### **INDUSTRIAL GROWTH** *Quarterly Update Second Quarter 2017*



CAPITAL PLACEMENTS • MERGERS, ACQUISITIONS & DIVESTITURES • RESTRUCTURINGS



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#### August 2017

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

We are pleased to share with you SCA's SOLIConnect Industrial Growth report, which contains news, statistics and key trends for industrial sectors that we actively cover for 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) Plastics and Packaging companies.

During the second quarter, returns for the industrials sector in the equity capital markets continued their expansion momentum with the majority of the subsectors followed by SCA generating positive returns after a tumultuous six months of the Trump presidency. The Analytical Instrumentation & Testing Equipment subsector led the industry with a quarterly return of +12.4%, compared with the S&P 500 quarterly return of +2.7%. Other industry subsectors with notable positive quarterly growth include Plastics & Packaging +10.2% and Electronics & Components +5.0%. M&A activity for the quarter slightly decreased compared to Q1 2017 with 220 transactions announced versus 258 deals last quarter; deal value increased substantially at \$24.6 billion compared to \$14.6 billion last quarter. Notable transactions this quarter included Clariant AG's binding agreement to acquire Huntsman Corporation in a \$6.7 billion merger of equals in the Chemicals sector, NOVA Chemicals' acquisition of Williams Olefins for \$2.1 billion in the Chemicals sector, and Hitachi's acquisition of Sullair's U.S., Singapore, and Australian operations for \$1.2 billion in the Precision Machine Products sector.

Through the first half of 2017, industrial growth and output has maintained continued strength as industrial production growth of +4.7% for Q2 was up significantly compared with Q1 at +1.4%. Other key headline numbers included manufacturing up +0.2%, as expected, and the capacity utilization rate rising to 76.6%, which is the highest level in nearly two years. Some of this growth was driven by improvements in utilities, resulting from a warm summer across the U.S, however, these figures are reflective of a strengthening sector. Durable goods orders also showed strength as new orders rose +16.1% annually, versus an annual rate of +3.8% one year ago, and core capital goods also grew +5.6% year-over-year. Order-level activity often reflects the level of optimism corporations have to expend capital on orders and invest in new projects. Clearly, June was very strong with these order volumes, however, it should be noted that much of this growth was transportation-related, in particular new civilian aircraft orders. Also, throughout this year, durable orders have lacked consistency each month, yet the consensus view is that this monthly report is much more favorable than unfavorable with the second-half outlook in the manufacturing sector now considerably more upbeat. Lastly, Manufacturing Purchasing Managers Index (PMI), which provides an estimate of current private sector output, in June showed acceleration at 53.2 ahead of the consensus of 52.3. Strength was in the index's new orders, which reached a two-year high, as well as output and employment. All points to solid fundamentals and improving outlook for the remainder of 2017.

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

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Matt Caine Managing Director mcaine@soliccapital.com



**Edward R. Casas** Senior Managing Director ecasas@soliccapital.com



Recent Representative Engagements \* 



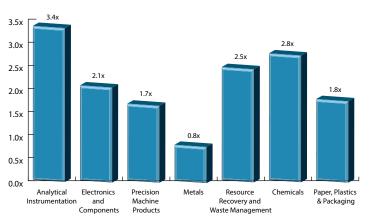
\* Includes transactions led by the team of SOLIC professionals at predecessor firms

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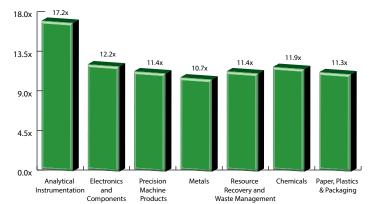


# Market Overview



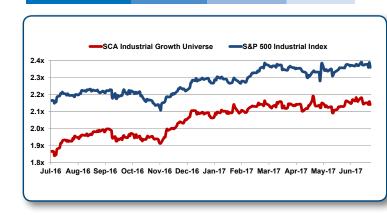


### Enterprise Value To EBITDA



Revenue and EBITDA valuation multiples remain strong as deal volume contracted in Q2 2017 compared to Q1 2017.

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



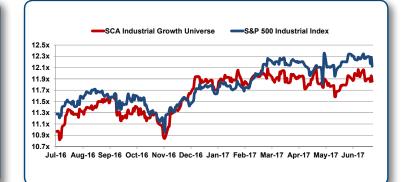
### Federal Reserve Industrial Production



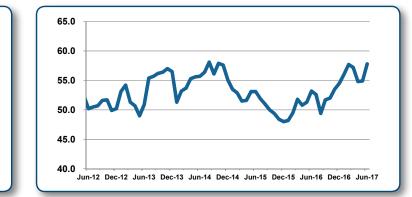
\* Please see pages 16-21 for SCA Industrial Growth Universe and additional information in the "Notes" section at the end of this report.



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



### Institute for Supply Management Purchasing Managers' Index



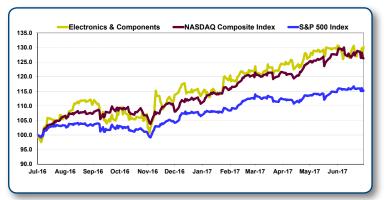


## Sector Stock Performance (one year)

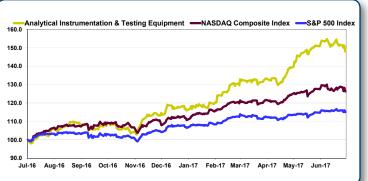
### SCA Industrial Growth Index



### SCA Electronics and Components Sector



## SCA Analytical Instrumentation & Testing Equipment Sector



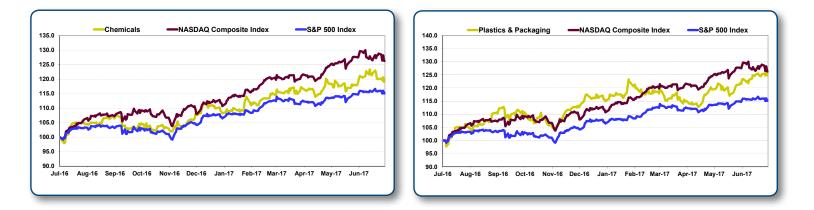
### SCA Precision Machine Products Sector



### SCA Metals Sector



### SCA Chemicals Sector



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



## SCA Resource Recovery & Waste Management Sector



### SCA Plastics & Packaging Sector



## S Notable Industry Developments

**Crude Oil Prices Loose Gas Despite OPEC Production Cuts** WTI crude oil prices declined in the second guarter by 8.4% to \$46.04 per barrel. New production from Libya and Nigeria, as well as U.S. inventories at 5-year average highs, contributed to the price tightening. OPEC nations agreed to extend production cuts through the first guarter of 2018. Members have largely complied with the voluntary production cuts despite increased production in Irag as delayed wells become operational. The U.S. is expected to increase its production in the Permian and Eagle Ford regions as prolific non-tight formations and stacked plays make it marginally profitable at average barrel prices of \$50 per barrel. The Baker Hughes rig count reported an increase of 94 oil rigs and 24 gas rigs in the second guarter, signifying continued activity and increased output by U.S. upstream oil and gas producers in response to OPEC's continued production cuts.

Consumer Spending Drives 2.6% of Q2 GDP Growth Q2 GDP growth bounced back at a +2.6% annualized rate after anemic GDP growth of +1.4% in Q1. This quarter's growth was fueled by a rise in consumer spending of +2.8% aided by a strong labor market and robust gains in the stock market. Consumers purchased more staple goods compared to expensive discretionary items. Business investment remained strong with an increase of +8.2% in expenditures primarily on IT equipment, however, spending on upstream oil and gas well drilling structures contracted. Q2 GDP growth benefited from global trade as exports rose twice as fast as imports. President Trump vows to maintain his campaign promises of extensive infrastructure spending, tax cuts, federal deregulation, and net import reduction to target future GDP growth. The Federal Reserve agreed to leave interest rates alone in July and has hinted at a future interest rate hike later this year.



SCA Industrial Growth Index Continues Its Robust Growth Quarterly returns for the SCA Industrial Growth Sector continued to expand in the second quarter posting an average increase of +4.3% after a prior average increase of +5.3% in the first quarter of 2017. The Analytical Instrumentation & Testing Equipment sector posted the most dominant gain in the second guarter of +12.4% after reporting substantial gains last guarter. Trailing twelve months ("TTM") returns for the SCA Industrial Growth Sector were a notable +27.7% bolstered by the majority of the subsectors reporting modest gains during the TTM period, notably the Analytical Instrumentation & Testing Equipment and Precision Machine Products sectors reported dramatic gains of +48.9% and +35.5%, respectively. The average TTM performance recorded over this same period by the broader market indices, S&P 500 and NASDAQ, were +15.2% and +26.3%, respectively.

### Second Quarter 2017

### Manufacturing Activity Growth Rebounds

Manufacturing growth recovered in the second guarter, after a sharp correction in April. An acceleration in orders and production combined with increased exports demonstrates that manufacturing is rebounding. According to the Institute for Supply Management, the June Purchasing Managers' Index ("PMI") registered 57.8%, an increase of 2.9 percentage points from May's PMI reading of 54.9%. Despite a dip in April and May, the PMI has steadily increased since August 2016. A PMI greater than 50.0% represents expansion in the manufacturing sector, while under 50.0% signals contraction in the sector. The New Orders Index registered 63.5%, an increase of 4.0 percentage points from May's reading of 59.5%. The Production Index registered 62.4%, 5.3 percentage points higher than May's reading of 57.1%. The Employment Index registered 57.2%, an increase of 3.7 percentage points from May's reading of 53.5%. The Prices Index registered 55.0%, demonstrating higher raw materials prices for the sixteenth consecutive month. Fifteen (15) of the 18 manufacturing industries reported an increase in new orders with 14 of the 18 industries reporting an increase in production in June.

### **U.S. Chemical Production Stabilizes**

The U.S. Chemical Production Regional Index (CPRI) rebounded slightly in June by 30 basis points following cumulative declines since March, according to the American Chemistry Council. The CPRI tracks U.S. chemical production measured on a threemonth moving average basis. Manufacturing growth activity, a leading determinant of the chemicals industry, expanded in the second guarter reducing downward pressure on the CPRI after a revised contraction in May. U.S. national chemical production was stagnant compared to June 2016, with the Ohio Valley and Gulf Coast geographic regions experiencing the notable yearover-year growth amongst the seven U.S. regions at 180 and 130 basis points, respectively.

### 2017 World Steel Output Expands

World crude steel production increased by 4.5% for the first half of 2017 compared to the same period in 2016, according to the World Steel Association. World production totaled 836.0 million tonnes (Mt) in the first half of 2017 compared to 800.0 Mt to the same period in 2016. U.S. production increased by +130 basis points to 40.6 Mt in the first half of 2017 compared to last year, due to a vibrant economy and increased capital expenditures in the energy sector. The most recent Short Range Outlook forecasts 2017 world steel demand will slightly expand by +1.3% to 1,535.2 Mt. U.S. steel producers face downward pressure from lower cost steel exporters, such as China, depreciating steal prices from an oversaturated steel market. The U.S. is expected to lead demand in the developed world in 2017/2018 with potential import tariffs and anticipated infrastructure spending bills. Global recessionary threats continue to recede with economic growth improving in most developed nations, however, free trade under possible new economic trade tariffs marshal a new vantage of geopolitical uncertainty for the world economy.



### Upcoming Industry Conferences

Analytical Instrumentation	and Testing Equipment
Microscopy & Microanalysis 2017 August 6-10, 2017 St. Louis, MO	PITTCON 2018 February 26 - March 1, 2018 Orlando, FL
<b>Electronics and Componen</b>	ts
Coil Winding, Insulation, and Exhibition Components May 15-18, 2018 Las Vegas, NV	IEEE Electronic Electrical Manufacturing and Technology Conference May 29 - June 1, 2018 San Diego, CA
Precision Machine Product	s, Toolings, and Stampings
Precision Machined Products Association Annual Meeting October 26-30, 2017 Napa Valley, CA	FABTECH November 6-9, 2017 Chicago, IL
Metals	
North American Ferroalloys Conference 2017 September 6-8, 2017 Chicago, IL	METALCON October 18-20, 2017 Las Vegas, NV
Resource Recovery and Wa	aste Management
The Resource Recycling Conference August 28-30, 2017 Minneapolis, MN	Renewable Energy from Waste Conference October 2-5, 2017 Fort Myers, FL
Chemicals	
2017 Polyurethanes Technical Conference October 2-4, 2017 New Orleans, LA	American Chemistry Council Chairman's Dinner November 7-9, 2017 Kiawah Island, SC
Plastics and Packaging	
PACK EXPO International September 25-27, 2017 Las Vegas, NV	11th Annual Packaging Conference February 5-7, 2018 Orlando, FL



# C Selected M&A Transactions



Date	Target	Buyer	Enterprise Value (\$ mm)	Enterprise Value / Revenue	Enterprise Value / EBITDA
06/29/17	Indevco Management Resources, Inc.	DS Smith Plc	\$1,100.0	n/a	n/a
Description:		itional agreement to acquire an 80 <sup>6</sup> rugated packaging products, from			ent
06/29/17	PolyOne Designed Structures and Solutions LLC	Arsenal Capital Partners	\$115.0	n/a	n/a
Description:		definitive agreement to acquire Po ctures polymer structures and spec 20 million.	• •		
06/28/17	Cobalt Boats, LLC	Malibu Boats, Inc.	\$130.0	0.9x	n/a
Description:	Malibu Boats entered into definitiv recreational boats, for approximate	ve agreement to acquire Cobalt Bo tely \$130 million.	ats, which mar	nufactures cons	umer
06/26/17	Clear Lam Packaging, Inc.	Sonoco Products Company	\$170.0	n/a	n/a
Description:		d a definitive agreement to acquire ackaging materials, from investors f			
06/23/17	Spectrum, Inc.	Repligen Corporation	\$366.7	9.1x	n/a
Description:	Repligen Corporation entered into products, for approximately \$370	a definitive agreement to acquire million.	Spectrum, Inc	., which produce	es filtration
06/02/17	AMTROL Inc.	Worthington Steel of Michigan, Inc. (Parent: Worthington Industries, Inc.)	\$283.0	1.1x	7.4x
Description:	Worthington Steel of Michigan ac solutions, from Amtrol Holdings fo	quired AMTROL Inc., a manufactur or approximately \$280 million.	er of well tank	s and water sys	tem

Date	Target	Buyer	Enterprise Value (\$ mm)	Enterprise Value / Revenue	Enterprise Value / EBITDA
05/30/17	NII FPG Company	Kadant Inc.	\$173.0	2.1x	n/a
Description:		and asset purchase agreement to a industry, for approximately \$170 mi	•	G Company, a p	producer of
05/26/17	PPG Industries Fiber Glass Products, Inc.	Nippon Electric Glass America, Inc.	\$545.0	1.6x	n/a
Description:	Nippon Electric Glass America, I	rglass reinforcements, from PPG Inc			
05/26/17	Chromalox, Inc.	Spirax-Sarco Engineering plc	\$415.0	2.1x	9.7x
Description:		an agreement to acquire Chromalopplications, from Irving Place Capita			
05/23/17	Calentadores de America S.A. de C.V., Fluida, S.A. de C.V., and Water Heating Technologies Corp.	Rheem Manufacturing Company Inc. (Parent: Grupo Industrial Saltillo, S.A.B. de C.V.)	\$210.4	n/a	n/a
Description:	• • • •	entered into an agreement to acqu ch collectively manufacture househ			
05/22/17	Huntsman Corporation	Clariant AG	\$10,789.9	1.1x	9.6x
Description:		agreement to acquire Huntsman Co products, for \$6.7 billion in a merger	•		lifferentiated
05/19/17	Macro Plastics, Inc.	IPL Inc. (Parent: LINPAC USA Holdings Inc.)	\$150.0	2.0x	9.4x
Description:	IPL agreed to acquire Macro Plas for \$150 million.	stics, Inc., a manufacturer of reusat	ble plastic cont	ainers in the foo	od industry,



Date	Target	Buyer	Enterprise Value (\$ mm)	Enterprise Value / Revenue	Enterprise Value / EBITDA
05/08/17	Truck Bodies & Equipment International, Inc.	Federal Signal Corporation	\$270.0	1.3x	7.2x
Description:		ed into an agreement to acquire Tron on truck body and hoist equipment,			
05/08/17	Comverge, Inc.	Itron, Inc.	\$100.0	1.7x	n/a
Description:		nt to acquire Comverge, Inc., a pro ommercial/residential consumers, fr	-		-
05/02/17	Smiths Interconnect, Inc., Microwave Telecoms Business	Infinite RF Holdings, Inc.	\$109.8	1.1x	n/a
Description:	<b>9</b> 1	crowave Telecoms business segme utions, from Smiths Interconnect, In			nication
04/26/17	Drew Marine, Inc., Technical Solutions	Wilhelmsen Ships Service AS	\$400.0	n/a	n/a
Description:		d an agreement to acquire Technica w Marine for approximately \$400 m		manufacturer of	cleaners and
04/25/17	Sullair US Purchaser Inc, Sullair Asia Pte Ltd and Silver II Australia Holdings Pty Ltd	Hitachi, Ltd.	\$1,245.0	3.4x	n/a
Description:	•	nt to acquire Sullair's U.S., Singapo npressors, from Accudyne Industrie			
04/17/17	Williams Olefins, L.L.C.	NOVA Chemicals Inc.	\$2,100.0	n/a	n/a
Description:	<b>v v</b>	ement to acquire Williams Olefins, s Field Services Group for \$2.1 bill	• •	oolymer grade e	thylene and
04/17/17	MOCON, Inc.	AMETEK, Inc.	\$177.6	2.8x	17.8x
Description:	AMETEK entered into an agreem solutions, for approximately \$180	nent to acquire MOCON, Inc., a dive ) million	ersified provide	er of analytical a	nd monitorinç

Date Target Buyer The Valspar Corporation, 04/12/17 Axalta Co Valspar Wood Axalta Coating Systems entered into an asse Description: industrial wood coatings, from The Valspar Co **Consolidated Container** 04/11/17 Loews Co Company LLC Loews Corporation entered into an agreemen Description: plastic packaging solutions, from Bain Capita 04/05/17 Houghton International Inc. Quaker C Quaker Chemical Corporation executed a det Description: specialty chemicals and lubricants, from Gulf **Global Industries, Inc.** Ag Growt 04/04/17 Ag Growth International acquired Global Industries, which manufactures grain storage equipment and water Description: treatment systems, for \$100 million.

solutions, for approximately \$180 million.

	Enterprise Value (\$ mm)	Enterprise Value / Revenue	Enterprise Value / EBITDA							
oating Systems Ltd.	\$420.0	1.9x	n/a							
et purchase agreement Corporation for \$420 mill	•	par Wood, a pro	oducer of							
corporation	\$1,200.0	n/a	n/a							
ent to acquire Consolidat al Private Equity for \$1.2		Company, a prov	vider of rigid							
Chemical Corporation	\$1,415.4	1.8x	11.8x							
efinitive agreement to acquire Houghton International, a producer of f Houghton Lubricants and other minority owners for \$1.4 billion.										
th International Inc.	\$100.0	n/a	n/a							
lustrias, which manufast	uroa arain atar	an oquinmont	and water							



# **H** 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 <sup>[1]</sup>									
AME	AMETEK, Inc.	\$60.57	96.3%	\$13,937.7	\$15,781.9	4.0x	15.5x	14.2x	27.3x
CGNX	Cognex Corporation	84.90	86.6%	7,356.3	6,887.8	12.3x	34.9x	30.4x	41.3x
ESIO	Electro Scientific Industries, Inc.	8.24	89.6%	272.8	224.3	1.4x	NM	13.0x	NM
ESE	ESCO Technologies Inc.	59.65	97.1%	1,540.8	1,657.3	2.7x	15.7x	12.8x	30.7x
HEI	HEICO Corporation	71.84	95.6%	5,562.3	6,200.8	4.3x	17.6x	16.4x	35.7x
MTD	Mettler-Toledo International Inc.	588.54	97.3%	15,196.1	15,994.9	6.2x	26.1x	22.8x	38.4x
MTSC	MTS Systems Corporation	51.80	87.8%	867.2	1,225.5	1.6x	11.3x	10.8x	43.6x
					Mean	3.4x	17.2x	15.0x	36.2x

Electro	nics and Components								
BELF.B	Bel Fuse Inc.	24.70	73.5%	288.0	358.7	0.7x	7.2x	7.3x	8.1x
ETN	Eaton Corporation plc	77.83	98.1%	34,813.4	42,556.4	2.2x	13.3x	12.1x	18.1x
LFUS	Littelfuse, Inc.	165.00	95.3%	3,744.3	3,937.0	3.5x	16.2x	14.2x	30.3x
					Mean	2.1x	12.2x	11.2x	18.8x

Precisi	Precision Machine Products, Tooling and Stampings											
CW	Curtiss-Wright Corporation	91.78	85.3%	4,061.3	4,754.2	2.2x	11.9x	10.6x	21.8x			
HDNG	Hardinge Inc.	12.42	96.3%	160.5	139.8	0.5x	10.5x	NM	NM			
HURC	Hurco Companies, Inc.	34.75	97.0%	230.2	171.0	0.8x	9.0x	NM	22.9x			
KMT	Kennametal Inc.	37.42	86.8%	3,014.3	3,643.4	1.8x	13.0x	10.5x	NM			
ROLL	<b>RBC Bearings Incorporated</b>	101.76	93.9%	2,419.0	2,649.9	4.3x	17.8x	15.4x	34.3x			
SHLO	Shiloh Industries, Inc.	11.74	70.3%	209.8	445.6	0.4x	6.4x	NM	30.9x			
TKR	The Timken Company	46.25	89.4%	3,607.2	4,148.7	1.5x	10.9x	9.4x	29.4x			
					Mean	1.7x	11.4x	11.5x	27.8x			

Ticker	Company Name	Stock Price	% of 52 Week High	Market Cap (\$mm)	Enterprise Value (\$mm)	Enter	orise Valı	ue to:	P/E
						LTM Revenue	LTM EBITDA	NTM EBITDA	
Metals F	Processors								
ATI	Allegheny Technologies Incorporated	17.01	71.8%	1,851.1	3,731.8	1.2x	15.4x	8.5x	NM
CMC	Commercial Metals Company	19.43	78.9%	2,249.8	3,038.1	0.6x	9.9x	7.4x	29.4x
RS	Reliance Steel & Aluminum Co.	72.81	82.2%	5,306.6	7,226.9	0.8x	8.4x	7.9x	16.5x
TSX:RUS	Russel Metals Inc.	19.97	87.2%	1,234.3	1,392.5	0.7x	11.7x	8.6x	19.1x
SCHN	Schnitzer Steel Industries, Inc.	25.20	82.4%	663.4	837.1	0.5x	8.8x	7.7x	16.2x
ASX: SGM	Sims Metal Management Limited	11.65	98.1%	2,308.4	2,060.4	0.6x	12.6x	8.5x	26.7x
WOR	Worthington Industries, Inc.	50.22	80.4%	3,153.9	3,576.7	1.2x	8.6x	10.0x	15.9x
					Mean	0.8x	10.8x	8.4x	20.6x
Tube an	d Pipe Producers <sup>[2]</sup>								
AKS	AK Steel Holding Corporation	6.57	57.7%	2,068.4	4,099.7	0.7x	6.1x	6.4x	25.4x
NWPX	Northwest Pipe Company	16.26	83.2%	156.2	136.2	0.9x	NM	23.8x	NM
SSAB A	SSAB AB	49.51	1027.6%	4,072.0	6,374.7	0.9x	9.4x	7.7x	21.1x
STLD	Steel Dynamics, Inc.	35.81	89.1%	8,658.5	10,007.9	1.2x	7.4x	6.2x	16.9x
SYNL	Synalloy Corporation	11.31	82.3%	98.2	127.8	0.9x	38.3x	NM	NM
BIT:TEN	Tenaris S.A.	14.09	70.8%	18,384.9	17,076.6	3.8x	20.7x	15.3x	147.1x
Х	United States Steel Corporation	22.14	52.9%	3,867.0	5,575.0	0.5x	9.1x	5.0x	NM
					Mean	0.9x	10.5x	10.7x	21.1x

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Х	United States Steel Corporation	22.14	52.9%	3,867.0	5,575.0	0.5x	9.1x	5.0x	NM
					Mean	0.9x	10.5x	10.7x	21.1x

[1] CGNX is excluded from mean calculations of Revenue, LTM EBITDA, and NTM EBITDA multiples. [2] SYNL is excluded from mean calculation of LTM EBITDA multiple; BIT:TEN is excluded from mean calculation of Revenue and 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	
Resourc	ce Recovery and Waste N	/lanagei	ment <sup>[3]</sup>						
CWST	Casella Waste Systems, Inc.	16.41	96.8%	687.3	1,193.9	2.1x	10.7x	9.3x	NM
CECE	CECO Environmental Corp.	9.18	61.7%	317.6	397.4	1.0x	7.3x	7.5x	NM
CLH	Clean Harbors, Inc.	55.83	90.6%	3,194.0	4,530.6	1.6x	11.2x	9.7x	NM
HCCI	Heritage-Crystal Clean, Inc	15.90	94.9%	358.2	376.6	1.1x	10.2x	7.5x	29.0x
RSG	Republic Services, Inc.	63.73	97.5%	21,545.8	29,185.1	3.1x	10.9x	10.3x	33.9x
ECOL	US Ecology, Inc.	50.50	93.5%	1,101.5	1,366.6	2.9x	12.8x	10.8x	34.6x
WCN	Waste Connections, Inc.	64.42	96.1%	16,964.1	20,694.7	5.2x	17.0x	14.2x	74.7x
WM	Waste Management, Inc.	73.35	98.4%	32,405.9	41,438.9	3.0x	11.2x	10.3x	26.8x
					Mean	2.5x	11.4x	9.9x	31.1x

Diversi	fied Chemicals <sup>[4]</sup>								
ASH	Ashland Global Holdings Inc.	65.91	51.4%	4,101.6	6,262.6	1.2x	8.0x	9.8x	NM
CBT	Cabot Corporation	53.43	87.1%	3,338.1	4,255.1	1.7x	8.5x	8.1x	14.4x
DOW	The Dow Chemical Company	63.07	96.3%	77,052.6	94,051.6	1.9x	9.8x	8.7x	15.5x
EMN	Eastman Chemical Company	83.99	97.3%	12,248.0	19,010.0	2.1x	9.0x	8.5x	14.1x
DD	E. I. du Pont de Nemours and Company	80.71	96.2%	69,978.2	74,880.2	3.0x	14.1x	13.0x	27.1x
FMC	FMC Corporation	73.05	94.4%	9,788.8	11,714.5	3.6x	16.4x	20.5x	37.5x
OLN	Olin Corporation	30.28	89.4%	5,023.5	8,494.1	1.5x	10.1x	8.0x	105.6x
					Mean	2.1x	10.8x	10.9x	21.7x

[3] WCN is excluded from mean calculation of P/E multiple.[4] OLN is excluded from mean calculation of P/E multiple.

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	
Special	Specialty Chemicals								
ALB	Albemarle Corporation	105.54	90.5%	11,688.8	12,293.4	4.5x	15.6x	13.9x	42.5x
ECL	Ecolab Inc.	132.75	98.4%	38,503.5	45,901.5	3.5x	15.9x	15.0x	31.4x
FOE	Ferro Corporation	18.29	94.4%	1,529.7	2,080.0	1.8x	12.4x	9.0x	33.8x
FUL	H.B. Fuller Company	51.11	94.1%	2,582.8	3,280.2	1.5x	11.9x	10.7x	23.4x
IFF	International Flavors & Fragrances Inc.	135.00	94.0%	10,661.1	11,918.6	3.8x	18.0x	15.3x	26.8x
MTX	Minerals Technologies Inc.	73.20	87.3%	2,568.3	3,485.3	2.1x	9.9x	9.5x	19.3x
POL	PolyOne Corporation	38.74	94.8%	3,167.2	4,307.4	1.3x	10.6x	9.7x	18.8x
KWR	Quaker Chemical Corporation	145.23	94.4%	1,930.2	1,917.0	2.5x	17.4x	16.4x	34.8x
SCL	Stepan Company	87.14	96.1%	1,958.0	2,078.3	1.2x	9.8x	8.0x	22.4x
					Mean	2.5x	13.5x	11.9x	28.1x
Industri	al Gases								
APD	Air Products and Chemicals, Inc.	143.06	90.6%	31,147.0	31,786.6	3.3x	9.6x	11.3x	20.8x
PX	Praxair, Inc.	132.55	95.6%	37,890.9	47,185.9	4.4x	13.3x	12.9x	24.9x
					Mean	3.8x	11.5x	12.1x	22.8x

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	
Special	Specialty Chemicals								
ALB	Albemarle Corporation	105.54	90.5%	11,688.8	12,293.4	4.5x	15.6x	13.9x	42.5x
ECL	Ecolab Inc.	132.75	98.4%	38,503.5	45,901.5	3.5x	15.9x	15.0x	31.4x
FOE	Ferro Corporation	18.29	94.4%	1,529.7	2,080.0	1.8x	12.4x	9.0x	33.8x
FUL	H.B. Fuller Company	51.11	94.1%	2,582.8	3,280.2	1.5x	11.9x	10.7x	23.4x
IFF	International Flavors & Fragrances Inc.	135.00	94.0%	10,661.1	11,918.6	3.8x	18.0x	15.3x	26.8x
MTX	Minerals Technologies Inc.	73.20	87.3%	2,568.3	3,485.3	2.1x	9.9x	9.5x	19.3x
POL	PolyOne Corporation	38.74	94.8%	3,167.2	4,307.4	1.3x	10.6x	9.7x	18.8x
KWR	Quaker Chemical Corporation	145.23	94.4%	1,930.2	1,917.0	2.5x	17.4x	16.4x	34.8x
SCL	Stepan Company	87.14	96.1%	1,958.0	2,078.3	1.2x	9.8x	8.0x	22.4x
					Mean	2.5x	13.5x	11.9x	28.1x
Industri	al Gases								
APD	Air Products and Chemicals, Inc.	143.06	90.6%	31,147.0	31,786.6	3.3x	9.6x	11.3x	20.8x
PX	Praxair, Inc.	132.55	95.6%	37,890.9	47,185.9	4.4x	13.3x	12.9x	24.9x
					Mean	3.8x	11.5x	12.1x	22.8x



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	
Paper a	Paper and Corrugated Packaging <sup>[5]</sup>								
GPK	Graphic Packaging Holding Company	13.78	93.7%	4,279.5	6,494.9	1.5x	9.2x	8.6x	21.2x
GEF	Greif, Inc.	55.78	88.5%	2,770.5	3,850.7	1.1x	8.6x	7.9x	27.8x
IP	International Paper Company	56.61	96.2%	23,374.1	33,672.1	1.6x	11.1x	8.3x	30.3x
PKG	Packaging Corporation of America	111.39	98.1%	10,407.7	12,789.9	2.2x	10.8x	9.7x	22.7x
SON	Sonoco Products Company	51.42	92.5%	5,110.0	6,174.7	1.3x	9.7x	9.3x	18.7x
WRK	WestRock Company	56.66	96.7%	14,211.6	19,584.8	1.4x	9.0x	7.6x	58.4x
					Mean	1.5x	9.7x	8.6x	24.1x

Plastics/Films <sup>[6]</sup>										
SHLM	A. Schulman, Inc.	32.00	84.9%	938.8	1,950.4	0.8x	9.4x	8.2x	NM	
ATR	AptarGroup, Inc.	86.86	98.8%	5,422.6	5,919.3	2.5x	12.5x	12.0x	26.2x	
BERY	Berry Global Group, Inc.	57.01	96.7%	7,382.8	13,175.8	2.0x	11.2x	9.3x	24.7x	
ITP	Intertape Polymer Group Inc.	19.00	95.9%	1,123.2	1,336.4	1.6x	12.3x	9.6x	20.4x	
MYE	Myers Industries, Inc.	17.95	92.3%	539.9	712.2	1.3x	12.3x	11.5x	69.6x	
LSE:RPC	RPC Group Plc	9.77	68.0%	4,038.9	5,450.5	1.5x	10.9x	7.2x	20.4x	
TG	Tredegar Corporation	15.25	59.6%	500.7	664.9	0.8x	10.1x	NM	24.0x	
					Mean	1.5x	11.2x	9.6x	23.1x	

[5] WRK is excluded from mean calculation of P/E multiple.[6] MYE is excluded from mean calculation of P/E multiple.

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								
BMS	Bemis Company, Inc.	46.25	86.7%	4,252.7	5,755.1	1.4x	9.8x	10.0x	18.9x
CCL.B	CCL Industries Inc.	50.48	92.0%	8,852.9	10,572.7	3.3x	17.7x	13.0x	33.8x
LABL	Multi-Color Corporation	81.60	92.5%	1,383.3	1,842.4	2.0x	11.5x	10.4x	22.8x
SEE	Sealed Air Corporation	44.76	88.4%	8,764.5	12,662.2	1.9x	12.2x	15.0x	24.5x
WPK	Winpak Ltd.	44.80	94.8%	2,911.8	2,697.1	3.1x	13.3x	12.9x	26.7x
					Mean	2.3x	12.9x	12.2x	25.4x
OVERA	LL INDUSTRIAL GRO	Mean	2.1x	11.9x	11.0x	25.1x			





### **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.
- Any public companies chosen for the "SCA Industrial Growth Universe" are companies commonly used for industry information to show performance within a sector. They do not include all public companies that could be categorized within the sector and were not created as benchmarks; they do not imply benchmarking and do not constitute recommendations for a particular security and/or sector. The charts and graphs used in this report have been compiled by SOLIC Capital Advisors solely for purposes of illustration.

For further information regarding our Industrial Growth Services, please contact: Edward R. Casas, Senior Managing Director, ecasas@soliccapital.com Matt Caine, Managing Director, mcaine@soliccapital.com

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