



Manufacturing Update

February 2020

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.

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Macro-Economic Trends

	Dec-19	Jan-20	Trend
PMI	47.2	50.9	Positive
Total Unemployment	3.5	3.6	Neutral
CPI Monthly Change	0.2	0.1	Positive
PPI Monthly Change	0.1	0.5	Negative
Industrial Production	109.5	109.2	Negative
Capacity Utilization	77.1	76.8	Negative
Manufacturing Production	105.0	104.9	Negative
Manufacturing Utilization	75.2	75.1	Negative

Sector Index Performance

	3-Year	1-Year	3-Month
Aerospace & Defense	54.6%	13.4%	2.6%
Components & Materials	-14.8%	-17.3%	-7.1%
Industrial Equipment	65.0%	31.1%	5.1%
Engineering & Industrial Services	15.4%	13.5%	2.9%
NASDAQ	63.0%	25.7%	10.4%
S&P	41.5%	19.3%	6.2%

MHH Sectors/Sub-sectors

Aerospace & Defense

- Aerospace
- Defense

Components & Materials

- Electronic Components
- Specialty Materials
- Vehicle Parts and Supplies

Industrial Equipment

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

Engineering & Industrial Services

- Industrial Distribution
- Industrial Recycling
- Technical Services

Note: Please refer to Page 18 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, L3Harris Technologies, 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, 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., 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.

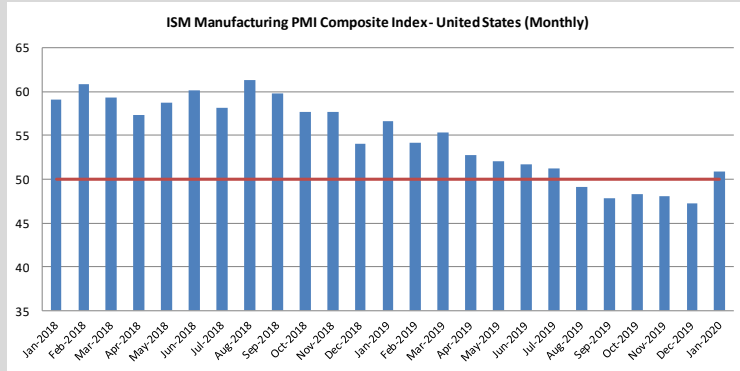
The MMH Engineering & Industrial Services Index is currently comprised of AECOM Technology Corp., Aurubis AG, Balfour Beatty plc, Cardno Ltd., Clean Harbors Inc., Commercial Metals Company, Dowa Holdings Co. Ltd., Fastenal Company, Fluor Corp., HD Supply Holdings Inc., Jacobs Engineering Group Inc., 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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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.



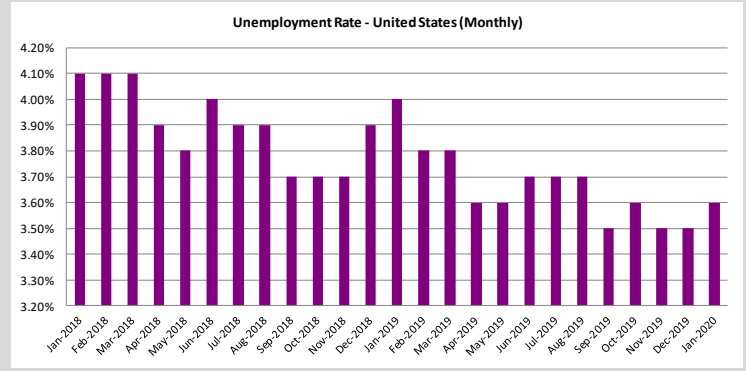
Source: Institute for Supply Management

Commentary

Purchasing activity in the manufacturing sector expanded in January, after contracting in the past 5 consecutive months. The economy grew for the 129th consecutive month. Growth in New Orders, Production, Prices and Exports / Imports offset contractions in Backlog, Inventories, Employment and Supplier Deliveries.

Unemployment Rate

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



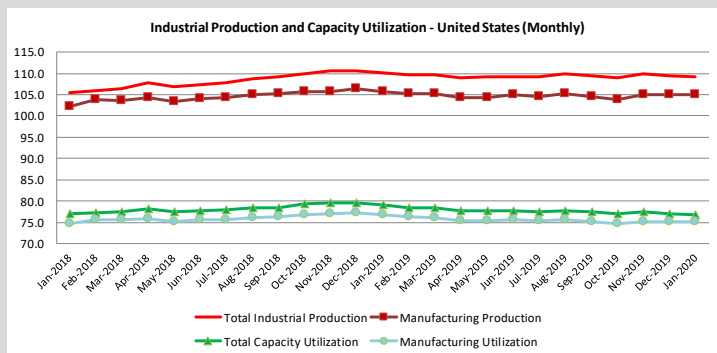
Source: United States Bureau of Labor

Commentary

In January, the unemployment rate and the total number of unemployed persons were changed little at 3.6% and 5.9 million, respectively. Total nonfarm payroll employment rose by 225,000 driven by job gains in construction, health care and transportation and warehousing.

Industrial Production and Capacity Utilization

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



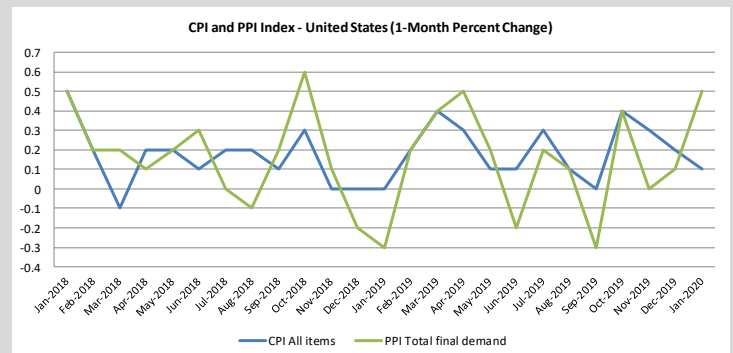
Source: United States Federal Reserve

Commentary -

Industrial production fell 0.3% in January, as the utilities output fell due to unseasonably warm weather and the manufacturing output fell due to slowed aircraft production. At 109.2% of its 2012 average, total industrial production was 0.8% lower in January than it was a year earlier. Utilization in the industrial and manufacturing sectors decreased by 0.3% and 0.1%, respectively.

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 -

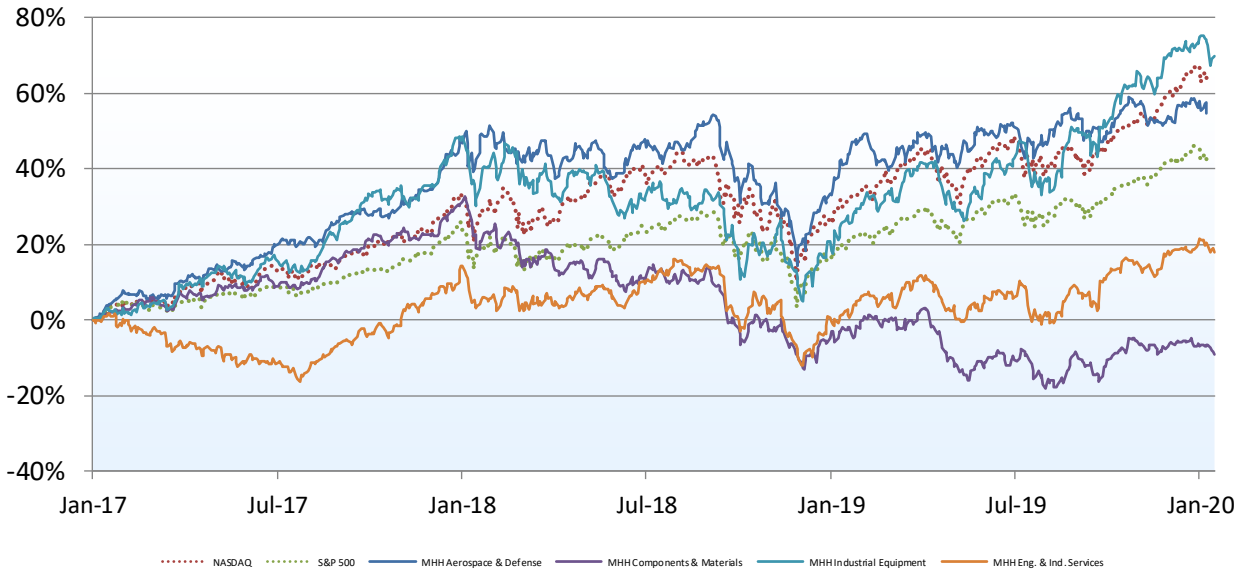
CPI for all items rose 0.1% in January, as notable increases in the shelter, food and medical care indexes offset the 1.6% decline in the gasoline index. PPI for final demand rose 0.5% in January, driven largely by the 0.7% increase in prices for final demand services as trade service margins advanced 1.2%, while the index for final demand goods inched up 0.1%.

Sector Index Performance

Comparative Sector Index Performance (Last Three Years)

Last Three Years

Daily from January 31, 2017 to January 31, 2020
Price as Percent of Base (January 31, 2017 = 0%)

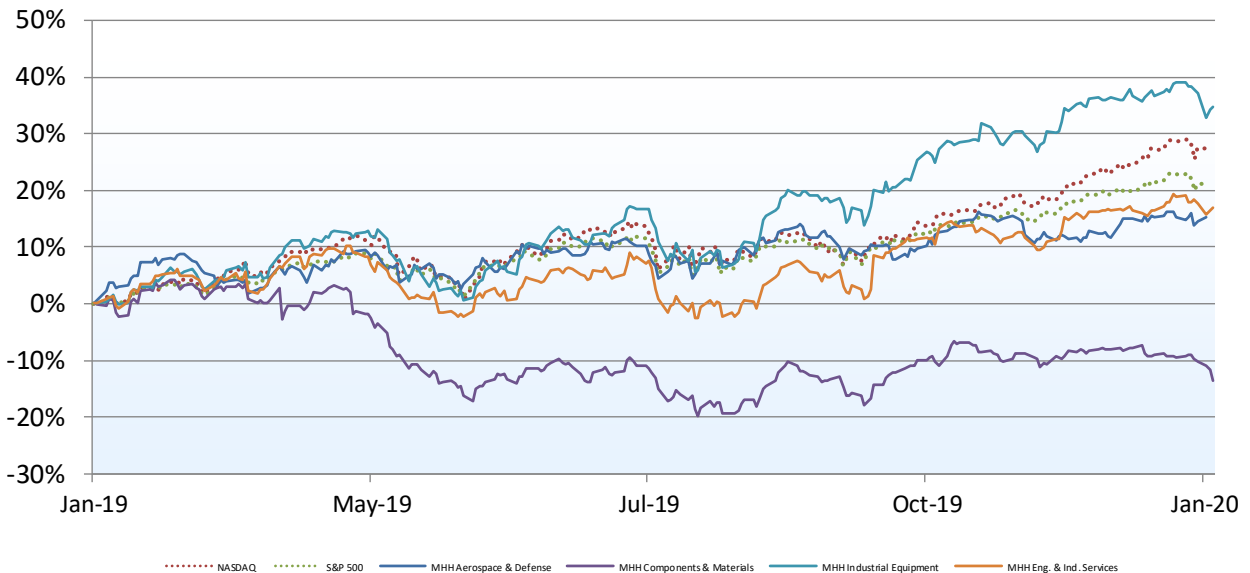


Source: CapitalIQ

Comparative Sector Index Performance (Last Twelve Months)

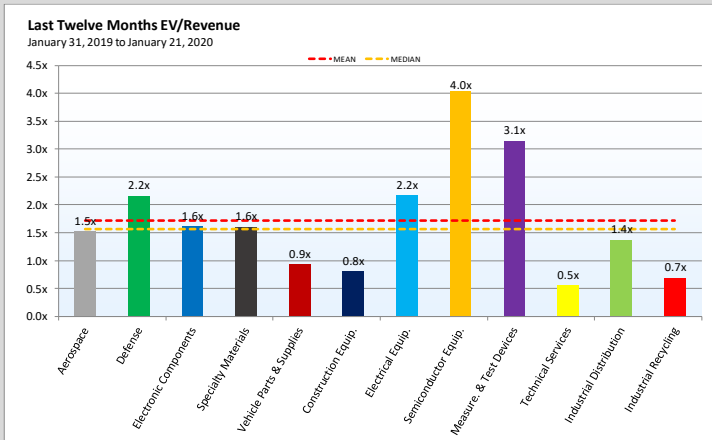
Last Twelve Months

Daily from January 31, 2019 to January 31, 2020
Price as Percent of Base (January 31, 2019 = 0%)



Source: CapitalIQ

Comparative Subsector LTM EV/Revenue

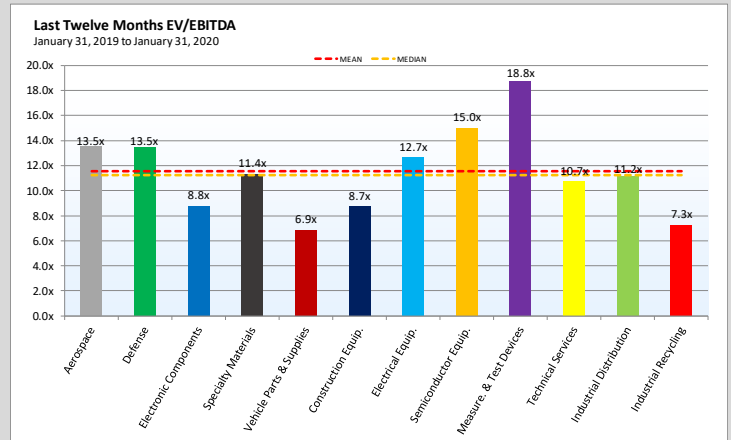


Source: CapitalIQ

Commentary

During the last twelve months, our subsector indices had a mean EV/Revenue of 1.7x (i.e., red line) and a median of 1.6x (i.e., yellow line). Of the subsectors, Semiconductor Capital Equipment had the high multiple at 4.0x and Technical Services had the low multiple at 0.5x.

Comparative Subsector LTM EV/EBITDA

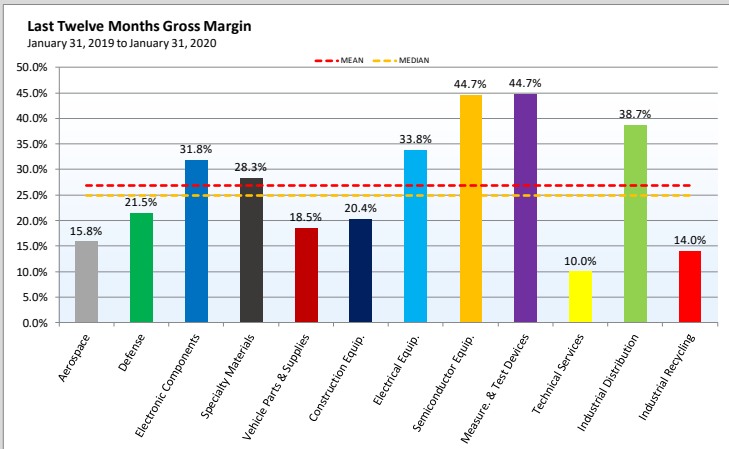


Source: CapitalIQ

Commentary

During the last twelve months, our subsector indices had a mean EV/EBITDA of 11.5x and a median of 11.3x. Of the subsectors, Measurement, Control & Testing Devices had the high multiple at 18.8x and Vehicle Parts & Supplies had the low multiple at 6.9x.

Comparative Subsector LTM Gross Margin

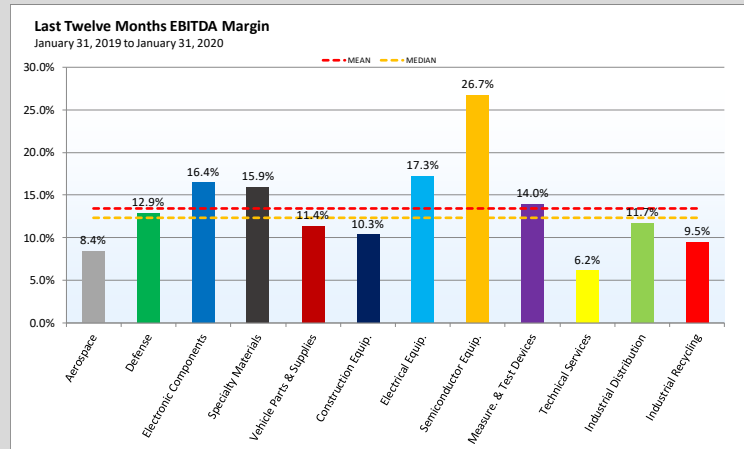


Source: CapitalIQ

Commentary

During the last twelve months, our subsector indices had a mean Gross Margin of 26.9% and a median of 24.9%. Of the subsectors, Measurement, Control & Testing Devices and Semiconductor Capital Equipment had the high margins at 44.7%, and Technical Services had the low margin at 10.0%.

Comparative Subsector LTM EBITDA Margin

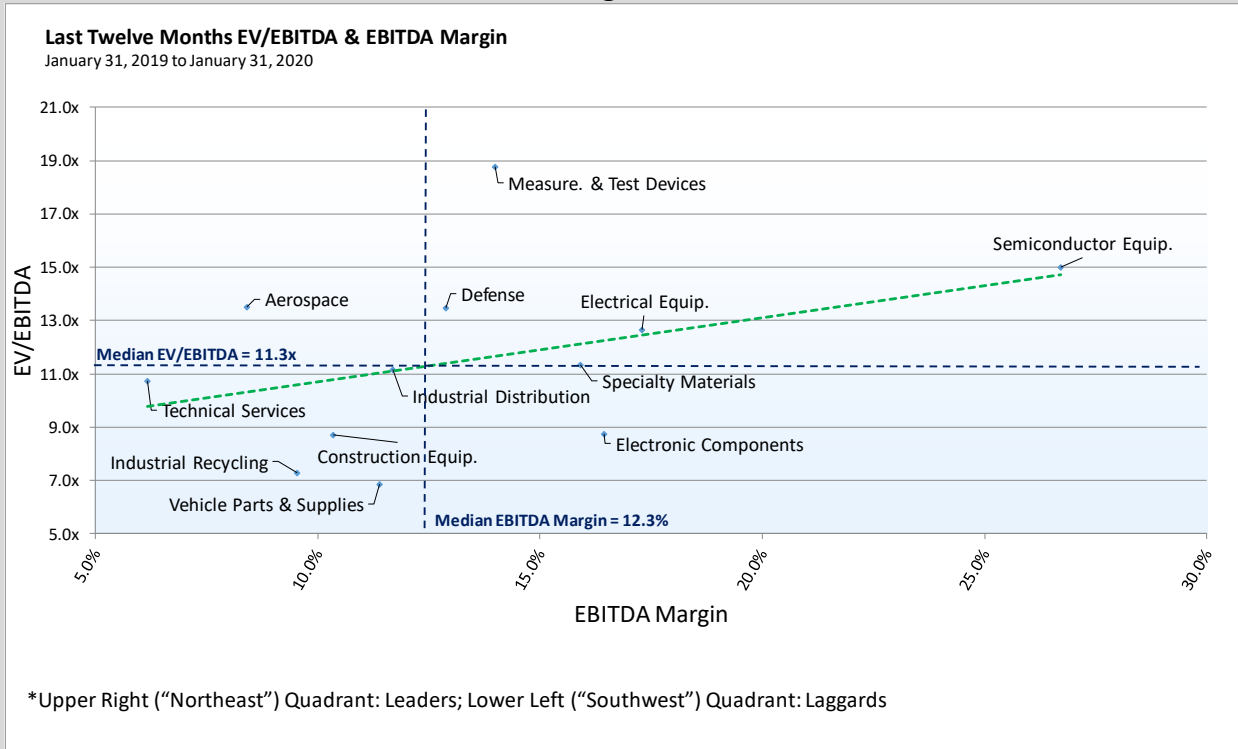


Source: CapitalIQ

Commentary

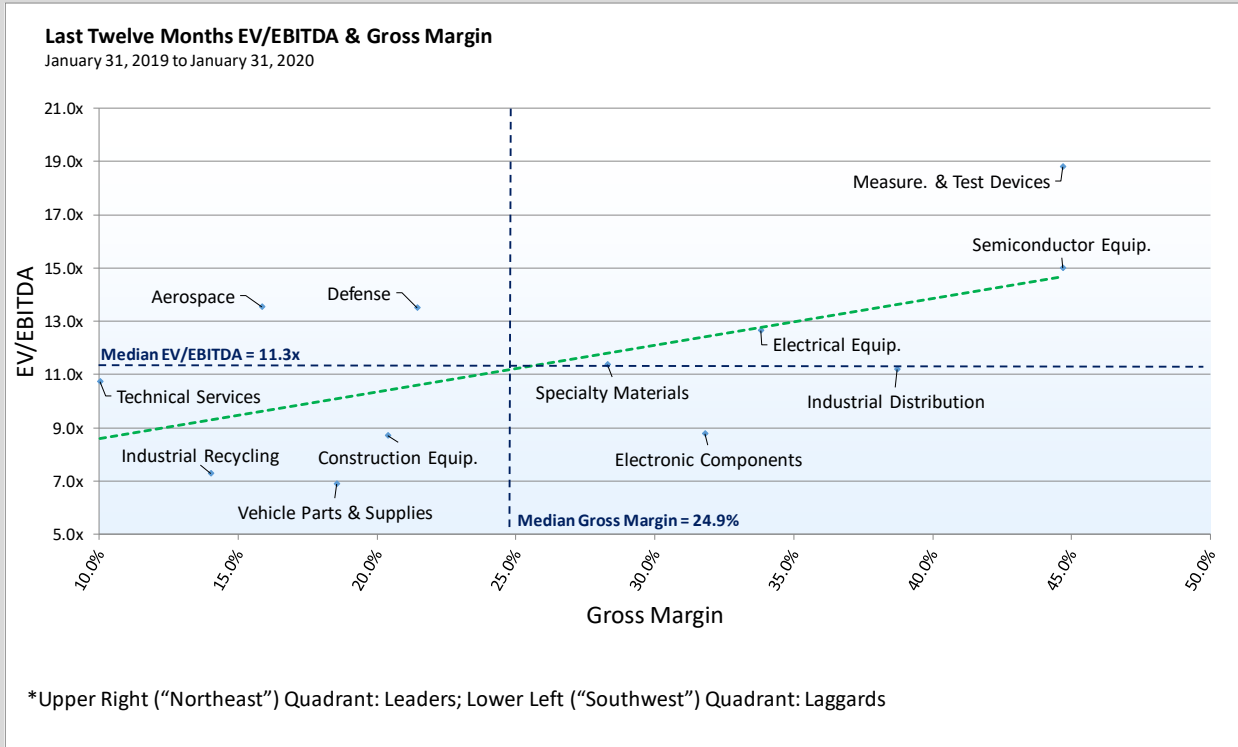
During the last twelve months, our subsector indices had a mean EBITDA Margin of 13.4% and a median of 12.3%. Of the subsectors, Semiconductor Capital Equipment had the high margin at 26.7% and Technical Services had the low margin at 6.2%.

Index Subsector LTM EV/EBITDA vs. EBITDA Margin*



Source: CapitalIQ

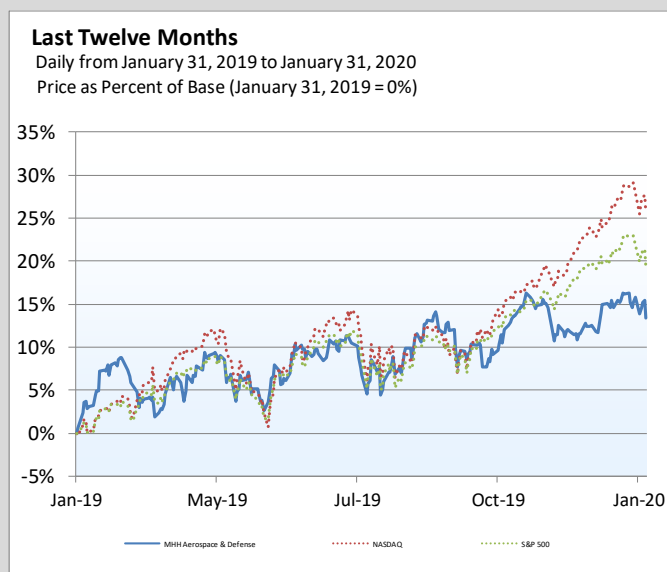
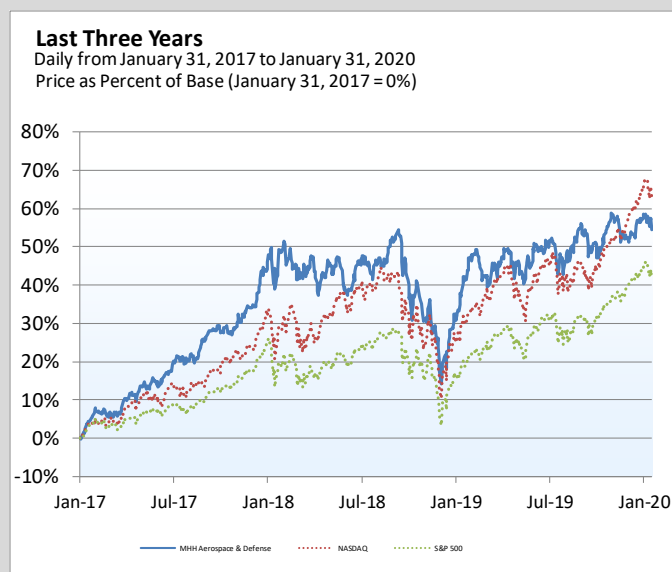
Index Subsector LTM EV/EBITDA vs. Gross Margin*



Source: CapitalIQ

Comparative Index Performance

The Mufson Howe Hunter Aerospace & Defense Index^(a) increased by 2.6% during the three months ending January 31, 2020.




Price Performance

	3-Year	LTM	3 Month
Mufson Howe Hunter Aerospace & Defense Index ^(a)	54.6%	13.4%	2.6%
NASDAQ	63.0%	25.7%	10.4%
S&P 500	41.5%	19.3%	6.2%

(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*
 Collins Aerospace (Military Global Positioning System Business)		\$1,925.0

BAE Systems plc (LSE:BA.) entered into a definitive asset purchase agreement to acquire the Military Global Positioning System business of Collins Aerospace for \$1.9 billion on January 20, 2020. Post completion, the acquired business will be integrated into Electronic Systems division of BAE Systems. Completion is subject to successful closure of the Raytheon-United Technologies Corporation (UTC) merger, as BAE Systems entered into a definitive agreement to acquire the Airborne Tactical Radios business of Raytheon Company (NYSE:RTN) for approximately \$280 million on January 20, 2020 as well.

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

Aerospace & Defense

Selected Valuation Metrics

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

Company	Ticker	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)	BA	\$318.27	\$179,234	\$198,053	\$76,559	\$169	-\$2.81	2.59x	NM	NM	6.2%	0.2%
United Technologies Corporation (UTX)	UTX	150.20	128,226	169,192	77,046	14,056	5.82	2.20x	12.0x	25.8x	26.2%	18.2%
Honeywell International Inc. (HON)	HON	173.22	123,771	129,364	36,709	7,939	6.35	3.52x	16.3x	27.3x	33.7%	21.6%
Airbus SE (ENXTPA:AIR)	ENXTPA:AIR	147.72	115,614	120,562	79,091	4,432	0.81	1.52x	27.2x	NM	14.9%	5.6%
Thales S.A. (ENXTPA:HO)	ENXTPA:HO	110.00	23,392	28,620	18,881	2,117	4.28	1.52x	13.5x	25.7x	25.7%	11.2%
Rolls-Royce Holdings plc (LSE:RR.)	LSE:RR.	8.84	17,013	20,135	20,491	779	-0.05	0.98x	25.8x	NM	12.5%	3.8%
Textron Inc. (TXT)	TXT	45.93	10,484	13,230	13,630	1,576	2.72	0.97x	8.4x	16.9x	9.3%	11.6%
Embraer S.A. (BOVESPA:EMBR3)	BOVESPA:EMBR3	4.24	3,118	2,538	4,770	232	0.07	0.53x	10.9x	NM	16.8%	4.9%
Mean			\$75,107	\$85,212	\$40,897	\$3,912	\$2.15	1.73x	16.3x	23.9x	18.2%	9.6%
Median			69,503	74,591	28,600	1,847	1.77	1.52x	13.5x	25.7x	15.8%	8.4%
Defense												
Lockheed Martin Corporation (LMT)	LMT	\$428.12	\$119,874	\$132,158	\$59,812	\$8,776	\$15.76	2.21x	15.1x	27.2x	14.0%	14.7%
Northrop Grumman Corporation (NOC)	NOC	374.57	62,792	75,995	33,841	3,987	9.37	2.25x	19.1x	40.0x	21.5%	11.8%
Raytheon Company (RTN)	RTN	220.94	61,527	62,946	29,176	4,669	9.02	2.16x	13.5x	24.5x	26.6%	16.0%
General Dynamics Corporation (GD)	GD	175.44	50,689	61,717	39,350	5,493	9.03	1.57x	11.2x	19.4x	17.9%	14.0%
L3Harris Technologies, Inc. (LHX)	LHX	221.33	48,928	56,005	18,526	2,388	4.48	3.02x	23.5x	NM	28.9%	12.9%
BAE Systems plc (BA.)	BA.	8.33	26,685	31,245	22,027	2,569	0.38	1.42x	12.2x	21.9x	63.3%	11.7%
Huntington Ingalls Industries, Inc. (HII)	HII	261.00	10,675	12,400	8,899	982	10.75	1.39x	12.6x	24.3x	17.2%	11.0%
Mean			\$54,453	\$61,781	\$30,233	\$4,123	\$8.40	2.00x	15.3x	26.2x	27.1%	13.1%
Median			50,689	61,717	29,176	3,987	9.03	2.16x	13.5x	24.4x	21.5%	12.9%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close January 31, 2020.

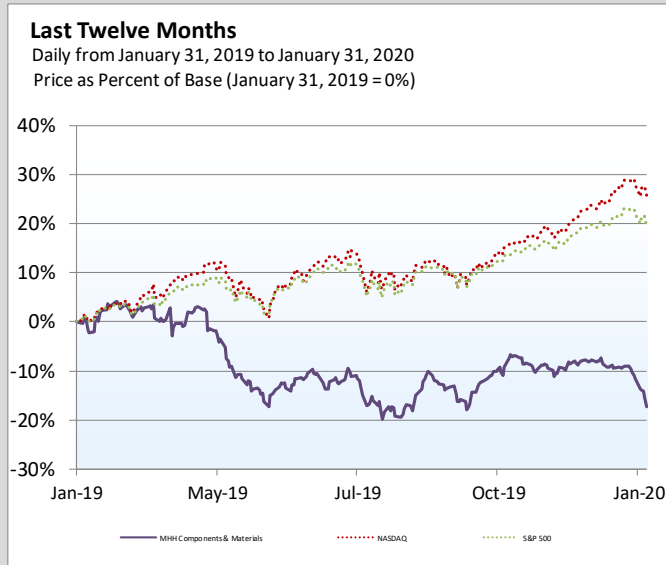
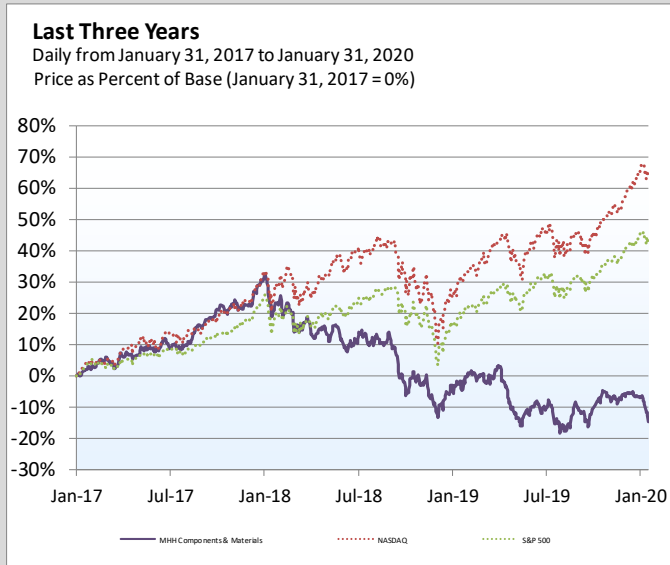
(2) Enterprise value is defined as equity value plus net debt, preferred stock and minority interests. Net Debt includes long term debt, short term debt, post-retirement benefits and unfunded pensions, if applicable, less cash and cash equivalents.

(3) As of December 31, 2019 excluding TXT (January 4, 2020); LHX (January 3, 2020); BOVESPA:EMBR3 (September 30, 2019); and BA., HO and RR. (June 30, 2019).

(4) Excludes non-recurring and discontinued operations.

Comparative Index Performance

The Mufson Howe Hunter Components & Materials Index^(a) decreased by 7.1% during the three months ending January 31, 2020.



Price Performance	3-Year	LTM	3 Month
Mufson Howe Hunter Components & Materials Index ^(a)	-14.8%	-17.3%	-7.1%
NASDAQ	63.0%	25.7%	10.4%
S&P 500	41.5%	19.3%	6.2%

(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*
		\$3,294.6

BorgWarner Inc. (NYSE:BWA) entered into a definitive transaction agreement to acquire Delphi Technologies PLC (NYSE:DLPH) for \$1.5 billion on January 28, 2020, in a transaction valued at \$3.3 billion. Delphi Technologies engages in the design, development, and manufacture of integrated powertrain technologies worldwide. Following the implementation of the transaction, Delphi Technologies will become a wholly-owned subsidiary of BorgWarner Inc. Current BorgWarner stockholders are expected to own ~84% of the combined company, which will be led by Frédéric Lissalde, BorgWarner's President and Chief Executive Officer, and Kevin Nowlan, BorgWarner's Chief Financial Officer.

*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	Price/EBITDA	Price/EPS	Gross Profit	EBITDA
Electronic Components											
TE Connectivity Ltd (TEL)	\$92.18	\$30,801	\$34,563	\$13,269	\$2,901	\$4.02	2.60x	11.9x	23.0x	32.5%	21.9%
Amphenol Corp. (APH)	99.47	29,492	32,455	8,225	1,952	3.09	3.95x	16.6x	32.2x	31.8%	23.7%
Corning Inc. (GLW)	26.69	20,338	28,034	11,503	3,274	1.17	2.44x	8.6x	22.8x	38.5%	28.5%
Omron Corp. (TSE:6645)	59.15	12,146	10,557	7,533	891	1.91	1.40x	11.9x	31.0x	41.2%	11.8%
Alps Electric Ltd (TSE:6770)	18.47	3,777	3,989	7,727	756	0.59	0.52x	5.3x	31.2x	16.8%	9.8%
Belden Inc. (BDC)	49.27	2,240	3,443	2,131	350	2.64	1.62x	9.8x	18.7x	37.4%	16.4%
Vishay Intertechnology (VSH)	20.29	2,931	2,740	2,668	437	1.08	1.03x	6.3x	18.8x	25.2%	16.4%
AVX Corp. (AVX)	20.27	3,428	2,675	1,562	305	0.84	1.71x	8.8x	24.2x	24.3%	19.5%
Encore Wire Corp. (WIRE)	54.31	1,138	935	1,292	108	2.81	0.72x	8.7x	19.3x	14.2%	8.3%
Mean		\$11,810	\$13,266	\$6,212	\$1,219	\$2.02	1.78x	9.8x	24.6x	29.1%	17.4%
Median		3,777	3,989	7,533	756	1.91	1.62x	8.8x	23.0x	31.8%	16.4%
Specialty Materials											
3MCompany (MMM)	\$158.66	\$91,259	\$109,368	\$32,136	\$8,729	\$7.21	3.40x	12.5x	22.0x	47.9%	27.2%
BASF SE (DE:BAS)	67.71	62,186	82,907	67,770	7,476	2.26	1.22x	11.1x	30.0x	27.4%	11.0%
DuPont de Nemours (DD)	51.18	37,800	54,276	21,512	4,906	1.94	2.52x	11.1x	26.4x	34.7%	22.8%
Dow Inc. (DOW)	46.07	34,161	51,482	42,951	6,642	2.41	1.20x	7.8x	19.1x	14.8%	15.5%
PPG Industries, Inc. (PPG)	119.84	28,338	33,226	15,146	2,440	4.71	2.19x	13.6x	25.4x	42.9%	16.1%
Akzo Nobel N.V. (ENXTAM:AKZA)	94.57	18,876	20,111	10,410	1,254	2.37	1.93x	16.0x	39.8x	42.8%	12.0%
Celanese Corp. (CE)	103.50	12,510	16,484	6,297	1,357	5.96	2.62x	12.1x	17.4x	25.5%	21.5%
Solvay SA (ENXTBR:SOLB)	103.70	10,697	15,041	12,373	2,257	6.40	1.22x	6.7x	16.2x	26.4%	18.2%
Evonik Industries AG (DE:EVK)	27.46	12,774	14,713	16,183	2,545	1.72	0.91x	5.8x	15.9x	29.2%	15.7%
Ferro Corporation (FOE)	13.68	1,121	1,965	1,543	169	0.57	1.27x	11.6x	24.1x	26.9%	11.0%
Mean		\$30,972	\$39,957	\$22,632	\$3,777	\$3.56	1.85x	10.83x	23.63x	31.8%	17.1%
Median		23,607	26,668	15,664	2,492	2.39	1.60x	11.35x	23.04x	28.3%	15.9%
Vehicle Parts and Supplies											
Johnson Controls Inc. (JCI)	\$39.45	\$30,092	\$37,428	\$24,080	\$2,741	\$0.87	1.55x	13.7x	NM	32.3%	11.4%
Denso Corp. (TSE:6902)	41.91	32,475	31,911	48,567	5,056	1.89	0.66x	6.3x	22.1x	14.3%	10.4%
Continental AG (DB:CON)	113.22	22,826	29,497	48,680	4,435	9.07	0.61x	6.7x	12.5x	24.3%	9.1%
Aptiv PLC (APTV)	84.79	21,646	26,119	14,357	2,114	3.06	1.82x	12.4x	27.7x	18.5%	14.7%
Autoliv, Inc. (ALV)	76.63	6,682	8,502	8,548	1,119	4.93	0.99x	7.6x	15.5x	18.5%	13.1%
Lear Corp. (LEA)	123.18	7,449	8,406	19,810	1,773	10.60	0.42x	4.7x	11.6x	9.6%	8.9%
Bosch Ltd. (BSE:500530)	194.37	5,733	5,356	1,459	236	4.55	3.67x	22.7x	NM	45.2%	16.2%
Stanley Electric Co. Ltd. (TSE:6923)	26.35	4,249	3,480	3,749	721	1.51	0.93x	4.8x	17.4x	21.9%	19.2%
Delphi Automotive PLC (DLPH)	15.34	1,320	2,970	4,361	432	1.03	0.68x	6.9x	14.9x	14.5%	9.9%
Mean		\$14,719	\$17,074	\$19,290	\$2,070	\$4.17	1.26x	9.5x	17.4x	22.1%	12.6%
Median		7,449	8,502	14,357	1,773	3.06	0.93x	6.9x	15.5x	18.5%	11.4%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close January 31, 2020.

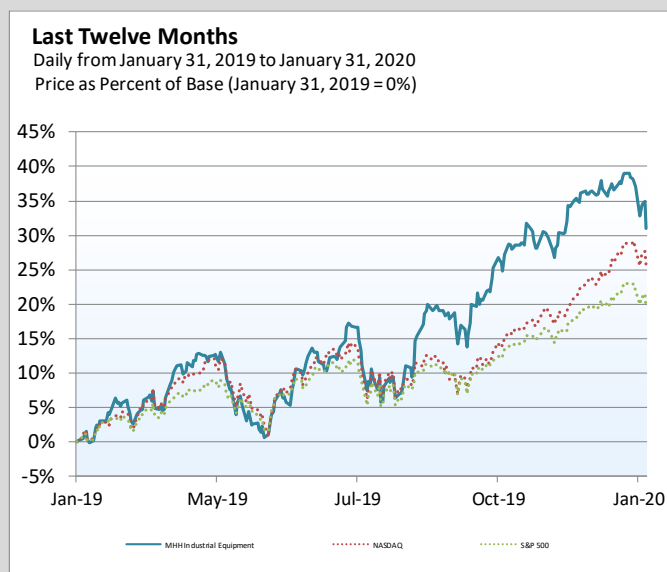
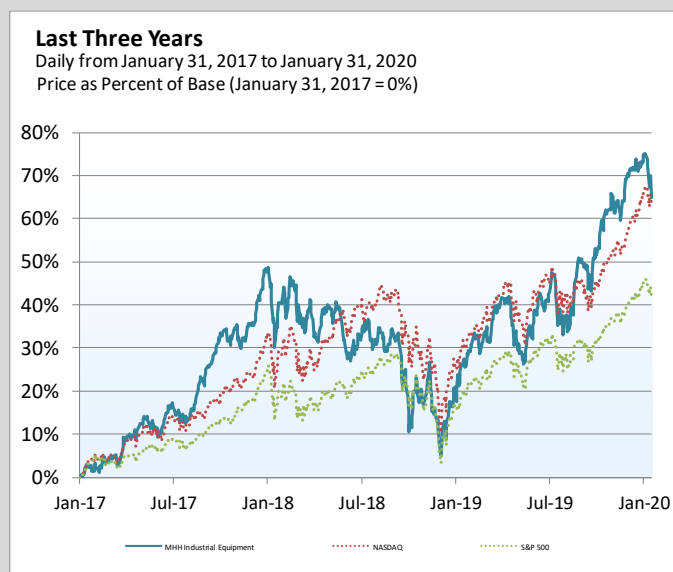
(2) Enterprise value is defined as equity value plus net debt, preferred stock and minority interests. Net Debt includes long term debt, short term debt, post-retirement benefits and unfunded pensions, if applicable, less cash and cash equivalents.

(3) As of December 31, 2019 excluding TEL (December 27, 2019); and DB:CON, DE:BAS, DE:EVK, ENXTBR:SOLB, FOE and WIRE (September 30, 2019).

(4) Excludes non-recurring and discontinued operations.

Comparative Index Performance

The Mufson Howe Hunter Industrial Equipment Index^(a) increased by 5.1% during the three months ending January 31, 2020.





Price Performance

	3-Year	LTM	3 Month
Mufson Howe Hunter Industrial Equipment Index ^(a)	65.0%	31.1%	5.1%
NASDAQ	63.0%	25.7%	10.4%
S&P 500	41.5%	19.3%	6.2%

(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*
		\$8,122.2

Traton SE (XTRA:8TRA) offered to acquire the remaining 83.2% stake in Navistar International Corporation (NYSE:NAV) for \$2.9 billion on January 30, 2020, in a transaction valued at \$8.1 billion. Under the terms of the offer, Traton will acquire Navistar shares at \$35 per share in cash. Volkswagen AG (XTRA:VOW3), parent of Traton, has signaled its intention to provide funds for financing. Navistar, through its subsidiaries, manufactures and sells commercial trucks, diesel engines, school and commercial buses and service parts for trucks and diesel engines worldwide. The transaction is expected to close by the end of 2020.

*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)

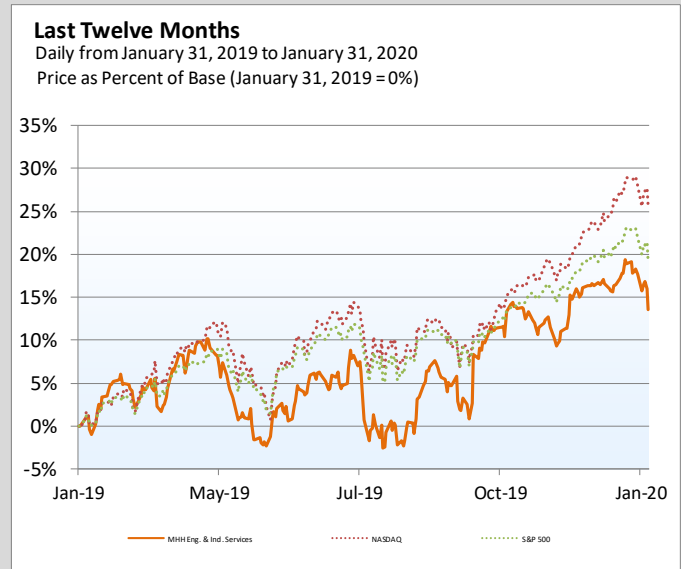
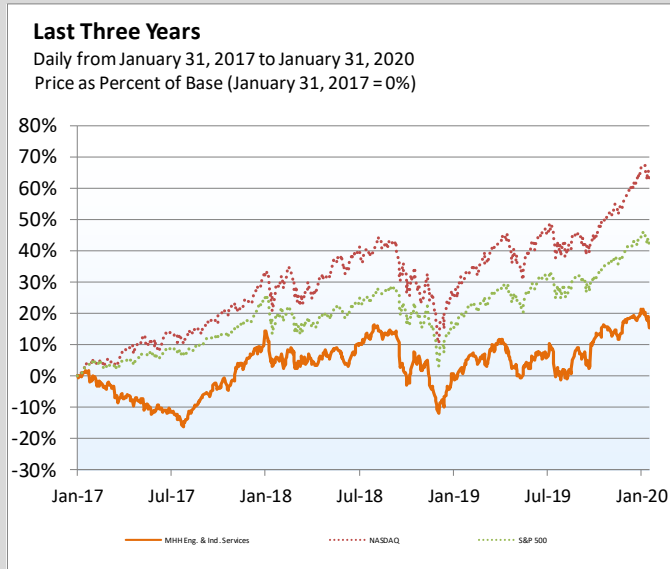
Company	Market & Capitalization			LTM Performance ⁽³⁾			Valuation			Margins	
	Price ⁽¹⁾	Equity Value	Enterprise Value ⁽²⁾	Revenue	EBITDA ⁽⁴⁾	EPS	Enterprise Value/Revenue	EBITDA/Revenue	Price/EPS	Gross Profit	EBITDA
Construction Equipment											
Caterpillar Inc. (CAT)	\$131.35	\$72,592	\$102,006	\$53,800	\$10,947	\$8.63	1.90x	9.3x	15.2x	26.9%	20.3%
Deere & Company (DE)	158.58	49,922	92,198	39,233	6,179	8.22	2.35x	14.9x	19.3x	23.4%	15.7%
Cummins Inc. (CMI)	159.97	24,204	26,402	23,571	3,253	11.82	1.12x	8.1x	13.5x	25.4%	13.8%
Hyundai Heavy Industries Co. Ltd (KOSE:A009540)	95.21	6,733	8,243	12,110	196	(1.48)	0.68x	NM	NM	4.5%	1.6%
Navistar International Corp. (NAV)	36.62	3,635	7,500	11,251	799	2.86	0.67x	9.4x	12.8x	16.0%	7.1%
Oshkosh Corp. (OSK)	86.04	5,877	6,606	8,274	856	6.26	0.80x	7.7x	13.8x	17.9%	10.3%
Terex Corp. (TEX)	25.35	1,807	2,640	4,353	385	2.17	0.61x	6.9x	11.7x	20.4%	8.8%
Mean		\$23,539	\$35,085	\$21,799	\$3,231	\$5.50	1.16x	9.4x	14.4x	19.2%	11.1%
Median		6,733	8,243	12,110	856	6.26	0.80x	8.7x	13.6x	20.4%	10.3%
Electrical Equipment											
Schneider Electric SE (ENXTPA:SU)	\$100.35	\$55,281	\$65,033	\$30,274	\$5,156	\$4.39	2.15x	12.6x	22.9x	39.2%	17.0%
Emerson Electric Co. (EMR)	71.63	43,760	48,027	18,376	3,709	2.87	2.61x	12.9x	24.9x	42.5%	20.2%
Eaton Corporation plc (ETN)	94.47	39,054	46,831	21,390	3,754	3.94	2.19x	12.5x	24.0x	33.0%	17.5%
Rockwell Automation Inc. (ROK)	191.66	22,268	24,283	6,737	1,456	6.31	3.60x	16.7x	30.4x	42.5%	21.6%
Ametek Inc. (AME)	97.15	22,208	24,082	5,159	1,404	2.91	4.67x	17.2x	33.3x	34.7%	27.2%
Hubbell Inc. (HUBB)	143.23	7,790	9,337	4,591	762	6.00	2.03x	12.3x	23.9x	29.9%	16.6%
Regal Beloit Corporation (RBC)	78.46	3,212	4,227	3,238	496	4.56	1.31x	8.5x	17.2x	26.6%	15.3%
Powell Industries, Inc. (POWL)	41.27	479	355	542	28	0.95	0.66x	12.7x	NM	17.4%	5.2%
Mean		\$24,256	\$27,772	\$11,288	\$2,095	\$3.99	2.40x	13.2x	25.2x	33.2%	17.6%
Median		22,238	24,182	5,948	1,430	4.17	2.17x	12.7x	24.0x	33.8%	17.3%
Measurement, Control, and Testing Devices											
Danaher Corporation (DHR)	\$160.87	\$111,885	\$115,313	\$17,911	\$4,459	\$2.85	6.44x	25.9x	NM	55.7%	24.9%
Xcerra Corporation (XCRA)	38.58	29,619	41,656	31,933	4,081	1.72	1.30x	10.2x	22.4x	32.5%	12.8%
Entegris, Inc. (ENTG)	51.76	6,981	7,690	1,591	433	1.14	4.83x	17.8x	NM	45.3%	27.2%
MKS Instruments, Inc. (MKSI)	104.82	5,714	6,139	1,900	386	2.66	3.23x	15.9x	39.5x	44.1%	20.3%
Brooks Automation, Inc. (BRKS)	38.08	2,735	2,454	812	114	0.32	3.02x	21.6x	NM	40.6%	14.0%
FormFactor, Inc. (FORM)	25.31	1,916	1,799	589	95	0.42	3.05x	19.0x	NM	40.3%	16.1%
Rudolph Technologies, Inc. (RTEC)	-	1,938	1,759	306	22	0.43	5.75x	NM	0.0x	51.1%	7.3%
Cohu, Inc. (COHU)	22.37	923	1,166	583	37	(0.65)	2.00x	NM	NM	41.1%	6.4%
Nova Measuring Instruments Ltd. (NVMI)	38.04	1,064	913	225	49	0.91	4.06x	18.6x	NM	54.5%	21.8%
FARO Technologies, Inc. (FARO)	51.66	899	776	390	14	(0.22)	1.99x	NM	NM	57.4%	3.7%
Axcelis Technologies, Inc. (ACLS)	24.15	783	682	343	32	0.39	1.99x	21.6x	NM	42.0%	9.2%
Nanometrics Incorporated (NANO)	0.23	65	56	9	-5	(0.01)	6.42x	NM	NM	90.7%	NM
Mean		\$13,710	\$15,033	\$4,716	\$810	\$0.83	3.67x	18.8x	20.6x	49.6%	14.9%
Median		1,927	1,779	586	72	0.42	3.14x	18.8x	22.4x	44.7%	14.0%
Semiconductor Capital Equipment											
ASML Holding NV (ASML)	\$281.87	\$118,269	\$116,484	\$13,265	\$3,543	\$4.63	8.78x ‡	NM ‡	NM	44.7%	26.7%
Applied Materials, Inc. (AMAT)	57.99	53,270	54,965	15,017	3,853	2.24	3.66x	14.3x	25.8x	43.8%	25.7%
Lam Research Corp. (LRCX)	298.21	42,484	42,218	9,549	2,684	9.76	4.42x	15.7x	30.6x	45.2%	28.1%
Tokyo Electron Ltd (TSE:8035)	226.07	35,154	32,457	10,333	2,501	8.97	3.14x	13.0x	25.2x	40.5%	24.2%
KLA-Tencor Corp. (KLAC)	165.74	26,153	27,948	5,279	1,862	5.26	5.29x	15.0x	31.5x	57.8%	35.3%
Teradyne Inc. (TER)	65.99	11,058	10,607	2,295	653	1.84	4.62x	16.3x	35.9x	58.4%	28.4%
Veeco Instruments Inc. (VECO)	12.75	624	700	419	7	(0.60)	1.67x	NM ‡	NM	38.0%	1.6%
Mean		\$41,002	\$40,769	\$8,022	\$2,157	\$4.59	3.80x	14.8x	29.8x	46.9%	24.3%
Median		35,154	32,457	9,549	2,501	4.63	4.04x	15.0x	30.6x	44.7%	26.7%

NA = Not Available; NM = Not Meaningful; LTM = Latest Twelve Months
 ‡ = excluded from Mean and Median calculations
 Source: CapitalIQ

- (1) As of close January 31, 2020.
- (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 December 31, 2019 excluding AMAT (January 26, 2020); LRCX (December 29, 2019); COHU, FORM and RBC (December 28, 2019); DE (November 3, 2019); NAV (October 31, 2019); FARO, KOSE:A009540 and VECO (September 30, 2019); NANO (July 31, 2019); and ENXTPA:SU and XCRA (June 30, 2019).
- (4) Excludes non-recurring and discontinued operations.

Comparative Index Performance

The Mufson Howe Hunter Engineering & Industrial Services Index^(a) increased by 2.9% during the three months ending January 31, 2020.





Price Performance

	3-Year	LTM	3 Month
Mufson Howe Hunter Engineering & Industrial Services Index ^(a)	15.4%	13.5%	2.9%
NASDAQ	63.0%	25.7%	10.4%
S&P 500	41.5%	19.3%	6.2%

(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 17 for sector news

Highlighted M&A Transaction – Engineering & Industrial Services

Target	Acquirer	Value*
		ND
<p>JACOBS U.K. Limited, a subsidiary of Jacobs Engineering Group (NYSE:J), completed the acquisition of Amec Foster Wheeler Nuclear U.K. Limited from John Wood Group PLC (LSE:WG.) on January 8, 2020. Amec Foster Wheeler Nuclear U.K. Limited provides designing, consultancy, engineering, and project management services to the defense, environmental, manufacturing, mining, nuclear, oil and gas, power and utilities and renewable sectors.</p>		
<p>*ND – Not disclosed. Transaction values reported on the basis of enterprise value in USD millions.</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
Industrial Distribution											
Fastenal Company (FAST)	\$34.88	\$20,026	\$20,441	\$5,334	\$1,205	\$1.13	3.83x	17.0x	30.8x	47.2%	22.6%
W.W. Grainger, Inc. (GWW)	302.67	16,250	18,105	11,486	1,617	14.36	1.58x	11.2x	21.1x	38.3%	14.1%
HD Supply Holdings, Inc. (HDS)	40.74	6,607	9,205	6,207	825	2.29	1.48x	11.2x	17.8x	39.1%	13.3%
MSC Industrial Direct Co., Inc. (MSM)	68.07	3,771	4,214	3,356	488	4.57	1.26x	8.6x	14.9x	42.4%	14.5%
WESCO International, Inc. (WCC)	48.41	2,023	3,398	8,359	411	4.13	0.41x	8.3x	11.7x	18.9%	4.9%
MRC Global Inc. (MRC)	11.26	925	2,084	3,905	211	0.80	0.53x	9.9x	14.2x	17.7%	5.4%
Lawson Products, Inc. (LAWS)	47.22	423	431	368	24	1.20	1.17x	18.0x	39.4x	53.4%	6.5%
Transcat, Inc. (TRNS)	30.60	225	257	172	17	0.81	1.49x	14.8x	37.9x	24.4%	10.1%
Mean		\$6,281	\$7,267	\$4,898	\$600	\$3.66	1.47x	12.4x	23.5x	35.2%	11.4%
Median		2,897	3,806	4,619	450	1.75	1.37x	11.2x	19.4x	38.7%	11.7%
Industrial Recycling											
Veolia Environnement S.A. (ENXTPA:VIE)	\$29.58	\$16,411	\$31,477	\$29,318	\$3,169	\$0.82	1.07x	9.9x	36.2x	16.3%	10.8%
Clean Harbors, Inc. (CLH)	82.22	4,589	6,019	3,399	516	1.48	1.77x	11.7x	NM	30.4%	15.2%
Commercial Metals Company (CMC)	20.55	2,438	3,520	5,936	579	2.17	0.59x	6.1x	9.5x	15.0%	9.8%
Dowa Holdings Co., Ltd. (TSE:5714)	36.68	2,171	3,362	4,318	402	2.50	0.78x	8.4x	14.7x	13.0%	9.3%
Aurubis AG (DE:NDA)	54.67	2,456	2,287	11,758	414	3.84	0.19x	5.5x	14.2x	9.0%	3.5%
Sims Limited (ASX:SGM)	7.19	1,456	1,213	4,664	196	0.42	0.26x	6.2x	17.2x	11.7%	4.2%
Mean		\$4,920	\$7,980	\$9,899	\$879	\$1.87	0.78x	8.0x	18.4x	15.9%	8.8%
Median		2,447	3,441	5,300	465	1.83	0.69x	7.3x	14.7x	14.0%	9.5%
Technical Services											
AECOM (ACM)	\$48.23	\$7,630	\$10,162	\$20,053	\$949	\$1.80	0.51x	10.7x	26.8x	4.3%	4.7%
John Wood Group PLC (LSE:WG.)	4.96	3,345	5,851	9,886	545	0.23	0.59x	10.7x	21.3x	12.2%	5.5%
Tetra Tech, Inc. (TTEK)	85.60	4,681	5,158	2,450	242	2.26	2.10x	21.28	38	NM	NM
KBR, Inc. (KBR)	27.20	3,855	4,670	5,517	376	1.13	0.85x	12.4x	24.0x	9.3%	6.8%
Fluor Corporation (FLR)	17.89	2,508	2,741	18,520	-119	(1.62)	0.15x	NM	NM	NM	NM
Balfour Beatty plc (LSE:BBY)	3.51	2,399	2,652	8,655	186	0.11	0.31x	14.3x	30.7x	5.7%	2.1%
Primoris Services Corporation (PRIM)	21.33	1,038	1,603	3,194	241	1.50	0.50x	6.6x	14.2x	10.8%	7.5%
NV5 Global, Inc. (NVEE)	62.11	796	867	492	61	1.76	1.76x	14.2x	35.3x	47.7%	12.5%
Cardno Limited (ASX:CDD)	0.26	118	181	925	38	0.02	0.20x	4.7x	14.0x	7.4%	4.1%
Jura Energy Corporation (JEC)	0.09	6	27	12	8	0.00	2.31x	3.6x	19.4x	61.9%	63.7%
Mean		\$2,638	\$3,391	\$6,970	\$253	\$0.72	0.93x	11.0x	24.8x	19.9%	13.4%
Median		2,453	2,696	4,356	213	0.68	0.55x	10.7x	24.0x	10.0%	6.2%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close January 31, 2020.

(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 December 31, 2019 excluding TTEK (December 29, 2019); TRNS (December 28, 2019); CMC and MSM (November 30, 2019); HDS (November 3, 2019); CLH, DE:NDA, ENXTPA:VIE, FLR, JEC, KBR, LAWS, MRC and PRIM (September 30, 2019); NVEE (September 28, 2019); ASX:CDD, ASX:SGM and LSE:WG. (June 30, 2019); and LSE:BBY (June 28, 2019).

(4) Excludes non-recurring and discontinued operations.

Selected News – Aerospace & Defense

General Dynamics Corporation (NYSE:GD) reported net income of \$3,484.0 million for fiscal year 2019 as compared to \$3,345.0 million for the prior year. Earnings per share were \$11.98 versus \$11.18 for the prior year. Revenues for the year increased to \$39,350.0 million from \$36,193.0 million for fiscal year 2018.

Honeywell International Inc. (NYSE:HON) reported net income of \$6,143.0 million for fiscal year 2019 as compared to \$6,765.0 million for the prior year. Earnings per share were \$8.41 versus \$8.98 for the prior year. Revenues for the year decreased to \$36,709.0 million from \$41,802.0 million for fiscal year 2018.

Lockheed Martin Corporation (NYSE:LMT) reported net income of \$6,230.0 million for fiscal year 2019 as compared to \$5,046.0 million for the prior year. Earnings per share were \$21.95 versus \$17.59 for the prior year. Revenues for the year increased to \$59,812.0 million from \$53,762.0 million for fiscal year 2018.

Lockheed Martin Corporation (NYSE:LMT) announced the appointment of **General Joseph F. Dunford Jr.** to its Board of Directors.

Northrop Grumman Corporation (NYSE:NOC) reported net income of \$2,248.0 million for fiscal year 2019 as compared to \$3,229.0 million for the prior year. Earnings per share were \$13.22 versus \$18.49 for the prior year. Revenues for the year increased to \$33,841.0 million from \$30,095.0 million for fiscal year 2018.

Raytheon Company (NYSE:RTN) reported net income of \$3,343.0 million for fiscal year 2019 as compared to \$2,909.0 million for the prior year. Earnings per share were \$11.92 versus \$10.15 for the prior year. Revenues for the year increased to \$29,176.0 million from \$27,058.0 million for fiscal year 2018.

Textron Inc. (NYSE:TXT) reported net income of \$815.0 million for fiscal year 2020 as compared to \$1,222.0 million for the prior year. Earnings per share were \$3.50 versus \$4.83 for the prior year. Revenues for the year decreased to \$13,630.0 million from \$13,972.0 million for fiscal year 2019.

The Boeing Company (NYSE:BA) reported net income of (\$636.0) million for fiscal year 2019 as compared to \$10,460.0 million for the prior year. Earnings per share were (\$1.12) versus \$17.85 for the prior year. Revenues for the year decreased to \$76,559.0 million from \$101,127.0 million for fiscal year 2018.

The Boeing Company (NYSE:BA) announced the appointment of **David L. Calhoun** to the role of President and Chief Executive Officer.

United Technologies Corporation (NYSE:UTX) reported net income of \$5,537.0 million for fiscal year 2019 as compared to \$5,269.0 million for the prior year. Earnings per share were \$6.41 versus \$6.50 for the prior year. Revenues for the year increased to \$77,046.0 million from \$66,501.0 million for fiscal year 2018.

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

Selected News – Components & Materials

3M Company (NYSE:MMM) reported net income of \$4,570.0 million for fiscal year 2019 as compared to \$5,349.0 million for the prior year. Earnings per share were \$7.81 versus \$8.89 for the prior year. Revenues for the year decrease to \$32,136.0 million from \$32,765.0 million for fiscal year 2018.

Alps Alpine Co., Ltd. (TSE:6770) reported third quarter net income of (\$6.1) million for fiscal year 2020 as compared to \$89.2 million for the prior year period. Earnings per share were (\$0.03) versus \$0.46 for the prior year period. Revenues for the quarter decrease to \$1,884.1 million from \$2,015.9 million for the same period in fiscal year 2019.

Amphenol Corporation (NYSE:APH) reported net income of \$1,155.0 million for fiscal year 2019 as compared to \$1,205.0 million for the prior year. Earnings per share were \$3.75 versus \$3.85 for the prior year. Revenues for the year increase to \$8,225.4 million from \$8,202.0 million for fiscal year 2018.

Aptiv PLC (NYSE:APTIV) reported net income of \$990.0 million for fiscal year 2019 as compared to \$1,067.0 million for the prior year. Earnings per share were \$3.85 versus \$4.02 for the prior year. Revenues for the year decrease to \$14,357.0 million from \$14,435.0 million for fiscal year 2018.

Aptiv PLC (NYSE:APTIV) announced the appointment of **Joseph L. Hooley** to its Board of Directors.

Autoliv, Inc. (NYSE:ALV) reported net income of \$461.5 million for fiscal year 2019 as compared to \$190.4 million for the prior year. Earnings per share were \$5.29 versus \$2.19 for the prior year. Revenues for the year decrease to \$8,547.6 million from \$8,678.2 million for fiscal year 2018.

AVX Corporation (NYSE:AVX) reported third quarter net income of \$47.9 million for fiscal year 2020 as compared to \$74.3 million for the prior year period. Earnings per share were \$0.28 versus \$0.44 for the prior year period. Revenues for the quarter decrease to \$344.4 million from \$442.4 million for the same period in fiscal year 2019.

Celanese Corporation (NYSE:CE) reported net income of \$852.0 million for fiscal year 2019 as compared to \$1,207.0 million for the prior year. Earnings per share were \$6.84 versus \$8.91 for the prior year. Revenues for the year decrease to \$6,297.0 million from \$7,155.0 million for fiscal year 2018.

Corning Incorporated (NYSE:GLW) reported net income of \$960.0 million for fiscal year 2019 as compared to \$1,066.0 million for the prior year. Earnings per share were \$1.07 versus \$1.13 for the prior year. Revenues for the year increase to \$11,503.0 million from \$11,290.0 million for fiscal year 2018.

DENSO Corporation (TSE:6902) reported third quarter net income of \$293.5 million for fiscal year 2020 as compared to \$710.3 million for the prior year period. Earnings per share were \$0.38 versus \$0.91 for the prior year period. Revenues for the quarter decrease to \$11,746.9 million from \$12,347.3 million for the same period in fiscal year 2019.

Dow Inc. (NYSE:DOW) reported net income of (\$1,359.0) million for fiscal year 2019 as compared to \$4,641.0 million for the prior year. Earnings per share were (\$1.84) versus \$6.21 for the prior year. Revenues for the year decrease to \$42,951.0 million from \$49,604.0 million for fiscal year 2018.

DuPont de Nemours, Inc. (NYSE:DD) reported net income of \$498.0 million for fiscal year 2019 as compared to \$3,844.0 million for the prior year. Earnings per share were \$0.67 versus \$4.94 for the prior year. Revenues for the year decrease to \$21,512.0 million from \$85,977.0 million for fiscal year 2018.

Selected News – Components & Materials (cont'd.)

Johnson Controls International plc (NYSE:JCI) reported first quarter net income of \$159.0 million for fiscal year 2020 as compared to \$355.0 million for the prior year period. Earnings per share were \$0.21 versus \$0.39 for the prior year period. Revenues for the quarter increase to \$5,576.0 million from \$5,464.0 million for the same period in fiscal year 2019.

Lear Corporation (NYSE:LEA) reported net income of \$753.6 million for fiscal year 2019 as compared to \$1,149.8 million for the prior year. Earnings per share were \$12.75 versus \$17.22 for the prior year. Revenues for the year decrease to \$19,810.3 million from \$21,148.5 million for fiscal year 2018.

OMRON Corporation (TSE:6645) reported third quarter net income of \$477.7 million for fiscal year 2020 as compared to \$112.4 million for the prior year period. Earnings per share were \$2.33 versus \$0.54 for the prior year period. Revenues for the quarter decrease to \$1,546.5 million from \$1,999.9 million for the same period in fiscal year 2019.

PPG Industries, Inc. (NYSE:PPG) reported net income of \$1,243.0 million for fiscal year 2019 as compared to \$1,341.0 million for the prior year. Earnings per share were \$5.22 versus \$5.47 for the prior year. Revenues for the year decrease to \$15,146.0 million from \$15,374.0 million for fiscal year 2018.

Stanley Electric Co., Ltd. (TSE:6923) reported third quarter net income of \$67.2 million for fiscal year 2020 as compared to \$95.5 million for the prior year period. Earnings per share were \$0.41 versus \$0.58 for the prior year period. Revenues for the quarter decrease to \$899.2 million from \$1,036.5 million for the same period in fiscal year 2019.

TE Connectivity Ltd. (NYSE:TEL) reported first quarter net income of \$26.0 million for fiscal year 2020 as compared to \$276.0 million for the prior year period. Earnings per share were \$0.08 versus \$0.80 for the prior year period. Revenues for the quarter decrease to \$3,168.0 million from \$3,347.0 million for the same period in fiscal year 2019.

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

Selected News – Industrial Equipment

ASML Holding N.V. (ENXTAM:ASML) reported net income of \$2,909.1 million for fiscal year 2019 as compared to \$2,967.3 million for the prior year. Earnings per share were \$6.90 versus \$6.96 for the prior year. Revenues for the year increased to \$13,264.5 million from \$12,530.3 million for fiscal year 2018.

Caterpillar Inc. (NYSE:CAT) reported net income of \$6,093.0 million for fiscal year 2019 as compared to \$6,147.0 million for the prior year. Earnings per share were \$10.74 versus \$10.26 for the prior year. Revenues for the year decreased to \$53,800.0 million from \$54,722.0 million for fiscal year 2018.

Danaher Corporation (NYSE:DHR) reported net income of \$3,008.2 million for fiscal year 2019 as compared to \$2,650.9 million for the prior year. Earnings per share were \$4.05 versus \$3.74 for the prior year. Revenues for the year decreased to \$17,911.1 million from \$19,893.0 million for fiscal year 2018.

Eaton Corporation plc (NYSE:ETN) announced the appointment of **April Miller Boise** to its Board of Directors, as well as the appointment of **Aravind Yarlagadda** to the role of Chief Digital Officer and Executive Vice President.

Lam Research Corporation (NasdaqGS:LRCX) reported second quarter net income of \$514.5 million for fiscal year 2020 as compared to \$568.9 million for the prior year period. Earnings per share were \$3.43 versus \$3.51 for the prior year period. Revenues for the quarter increased to \$2,583.5 million from \$2,522.7 million for the same period in fiscal year 2019.

MKS Instruments, Inc. (NasdaqGS:MKSI) reported net income of \$140.4 million for fiscal year 2019 as compared to \$392.9 million for the prior year. Earnings per share were \$2.55 versus \$7.14 for the prior year. Revenues for the year decreased to \$1,899.8 million from \$2,075.1 million for fiscal year 2018.

Oshkosh Corporation (NYSE:OSK) reported first quarter net income of \$75.7 million for fiscal year 2020 as compared to \$109.0 million for the prior year period. Earnings per share were \$1.10 versus \$1.51 for the prior year period. Revenues for the quarter decreased to \$1,695.1 million from \$1,803.4 million for the same period in fiscal year 2019.

Oshkosh Corporation (NYSE:OSK) announced the appointment of **Michael E. Pack** to the role of Chief Financial Officer and Executive Vice President.

Rockwell Automation, Inc. (NYSE:ROK) reported first quarter net income of \$310.7 million for fiscal year 2020 as compared to \$80.3 million for the prior year period. Earnings per share were \$2.66 versus \$0.66 for the prior year period. Revenues for the quarter increased to \$1,684.5 million from \$1,642.3 million for the same period in fiscal year 2019.

Teradyne, Inc. (NasdaqGS:TER) reported net income of \$479.2 million for fiscal year 2019 as compared to \$451.8 million for the prior year. Earnings per share were \$2.67 versus \$2.35 for the prior year. Revenues for the year increased to \$2,295.0 million from \$2,100.8 million for fiscal year 2018.

Tokyo Electron Limited (TSE:8035) reported third quarter net income of \$453.9 million for fiscal year 2020 as compared to \$445.1 million for the prior year period. Earnings per share were \$2.89 versus \$2.70 for the prior year period. Revenues for the quarter increased to \$2,718.6 million from \$2,444.2 million for the same period in fiscal year 2019.

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

Selected News – Engineering & Industrial Services

Commercial Metals Company (NYSE:CMC) reported first quarter net income of \$83.3 million for fiscal year 2020 as compared to \$19.7 million for the prior year period. Earnings per share were \$0.69 versus \$0.16 for the prior year period. Revenues for the quarter increased to \$1,384.7 million from \$1,277.3 million for the same period in fiscal year 2019.

Commercial Metals Company (NYSE:CMC) announced the appointment of **Peter Matt** to its Board of Directors.

Fastenal Company (NasdaqGS:FAST) reported net income of \$790.9 million for fiscal year 2019 as compared to \$751.9 million for the prior year. Earnings per share were \$1.38 versus \$1.31 for the prior year. Revenues for the year increased to \$5,333.7 million from \$4,965.1 million for fiscal year 2018.

MSC Industrial Direct Co., Inc. (NYSE:MSM) reported first quarter net income of \$65.4 million for fiscal year 2020 as compared to \$74.2 million for the prior year period. Earnings per share were \$1.18 versus \$1.33 for the prior year period. Revenues for the quarter decreased to \$823.6 million from \$831.6 million for the same period in fiscal year 2019.

Tetra Tech, Inc. (NasdaqGS:TTEK) reported first quarter net income of \$47.3 million for fiscal year 2020 as compared to \$42.0 million for the prior year period. Earnings per share were \$0.85 versus \$0.75 for the prior year period. Revenues for the quarter increased to \$614.0 million from \$553.4 million for the same period in fiscal year 2019.

W.W. Grainger, Inc. (NYSE:GWW) reported net income of \$849.0 million for fiscal year 2019 as compared to \$782.0 million for the prior year. Earnings per share were \$15.34 versus \$13.73 for the prior year. Revenues for the year increased to \$11,486.0 million from \$11,221.0 million for fiscal year 2018.

WESCO International, Inc. (NYSE:WCC) reported net income of \$223.4 million for fiscal year 2019 as compared to \$227.3 million for the prior year. Earnings per share were \$5.14 versus \$4.82 for the prior year. Revenues for the year increased to \$8,358.9 million from \$8,176.6 million for 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
L3Harris Technologies	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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