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