



Manufacturing Update

August 2018

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

Macro-Economic Trends

	Jun-18	Jul-18	Trend
PMI	60.2	58.1	Negative
Total Unemployment	4.0	3.9	Positive
CPI Monthly Change	0.1	0.2	Negative
PPI Monthly Change	0.3	0.0	Positive
Industrial Production	107.9	108.0	Positive
Capacity Utilization	78.1	78.1	Neutral
Manufacturing Production	104.3	104.6	Positive
Manufacturing Utilization	75.7	75.9	Positive

Sector Index Performance

	3-Year	1-Year	3-Month
Aerospace & Defense	66.6%	23.2%	4.9%
Components & Materials	21.2%	4.8%	3.2%
Industrial Equipment	64.5%	17.7%	3.6%
Industrial & Engineering	20.3%	24.7%	7.7%
Services and Distribution			
NASDAQ	49.6%	20.9%	8.6%
S&P	33.9%	14.0%	6.3%

Primary Mufson Howe Hunter Contacts:

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

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

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

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

Peter J. Hill
Managing Director
215.399.5407
phill@mhhco.com

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

MHH Sectors/Sub-sectors

Aerospace & Defense

- Aerospace
- Defense

Components & Materials

- Electronic Components
- Specialty Materials
- Vehicle Parts and Supplies

Industrial Equipment

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

Industrial & Engineering Services and Distribution

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

Note: Please refer to Page 20 for the Universe components.

TABLE OF CONTENTS

Major Economic Indicators.....	1
Sector Index Performance Summary	2
Subsector Trading Multiples & Margins	3
Aerospace & Defense	5
Components & Materials.....	7
Industrial Equipment	9
Industrial & Engineering Services and Distribution	11
Selected Highlights	13
MHH Manufacturing Universe Directory.....	20

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

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

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

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

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

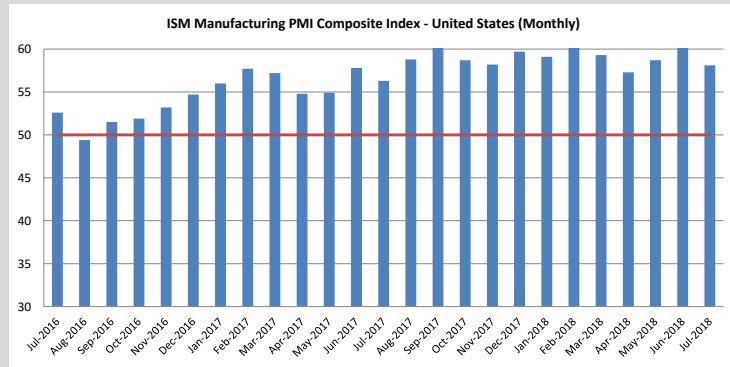
The companies that comprise each Index can change periodically as a result of a variety of reasons, including mergers, acquisitions, initial public offerings, and other transactions; therefore, comparisons to historical time periods and historical performance for each Index may not entirely correspond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

The information and statistical data contained herein have been obtained from sources that Mufson Howe Hunter believes are reliable, but Mufson Howe Hunter makes no representation or warranty as to the accuracy or completeness of any such information and data and expressly disclaims any and all liability relating to or resulting from your use of these materials. The information and data contained herein are current and only as of the date(s) indicated and Mufson Howe Hunter has no intention, obligation, or duty to update these materials after such date(s). These materials do not constitute an offer to sell or the solicitation of an offer to buy any securities. Copyright© 2018 Mufson Howe Hunter & Company LLC. All rights reserved. The Manufacturing Update is produced by Mufson Howe Hunter. Mufson Howe Hunter provides a full range of investment banking services to manufacturing companies. For more information, visit www.mhhco.com.

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 July as the economy grew for the 111th consecutive month. New Orders, Production, Employment, and Backlog all grew. Supplier Deliveries, however, slowed at a slower rate as Raw Materials Inventories continued to expand and Prices increased at a slower rate.

Unemployment Rate

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



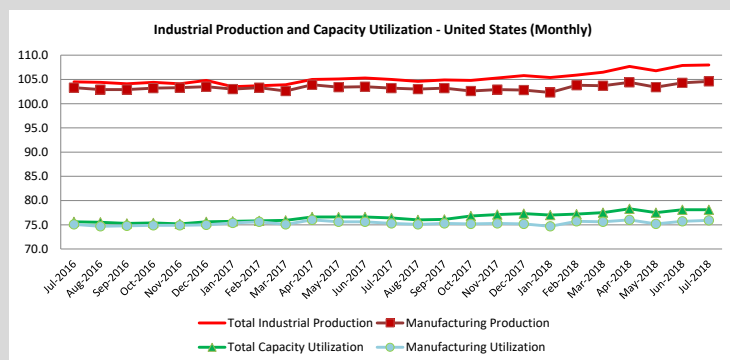
Source: United States Bureau of Labor

Commentary

In July, the unemployment rate edged down to 3.9%. Total nonfarm payroll employment increased by 157,000 with employment gains in business services, healthcare, and manufacturing. The manufacturing industry added 37,000 jobs in July, and has added 327,000 jobs over the past 12 months.

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.



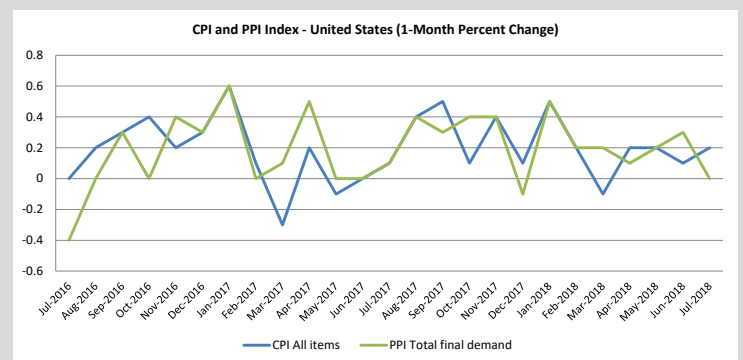
Source: United States Federal Reserve

Commentary

Industrial production edged up 0.1% in July after rising at an average pace of 0.5% over the last five months. Manufacturing output increased 0.3% in July, and was 2.8% higher than its year-earlier level. At 108.0% of its 2012 average, total industrial production in July was 4.2% higher than it was a year earlier.

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

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



Source: United States Bureau of Labor

Commentary

CPI for all items increased 0.2% in July. The index for shelter rose 0.3%, accounting for nearly 60% of the seasonally adjusted increase in CPI. PPI for final demand was unchanged in July (0.0%). The index for final demand goods increased 0.1%, offset by a 0.1% decline in prices for final demand services.

Sector Index Performance

Comparative Sector Index Performance (Last Three Years)

Last Three Years

Daily from July 31, 2015 to July 31, 2018

Price as Percent of Base (July 31, 2015 = 0%)



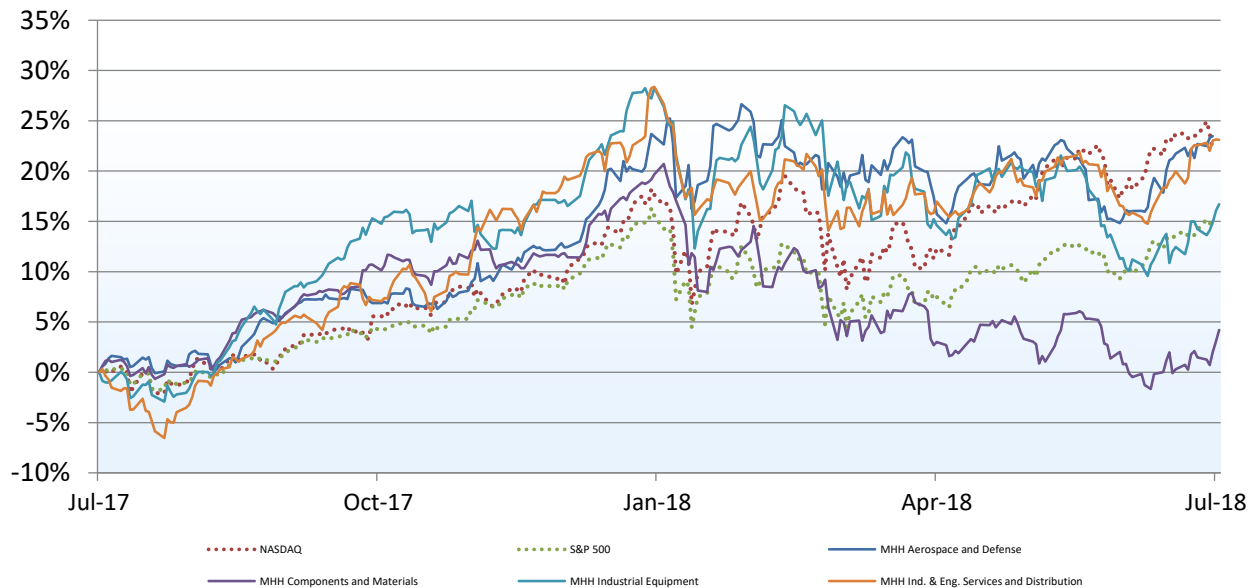
Source: CapitalIQ

Comparative Sector Index Performance (Last Twelve Months)

Last Twelve Months

Daily from July 31, 2017 to July 31, 2018

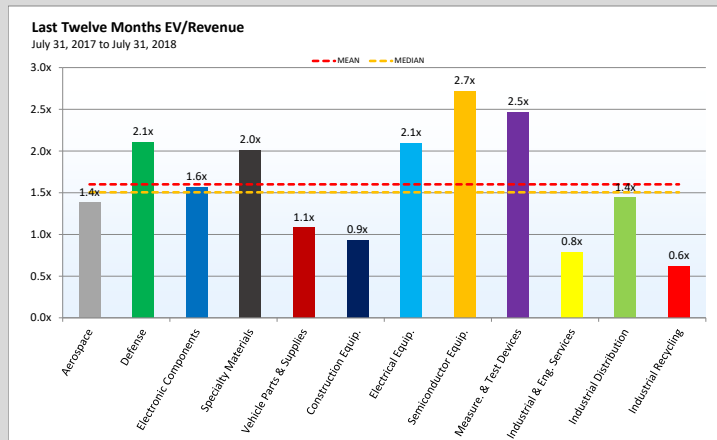
Price as Percent of Base (July 31, 2017 = 0%)



Source: CapitalIQ

Subsector Trading Multiples & Margins

Comparative Subsector LTM EV/Revenue

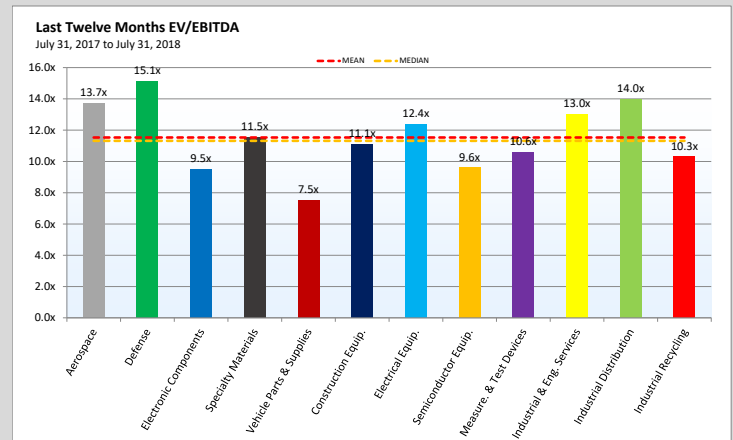


Source: CapitalIQ

Commentary

During the last twelve months, our index subsectors had a mean EV/Revenue of 1.6x and a median of 1.5x. Of the subsectors, Semiconductor Equipment was the high multiple at 2.7x and Industrial Recycling was the low multiple at 0.6x.

Comparative Subsector LTM EV/EBITDA

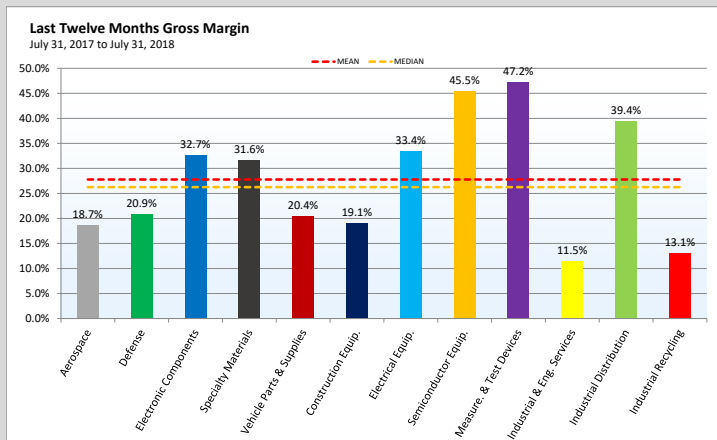


Source: CapitalIQ

Commentary

During the last twelve months, our index subsectors had a mean EV/EBITDA of 11.5x and a median of 11.3x. Of the subsectors, Defense was the high multiple at 15.1x and Vehicle Parts & Supplies was the low multiple at 7.5x.

Comparative Subsector LTM Gross Margin

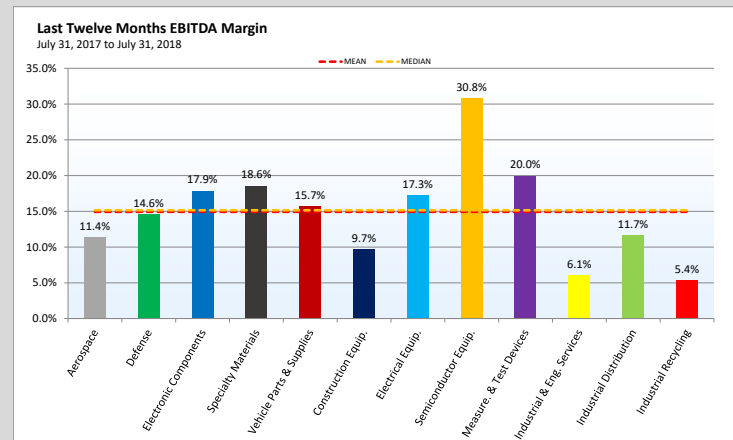


Source: CapitalIQ

Commentary

During the last twelve months, our index subsectors had a mean Gross Margin of 27.8% and a median of 26.3%. Of the subsectors, Measurement, Control, and Testing Devices was the high margin at 47.2% and Industrial & Engineering Services was the low margin at 11.5%.

Comparative Subsector LTM EBITDA Margin

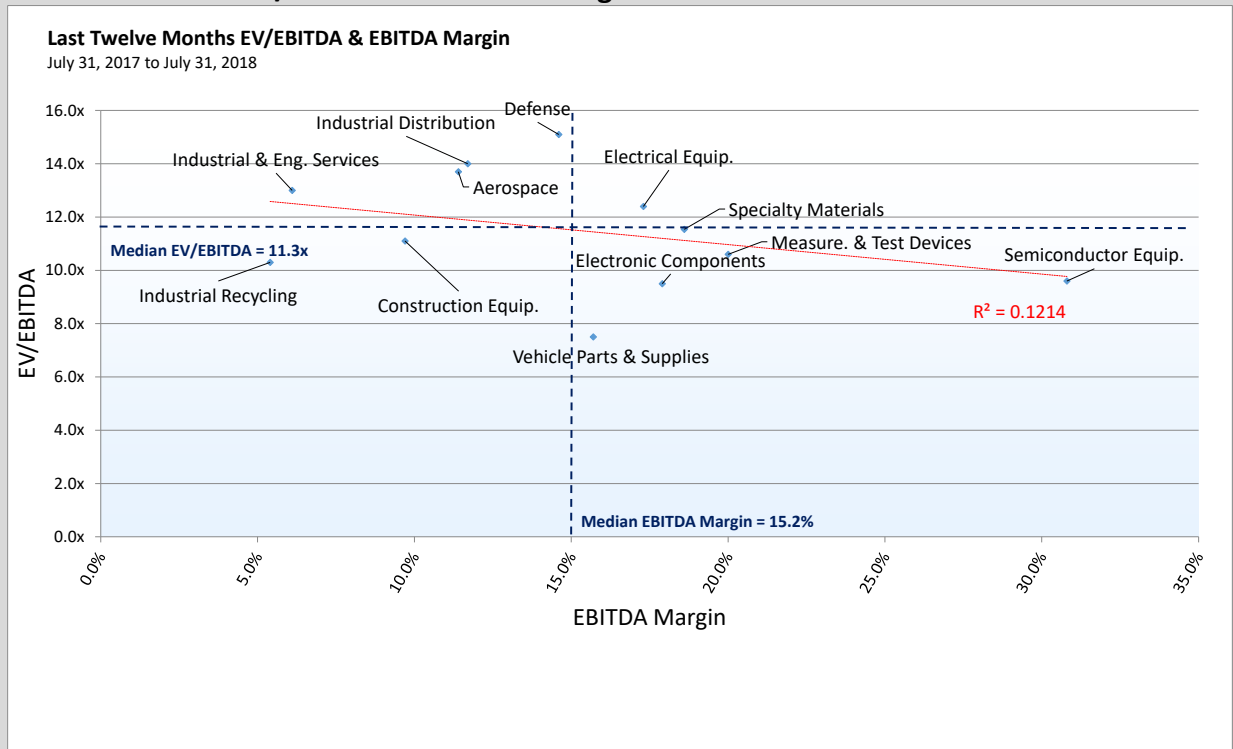


Source: CapitalIQ

Commentary

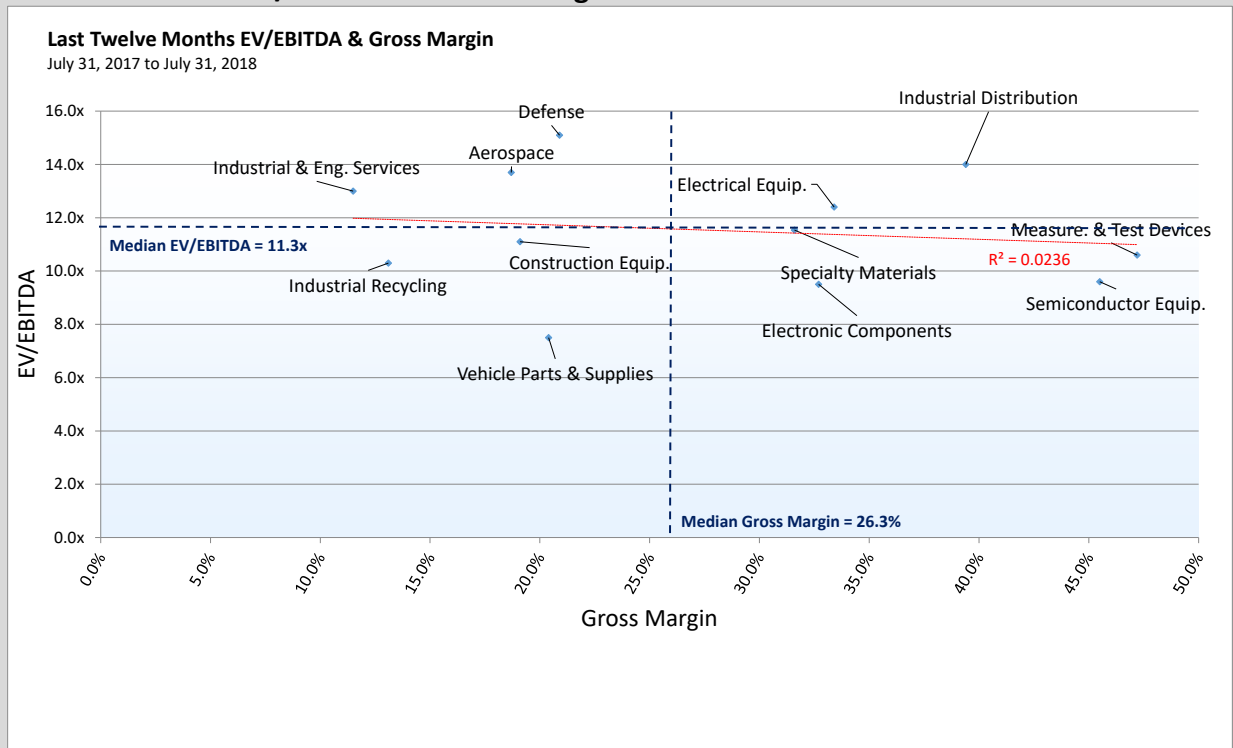
During the last twelve months, our index subsectors had a mean EBITDA Margin of 14.9% and a median of 15.2%. Of the subsectors, Semiconductor Capital Equipment was the high margin at 30.8% and Industrial Recycling was the low margin at 5.4%.

Index Subsector LTM EV/EBITDA vs. EBITDA Margin



Source: CapitalIQ

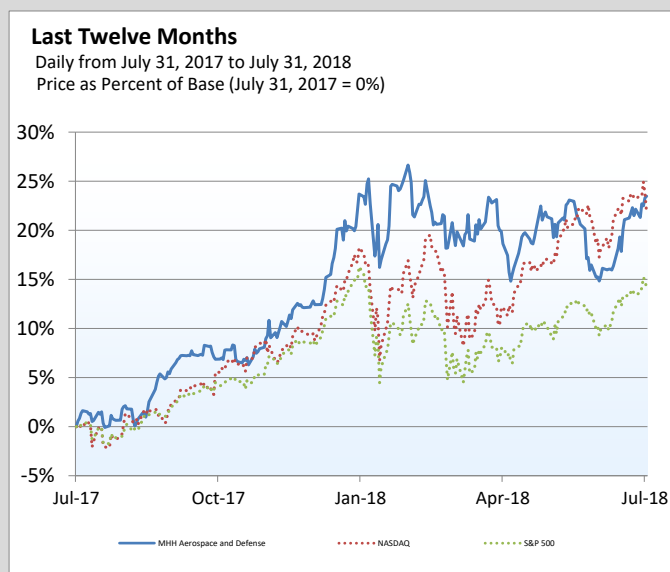
Index Subsector LTM EV/EBITDA vs. Gross Margin



Source: CapitalIQ

Comparative Index Performance

The Mufson Howe Hunter Aerospace & Defense Index^(a) increased by 4.9% during the three months ending July 31, 2018.



Price Performance



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

3-Year	LTM	3 Month
66.6%	23.2%	4.9%
49.6%	20.9%	8.6%
33.9%	14.0%	6.3%

(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*
 EMBRAER (Commercial Aircraft Operations)	 BOEING	\$3,800.0
<p>The Boeing Company (NYSE:BA) signed a memorandum of understanding to acquire 80% stake in commercial aircraft operations of Embraer S.A. (BOVESPA:EMBR3) for \$3.8 billion on July 5, 2018. The agreement proposes the formation of a joint venture comprising the commercial aircraft operations, in which Boeing will hold 80% stake and Embraer will hold 20% stake. The transaction is expected to close by end of 2019.</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)	\$356.30	\$204,697	\$207,112	\$96,020	\$13,056	\$11.42	2.16x	15.9x	31.2x	19.1%	13.6%
United Technologies Corporation (UTX)	135.74	108,605	127,958	62,689	10,535	5.37	2.04x	12.1x	25.3x	26.4%	16.8%
Honeywell International Inc. (HON)	159.65	118,558	125,970	42,275	8,658	6.02	2.98x	14.5x	26.5x	31.8%	20.5%
Airbus SE (ENXTPA:AIR)	124.05	96,162	97,900	77,660	5,901	3.12	1.26x	16.6x	39.7x	12.1%	7.6%
Thales S.A. (ENXTPA:HO)	131.60	27,965	25,505	18,818	2,268	5.02	1.36x	11.2x	26.2x	25.2%	12.1%
Rolls-Royce Holdings plc (LSE:RR.)	12.99	24,146	24,890	22,614	2,308	0.58	1.10x	10.8x	22.5x	18.3%	10.2%
Textron Inc. (TXT)	68.27	16,959	20,293	14,523	1,573	2.33	1.40x	12.9x	29.2x	17.1%	10.8%
Embraer S.A. (BOVESPA:EMBR3)	5.13	3,762	5,235	4,544	298	0.00	1.15x	17.6x	NA	16.8%	6.6%
Mean		\$75,107	\$79,358	\$42,393	\$5,575	\$4.23	1.68x	14.0x	28.7x	20.8%	12.3%
Median		62,063	61,702	32,444	4,105	4.07	1.38x	13.7x	26.5x	18.7%	11.4%
Defense											
Lockheed Martin Corporation (LMT)	\$326.10	\$92,352	\$105,463	\$52,306	\$6,997	\$12.07	2.02x	15.1x	27.0x	11.5%	13.4%
General Dynamics Corporation (GD)	199.76	59,185	71,601	32,578	4,708	8.21	2.20x	15.2x	24.3x	19.4%	14.5%
Northrop Grumman Corporation (NOC)	300.49	52,322	65,914	26,774	4,093	11.40	2.46x	16.1x	26.4x	22.4%	15.3%
Raytheon Company (RTN)	198.03	56,490	58,960	25,959	3,882	7.09	2.27x	15.2x	27.9x	24.9%	15.0%
Rockwell Collins, Inc. (COL)	138.99	22,845	29,414	8,592	1,811	4.58	3.42x	16.2x	30.3x	26.5%	21.1%
BAE Systems plc (BA.)	8.56	27,335	28,539	23,181	2,388	0.33	1.23x	11.9x	25.6x	63.1%	10.3%
L3 Technologies, Inc. (LLL)	214.44	16,797	19,418	9,821	1,337	7.23	1.98x	14.5x	29.6x	11.9%	13.6%
Huntington Ingalls Industries, Inc. (HII)	233.05	10,371	11,123	7,753	1,142	11.99	1.43x	9.7x	19.4x	19.2%	14.7%
Mean		\$42,212	\$48,804	\$23,371	\$3,295	\$7.86	2.13x	14.3x	26.3x	24.8%	14.7%
Median		39,829	44,187	24,570	3,135	7.72	2.11x	15.1x	26.7x	20.9%	14.6%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close July 31, 2018.

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

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

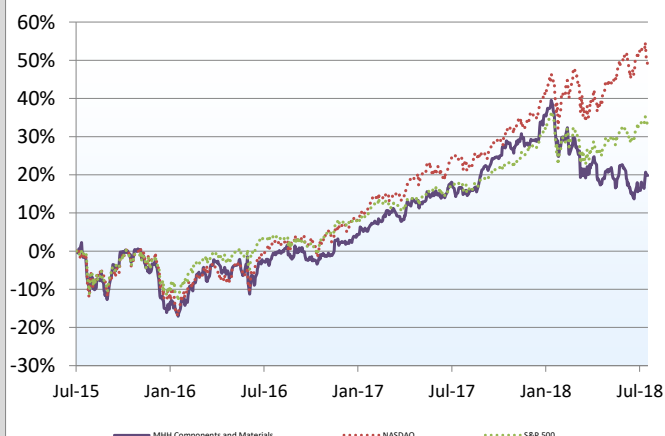
(4) Excludes non-recurring and discontinued operations.

Comparative Index Performance

The Mufson Howe Hunter Components & Materials Index^(a) increased by 3.2% during the three months ending July 31, 2018.

Last Three Years

Daily from July 31, 2015 to July 31, 2018
Price as Percent of Base (July 31, 2015 = 0%)



Last Twelve Months

Daily from July 31, 2017 to July 31, 2018
Price as Percent of Base (July 31, 2017 = 0%)



Price Performance

	3-Year	LTM	3 Month
Mufson Howe Hunter Components & Materials Index ^(a)	21.2%	4.8%	3.2%
NASDAQ	49.6%	20.9%	8.6%
S&P 500	33.9%	14.0%	6.3%

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

Please see Page 15 for sector news

Highlighted M&A Transaction – Components & Materials

Target	Acquirer	Value*
Win 	• APTIV •	\$650.0

Aptiv PLC (NYSE:APTIV) entered into a definitive agreement to acquire Winchester Interconnect from Snow Phipps Group, LLC for \$650 million on July 10, 2018. Winchester Interconnect designs, develops, and delivers interconnect solutions, offering connectors, cable assemblies and fiber products, cables, and hermetics. Winchester had revenues of approximately \$250 million. Upon completion of the transaction, Winchester will operate as an independent business unit within Aptiv's Signal & Power Solutions segment.

*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/EPS	Gross Profit	EBITDA	
Electronic Components											
TE Connectivity Ltd (TEL)	\$93.57	\$32,605	\$35,950	\$14,445	\$3,124	\$4.18	2.49x	11.5x	22.4x	33.0%	21.6%
Corning Inc. (GLW)	33.18	26,876	32,592	10,491	2,825	1.18	3.11x	11.5x	28.2x	39.3%	26.9%
Amphenol Corp. (APH)	93.51	28,086	30,583	7,633	1,801	2.88	4.01x	17.0x	32.4x	32.7%	23.6%
Omron Corp. (TSE:6645)	45.04	9,443	8,481	7,816	1,016	2.19	1.09x	8.3x	20.6x	41.7%	13.0%
Alps Electric Ltd (TSE:6770)	28.73	5,628	6,265	7,858	996	1.51	0.80x	6.3x	19.0x	22.0%	12.7%
Belden Inc. (BDC)	64.75	2,632	3,932	2,501	449	3.46	1.57x	8.8x	18.7x	39.9%	17.9%
Vishay Intertechnology (VSH)	25.00	3,605	2,673	2,716	521	1.40	0.98x	5.1x	17.8x	27.4%	19.2%
AVX Corp. (AVX)	20.78	3,502	2,656	1,685	268	0.80	1.58x	9.9x	25.9x	21.0%	15.9%
Encore Wire Corp. (WMRE)	48.75	1,016	914	1,222	96	2.43	0.75x	9.5x	20.1x	13.4%	7.9%
Mean		\$12,599	\$13,783	\$6,263	\$1,233	\$2.23	1.82x	9.8x	22.8x	30.0%	17.6%
Median		5,628	6,265	7,633	996	2.19	1.57x	9.5x	20.6x	32.7%	17.9%
Specialty Materials											
DowDuPont Inc. (DWDP)	\$68.77	\$159,601	\$185,331	\$81,175	\$15,853	\$3.08	2.28x	11.7x	22.4x	26.1%	19.5%
3MCompany (MMM)	212.32	124,550	135,963	32,830	8,530	6.69	4.14x	15.9x	31.7x	49.9%	26.0%
BASF SE (DE:BAS)	96.37	88,516	104,295	75,583	14,078	5.69	1.38x	7.4x	17.0x	31.8%	18.6%
PPG Industries, Inc. (PPG)	110.66	26,782	30,866	15,370	2,429	4.60	2.01x	12.7x	24.1x	42.9%	15.8%
Akzo Nobel N.V. (ENXTAM:AKZA)	92.57	23,679	27,594	10,879	1,057	1.46	2.54x	NM	NM	43.0%	9.7%
Evonik Industries AG (DE:EVK)	37.19	17,315	20,735	17,166	3,049	2.39	1.21x	6.8x	15.6x	31.6%	17.8%
Celanese Corp. (CE)	118.11	15,947	19,226	6,854	1,555	6.55	2.81x	12.4x	18.0x	26.8%	22.7%
Solvay SA (ENXTBR:SOLB)	137.21	14,177	18,533	12,710	2,382	6.62	1.46x	7.8x	20.7x	27.9%	18.7%
Ferro Corporation (FOE)	22.52	1,895	2,701	1,549	237	1.04	1.74x	11.4x	21.6x	29.3%	15.3%
Mean		\$52,496	\$60,583	\$28,235	\$5,463	\$4.23	2.17x	10.76x	21.38x	34.4%	18.2%
Median		23,679	27,594	15,370	2,429	4.60	2.01x	11.54x	21.18x	31.6%	18.6%
Vehicle Parts and Supplies											
Continental AG (DB:CON)	\$231.19	\$46,239	\$48,932	\$51,760	\$6,543	\$15.51	0.95x	7.5x	14.9x	25.7%	12.6%
Johnson Controls Inc. (JCI)	37.51	34,693	47,633	31,166	4,904	2.14	1.53x	9.7x	17.5x	30.1%	15.7%
Denso Corp. (TSE:6902)	49.18	38,350	38,041	47,587	6,106	2.89	0.80x	6.2x	17.0x	16.5%	12.8%
Aptiv PLC (APTIV)	98.07	25,963	29,317	13,902	2,203	3.38	2.11x	13.3x	29.0x	20.0%	15.8%
Lear Corp. (LEA)	180.13	11,801	12,724	21,660	2,284	14.89	0.59x	5.6x	12.1x	11.5%	10.5%
Autoliv, Inc. (ALV)	102.46	8,928	10,717	10,810	1,323	7.22	0.99x	8.1x	14.2x	20.4%	12.2%
Bosch Ltd. (BSE:500530)	272.81	8,326	7,909	1,776	327	6.02	4.45x	24.2x	NM	45.5%	18.4%
Delphi Automotive PLC (DLPH)	45.17	4,010	5,387	4,977	804	3.84	1.08x	6.7x	11.8x	19.8%	16.2%
Stanley Electric Co. Ltd. (TSE:6923)	34.99	5,742	4,972	4,078	825	1.78	1.22x	6.0x	19.6x	22.7%	20.2%
Mean		\$20,450	\$22,848	\$20,857	\$2,813	\$6.41	1.52x	9.7x	17.0x	23.6%	15.0%
Median		11,801	12,724	13,902	2,203	3.84	1.08x	7.5x	16.0x	20.4%	15.7%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close July 31, 2018.

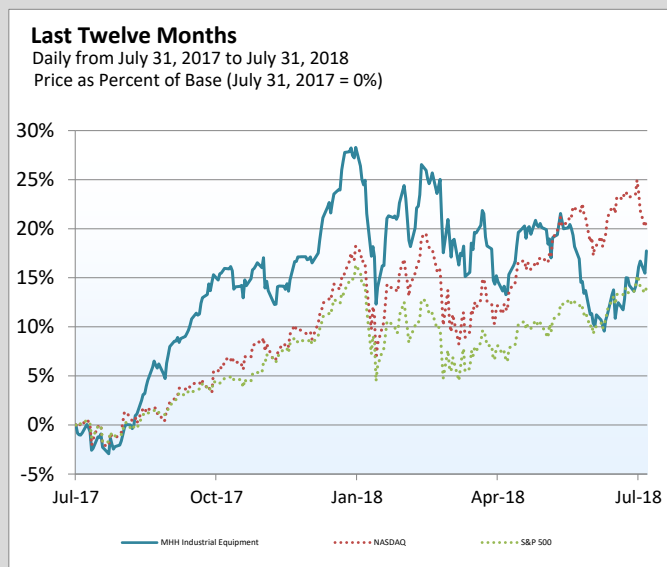
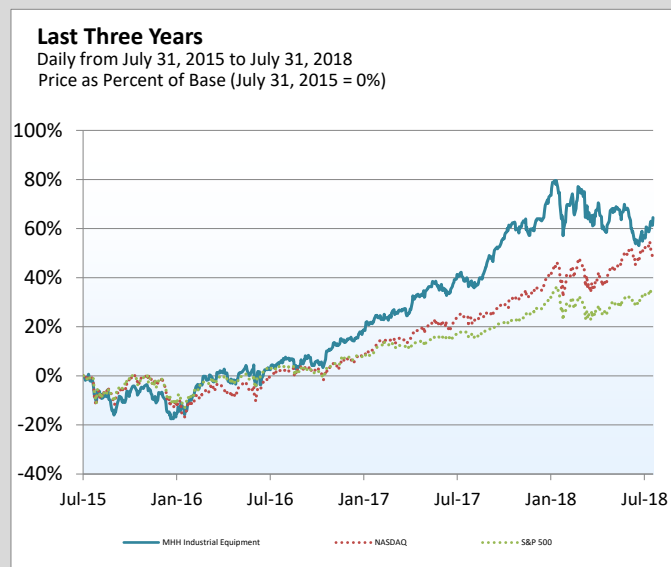
(2) Enterprise value is defined as equity value plus net debt, preferred stock and minority interests. Net Debt includes long term debt, short term debt, post-retirement benefits and unfunded pensions, if applicable, less cash and cash equivalents.

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

(4) Excludes non-recurring and discontinued operations.

Comparative Index Performance

The Mufson Howe Hunter Industrial Equipment Index^(a) increased by 3.6% during the three months ending July 31, 2018.



Price Performance	3-Year	LTM	3 Month
Mufson Howe Hunter Industrial Equipment Index ^(a)	64.5%	17.7%	3.6%
NASDAQ	49.6%	20.9%	8.6%
S&P 500	33.9%	14.0%	6.3%

(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 – Industrial Equipment

Target	Acquirer	Value*
		\$17.0

FARO Technologies, Inc. (NasdaqGS:FARO) acquired Opto-Tech s.r.l. for €18.5 million on July 13, 2018. The purchase price consists of €14.5 million paid upon the closing using cash on hand and a contingent component of up to €4 million, which is payable based upon the achievement of product development milestones over the two-year period following the closing. Opto-Tech Srl, through its subsidiaries, manufactures and markets optoelectronic products, such as 3D structured light scanning solutions. The company is based in Rezzato, Italy.

*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)	\$143.80	\$85,979	\$113,557	\$51,179	\$11,106	\$8.22	2.22x	10.2x	17.5x	27.7%	21.7%
Deere & Company (DE)	144.79	46,953	85,796	32,999	5,380	6.12	2.60x	15.9x	23.6x	23.3%	16.3%
Cummins Inc. (CMI)	142.81	23,249	25,074	22,463	2,712	9.36	1.12x	9.2x	15.3x	23.8%	12.1%
Navistar International Corp. (NAV)	43.07	4,254	8,509	9,138	672	1.48	0.93x	12.7x	29.2x	17.3%	7.4%
Hyundai Heavy Industries Co. Ltd (KOSE:A009540)	95.58	6,605	7,337	13,379	177	(9.55)	0.55x	NM	NM	4.6%	1.3%
Oshkosh Corp. (OSK)	75.25	5,501	5,947	7,612	738	4.61	0.78x	8.1x	16.3x	17.5%	9.7%
Terex Corp. (TEX)	44.12	3,353	4,074	4,838	341	2.01	0.84x	11.9x	21.9x	19.1%	7.0%
Mean		\$25,128	\$35,756	\$20,230	\$3,018	\$3.18	1.29x	11.3x	20.6x	19.1%	10.8%
Median		6,605	8,509	13,379	738	4.61	0.93x	11.1x	19.7x	19.1%	9.7%
Electrical Equipment											
Schneider Electric SE (ENXTPA:SU)	\$80.56	\$45,125	\$53,945	\$29,036	\$4,695	\$4.13	1.86x	11.5x	19.5x	38.6%	16.2%
Emerson Electric Co. (EMR)	72.28	45,543	48,334	16,538	3,484	2.52	2.92x	13.9x	28.6x	42.4%	21.1%
Eaton Corporation plc (ETN)	83.17	36,038	43,318	21,162	3,657	3.55	2.05x	11.8x	23.4x	32.7%	17.3%
Rockwell Automation Inc. (ROK)	187.56	23,101	22,840	6,604	1,361	5.54	3.46x	16.8x	33.9x	42.2%	20.6%
Amelec Inc. (AME)	77.80	18,017	19,605	4,609	1,208	2.42	4.25x	16.2x	32.1x	34.2%	26.2%
Hubbell Inc. (HUBB)	123.25	6,751	8,551	4,026	692	5.65	2.12x	12.4x	21.8x	31.1%	17.2%
Regal Beloit Corporation (RBC)	85.95	3,780	4,824	3,426	476	4.09	1.41x	10.1x	21.0x	26.7%	13.9%
Powell Industries, Inc. (POWL)	36.65	420	353	373	-14	(1.44)	0.95x	NM	NM	11.5%	NM
Mean		\$22,347	\$25,221	\$10,722	\$1,945	\$3.31	2.38x	13.2x	25.8x	32.4%	18.9%
Median		20,559	21,223	5,607	1,285	3.82	2.09x	12.4x	23.4x	33.4%	17.3%
Semiconductor Capital Equipment											
ASML Holding NV (ASML)	\$214.75	\$91,333	\$91,424	\$11,868	\$3,785	\$4.89	7.70x ‡	24.2x ‡	NM	42.9%	31.9%
Applied Materials, Inc. (AMAT)	48.63	49,021	48,975	16,484	5,078	2.64	2.97x	9.6x	18.4x	45.5%	30.8%
Lam Research Corp. (LRCX)	190.64	29,910	27,377	11,077	3,545	11.07	2.47x	7.7x	17.2x	46.6%	32.0%
Tokyo Electron Ltd (TSE:8035)	171.17	28,092	24,914	10,735	2,895	10.30	2.32x	8.6x	16.6x	42.1%	27.0%
KLA-Tencor Corp. (KLAC)	117.42	18,271	17,628	4,037	1,601	5.78	4.37x	11.0x	20.3x	64.1%	39.7%
Teradyne Inc. (TER)	43.25	8,274	7,455	1,997	558	1.40	3.73x	13.4x	30.9x	57.4%	27.9%
Veeco Instruments Inc. (VECO)	14.65	713	681	594	50	(0.51)	1.15x	13.7x ‡	NM	39.8%	8.4%
Mean		\$32,231	\$31,208	\$8,113	\$2,501	\$5.08	2.83x	10.1x	20.7x	48.3%	28.2%
Median		28,092	24,914	10,735	2,895	4.89	2.72x	9.6x	18.4x	45.5%	30.8%
Measurement, Control, and Testing Devices											
Danaher Corporation (DHR)	\$102.58	\$71,781	\$82,210	\$19,290	\$4,782	\$2.95	4.26x	17.2x	34.8x	56.4%	24.8%
Entegris, Inc. (ENTG)	35.15	4,978	5,371	1,446	407	1.15	3.71x	13.2x	30.5x	47.1%	28.1%
MKS Instruments, Inc. (MKS)	94.30	5,156	4,880	2,125	598	5.57	2.30x	8.2x	16.9x	47.2%	28.1%
Brooks Automation, Inc. (BRKS)	30.58	2,157	2,119	760	126	0.85	2.79x	16.8x	36.0x	40.3%	16.6%
FARO Technologies, Inc. (FARO)	65.10	1,105	961	388	32	0.53	2.48x	NM	NM	58.2%	8.2%
FormFactor, Inc. (FORM)	12.95	946	901	529	79	0.27	1.70x	11.4x	NM	39.3%	14.9%
Nanometrics Incorporated (NANO)	37.66	900	751	306	75	1.66	2.46x	10.1x	22.7x	56.6%	24.4%
Rudolph Technologies, Inc. (RTEC)	28.60	910	729	278	65	1.16	2.63x	11.2x	24.6x	54.6%	23.4%
Nova Measuring Instruments Ltd. (NVMI)	27.99	782	621	236	63	1.28	2.63x	9.8x	21.9x	58.1%	26.8%
Axcelis Technologies, Inc. (ACLS)	22.00	707	614	462	68	1.07	1.33x	9.1x	20.6x	37.3%	14.6%
Xcerra Corporation (XCRA)	14.24	782	607	473	69	0.68	1.28x	8.8x	20.9x	46.5%	14.7%
Cohu, Inc. (COHU)	25.18	727	597	373	56	1.01	1.60x	10.6x	25.0x	41.0%	15.1%
Mean		\$7,578	\$8,363	\$2,222	\$535	\$1.52	2.43x	11.5x	25.4x	48.6%	20.0%
Median		928	826	468	72	1.11	2.47x	10.6x	23.6x	47.2%	20.0%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close July 31, 2018.

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

(3) As of June 30, 2018 excluding ASML, CMI and TER (July 1, 2018); DHR (June 29, 2018); LRCX (June 24, 2018); NAV and XCRA (April 30, 2018); AMAT and DE (April 29, 2018); and A009540, BRKS, EMR, POWL and RBC (March 31, 2018).

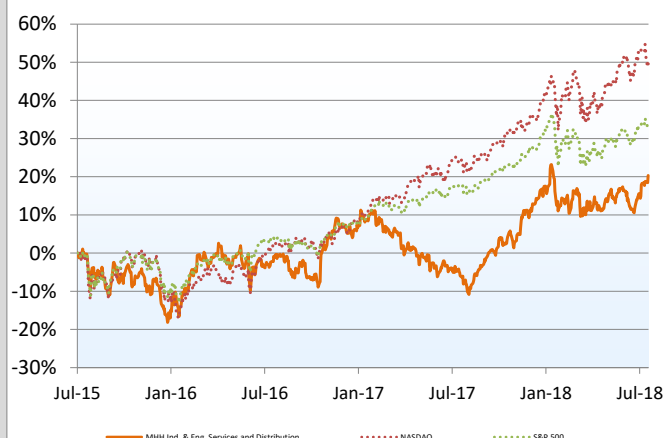
(4) Excludes non-recurring and discontinued operations.

Comparative Index Performance

The Mufson Howe Industrial & Engineering Services and Distribution Index^(a) increased by 7.7% during the three months ending July 31, 2018.

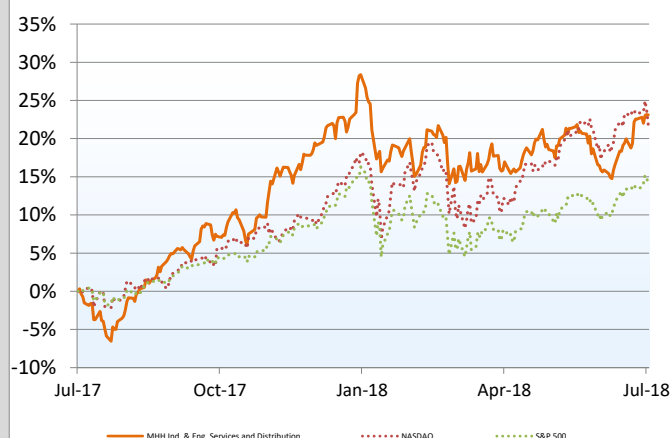
Last Three Years

Daily from July 31, 2015 to July 31, 2018
Price as Percent of Base (July 31, 2015 = 0%)



Last Twelve Months

Daily from July 31, 2017 to July 31, 2018
Price as Percent of Base (July 31, 2017 = 0%)



Price Performance

	3-Year	LTM	3 Month
Mufson Howe Hunter Industrial & Engineering Services and Distribution Index ^(a)	20.3%	24.7%	7.7%
NASDAQ	49.6%	20.9%	8.6%
S&P 500	33.9%	14.0%	6.3%

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

Please see Page 19 for sector news

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

Target	Acquirer	Value*
		NA

Veolia Environnement S.A. (ENXTPA:VIE) signed an agreement of intent to acquire an unknown stake in ROSVODOKANAL Group on July 18, 2018. ROSVODOKANAL provides water-supply and wastewater-disposal utility services in the Russian Federation and Ukraine. The company was founded in 1949 and is based in Moscow, Russia. ROSVODOKANAL Group operates as a subsidiary of Ventrelt Holding Limited.

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

Industrial & Engineering Services and Distribution

Selected Valuation Metrics

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

Company	Market & Capitalization			LTM Performance ⁽³⁾			Valuation		Margins		
	Price ⁽¹⁾	Equity Value	Enterprise Value ⁽²⁾	Revenue	EBITDA ⁽⁴⁾	EPS	Enterprise Value/Revenue	EBITDA	Price/EPS	Gross Profit	EBITDA
Industrial and Engineering Services											
Jacobs Engineering Group Inc. (JEC)	\$67.63	\$9,589	\$11,360	\$13,496	\$837	\$2.77	0.84x	13.6x	24.4x	18.6%	6.2%
AECOM (ACM)	33.56	5,381	8,686	19,120	743	1.00	0.45x	11.7x	33.6x	3.3%	3.9%
John Wood Group PLC (LSE:WG)	8.52	5,697	7,331	5,394	299	0.22	1.36x	24.5x	38.0x	12.6%	5.5%
Fluor Corporation (FLR)	51.25	7,205	7,146	19,677	775	1.83	0.36x	9.2x	27.9x	3.6%	3.9%
Tetra Tech, Inc. (TTEK)	60.80	3,381	3,657	2,182	248	2.12	1.68x	14.7x	28.7x	18.2%	11.4%
KBR, Inc. (KBR)	19.98	2,811	3,393	4,276	261	0.91	0.79x	13.0x	22.0x	8.5%	6.1%
Balfour Beatty plc (LSE:BBY)	3.85	2,618	2,788	9,348	103	0.09	0.30x	27.1x	NM	5.1%	1.1%
Primoris Services Corporation (PRIM)	27.01	1,392	1,513	2,323	165	1.04	0.65x	9.1x	25.9x	11.5%	7.1%
White Group Public Company Limited (WG)	4.69	84	50	36	5	0.17	1.41x	9.4x	27.1x	24.5%	15.1%
Mean		\$4,240	\$5,103	\$8,428	\$382	\$1.13	0.87x	14.7x	28.4x	11.8%	6.7%
Median		3,381	3,657	5,394	261	1.00	0.79x	13.0x	27.5x	11.5%	6.1%
Industrial Distribution											
W.W. Grainger, Inc. (GWW)	\$346.56	\$19,454	\$21,592	\$10,895	\$1,552	\$12.17	1.98x	13.9x	28.5x	39.0%	14.2%
Fastenal Company (FAST)	56.93	16,336	16,625	4,675	1,067	2.01	3.56x	15.6x	28.3x	48.8%	22.8%
HD Supply Holdings, Inc. (HDS)	43.98	8,080	10,115	5,294	715	1.64	1.91x	14.1x	26.9x	39.7%	13.5%
MSC Industrial Direct Co., Inc. (MSM)	84.63	4,786	5,281	3,120	497	4.64	1.69x	10.6x	18.2x	43.8%	15.9%
WESCO International, Inc. (WCC)	61.00	2,872	4,105	8,095	390	3.50	0.51x	10.5x	17.4x	19.1%	4.8%
MRC Global Inc. (MRC)	22.65	2,031	2,980	3,954	175	0.42	0.75x	17.0x	NM	15.6%	4.4%
Lawson Products, Inc. (LAWS)	27.05	241	257	331	15	0.64	0.78x	16.8x	NM	56.9%	4.6%
Transcat, Inc. (TRNS)	22.85	165	186	156	15	0.71	1.19x	12.0x	32.4x	24.3%	9.9%
Mean		\$6,746	\$7,643	\$4,565	\$553	\$3.22	1.55x	13.8x	25.3x	35.9%	11.3%
Median		3,829	4,693	4,315	443	1.82	1.44x	14.0x	27.6x	39.4%	11.7%
Industrial Recycling Services											
Veolia Environnement S.A. (ENXTPA:VIE)	\$22.86	\$12,589	\$22,886	\$29,755	\$3,396	\$0.96	0.77x	6.7x	23.9x	16.8%	11.4%
Clean Harbors, Inc. (CLH)	56.93	3,199	4,604	3,102	449	0.79	1.48x	10.3x	NM	29.8%	14.5%
Aurubis AG (DE:NDA)	81.94	3,684	3,811	13,958	675	7.01	0.27x	5.6x	11.7x	10.9%	4.8%
Commercial Metals Company (CMC)	22.34	2,614	3,173	5,145	277	0.61	0.62x	11.4x	36.8x	11.3%	5.4%
Dow Chemicals Co., Ltd. (TSE:5714)	32.08	1,899	2,809	4,282	458	3.52	0.66x	6.1x	9.1x	14.7%	10.7%
Sims Metal Management Limited (ASX:SGM)	12.75	2,584	2,283	4,438	212	0.51	0.51x	10.8x	25.0x	13.1%	4.8%
Cardno Limited (ASX:CDD)	0.94	439	436	898	23	0.01	0.49x	19.1x	NM	7.3%	2.5%
Mean		\$3,858	\$5,714	\$8,797	\$784	\$1.92	0.69x	10.0x	21.3x	14.8%	7.7%
Median		2,614	3,173	4,438	449	0.79	0.62x	10.3x	23.9x	13.1%	5.4%

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

‡ = excluded from Mean and Median calculations

Source: CapitalIQ

(1) As of close July 31, 2018.

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

(3) As of June 30, 2018 excluding TTEK (July 1, 2018); JEC (June 29, 2018); MSM (June 2, 2018); CMC (May 31, 2018); HDS (April 29, 2018); 5714, ACM, NDA, PRIM and WG (March 31, 2018); and BBY, CDD, SGM and WG (December 31, 2017).

(4) Excludes non-recurring and discontinued operations.

Selected News – Aerospace & Defense

Airbus SE (ENXTPA:AIR) reported second quarter net income of \$248.5 million for fiscal year 2018 as compared to \$778.1 million for the prior year period. Earnings per share were \$0.32 versus \$1.00 for the prior year period. Revenues for the quarter increased to \$17,327.0 million from \$15,668.0 million for the same period in fiscal year 2017.

General Dynamics Corporation (NYSE:GD) reported second quarter net income of \$786.0 million for fiscal year 2018 as compared to \$749.0 million for the prior year period. Earnings per share were \$2.62 versus \$2.45 for the prior year period. Revenues for the quarter increased to \$9,186.0 million from \$7,675.0 million for the same period in fiscal year 2017.

Honeywell International Inc. (NYSE:HON) reported second quarter net income of \$1,267.0 million for fiscal year 2018 as compared to \$1,392.0 million for the prior year period. Earnings per share were \$1.68 versus \$1.80 for the prior year period. Revenues for the quarter increased to \$10,919.0 million from \$10,078.0 million for the same period in fiscal year 2017.

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

L3 Technologies, Inc. (NYSE:LLL) reported second quarter net income of \$375.0 million for fiscal year 2018 as compared to \$202.0 million for the prior year period. Earnings per share were \$4.72 versus \$2.54 for the prior year period. Revenues for the quarter increased to \$2,583.0 million from \$2,385.0 million for the same period in fiscal year 2017.

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

Lockheed Martin Corporation (NYSE:LMT) reported second quarter net income of \$1,163.0 million for fiscal year 2018 as compared to \$955.0 million for the prior year period. Earnings per share were \$4.05 versus \$3.28 for the prior year period. Revenues for the quarter increased to \$13,398.0 million from \$12,563.0 million for the same period in fiscal year 2017.

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

Northrop Grumman Corporation (NYSE:NOC) reported second quarter net income of \$689.0 million for fiscal year 2018 as compared to \$555.0 million for the prior year period. Earnings per share were \$3.93 versus \$3.16 for the prior year period. Revenues for the quarter increased to \$7,119.0 million from \$6,473.0 million for the same period in fiscal year 2017.

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

Raytheon Company (NYSE:RTN) reported second quarter net income of \$800.0 million for fiscal year 2018 as compared to \$553.0 million for the prior year period. Earnings per share were \$2.78 versus \$1.89 for the prior year period. Revenues for the quarter increased to \$6,625.0 million from \$6,281.0 million for the same period in fiscal year 2017.

Selected Highlights

Rockwell Collins, Inc. (NYSE:COL) reported third quarter net income of \$275.0 million for fiscal year 2018 as compared to \$179.0 million for the prior year period. Earnings per share were \$1.66 versus \$1.12 for the prior year period. Revenues for the quarter increased to \$2,208.0 million from \$2,094.0 million for the same period in fiscal year 2017.

Textron Inc. (NYSE:TXT) reported second quarter net income of \$224.0 million for fiscal year 2018 as compared to \$153.0 million for the prior year period. Earnings per share were \$0.87 versus \$0.57 for the prior year period. Revenues for the quarter increased to \$3,726.0 million from \$3,604.0 million for the same period in fiscal year 2017.

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

The Boeing Company (NYSE:BA) reported second quarter net income of \$2,196.0 million for fiscal year 2018 as compared to \$1,749.0 million for the prior year period. Earnings per share were \$3.73 versus \$2.87 for the prior year period. Revenues for the quarter increased to \$24,258.0 million from \$23,051.0 million for the same period in fiscal year 2017.

United Technologies Corporation (NYSE:UTX) reported second quarter net income of \$2,048.0 million for fiscal year 2018 as compared to \$1,439.0 million for the prior year period. Earnings per share were \$2.56 versus \$1.80 for the prior year period. Revenues for the quarter increased to \$16,705.0 million from \$15,280.0 million for the same period in fiscal year 2017.

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

Selected News – Components & Materials

3M Company (NYSE:MMM) reported second quarter net income of \$1,857.0 million for fiscal year 2018 as compared to \$1,583.0 million for the prior year period. Earnings per share were \$3.07 versus \$2.58 for the prior year period. Revenues for the quarter increase to \$8,390.0 million from \$7,810.0 million for the same period in fiscal year 2017.

Akzo Nobel N.V. (ENXTAM:AKZA) reported second quarter net income of \$316.2 million for fiscal year 2018 as compared to \$343.4 million for the prior year period. Earnings per share were \$1.24 versus \$1.37 for the prior year period. Revenues for the quarter decrease to \$2,853.8 million from \$2,889.9 million for the same period in fiscal year 2017.

Alps Electric Co., Ltd. (TSE:6770) reported first quarter net income of \$34.7 million for fiscal year 2019 as compared to \$56.3 million for the prior year period. Earnings per share were \$0.18 versus \$0.29 for the prior year period. Revenues for the quarter increase to \$1,824.4 million from \$1,687.3 million for the same period in fiscal year 2018.

Amphenol Corporation (NYSE:APH) reported second quarter net income of \$284.8 million for fiscal year 2018 as compared to \$251.5 million for the prior year period. Earnings per share were \$0.91 versus \$0.80 for the prior year period. Revenues for the quarter increase to \$1,981.4 million from \$1,666.5 million for the same period in fiscal year 2017.

Autoliv, Inc. (NYSE:ALV) reported second quarter net income of \$37.2 million for fiscal year 2018 as compared to \$129.8 million for the prior year period. Earnings per share were \$0.42 versus \$1.47 for the prior year period. Revenues for the quarter increase to \$2,211.5 million from \$1,983.9 million for the same period in fiscal year 2017.

AVX Corporation (NYSE:AVX) reported first quarter net income of \$56.0 million for fiscal year 2019 as compared to \$31.5 million for the prior year period. Earnings per share were \$0.33 versus \$0.19 for the prior year period. Revenues for the quarter increase to \$454.1 million from \$331.4 million for the same period in fiscal year 2018.

BASF SE (DE:BAS) reported second quarter net income of \$1,726.8 million for fiscal year 2018 as compared to \$1,706.8 million for the prior year period. Earnings per share were \$1.88 versus \$1.86 for the prior year period. Revenues for the quarter increase to \$19,580.0 million from \$18,555.6 million for the same period in fiscal year 2017.

Celanese Corporation (NYSE:CE) reported second quarter net income of \$344.0 million for fiscal year 2018 as compared to \$231.0 million for the prior year period. Earnings per share were \$2.52 versus \$1.66 for the prior year period. Revenues for the quarter increase to \$1,844.0 million from \$1,510.0 million for the same period in fiscal year 2017.

Corning Incorporated (NYSE:GLW) reported second quarter net income of \$738.0 million for fiscal year 2018 as compared to \$439.0 million for the prior year period. Earnings per share were \$0.78 versus \$0.42 for the prior year period. Revenues for the quarter increase to \$2,747.0 million from \$2,497.0 million for the same period in fiscal year 2017.

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

Ferro Corporation (NYSE:FOE) reported second quarter net income of \$29.7 million for fiscal year 2018 as compared to \$21.0 million for the prior year period. Earnings per share were \$0.35 versus \$0.25 for the prior year period. Revenues for the quarter increase to \$416.2 million from \$348.6 million for the same period in fiscal year 2017.

Selected Highlights

Lear Corporation (NYSE:LEA) reported second quarter net income of \$331.4 million for fiscal year 2018 as compared to \$311.9 million for the prior year period. Earnings per share were \$4.83 versus \$4.49 for the prior year period. Revenues for the quarter increase to \$5,580.8 million from \$5,123.2 million for the same period in fiscal year 2017.

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

OMRON Corporation (TSE:6645) reported first quarter net income of \$132.4 million for fiscal year 2019 as compared to \$138.1 million for the prior year period. Earnings per share were \$0.63 versus \$0.65 for the prior year period. Revenues for the quarter increase to \$1,892.7 million from \$1,810.7 million for the same period in fiscal year 2018.

PPG Industries, Inc. (NYSE:PPG) reported second quarter net income of \$371.0 million for fiscal year 2018 as compared to \$496.0 million for the prior year period. Earnings per share were \$1.51 versus \$1.92 for the prior year period. Revenues for the quarter increase to \$4,131.0 million from \$3,804.0 million for the same period in fiscal year 2017.

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

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

PPG Industries, Inc. (NYSE:PPG) announced the appointment of **Anne M. Foulkes**, currently vice president, associate general counsel and secretary, as senior vice president, general counsel and secretary, effective Aug. 1.

Stanley Electric Co., Ltd. (TSE:6923) reported first quarter net income of \$90.1 million for fiscal year 2019 as compared to \$60.4 million for the prior year period. Earnings per share were \$0.55 versus \$0.36 for the prior year period. Revenues for the quarter increase to \$990.6 million from \$889.5 million for the same period in fiscal year 2018.

TE Connectivity Ltd. (NYSE:TEL) reported third quarter net income of \$454.0 million for fiscal year 2018 as compared to \$435.0 million for the prior year period. Earnings per share were \$1.29 versus \$1.22 for the prior year period. Revenues for the quarter increase to \$3,764.0 million from \$3,367.0 million for the same period in fiscal year 2017.

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

Selected News – Industrial Equipment

ASML Holding N.V. (ENXTAM:ASML) reported second quarter net income of \$726.4 million for fiscal year 2018 as compared to \$414.5 million for the prior year period. Earnings per share were \$1.71 versus \$0.96 for the prior year period. Revenues for the quarter increased to \$3,197.3 million from \$2,239.2 million for the same period in fiscal year 2017.

Caterpillar Inc. (NYSE:CAT) reported second quarter net income of \$1,707.0 million for fiscal year 2018 as compared to \$802.0 million for the prior year period. Earnings per share were \$2.82 versus \$1.35 for the prior year period. Revenues for the quarter increased to \$14,011.0 million from \$11,331.0 million for the same period in fiscal year 2017.

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

Danaher Corporation (NYSE:DHR) reported second quarter net income of \$673.8 million for fiscal year 2018 as compared to \$557.3 million for the prior year period. Earnings per share were \$0.95 versus \$0.79 for the prior year period. Revenues for the quarter increased to \$4,981.0 million from \$4,510.1 million for the same period in fiscal year 2017.

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

Entegris, Inc. (NasdaqGS:ENTG) reported second quarter net income of \$54.3 million for fiscal year 2018 as compared to \$40.0 million for the prior year period. Earnings per share were \$0.38 versus \$0.28 for the prior year period. Revenues for the quarter increased to \$383.1 million from \$329.0 million for the same period in fiscal year 2017.

FARO Technologies, Inc. (NasdaqGS:FARO) reported second quarter net income of \$1.2 million for fiscal year 2018 as compared to (\$3.6) million for the prior year period. Earnings per share were \$0.07 versus (\$0.22) for the prior year period. Revenues for the quarter increased to \$98.2 million from \$82.7 million for the same period in fiscal year 2017.

Hubbell Incorporated (NYSE:HUBB) reported second quarter net income of \$100.3 million for fiscal year 2018 as compared to \$79.1 million for the prior year period. Earnings per share were \$1.82 versus \$1.43 for the prior year period. Revenues for the quarter increased to \$1,166.7 million from \$948.3 million for the same period in fiscal year 2017.

Hyundai Heavy Industries Co., Ltd. (KOSE:A009540) reported first quarter net income of \$11.7 million for fiscal year 2018 as compared to \$336.2 million for the prior year period. Earnings per share were \$0.14 versus \$5.55 for the prior year period. Revenues for the quarter decreased to \$2,866.2 million from \$3,854.6 million for the same period in fiscal year 2017.

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

Lam Research Corporation (NasdaqGS:LRCX) reported net income of \$2,380.7 million for fiscal year 2018 as compared to \$1,697.8 million for the prior year. Earnings per share were \$13.17 versus \$9.24 for the prior year. Revenues for the year increased to \$11,077.0 million from \$8,013.6 million for fiscal year 2017.

MKS Instruments, Inc. (NasdaqGS:MKSI) reported second quarter net income of \$122.9 million for fiscal year 2018 as compared to \$120.4 million for the prior year period. Earnings per share were \$2.22 versus \$2.19 for the prior year period. Revenues for the quarter increased to \$573.1 million from \$480.8 million for the same period in fiscal year 2017.

Rockwell Automation Inc. (NYSE:ROK) reported third quarter net income of \$198.6 million for fiscal year 2018 as compared to \$216.9 million for the prior year period. Earnings per share were \$1.58 versus \$1.67 for the prior year period. Revenues for the quarter increased to \$1,698.7 million from \$1,599.2 million for the same period in fiscal year 2017.

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

Schneider Electric S.E. (ENXTPA:SU) reported second quarter net income of \$595.0 million for fiscal year 2018 as compared to \$546.5 million for the prior year period. Earnings per share were \$1.06 versus \$0.98 for the prior year period. Revenues for the quarter increased to \$7,185.3 million from \$6,944.1 million for the same period in fiscal year 2017.

Teradyne, Inc. (NYSE:TER) reported second quarter net income of \$101.0 million for fiscal year 2018 as compared to \$175.0 million for the prior year period. Earnings per share were \$0.52 versus \$0.87 for the prior year period. Revenues for the quarter decreased to \$526.9 million from \$696.9 million for the same period in fiscal year 2017.

Tokyo Electron Limited (TSE:8035) reported first quarter net income of \$502.9 million for fiscal year 2019 as compared to \$367.2 million for the prior year period. Earnings per share were \$3.05 versus \$2.23 for the prior year period. Revenues for the quarter increased to \$2,666.6 million from \$2,104.4 million for the same period in fiscal year 2018.

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

Selected News – Industrial & Engineering Services and Distribution

Aurubis AG (XTRA:NDA) announced that it's supervisory Board and at the request of the Executive Board appointed **Andrea Bauer** to its Supervisory Board with effect from June 22, 2018.

Fastenal Company (NasdaqGS:FAST) reported second quarter net income of \$211.2 million for fiscal year 2018 as compared to \$148.9 million for the prior year period. Earnings per share were \$0.74 versus \$0.52 for the prior year period. Revenues for the quarter increased to \$1,267.9 million from \$1,121.5 million for the same period in fiscal year 2017.

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

KBR, Inc. (NYSE:KBR) reported second quarter net income of \$42.0 million for fiscal year 2018 as compared to \$77.0 million for the prior year period. Earnings per share were \$0.30 versus \$0.54 for the prior year period. Revenues for the quarter increased to \$1,267.0 million from \$1,094.0 million for the same period in fiscal year 2017.

Lawson Products, Inc. (NasdaqGS:LAWS) reported second quarter net income of \$3.2 million for fiscal year 2018 as compared to \$7.3 million for the prior year period. Earnings per share were \$0.35 versus \$0.80 for the prior year period. Revenues for the quarter increased to \$90.4 million from \$75.0 million for the same period in fiscal year 2017.

MSC Industrial Direct Co., Inc. (NYSE:MSM) reported third quarter net income of \$79.1 million for fiscal year 2018 as compared to \$62.8 million for the prior year period. Earnings per share were \$1.39 versus \$1.09 for the prior year period. Revenues for the quarter increased to \$828.3 million from \$743.9 million for the same period in fiscal year 2017.

Transcat, Inc. (NasdaqGM:TRNS) reported first quarter net income of \$1.4 million for fiscal year 2019 as compared to \$0.9 million for the prior year period. Earnings per share were \$0.19 versus \$0.12 for the prior year period. Revenues for the quarter increased to \$36.7 million from \$36.3 million for the same period in fiscal year 2018.

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

W.W. Grainger, Inc. (NYSE:GWW) reported second quarter net income of \$237.0 million for fiscal year 2018 as compared to \$97.9 million for the prior year period. Earnings per share were \$4.16 versus \$1.67 for the prior year period. Revenues for the quarter increased to \$2,860.2 million from \$2,615.3 million for the same period in fiscal year 2017.

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

MHH Manufacturing Universe Directory

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

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

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

Mergers & Acquisitions

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

Raise Capital

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

Financial Advisory Services

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

The Mufson Howe Hunter Manufacturing Update Indices

The companies that comprise each Index periodically change as a result of 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. Historical performance is not a guarantee or prediction of future results. The information and statistical data contained herein have been obtained from sources that Mufson Howe Hunter believes are reliable, but Mufson Howe Hunter makes no representation or warranty as to the accuracy or completeness of any such information and data and expressly disclaims any and all liability relating to or resulting from your use of these materials. The information and data contained herein are current only as of the date(s) indicated and Mufson Howe Hunter has no intention, obligation or duty to update these materials after such date(s). These materials do not constitute an offer to sell or the solicitation of an offer to buy any securities.

Copyright © July 2018 Mufson Howe Hunter & Company LLC. All rights reserved. The Manufacturing Updated is produced monthly by Mufson Howe Hunter. Mufson Howe Hunter provides a full range of investment banking services to Manufacturing & Environmental companies. For more information, visit www.mhhco.com.

Broker dealer services provided by our wholly-owned subsidiary, Mufson Howe Hunter & Partners LLC, a member of FINRA and SIPC