



INDUSTRIAL GROWTH

Quarterly Update

Fourth Quarter 2018



CAPITAL PLACEMENTS • MERGERS, ACQUISITIONS & DIVESTITURES • RESTRUCTURINGS

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Q4 2018 Highlights

February 2019

To The Friends and Clients of SOLIC Capital Advisors("SCA"):

We are pleased to share with you SCA's *SOLICConnect* Industrial Growth report, which contains, news, statistics, and key trends for industrial sectors that we actively cover for our corporate clients, institutional capital sources, legal and accounting professionals, and other interested groups. These sectors are: (i) Analytical Instrumentation and Testing Equipment, (ii) Electronics and Components, (iii) Precision Machine Products, Tooling and Stampings, (iv) Metals, (v) Resource Recovery and Waste Management, (vi) Chemicals and (vii) Plastic and Packaging companies.

During the fourth quarter, equity capital market returns for SCA's Industrial Sector Universe fell 16.0%, with an average decrease of 18.1% across the seven sectors. The Q4 index performance lagged slightly behind the average S&P (-14.3%) and the NASDAQ Composite (-17.4%) as all market indices felt the brunt of negative market sentiment throughout the quarter. The SCA Industrial Index performance was driven by significant losses in the Metals (-31.9%), Precision Machine Products (-22.8%), and Electronics & Components (-20.6%) segments.

Volatility in the equity markets wiped out most gains achieved throughout 2018. December was a bearish month as a result of the government shutdown and continued concerns with respect to trade tariff exchanges and uncertainty with respect to the economic outlook in many international markets. M&A activity for the quarter contracted as compared to Q3 2018 from 242 to 228 transactions, valued at just \$13.9B, down considerably from Q3's \$28.3B watermark. This step down in acquisition volume is primarily due to increases in the cost of capital associated with higher interest rates and growing concern for economic instability on the horizon. Notable transactions for this quarter include ITE Rail Fund LP's agreement to acquire American Railcar Industries, Inc for \$1.8B, Grief Packaging LLC's acquisition of Carastar Industries, Inc. for \$1.8B, and Pan American Silver Corp's acquisition of Tahoe Resources for \$1.3B.

As a whole, the U.S. economy slowed less than expected for the fourth quarter in spite of the volatile equity markets, with current estimates of GDP growth at a 2.7% annualized rate. These estimates face potential headwinds with another potential government shutdown and an unresolved trade-war with China lurking. The economy is showing some signs of a coming slow down, with the housing market index slumping to its lowest levels in 3.5 years and consumer confidence beginning to list. However, businesses are still struggling to find workers as unemployment reaches new lows, and the federally-implemented import tariffs are increasing manufacturing costs for corporations such as 3M and Honeywell. Given that current governmental deficits are increasing, any leaning towards a downward cycle will likely lead to higher costs of capital and strains on the capital markets.

We welcome your comments and hope you find our *SOLICConnect* report informative.

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 *Recent Representative Engagements **

HEALTHCARE	<p>MESA Medical Group has been acquired by TEAMHealth Team Health Holdings (NYSE:TMH) Sell Side Advisor</p>	<p>\$156,000,000 SUMNER Regional Health Systems, Inc. Financial Advisor, Chief Executive Officer, Chief Restructuring Officer</p>	<p>\$690,600,000 Sale of Assets on behalf of MedCath MedCath Corporation (Nasdaq: MDTH) Sell Side Advisor</p>	<p>\$327,500,000 Capital Restructuring THE FOUNTAINS Fountains Senior Living Holdings, LLC Exclusive Financial Advisor</p>
FINANCIAL SERVICES	<p>\$100,000,000 Capital Placement GREEN BANK Placement Agent and Financial Advisor</p>	<p>\$750,000,000 Assets under Management SageCrest II, LLC Fiduciary Oversight</p>	<p>\$4,500,000,000 of Assets SENTINEL SENTINEL MANAGEMENT GROUP, INC. Financial Advisor to Bankruptcy Trustee Chapter 11 Reorganization</p>	<p>\$5,000,000,000 Pre-Filing Secured Indebtedness TB&W Financial Advisor and Chief Restructuring Officer</p>
REAL ESTATE AND INFRASTRUCTURE	<p>\$118,000,000 Sale of senior notes secured by property located at 610 Lexington Avenue New York 610 LEX Financial Advisor</p>	<p>\$212,320,000 Debt Restructuring SunCal Companies The Westland Project Albuquerque, New Mexico Financial Advisor</p>	<p>\$87,000,000 Debt Restructuring for the Illinois Tollway Oasis Project WILTON PARTNERS REAL ESTATE DEVELOPMENT Financial Advisor</p>	<p>\$500,000,000 Senior & Mezzanine Debt Restructuring related to 19 Master Planned Communities DE Shaw & Co Financial Advisor</p>
ENERGY	<p>Pre Restructuring Invested Capital of Over \$800,000,000 BOSQUE POWER COMPANY Financial and Restructuring Advisor in Connection with Chapter 11 Bankruptcy</p>	<p>\$240,600,000 Restructured Debt VAREL INTERNATIONAL Restructuring Advisor</p>	<p>Alexin, LLC has consummated an Institutional Private Placement of Series A Senior Preferred Units \$13,100,000 with Term Loan and Revolving Credit Facilities \$30,000,000 Financial Advisor</p>	<p>PTC Pasadena Tank Corporation has merged with HMT, Inc. a company sponsored by Berkshire Partners LLC Financial Advisor to Pasadena Tank Corporation</p>
INDUSTRIAL AND OUTSOURCING SERVICES	<p>HANCOCK PARK ASSOCIATES has made a strategic investment in Project Time & Cost Project Time & Cost Inc. Financial Advisor to Project Time & Cost Inc.</p>	<p>Tensar Tensar Corporation has completed a capital restructuring of \$280,000,000 of senior debt and \$100,000,000 of subordinated debt Financial Advisor</p>	<p>Operational Restructuring Bocchi Laboratories, Inc. acquired by Investment Group led by John Paul de Joria medica acquired by Joshua Partners, LLC Restructuring Advisor and Exclusive Sell Side Financial Advisor</p>	<p>\$289,800,000 Capital Restructuring in connection with a consensual Plan of Reorganization jiffylube Heartland Automotive Holdings, Inc. Heartland Automotive Services America's Largest Jiffy Lube Franchisee Financial Advisor to Unsecured Creditors Committee</p>

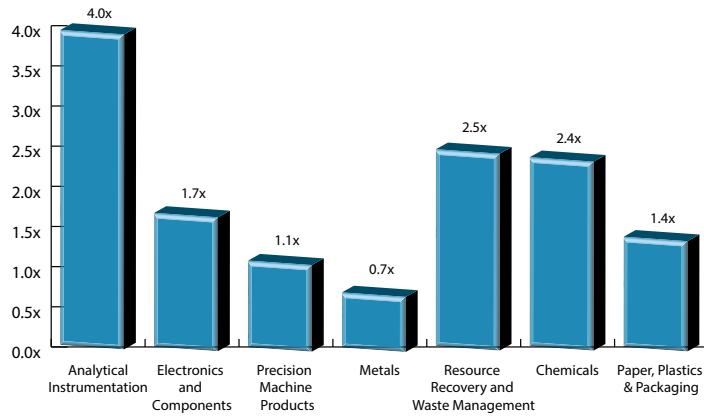
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* Includes transactions led by the team of SOLIC professionals at predecessor firms

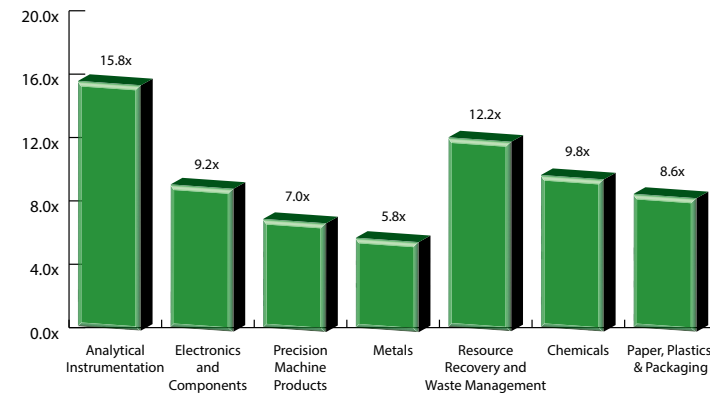
Market Overview



Enterprise Value To Revenue

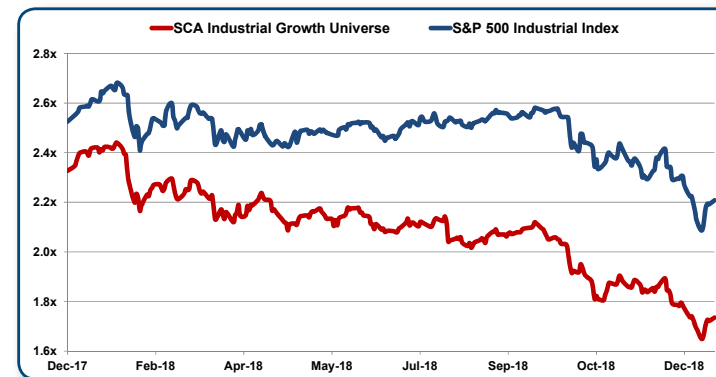


Enterprise Value To EBITDA

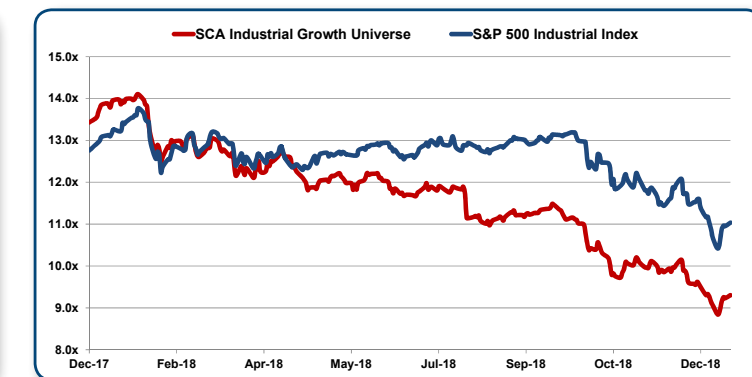


Revenue and EBITDA valuation multiples contracted slightly, while deal value saw a large drop despite an increase in volume as compared to Q3 2018.

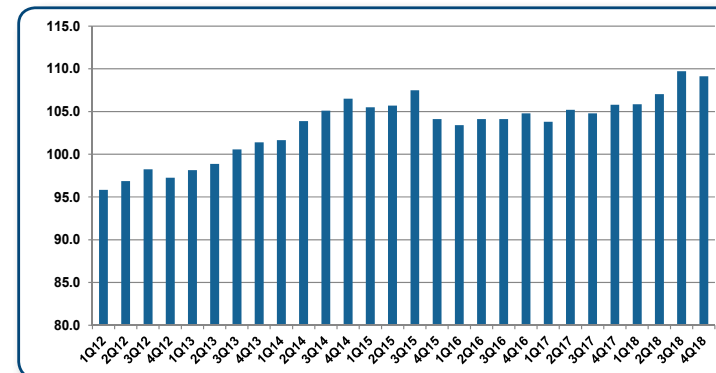
SCA Industrial Growth Universe vs. S&P 500 Total Enterprise Value / Revenue



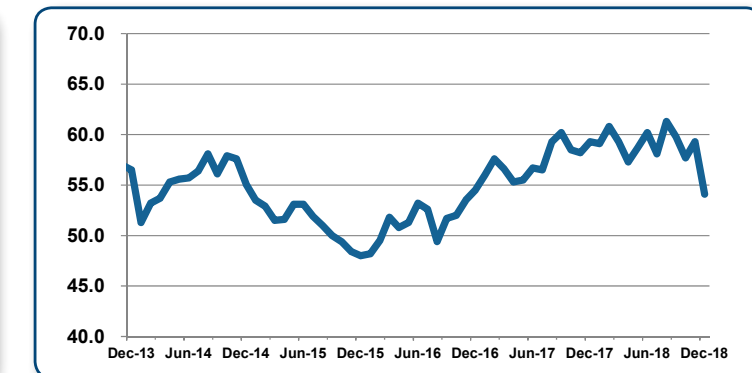
SCA Industrial Growth Universe vs. S&P 500 Total Enterprise Value / EBITDA



Federal Reserve Industrial Production

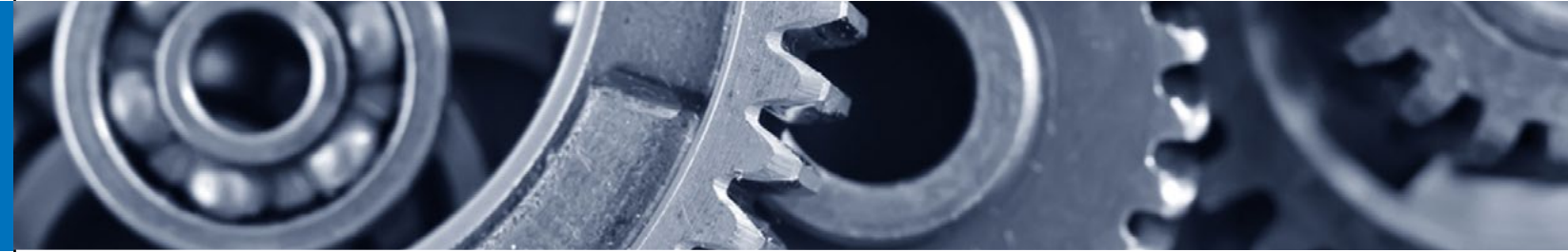


Institute for Supply Management Purchasing Managers' Index

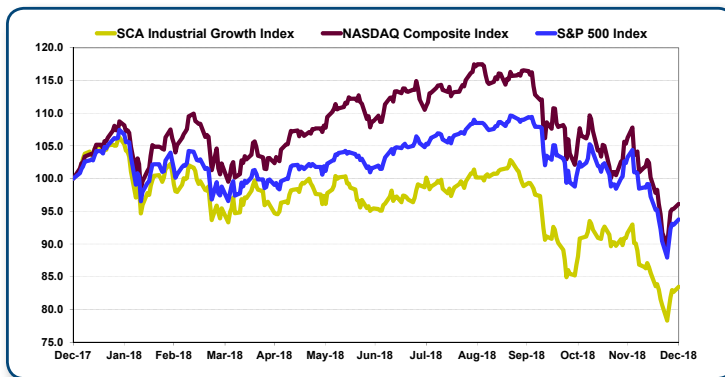


* Please see pages 16-21 for SCA Industrial Growth Universe and additional information in the "Notes" section at the end of this report.

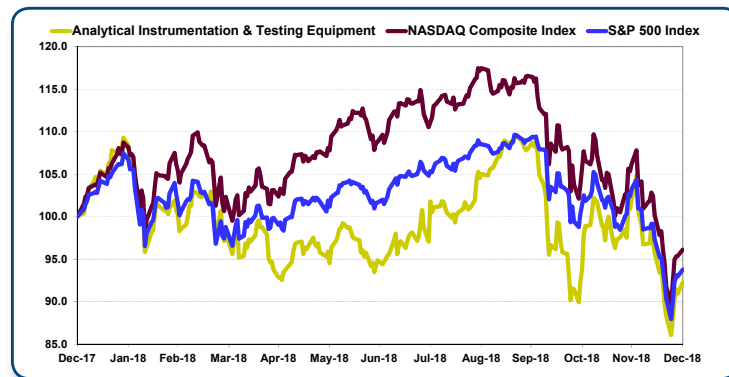
Sector Stock Performance (one year)



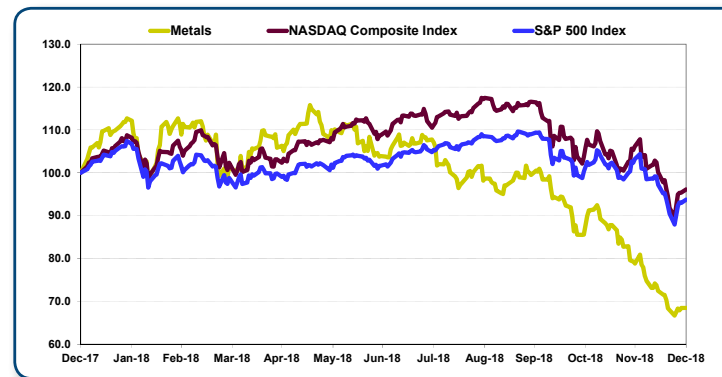
SCA Industrial Growth Index



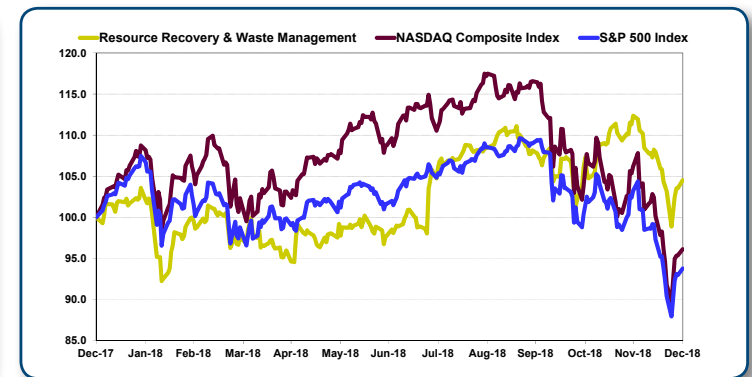
SCA Analytical Instrumentation & Testing Equipment Sector



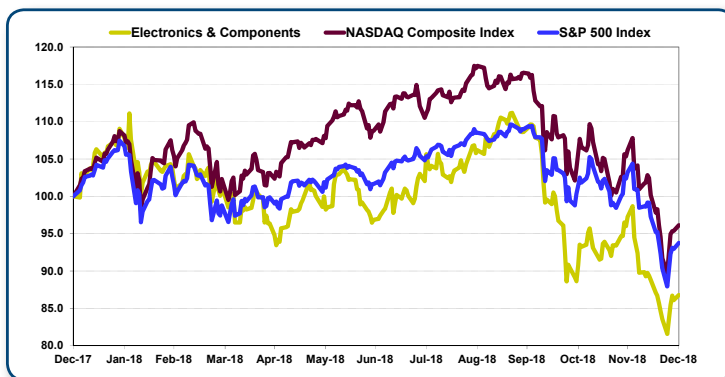
SCA Metals Sector



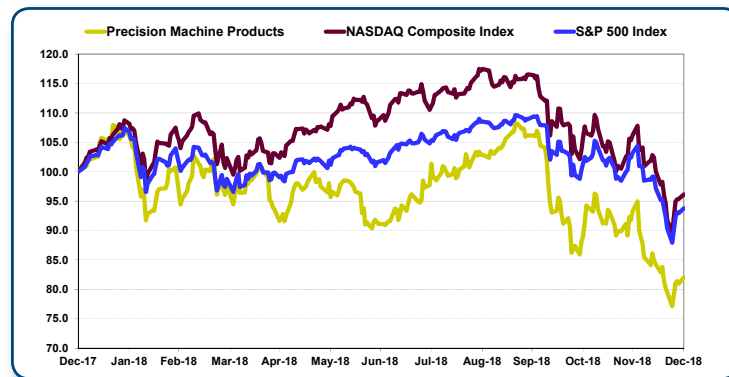
SCA Resource Recovery & Waste Management Sector



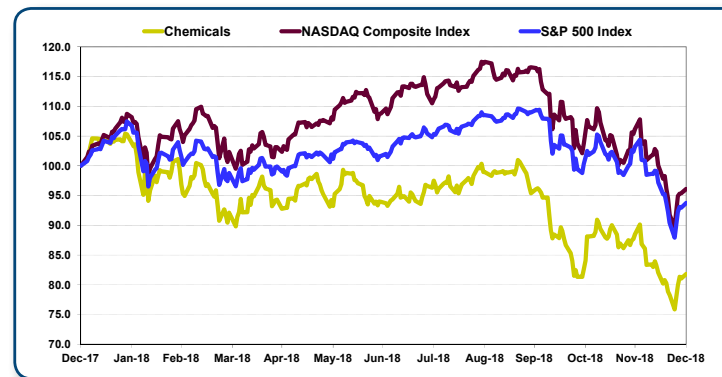
SCA Electronics and Components Sector



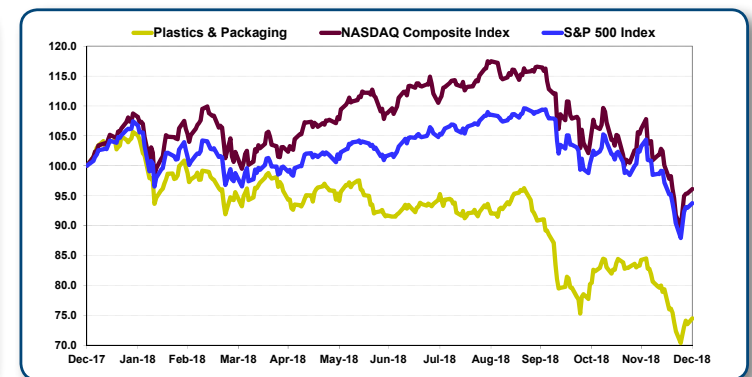
SCA Precision Machine Products Sector



SCA Chemicals Sector

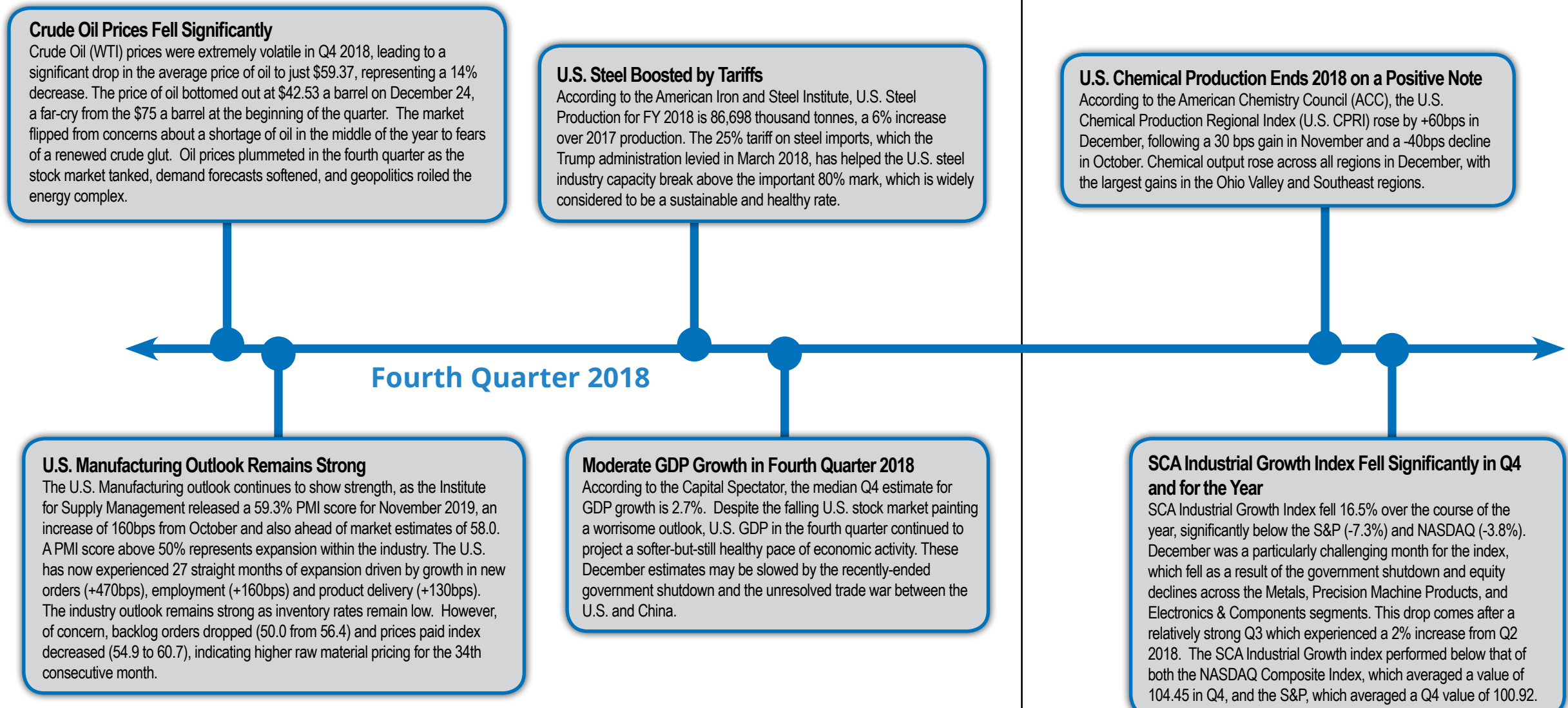


SCA Plastics & Packaging Sector



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Notable Industry Developments



Upcoming Industry Conferences

Analytical Instrumentation and Testing Equipment	
PITTCON 2019 March 17-21, 2019 Philadelphia, PA	Microscopy and Microanalysis August 4-8, 2019 Portland, OR
Electronics and Components	
Electrical Components and Technology Conference (ECTC) May 28-31, 2019 Las Vegas, NV	Coil Winding, Insulation and Electrical Manufacturing Expo (CWIEME) September 16-18, 2019 Chicago, IL
Precision Machine Products, Toolings, and Stampings	
EASTEC May 14, 2019 West Springfield, MA	Rapid + tct May 20-23, 2019 Detroit, MI
Metals	
EASTEC May 14, 2019 West Springfield, MA	International Conference & Exhibition on Injection Modeling of Metals, Ceramics and Carbides February 25-27, 2019 Orlando, FL
Resource Recovery and Waste Management	
SWANApalozza 2019 February 25-28, 2019 Boston, MA	34th International Conference on Solid Waste Technology and Management March 31 - April 3, 2019 Washington, DC
Chemicals	
GlobalChem Conference & Exhibition March 6-8, 2019 Washington, DC	WPC 2019: 34th Annual World Petrochemical Conference March 19-22, 2019 San Antonio, TX
Plastics and Packaging	
Plastec East June 11-13, 2019 New York, NY	Polymer Foam 2019 June 18-19, 2019 Pittsburgh, PA



Selected M&A Transactions



Date	Target	Buyer	Enterprise Value (\$ mm)	Enterprise Value / Revenue	Enterprise Value / EBITDA
12/20/18	Caraustar Industries, Inc.	Greif Packaging LLC (Parent: Paperboard Parent, Inc.)	\$1,800.0	1.3x	10.3x
Description:	Greif Packaging LLC entered into an agreement to acquire Caraustar Industries, Inc., a producer of recycled paperboard and converted paperboard products. Caraustar Industries, Inc. was founded in 1980 and is based in Austell, GA.				
12/13/18	Ranpak Corp.	One Madison Corporation (Parent: Ranpak Corp.)	\$950.0	n/a	n/a
Description:	One Madison Corporation entered into an agreement to acquire Ranpak Corp., a producer of paper-based box packaging solutions for industry and packaging/e-commerce packaging needs. Ranpak Corp. was founded in 1972 and is based in Concord Township, OH.				
12/13/18	MP Pumps, Inc.	Gardner Denver Holdings, Inc.	\$58.0	n/a	n/a
Description:	Gardner Denver Holdings, Inc. has acquired MP Pumps, Inc., a producer of centrifugal pumps for agricultural, industrial/commercial, marine, transportation, and petroleum markets. MP Pumps was founded in 1942 and is based in Fraser, MI.				
12/12/18	Carmanah Technologies Corporation - certain assets	SPX Corporation (Parent: Carmanah Technologies Corporation)	\$77.0	2.9x	n/a
Description:	SPX Corporation entered into an agreement to acquire certain assets of Carmanah Technologies Corporation which is comprised of a marine and obstruction lighting business.				
12/10/18	Syntron Material Handling, LLC	Kadant Inc.	\$179.0	2.0x	n/a
Description:	Kadant Inc. has acquired Syntron Material Handling, LLC, a producer of material handling equipment.				
12/10/18	Petersen Aluminum Corporation	Carlisle Companies Incorporated	\$197.0	1.2x	n/a
Description:	Carlisle Companies Incorporated entered into an agreement to acquire Petersen Aluminum Corporation, an operator of a metals service center for the architectural metal industry. Petersen Aluminum Corporation was founded in 1965 and is based in Elk Grove Village, IL.				

Date	Target	Buyer	Enterprise Value (\$ mm)	Enterprise Value / Revenue	Enterprise Value / EBITDA
12/06/18	TCI, LLC	Allied Motion Technologies Inc.	\$64.1	n/a	n/a
Description:	Allied Motion Technologies Inc. has acquired TCI, LLC, a producer of peripheral products for the electronic power conversion industry worldwide. TCI, LLC was founded in 1961 and is based in Germantown, WI.				
11/30/18	ARC Technologies, Inc. (nka:ARC Technologies LLC)	Hexcel Corporation	\$160.0	n/a	n/a
Description:	Hexcel Corporation entered into an agreement to acquire ARC Technologies, Inc., a producer of microwave absorber materials for the control of unwanted electronic interference. ARC Technologies, Inc. was founded in 1988 and is based in Amesbury, MA.				
11/27/18	SSI Controls Technologies Division of SSI Technologies, Inc.	Amphenol Corporation	\$400.0	2.2x	n/a
Description:	Amphenol Corporation entered into an agreement to acquire SSI Controls Technologies Division of SSI Technologies, Inc., the sensors manufacturing division				
11/27/18	Spectro Scientific, Inc.	AMETEK, Inc.	\$190.0	3.8x	n/a
Description:	AMETEK, Inc. has acquired Spectro Scientific, Inc., a producer of instruments for machine condition monitoring based on oil and fuel analysis. Spectro Scientific, Inc. was founded in 1981 and is based in Chelmsford, MA.				
11/15/18	ADA Carbon Solutions, LLC	Advanced Emissions Solutions, Inc.	\$75.0	1.0x	5.9x
Description:	Advanced Emissions Solutions, Inc. entered into an agreement to acquire ADA Carbon Solutions, LLC, a producer of powdered activated carbon products optimized for mercury compliance in emission control applications. ADA Carbon Solutions was founded in 2008 and is based in Littleton, CO.				
11/15/18	Polyfil Corporation	Kafril Industries Ltd.	\$34.7	n/a	n/a
Description:	Kafril Industries Ltd. has acquired Polyfil Corporation, a producer of additive concentrates and compounds for polyolefin plastics. Polyfil Corporation was founded in 1984 and is based in Rockaway, NJ.				
11/14/18	Tahoe Resources Inc.	Pan American Silver Corp. (Parent: Tahoe Resources Inc.)	\$1,342.5	2.7x	13.2x
Description:	Pan American Silver Corp. entered into an agreement to acquire Tahoe Resources Inc., a developer and operator of mineral properties in the Americas. Tahoe Resources Inc. was founded in 2009 and is based in Reno, NV.				

Date	Target	Buyer	Enterprise Value (\$ mm)	Enterprise Value / Revenue	Enterprise Value / EBITDA
11/13/18	Sonneborn US Holdings Inc.	HollyFrontier Refining & Marketing LLC	\$655.0	n/a	9.9x
Description:	HollyFrontier Refining & Marketing LLC entered into an agreement to acquire Sonneborn US Holdings, Inc., a producer of specialty hydrocarbons. Sonneborn US Holdings, Inc. was founded in 2012.				
11/12/18	Flexographic Packaging Division	Montagu Private Equity LLP (Parent: Eastman Kodak Company)	\$375.0	2.5x	11.4x
Description:	Montagu Private Equity LLP entered into an agreement to acquire Flexographic Packaging Division, a producer of printing equipment.				
11/08/18	PeroxyChem LLC	Evonik Industries AG (Parent: PeroxyChem LLC)	\$625.0	n/a	n/a
Description:	Evonik Industries AG entered into an agreement to acquire PeroxyChem LLC, a producer of hydrogen peroxides, peracetic acids, persulfates, calcium peroxides, mixed acids, and remediation technologies. PeroxyChem LLC was founded in 2013 and is based in Philadelphia, PA.				
11/07/18	Elite Comfort Solutions LLC	Leggett & Platt, Incorporated	\$1,245.9	n/a	n/a
Description:	Leggett & Platt, Incorporated entered into an agreement to acquire Elite Comfort Solutions LLC, a producer of polyurethane foams for the bedding and furniture industries. Elite Comfort Solutions LLC was founded in 2016 and is based in Newnan, GA.				
11/05/18	Genesis Systems Group, LLC	IPG Photonics Corporation (Parent: Genesis Systems Group, LLC)	\$115.0	n/a	n/a
Description:	IPG Photonics Corporation entered into an agreement to acquire Genesis Systems Group, LLC, a producer of robotic arc welding systems, assembly automation systems, and robotic tooling and material handling solutions. Genesis Systems Group, LLC was founded in 1983 and is based in Davenport, IA.				
10/30/18	Electro Scientific Industries, Inc.	MKS Instruments, Inc. (Parent: Electro Scientific Industries, Inc.)	\$928.3	2.2x	7.1x
Description:	MKS Instruments, Inc. entered into an agreement to acquire Electro Scientific Industries, Inc., a supplier of laser-based microfabrication solutions for the microtechnology industry worldwide. Electro Scientific Industries, Inc. was founded in 1944 and is based in Portland, OR.				

Date	Target	Buyer	Enterprise Value (\$ mm)	Enterprise Value / Revenue	Enterprise Value / EBITDA
10/29/18	4D Technology Corporation	Nanometrics Incorporated	\$39.9	n/a	n/a
Description:	Nanometrics Incorporated entered into an agreement to acquire 4D Technology Corporation, a producer of laser interferometers, surface roughness profilers, and interferometry accessories for the measurement of optics, optical systems, and precision machined surfaces. 4D Technology Corporation is based in Tucson, AZ.				
10/29/18	Alpha Technologies Services, Inc.	EnerSys	\$750.0	1.3x	11.2x
Description:	EnerSys entered into an agreement to acquire Alpha Technologies Services, Inc., a provider of powering solutions to the broadband and renewable energy industries.				
10/22/18	American Railcar Industries, Inc.	ITE Rail Fund L.P.; ITE Management LP (Parent: American Railcar Industries, Inc.)	\$1,798.9	3.6x	13.4x
Description:	ITE Rail Fund L.P. entered into an agreement to acquire American Railcar Industries, Inc., a producer of hopper and tank railcars in North America. American Railcar Industries, Inc. was founded in 1988 and is based in St. Charles, MO.				
10/03/18	Lime Energy Co.	Willdan Energy Solutions, Inc. (Parent: Lime Energy Co.)	\$120.0	0.9x	19.3x
Description:	Willdan Energy Solutions, Inc. entered into an agreement to acquire Lime Energy Co., a provider of energy efficiency programs for utilities in the U.S. Lime Energy Co. was founded in 1997 and is based in Newark, NJ.				
10/02/18	Catawba, South Carolina Paper and Pulp Mill of Resolute Forest Products Inc.	New-Indy Containerboard LLC (Parent: Kraft Group LLC)	\$300.0	n/a	n/a
Description:	New-Indy Containerboard LLC entered into an agreement to acquire Catawba, South Carolina Paper and Pulp Mill of Resolute Forest Products Inc.				
10/01/18	Agile Magnetics, Inc.	Standex International Corporation	\$39.0	2.3x	n/a
Description:	Standex International Corporation has acquired Agile Magnetics, Inc., a producer of custom transformers, inductors, coils, chokes, and custom magnetic and other assemblies. Agile Magnetics, Inc. was founded in 1992 and is based in Concord, NH.				
10/01/18	Arconic Inc. - Texarkana, TX Rolling Mill	Ta Chen International, Inc. (Parent: Arconic Inc.)	\$350.0	n/a	n/a
Description:	Ta Chen International, Inc. entered into an agreement to acquire Texarkana, TX Rolling Mill of Arconic Inc., an aluminum sheet and plate rolling mill.				

Valuation Metrics by Sector



Ticker	Company Name	Stock Price	% of 52 Week High	Market Cap (\$mm)	Enterprise Value (\$mm)	Enterprise Value to:			P/E
						LTM Revenue	LTM EBITDA	NTM EBITDA	
Analytical Instrumentation and Testing Equipment ^[1]									
AME	AMETEK, Inc.	\$66.73	81.5%	\$15,489.1	\$16,871.6	3.6x	13.6x	12.3x	19.3x
CGNX	Cognex Corporation	37.71	53.9%	6,493.3	5,965.9	7.7x	24.1x	21.9x	45.5x
ESIO	Electro Scientific Industries, Inc.	29.91	99.8%	1,026.4	861.1	2.0x	6.6x	9.0x	6.9x
ESE	ESCO Technologies Inc.	65.19	91.2%	1,689.1	1,896.8	2.5x	13.7x	12.4x	18.4x
HEI	HEICO Corporation	76.73	81.5%	9,022.9	9,732.5	5.5x	21.5x	19.4x	40.4x
MTD	Mettler-Toledo International Inc.	557.54	80.0%	13,963.6	14,870.8	5.1x	20.7x	18.3x	35.5x
MTSC	MTS Systems Corporation	40.16	70.5%	717.7	1,026.8	1.3x	10.0x	8.2x	12.6x
					Mean	4.0x	15.8x	14.5x	14.3x

Electronics and Components ^[2]									
BELF.B	Bel Fuse Inc.	18.02	62.1%	210.8	271.3	0.5x	6.2x	5.0x	NM
ETN	Eaton Corporation plc	68.24	75.9%	29,575.2	36,412.2	1.7x	9.7x	8.9x	14.0x
LFUS	Littelfuse, Inc.	168.03	70.6%	4,227.1	4,429.7	2.7x	11.8x	10.4x	34.2x
					Mean	1.7x	9.2x	8.1x	14.0x

Precision Machine Products, Tooling and Stampings ^[3]									
CW	Curtiss-Wright Corporation	100.60	70.2%	4,405.3	4,973.1	2.1x	10.2x	9.8x	17.2x
HURC	Hurco Companies, Inc.	35.23	69.8%	236.6	161.1	0.5x	4.7x	NM	12.0x
KMT	Kennametal Inc.	32.62	62.1%	2,678.2	3,204.7	1.3x	7.0x	6.6x	12.5x
ROLL	RBC Bearings Incorporated	130.84	77.0%	3,134.9	3,199.0	4.6x	18.5x	16.5x	29.7x
SHLO	Shiloh Industries, Inc.	5.74	46.7%	134.6	364.4	0.3x	4.9x	4.5x	11.7x
TKR	The Timken Company	36.84	66.2%	2,831.6	4,468.5	1.3x	8.0x	6.3x	10.7x
					Mean	1.1x	7.0x	6.8x	12.8x

Ticker	Company Name	Stock Price	% of 52 Week High	Market Cap (\$mm)	Enterprise Value (\$mm)	Enterprise Value to:			P/E
						LTM Revenue	LTM EBITDA	NTM EBITDA	
Metals Processors									
ATI	Allegheny Technologies Incorporated	21.94	72.5%	2,757.5	4,259.1	1.1x	8.7x	7.5x	15.7x
CMC	Commercial Metals Company	15.91	59.5%	1,871.5	2,407.6	0.5x	6.8x	4.4x	14.0x
RS	Reliance Steel & Aluminum Co.	71.18	73.1%	5,013.4	7,006.3	0.6x	5.9x	6.5x	6.1x
TSX:RUS	Russel Metals Inc.	20.71	63.4%	1,285.9	1,822.9	0.5x	5.3x	5.6x	6.4x
SCHN	Schnitzer Steel Industries, Inc.	21.81	56.1%	571.7	678.4	0.3x	3.4x	4.5x	4.0x
ASX:SGM	Sims Metal Management Limited	10.22	56.6%	2,071.8	1,762.4	0.3x	4.6x	4.3x	10.4x
WOR	Worthington Industries, Inc.	34.83	69.8%	1,983.8	2,758.1	0.7x	6.9x	8.7x	10.7x
					Mean	0.6x	6.0x	5.9x	9.6x

Tube and Pipe Producers ^[4]									
AKS	AK Steel Holding Corporation	2.27	33.4%	716.3	3,044.6	0.5x	6.5x	4.8x	NM
NWPX	Northwest Pipe Company	23.31	93.1%	226.9	226.9	1.5x	203.0x	10.0x	12.4x
SSAB A	SSAB AB (publ)	30.49	57.1%	27,357.8	39,385.8	0.5x	4.8x	3.9x	9.9x
STLD	Steel Dynamics, Inc.	29.87	57.3%	6,856.7	8,176.5	0.7x	4.4x	4.2x	5.5x
SYNL	Synalloy Corporation	16.72	67.4%	148.3	204.2	0.8x	6.7x	NM	10.9x
BIT:TEN	Tenaris S.A.	9.44	54.6%	11,144.3	11,034.8	1.8x	8.3x	7.2x	16.0x
X	United States Steel Corporation	18.25	38.3%	3,235.2	4,394.2	0.3x	3.2x	2.3x	4.8x
					Mean	0.9x	5.6x	5.4x	9.9x

[1] CGNX, HEI, & MTD are excluded from the mean calculation of P/E multiples.
 [2] LFUS is excluded from the mean calculation of P/E multiples.
 [3] ROLL is excluded from the mean calculation of LTM Revenue, LTM/NTM EBITDA and P/E multiples.
 [4] NWPX is excluded from the mean calculation of LTM EBITDA multiples.

Ticker	Company Name	Stock Price	% of 52 Week High	Market Cap (\$mm)	Enterprise Value (\$mm)	Enterprise Value to:			P/E
						LTM Revenue	LTM EBITDA	NTM EBITDA	
Resource Recovery and Waste Management									
CWST	Casella Waste Systems, Inc.	28.17	81.7%	1,209.1	1,722.6	2.7x	14.6x	11.3x	30.5x
CECE	CECO Environmental Corp.	6.60	71.9%	230.7	282.9	0.9x	11.9x	8.2x	NM
CLH	Clean Harbors, Inc.	48.24	66.5%	2,701.7	4,072.5	1.3x	8.7x	8.1x	20.5x
HCCI	Heritage-Crystal Clean, Inc	22.36	77.9%	515.4	498.6	1.2x	11.6x	9.2x	21.8x
RSG	Republic Services, Inc.	71.93	91.6%	23,346.4	31,517.7	3.1x	11.3x	10.7x	17.0x
ECOL	US Ecology, Inc.	62.00	80.4%	1,366.0	1,616.9	3.0x	13.1x	11.8x	20.5x
WCN	Waste Connections, Inc.	73.77	90.7%	19,438.9	22,956.7	4.8x	15.1x	13.7x	26.7x
WM	Waste Management, Inc.	87.95	92.1%	37,497.2	47,432.2	3.2x	11.6x	10.9x	16.6x
Mean						2.5x	12.2x	10.5x	21.9x

Diversified Chemicals ^[5]									
Ticker	Company Name	Stock Price	% of 52 Week High	Market Cap (\$mm)	Enterprise Value (\$mm)	LTM Revenue	LTM EBITDA	NTM EBITDA	P/E
ASH	Ashland Global Holdings Inc.	70.25	81.1%	4,389.7	6,624.7	1.8x	11.2x	11.3x	42.3x
CBT	Cabot Corporation	42.50	61.9%	2,551.2	3,530.2	1.1x	6.6x	5.8x	NM
NYSE: DWDP	DowDuPont Inc.	53.02	68.8%	121,640.8	151,288.8	1.8x	8.4x	7.7x	57.7x
EMN	Eastman Chemical Company	72.30	64.3%	10,125.0	16,633.0	1.6x	7.1x	7.1x	6.8x
FMC	FMC Corporation	73.23	74.2%	9,861.0	12,458.5	2.8x	10.3x	9.9x	44.1x
OLN	Olin Corporation	19.52	50.3%	3,256.6	6,477.4	0.9x	5.3x	5.0x	4.3x
Mean						1.7x	8.2x	7.8x	5.5x

[5] ASH, DWDP & FMC are excluded from the mean calculation of P/E multiples.

Ticker	Company Name	Stock Price	% of 52 Week High	Market Cap (\$mm)	Enterprise Value (\$mm)	Enterprise Value to:			P/E
						LTM Revenue	LTM EBITDA	NTM EBITDA	
Specialty Chemicals ^[6]									
ALB	Albemarle Corporation	76.74	55.3%	8,150.2	9,364.2	2.8x	9.0x	8.6x	24.6x
ECL	Ecolab Inc.	144.37	88.6%	41,704.6	48,658.8	3.3x	15.9x	15.0x	26.4x
FOE	Ferro Corporation	15.70	62.6%	1,307.2	2,123.9	1.3x	8.9x	7.0x	22.1x
FUL	H.B. Fuller Company	42.74	71.7%	2,166.7	4,403.8	1.5x	11.8x	8.8x	18.2x
IFF	International Flavors & Fragrances Inc.	132.23	84.0%	14,098.2	13,207.1	3.7x	16.4x	11.3x	37.2x
MTX	Minerals Technologies Inc.	50.67	62.7%	1,786.7	2,665.0	1.5x	7.6x	7.0x	8.9x
POL	PolyOne Corporation	28.28	59.6%	2,257.3	3,414.4	1.0x	8.9x	8.2x	12.4x
KWR	Quaker Chemical Corporation	177.82	81.9%	2,371.1	2,325.1	2.7x	18.7x	9.5x	56.5x
SCL	Stepan Company	73.63	80.9%	1,657.9	1,670.9	0.8x	7.4x	6.9x	18.0x
Mean						2.1x	11.6x	9.1x	18.7x

Industrial Gases									
Ticker	Company Name	Stock Price	% of 52 Week High	Market Cap (\$mm)	Enterprise Value (\$mm)	LTM Revenue	LTM EBITDA	NTM EBITDA	P/E
APD	Air Products and Chemicals, Inc.	160.70	91.7%	35,281.5	36,422.5	4.1x	11.7x	10.7x	24.4x
PX	Philex Mining Corporation	3.09	42.9%	15,265.8	24,409.8	2.9x	7.4x	6.5x	13.9x
Mean						3.5x	9.6x	8.6x	19.2x

[6] IFF & KWR are excluded from the mean calculation of P/E multiples.

Ticker	Company Name	Stock Price	% of 52 Week High	Market Cap (\$mm)	Enterprise Value (\$mm)	Enterprise Value to:			P/E
						LTM Revenue	LTM EBITDA	NTM EBITDA	
Paper and Corrugated Packaging ^[7]									
GPX	Graphic Packaging Holding Company	10.59	63.3%	3,286.8	6,945.0	1.2x	7.9x	6.8x	9.5x
GEF	Greif, Inc.	35.44	56.4%	1,899.4	2,849.2	0.7x	5.5x	5.4x	8.1x
IP	International Paper Company	39.81	59.5%	16,124.2	26,371.2	1.1x	6.4x	5.6x	5.9x
PKG	Packaging Corporation of America	82.32	62.8%	7,717.9	9,926.3	1.4x	6.8x	6.3x	9.7x
SON	Sonoco Products Company	52.61	89.6%	5,251.0	6,409.2	1.2x	8.7x	8.2x	21.9x
WRK	WestRock Company	37.27	52.1%	9,410.1	15,205.7	0.9x	5.3x	4.2x	5.1x
					Mean	1.1x	6.8x	6.1x	7.7x

Plastics/Films ^[8]									
ATR	AptarGroup, Inc.	92.70	82.5%	5,822.9	6,880.8	2.5x	12.9x	11.4x	29.4x
NYSE: BERY	Berry Global Group, Inc.	46.95	76.1%	6,150.5	11,628.5	1.5x	8.7x	7.8x	12.8x
TSX:ITP	Intertape Polymer Group Inc.	16.65	72.9%	980.1	1,633.5	1.3x	10.1x	7.4x	12.7x
MYE	Myers Industries, Inc.	15.12	58.8%	534.5	564.7	1.0x	10.7x	NM	NM
LSE: RPC	RPC Group Plc	6.47	72.9%	2,623.8	3,829.0	1.0x	6.5x	6.2x	10.5x
TG	Tredeggar Corporation	15.97	60.3%	525.5	579.8	0.6x	6.1x	NM	NM
					Mean	1.3x	9.2x	8.2x	12.0x

[7] SON is excluded from the mean calculation of P/E multiples.

[8] ATR is excluded from the mean calculation of P/E multiples.

Ticker	Company Name	Stock Price	% of 52 Week High	Market Cap (\$mm)	Enterprise Value (\$mm)	Enterprise Value to:			P/E
						LTM Revenue	LTM EBITDA	NTM EBITDA	
Flexible Packaging ^[9]									
BMS	Bemis Company, Inc.	45.34	85.5%	4,126.7	5,517.9	1.3x	9.7x	9.3x	37.4x
CCL.B	CCL Industries Inc.	49.76	73.5%	8,750.1	10,837.5	2.1x	10.9x	10.1x	17.0x
LABL	Multi-Color Corporation	34.24	38.2%	702.5	2,194.1	1.3x	7.3x	7.5x	8.2x
SEE	Sealed Air Corporation	34.21	68.6%	5,368.4	8,733.0	1.9x	11.0x	9.8x	NM
WPK	Winpak Ltd.	47.60	93.7%	3,094.0	2,710.9	2.4x	10.6x	9.8x	19.6x
					Mean	1.8x	9.9x	9.3x	15.0x
OVERALL INDUSTRIAL GROWTH SECTOR					Mean	1.8x	9.3x	8.4x	13.4x

[9] BMS is excluded from the mean calculation of P/E multiples.

 **NOTES**

Notes

- Sources: Capital IQ, Bloomberg, Federal Reserve, Institute for Supply Management, company 10-K, 10-Q and 8-K SEC filings, annual reports, press releases, and others as indicated.
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