

# **INDUSTRIAL GROWTH**

Quarterly Update Fourth Quarter 2016





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# Q4 2016 Highlights

#### March 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 fourth quarter, returns for the industrials sector in the equity capital markets improved substantially with all of the subsectors followed by SCA generating positive returns after the much-anticipated Presidential election. The Metals subsector led the industry with a quarterly return of +28.8%, compared with the S&P 500 quarterly return of +3.6%. Other industry subsectors with notable positive quarterly growth include Resource Recovery & Waste Management +12.1%, Precision Machine Products +11.1%, and Analytical Instrumentation & Testing Equipment +6.4%. M&A activity for the quarter slightly increased compared to Q3 2016 with 220 transactions announced versus 216 deals last quarter; deal value was also significantly less at \$18.1 billion compared to \$20.8 billion last quarter. Notable transactions for this quarter included Zoomlion Heavy Industry Science and Technology's acquisition of Terex Corporation in the machinery component sector for \$4.8 billion and Parker-Hannifin Corporation's acquisition of CLARCOR Inc. in the machinery sector for \$4.4 billion.

GDP growth slowed in the fourth quarter to +1.9% annualized rate compared to a more robust expansion rate of +3.5% (annualized) in the prior quarter. This slowdown in growth is due primarily to a swing in exports, which surged +14.5% in Q3, but fell to +7% in Q4. Eliminating exports and focusing solely on domestic demand, activity increased in Q4 to +3.6% from +2.7% in Q3. This most recent quarter's increase in GDP reflects +1.7% growth in personal consumption expenditures, +1.0% growth in private inventory investment, +0.7% growth in fixed investments, and growth in state and local government spending. Also, the Institute for Supply Management (ISM) manufacturing index jumped +1.7 points in February, reflecting the strongest monthly growth rate since August 2014 and beat market consensus by +1.3 points. To the positive in the manufacturing report was a jump in new orders and the breadth of strength across the 18 industries measured in the ISM. Considering full year 2016, private investment decreased for the first time since 2009 with slowdowns in both consumer and public spending. However, the U.S. ended 2016 with modest, steady economic growth. Looking ahead, the projected increase in oil prices could increase inflation and subsequently drive down consumer demand and slow growth. The Trump Administration's stimulative economic policies, such as proposed infrastructure spending and import reduction plans, are expected to increase future GDP driven by increased government spending and a contraction of the country's trade deficit. These growth-oriented plans are likely to have the Federal Reserve take some action in raising rates in order to stem inflation concerns.

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

**Matt Caine Managing Director** 

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





# Recent Representative Engagements \*

\$690,600,000

Sale of Assets

on behalf of

MedCath

MedCath Corporation

(Nasdaq: MDTH)

Sell Side Advisor

\$4,500,000,000

of Assets

SENTINEI

Financial Advisor to

Bankruptcy Trustee

Chapter 11 Reorganization

\$87,000,000

Debt Restructuring

for the Illinois Tollway

Oasis Project

WILTON

PARTNERS

Financial Advisor

Alexin, LLC

has consummated an Institutional Private

cement of Series A Senio

Preferred Units \$13,100,000

with Term Loan and

evolving Credit Facilitie \$30,000,000

Financial Advisor

\$156,000,000

SUMNER

Financial Advisor,

Chief Executive Officer, Chief Restructuring Officer

\$750,000,000

Assets under

Management

SageCrest II, LLC

Fiduciary Oversight

\$212,320,000

Debt Restructuring

5

SunCal Companies

The Westland Project

Ibuquerque, New Mexic

Financial Advisor

Restructured Debt



**REAL ESTATE** 

AND

**NFRASTRUCTURE** 

**ENERGY** 

**INDUSTRIAL** 

**OUTSOURCING** 

**SERVICES** 





Invested Capital of



Over \$800,000,000

Financial and Restructuring Chapter 11 Bankruptcy

has made a

strategic investment in

Project | Time&Cost

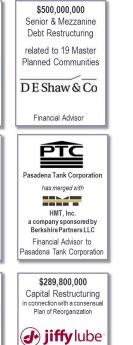
Project Time & Cost Inc.











Financial Advisor to

Capital Restructuring

THE FOUNTAINS

ountains Senior Living Holdings, LLC

Exclusive Financial Advisor

\$5,000,000,000

Pre-Filing Secured

Indebtedness

TB&W

Financial Advisor and

Chief Restructuring Officer

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

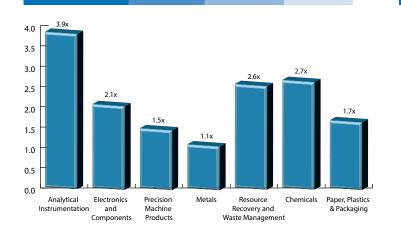
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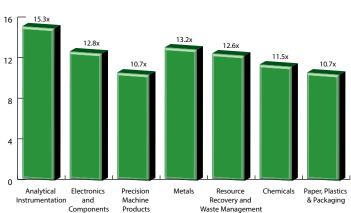


# Market Overview

# Enterprise Value To Revenue

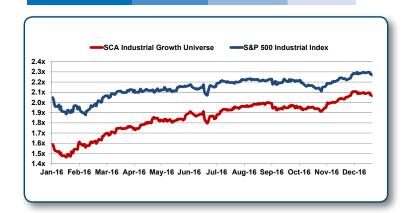


Enterprise Value To EBITDA

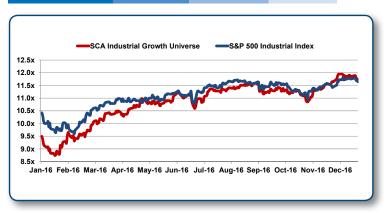


Revenue and EBITDA valuation multiples were bolstered after the Presidential election in Q4 despite a contraction in deal value from Q3 2016

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



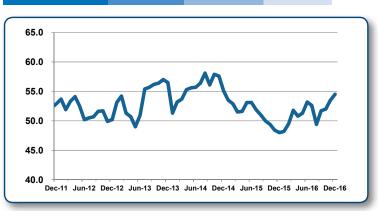
### SCA Industrial Growth Universe vs. S&P 500 Total Enterprise Value / EBITDA



## Federal Reserve Industrial Production



*Institute for Supply Management* Purchasing Managers' Index



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

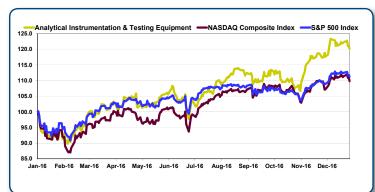


# Sector Stock Performance (one year)

### SCA Industrial Growth Index



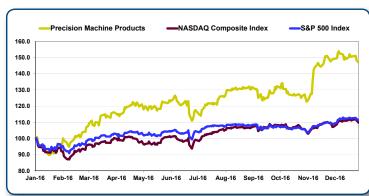
SCA Analytical Instrumentation & Testing Equipment Sector



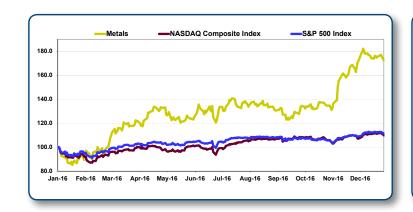
# SCA Electronics and Components Sector



SCA Precision Machine Products Sector



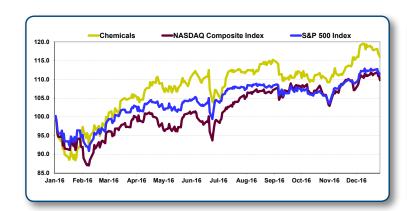
## SCA Metals Sector



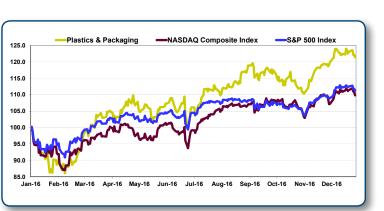
# SCA Resource Recovery & Waste Management Sector



## SCA Chemicals Sector



# SCA Plastics & Packaging Sector



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

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# Motable Industry Developments



### Crude Oil Prices Rise Ahead of OPEC Production Cuts

Crude oil prices fell in November before increasing sharply in December after OPEC. and 11-non OPEC countries including Russia and Mexico, agreed to reduce output by about 1.7 million barrels per day for the first half of 2017. Following this news, West Texas Intermediate ("WTI") crude oil prices rose to \$56.24/bbl and stabilized around \$52-\$54/bbl, an increase from \$48.24/bbl in the third guarter, but still lower than last year's average of \$59/bbl. Despite OPEC's first agreement to cut production in 8 years, the U.S. Energy Information Administration expects the global oil inventory to build at a slower rate in 2017 and 2018 than in 2016. This is due to the uncertainty of the OPEC agreement given OPEC members' poor record of complying with quotas. Additionality, the exemption of Nigeria and Libya and unwillingness from other non-OPEC producers, including Brazil, pose serious threats to the agreement's longevity. OPEC will meet in May to discuss a 6 month extension. Domestically, U.S. demand for oil continued to increase. The Baker Hughes rig count reported an increase of 100 oil rigs and 36 gas rigs in the fourth quarter, implying renewed activity and increased output by U.S. oil and gas producers in response to OPEC's planned production cuts.

### U.S. GDP Growth Slows in Q4

GDP growth slowed in Q4 to +1.9% annualized rate compared to its robust expansion in Q3 with an annualized rate of +3.5%. This slowdown in growth is due primarily to a swing in exports, which surged +14.5% in Q3 but fell to +7.0% in Q4. Eliminating exports and focusing solely on domestic demand, activity increased in Q4 to +3.6% from +2.7% in Q3. This quarter's increase in GDP reflects +1.7% growth in personal consumption expenditures (PCE), +1.0% growth in private inventory investment, +0.7% growth in fixed investments. and growth in state and local government spending that were partly offset by negative contributions from exports and federal government spending. Considering full year 2016. private investment decreased for the first time since 2009 with slowdowns in consumer spending and public spending. However, the U.S. ended 2016 with steady economic growth on a gently rising trend. Looking ahead, the projected increase in oil prices could increase inflation and subsequently drive down consumer demand and slow growth. President Trump's proposed infrastructure and import reduction plan is expected to increase future GDP due to increased government spending and a contraction of the trade deficit.

### SCA Industrial Growth Index Delivers Substantial Gains

Quarterly returns for the SCA Industrial Growth Sector increased substantially in the fourth quarter posting an average increase of +10.1% after a prior average increase of +6.3% in the third quarter of 2016. The Metals sector posted the most dominant gain in the fourth quarter of +28.8% after reporting flat gains last guarter. Trailing twelve months ("TTM") returns for the SCA Industrial Growth Sector were a notable +34.5% bolstered by all of the subsectors reporting prominant gains during the TTM period. The average TTM performance recorded over this same period by the broader market indices, S&P 500 and NASDAQ, were +11.2% and +9.8%, respectively.

## Upcoming Industry Conferences

#### **Analytical Instrumentation and Testing Equipment** PITTCON Microscopy & Microanalysis 2017 March 5-9, 2017 August 6-10, 2017 St. Louis, MD Chicago, IL

#### **Electronics and Components** IPC APEX EXPO IEEE Electronic Components February 12-16, 2017 and Technology Conference May 30 - June 2, 2017 San Diego, CA

# Lake Buena Vista, FL Precision Machine Products, Toolings, and Stampings

	FABTECH
Technology Show	November 6-9, 2017
April 25-27, 2017	Chicago, IL
Columbus NH	

NASCC: The Steel Conference	METALCON
	October 18-20, 201
San Antonio, TX	Las Vegas, NV

## Resource Recovery and Waste Management

WasteExpo 2017	The Resource Recycling
May 8-11, 2017	Conference
New Orleans, LA	August 28-30, 2017
	Minneapolis, MN

	InformEx
Exhibition	May 16-18, 2017
	Philadelphia, PA
Washington NC	

### Plastics and Packar

Plastics Recycling 2017	PACK EXPO International
March 6-8, 2017	September 25-27, 2017
New Orleans, LA	Las Vegas, NV
	March 6-8, 2017

# **Fourth Quarter 2016**

### **Manufacturing Activity Continues to Expand**

Manufacturing growth continued to expand in the fourth guarter. According to the Institute for Supply Management, the December Purchasing Managers' Index ("PMI") registered 54.7%, an increase of 150 basis points from November's PMI reading of 53.2%. A PMI greater than 50.0% represents expansion in the manufacturing sector; under 50.0% signals contraction in the sector. The New Orders Index registered 60.2%, a gain of 720 basis points from November's reading of 53.0%. The Production Index registered 60.3%, 430 basis points higher than November's reading of 56.0%. The Employment Index registered 53.1%, an increase of 80 basis points from November's reading of 52.3%. The Prices Index registered 65.5%, demonstrating higher raw materials prices for the tenth consecutive month. Of the 18 manufacturing industries, 11 reported an increase in new orders and 6 of the 18 industries reported increased production in December.

### U.S. Chemical Production Edged Higher in Q4

The U.S. Chemical Production Regional Index (U.S. CPRI) expanded in November by +20 basis points following a flat growth in October and a -20 basis point decline in September, according to the American Chemistry Council. The U.S. CPRI tracks U.S. chemical production measured on a three-month moving average basis. Manufacturing activity, a leading determinant of the chemicals industry, expanded in the fourth guarter contributing to the increase the CPRI. U.S. national chemical production decreased -110 basis points compared to November 2015, with the Ohio Valley geographic region experiencing the only positive year-over-year growth amongst the seven U.S. regions at +0.3%.

### **2016 World Steel Output Contracts**

World crude steel output slightly increased by 0.8% for the year 2016 compared to 2015, according to the World Steel Association, 2016 world production totaled 1,628.5 million tonnes (Mt) compared to 1.615.4 Mt in 2015. U.S. production decreased by -30 basis points in 2016 largely due to dollar appreciation and continued stagnation in the energy sector, producing 78.6 Mt compared to 78.8 Mt in 2015. The most recent Short Range Outlook forecasts 2017 world steel demand will slightly expand by +0.5%. Experts predict stabilization in previously low performing emerging economies, along with stable macroeconomic growth in ASEAN countries, leading the demand of steel consumption in 2017. U.S. demand is expected to grow in 2017 driven by increased demand from the construction and energy sectors. However, these gains will be offset by decreasing output from China, the world's largest steel producer accounting for about 50% of the world's total output, due to its softening real estate market and credit bubble speculation coupled with slow overall economic growth.

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# Selected M&A Transactions

Date	Target	Buyer	Enterprise Value (\$ mm)	Enterprise Value / Revenue	Enterprise Value / EBITDA
12/29/16	Terex Corporation (NYSE:TEX)	Zoomlion Heavy Industry Science and Technology Co., Ltd. (SZSE:000157)	\$4,627.6	0.8x	12.3x
Description:		e and Technology made a bid to accorducts, from an investor consortium		•	nufacturer of
12/22/16	<b>Dunn-Edwards Corporation</b>	Nippon Paint (USA) Inc.	\$608.0	1.7x	n/a
Description:		eement to acquire Dunn-Edwards C , from the Edwards Family in cash.	•	supplier of paint	s and
12/21/16	InvenSense, Inc. (NYSE:INVN)	TDK U.S.A. Corporation	\$1,200.3	3.5x	n/a
Description:	•	nto an agreement to acquire Inven The Vanguard Group, Inc. and othe		•	sor systems,
12/21/16	H-E Parts International LLC and HEP Australia Holdings Pty Ltd	Hitachi Construction Machinery Co., Ltd. (TSE:6305)	\$240.0	1.0x	9.6x
Description:	•	cquired H-E Parts International and some some some some some some some some		•	
12/21/16	Vinton Steel, LLC	Kyoei Steel Ltd. (TSE:5440)	\$52.0	n/a	n/a
Description:	Kyoei Steel agreed to acquire BD Capital Management for \$52 million	Vinton, a manufacturer of steel rebon.	oar and steel b	alls, from Black	Diamond
12/16/16	Manchester Industries, Inc.	Clearwater Paper Corporation (NYSE:CLW)	\$68.3	n/a	n/a
Description:	Clearwater Paper Corporation accommercial printing, from PaperW	quired Manchester Industries, a su Vorks Industries for \$68.3 million.	pplier of paper	board products	for

Date	Target	Buyer	Enterprise Value (\$ mm)	Enterprise Value / Revenue	Enterprise Value / EBITDA			
12/15/16	Republic Conduit, Inc.	Nucor Corporation (NYSE:NUE)	\$332.0	1.7x	n/a			
Description:	Nucor Corporation signed a definitive agreement to acquire Republic Conduit, a manufacturer of steel electric conduits, from Tenaris for approximately \$330 million.							
12/14/16	Conwed Plastics, LLC	DelStar Technologies, Inc.; SWM Luxembourg S.à.r.l; SWM Europe S.à.r.l.	\$335.0	2.4x	n/a			
Description:	DelStar Technologies, SWM Luxembourg, and SWM Europe signed an equity interest purchase agreement to acquire Conwed Plastics, a manufacturer of plastic netting and specialty plastic products, from Baldwin Enterprises for approximately \$340 million.							
12/09/16	Stillwater Mining Company (NYSE:SWC)	Sibanye Gold Limited (JSE:SGL)	\$2,027.0	3.0x	23.9x			
Description:	Sibanye Gold Limited entered into platinum group metals, for \$2.2 b	o an agreement to acquire Stillwate illion in cash.	er Mining Comp	oany, a manufad	cturer of			
12/09/16	Huber Engineered Materials, Silica Business Unit	Evonik Industries AG (DB:EVK)	\$630.0	n/a	n/a			
Description:	<u> </u>	ive agreement to acquire the Silica or Engineered Materials for \$630 m		a manufacture	r of silica for			
12/06/16	Southland Tube, Inc.	Nucor Corporation (NYSE:NUE)	\$130.0	n/a	n/a			
Description:	Nucor Corporation agreed to acq \$130 million.	uire Southland Tube, a producer of	carbon steel p	pipe and tubing	products, for			
12/01/16	CLARCOR Inc.	Parker-Hannifin Corporation (NYSE:PH)	\$4,312.7	3.1x	17.2x			
Description:	Parker-Hannifin Corporation entered into a definitive agreement to acquire CLARCOR, a provider of filtration products and filtration systems, for \$4 billion.							

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Date	Target	Buyer	Enterprise Value (\$ mm)	Enterprise Value / Revenue	Enterprise Value / EBITDA
11/03/16	Novomer, Inc., Converge Polyols Businesses	Aramco Services Company, Inc.; Saudi Aramco Technologies	\$100.0	n/a	n/a
Description:		Saudi Aramco Technologies acquire echnology, from Novomer for \$100	•	e Polyols busin	esses, a
11/02/16	Anchor Glass Container Corporation	CVC Capital Partners Limited; BA Glass BV	\$1,000.0	n/a	n/a
Description:	·	ess signed a definitive agreement to everage containers, from KPS Cap	•		ner
11/02/16	Pinova, Inc.	Les Derives Resiniques Et Terpeniques SA	\$150.0	n/a	n/a
Description:	Les Derives Resiniques Et Terper sensory ingredients, from Pinova	niques agreed to acquire Pinova Ind Holdings for \$150 million.	c., a distributer	of specialty ros	sins and
11/02/16	PVI Industries, LLC	Watts Regulator Company	\$78.0	1.6x	n/a
Description:	Watts Regulator Company acquire \$78 million.	ed PVI Industries, a supplier of con	nmercial water	heaters, for ap	proximately
11/02/16	Plastic Packaging Inc.	Sonoco Products Company (NYSE:SON)	\$64.5	n/a	n/a
Description:	Sonoco Products acquired Plastic million in cash.	c Packaging, a manufacturer of flex	ible plastic pad	ckaging product	s, for \$64.5
11/01/16	ESL ElectroScience, Inc.	Ferro Corporation (NYSE:FOE)	\$75.0	1.9x	n/a
Description:	Ferro Corporation acquired Electrand ceramic tapes, for \$75 million	ro Science Laboratories, a produce n.	r of screen-prii	ntable thick-film	materials

Date	Target	Buyer	Enterprise Value (\$ mm)	Enterprise Value / Revenue	Enterprise Value / EBITDA		
10/13/16	Sigma Electric Manufacturing Corp.	Argand Partners, LLC	\$250.0	1.7x	n/a		
Description:	Argand Partners acquired Sigma Electric Manufacturing, a producer of electrical fittings and other precision electrical components, from Goldman Sachs Private Equity Group and others for approximately \$150 million.						
10/11/16	Columbus Container Inc.	Packaging Corporation of America (NYSE:PKG)	\$100.0	n/a	3.3x		
Description:	Packaging Corporation of America entered into a definitive agreement to acquire substantially all of the assets of Columbus Container, a manufacturer of corrugated packaging products, for \$100 million.						
10/03/16	Tipper Tie, Inc.	John Bean Technologies Corporation (NYSE:JBT)	\$160.0	n/a	n/a		
Description:	John Bean Technologies Corporation signed a definitive agreement to acquire Tipper Tie, a supplier of processing and clipping machines, from Dover Corporation for \$160 million.						
10/03/16	ElectroMagnetic Enterprise	SL Montevideo Technology, Inc.	\$64.5	1.2x	n/a		
Description:	SL Montevideo Technology acquired substantially all of the assets of ElectroMagnetic Enterprise, a servicer of electric motors and commercial power generators, from UTC Aerospace Systems for approximately \$64.5 million.						

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# Waluation 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	
Analytic	ा al Instrumentation and Te	sting E	quipment <sup>1</sup>			rtovonao	LBITER		
AME	AMETEK, Inc.	\$48.60	91.8%	\$11,247.6	\$12,956.6	3.4x	12.7x	12.7x	21.1x
CGNX	Cognex Corporation	63.62	96.5%	5,450.1	5,060.5	10.3x	34.6x	27.7x	42.2x
ESIO	Electro Scientific Industries, Inc.	5.92	78.3%	192.2	136.0	0.8x	NM	NM	NM
ESE	ESCO Technologies Inc.	56.65	96.4%	1,457.1	1,513.2	2.6x	15.0x	12.2x	32.0x
HEI	HEICO Corporation	77.15	93.7%	4,820.2	5,419.3	3.9x	16.3x	15.8x	33.7x
MTD	Mettler-Toledo International Inc.	418.56	96.3%	10,983.0	11,684.7	4.7x	20.5x	18.3x	30.9x
MTSC	MTS Systems Corporation	56.70	90.6%	945.5	799.2	1.4x	12.2x	6.2x	27.5x
					Mean	3.9x	15.3x	15.5x	29.1x
Electron	nics and Components								
BELF.B	Bel Fuse Inc.	30.90	92.0%	356.6	436.3	0.8x	9.0x	NM	NM
ETN	Eaton Corporation plc	67.09	95.8%	30,304.6	38,089.6	1.9x	11.7x	11.4x	15.9x
LFUS	Littelfuse, Inc.	151.77	97.0%	3,419.7	3,661.7	3.7x	17.8x	14.3x	34.5x
					Mean	2.1x	12.8x	12.8x	25.2x
Precisio	on Machine Products, Too	ling and	l Stampings	6					
CW	Curtiss-Wright Corporation	98.36	91.4%	4,350.5	4,865.3	2.3x	11.9x	11.3x	23.6x
HDNG	Hardinge Inc.	11.08	80.8%	142.9	128.6	0.4x	9.5x	NM	NM
HURC	Hurco Companies, Inc.	33.10	97.1%	217.6	176.9	0.8x	7.0x	NM	14.7x
KMT	Kennametal Inc.	31.26	87.7%	2,498.7	3,107.1	1.5x	13.1x	11.2x	NM
ROLL	RBC Bearings Incorporated	92.81	97.7%	2,151.1	2,443.7	4.0x	16.7x	15.9x	30.3x
SHLO	Shiloh Industries, Inc.	6.91	70.7%	121.7	383.7	0.3x	7.5x	NM	NM
TKR	The Timken Company	39.70	96.5%	3,089.2	3,650.8	1.3x	9.1x	9.5x	34.3x
					Mean	1.5x	10 7x	12 0x	25 7x

Ticker	Company Name	Stock Price	% of 52 Week High	Market Cap (\$mm)	Enterprise Value (\$mm)	Enter	prise Valu	ıe to:	P/E
						LTM Revenue	LTM EBITDA	NTM EBITDA	
Metals F	Processors <sup>2</sup>								
ATI	Allegheny Technologies Inc.	15.93	83.0%	1,735.2	3,513.5	1.1x	NM	8.5x	NM
CMC	Commercial Metals Company	21.78	88.4%	2,516.5	3,070.6	0.7x	9.4x	8.4x	35.1x
RS	Reliance Steel & Aluminum Co.	79.54	90.8%	5,771.7	7,764.1	0.9x	9.9x	9.1x	18.6x
TSX:RUS	Russel Metals Inc.	19.04	92.1%	1,175.3	1,338.0	0.7x	12.8x	12.1x	NM
SCHN	Schnitzer Steel Industries, Inc.	25.70	84.0%	675.0	844.4	0.6x	11.3x	7.9x	NM
ASX: SGM	Sims Metal Management Limited	9.28	94.2%	1,831.6	1,650.1	0.5x	27.9x	8.4x	NM
WOR	Worthington Industries, Inc.	47.44	76.0%	2,967.9	3,496.0	1.2x	8.7x	11.2x	15.2x
					Mean	0.8x	10.4x	9.4x	23.0x
Tube ar	nd Pipe Producers <sup>3</sup>								
AKS	AK Steel Holding Corporation	10.21	89.6%	3,195.9	5,510.0	0.9x	9.2x	7.8x	NM
NWPX	Northwest Pipe Company	17.22	91.0%	165.3	154.5	1.0x	NM	20.5x	NM
SSAB A	SSAB AB	49.51	1115.2%	3,460.4	5,566.2	0.9x	13.2x	7.5x	111.3x
STLD	Steel Dynamics, Inc.	35.58	88.6%	8,675.1	10,196.4	1.4x	10.0x	7.5x	80.1x
SYNL	Synalloy Corporation	10.95	93.6%	94.9	103.1	0.7x	185.2x	NM	NM
BIT:TEN	Tenaris S.A.	14.09	76.8%	21,148.2	19,817.7	4.4x	31.8x	22.3x	NM
Χ	United States Steel Corporation	33.01	84.3%	5,692.9	7,328.9	0.7x	152.7x	7.4x	NM
					Mean	1.4x	16.1x	12.2x	NM

<sup>[1]</sup> CGNX is excluded from mean calculation of Revenue, LTM EBITDA, and P/E multiples.

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<sup>[2]</sup> ASX:SGM is excluded from mean calculation of LTM EBITDA multiple.

<sup>[3]</sup> SYNL and X are excluded from mean calculation of LTM EBITDA multiple; SSAB A and

STLD are excluded from mean calculation of P/E multiple.



		Stock	% of 52	Market Cap	Enterprise				
Ticker	Company Name	Price	Week High	(\$mm)	Value (\$mm)	Enter	prise Valu	ue to:	P/E
						LTM Revenue	LTM EBITDA	NTM EBITDA	
Resource	Resource Recovery and Waste Management <sup>4</sup>								
ECOL	US Ecology, Inc.	49.15	97.8%	1,070.5	1,351.9	2.7x	11.6x	11.0x	31.1x
CWST	Casella Waste Systems, Inc.	12.41	92.5%	514.9	1,011.9	1.8x	9.7x	8.3x	NM
CECE	CECO Environmental Corp.	13.95	93.8%	476.6	586.2	1.4x	11.1x	9.5x	48.0x
CLH	Clean Harbors, Inc.	55.65	95.6%	3,193.9	4,568.6	1.6x	11.5x	10.0x	NM
HCCI	Heritage-Crystal Clean, Inc	15.70	93.7%	351.8	389.3	1.1x	16.2x	8.2x	NM
RSG	Republic Services, Inc.	57.05	98.4%	19,394.7	27,107.6	2.9x	10.4x	9.9x	33.2x
WCN	Waste Connections, Inc.	78.59	98.4%	13,786.7	17,368.3	6.1x	19.2x	12.8x	52.1x
WM	Waste Management, Inc.	70.91	98.8%	31,342.4	40,597.4	3.0x	11.2x	10.5x	28.4x
					Mean	2.6x	12.6x	10.0x	30.9x
Diversifi	ed Chemicals⁵								
ASH	Ashland Global Holdings Inc.	109.29	87.4%	6,799.3	8,673.3	1.8x	11.5x	11.5x	NM
CBT	Cabot Corporation	50.54	93.2%	3,150.3	4,000.3	1.7x	8.7x	7.9x	21.6x
DOW	The Dow Chemical Company	57.22	96.4%	64,165.4	83,882.4	1.8x	9.0x	8.2x	8.9x
EMN	Eastman Chemical Company	75.21	95.5%	11,037.1	17,589.1	1.9x	8.3x	7.7x	13.0x
DD	E. I. du Pont de Nemours and Company	73.40	96.8%	63,809.7	70,073.7	2.8x	15.1x	11.3x	32.0x
FMC	FMC Corporation	56.56	94.3%	7,569.9	9,452.1	2.9x	14.1x	12.4x	293.4x
OLN	Olin Corporation	25.61	95.1%	4,232.6	7,785.7	1.4x	9.5x	8.2x	NM
JEIT	Oiii i Corporation	20.01	30.170	T, ZOZ. 0	Mean	2.0x	10.9x	9.6x	18.9x

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 <sup>6</sup>										
ALB	Albemarle Corporation	86.08	93.3%	9,681.9	13,050.1	3.7x	12.7x	17.6x	16.4x	
CHMT	Chemtura Corporation	33.20	99.6%	2,091.6	2,369.6	1.4x	7.7x	7.7x	75.1x	
ECL	Ecolab Inc.	117.22	94.1%	34,175.7	40,729.9	3.1x	14.2x	13.3x	32.6x	
FOE	Ferro Corporation	14.33	88.6%	1,194.9	1,649.4	1.5x	9.1x	7.4x	9.9x	
FUL	H.B. Fuller Company	48.31	94.9%	2,429.6	3,012.9	1.5x	11.0x	10.0x	22.5x	
IFF	International Flavors & Fragrances Inc.	117.83	82.0%	9,358.5	10,229.7	3.3x	14.6x	13.6x	23.4x	
MTX	Minerals Technologies Inc.	77.25	92.8%	2,698.7	3,650.5	2.2x	10.6x	10.0x	23.9x	
POL	PolyOne Corporation	32.04	83.4%	2,684.3	3,732.5	1.1x	9.7x	8.4x	20.3x	
KWR	Quaker Chemical Corporation	127.94	91.4%	1,696.1	1,682.9	2.3x	15.8x	14.8x	30.6x	
SCL	Stepan Company	81.48	93.7%	1,825.5	1,946.0	1.1x	9.4x	8.4x	21.0x	
VAL	The Valspar Corporation	103.61	95.1%	8,229.0	9,832.7	2.3x	14.6x	13.1x	23.8x	
					Mean	2.1x	11.8x	11.3x	22.4x	
Industrial Gases										
APD	Air Products and Chemicals, Inc.	143.82	91.1%	31,270.8	36,121.3	3.8x	11.1x	12.6x	20.7x	
PX	Praxair, Inc.	117.19	93.8%	33,444.7	43,063.7	4.1x	12.4x	11.8x	22.2x	
					Mean	3.9x	11.7x	12.2x	21.5x	

<sup>[4]</sup> CECE and WCN are excluded from mean calculation of P/E multiple.
[5] FMC is excluded from mean calculation of P/E multiple.
[6] CHMT is excluded from mean calculation of P/E multiple.

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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>7</sup>									
GPK	Graphic Packaging Holding Company	12.48	84.9%	3,963.3	6,172.6	1.4x	8.3x	7.9x	16.1x	
GEF	Greif, Inc.	51.31	88.5%	2,809.6	3,826.4	1.2x	8.8x	8.3x	32.8x	
IP	International Paper Company	53.06	97.0%	21,819.0	30,178.0	1.4x	9.7x	7.2x	25.4x	
PKG	Packaging Corporation of America	84.82	95.9%	7,920.9	10,315.0	1.8x	9.2x	8.3x	18.2x	
SON	Sonoco Products Company	52.70	95.0%	5,262.0	6,216.9	1.3x	9.4x	9.5x	22.7x	
WRK	WestRock Company	50.77	94.8%	12,581.6	18,144.8	1.3x	8.0x	7.5x	88.7x	
					Mean	1.4x	8.9x	8.1x	23.0x	
Plastics	/Films <sup>8</sup>									
SHLM	A. Schulman, Inc.	33.45	88.7%	981.4	2,030.5	0.8x	9.2x	8.7x	NM	
ATR	AptarGroup, Inc.	73.45	90.1%	4,604.7	5,091.0	2.2x	10.8x	10.5x	23.8x	
ITP	Intertape Polymer Group Inc.	18.75	97.8%	1,099.4	1,298.8	1.7x	13.1x	9.6x	24.6x	
MYE	Myers Industries, Inc.	14.30	90.2%	427.9	620.3	1.1x	10.5x	10.1x	166.6x	
LSE:RPC	RPC Group Plc	13.15	96.3%	4,344.6	5,415.5	2.1x	14.8x	9.9x	41.9x	
TG	Tredegar Corporation	24.00	93.8%	783.7	847.1	1.0x	10.4x	10.2x	47.0x	
					Mean	1.5x	11.5x	9.8x	34.3x	

<sup>[7]</sup> WRK is excluded from mean calculation of P/E multiple. [8] 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.	47.82	88.2%	4,481.3	5,905.5	1.5x	10.0x	9.4x	19.8x		
CCL.B	CCL Industries Inc.	196.39	95.6%	6,778.4	7,662.5	2.8x	14.4x	10.8x	29.2x		
LABL	Multi-Color Corporation	77.60	97.3%	1,313.9	1,781.8	2.0x	11.7x	10.6x	26.3x		
SEE	Sealed Air Corporation	45.34	85.8%	8,764.7	13,093.4	1.9x	12.1x	10.6x	20.5x		
WPK	Winpak Ltd.	33.81	89.2%	2,197.9	2,024.7	2.5x	10.8x	10.9x	21.7x		
					Mean	2.1x	11.8x	10.5x	23.5x		
OVERALL INDUSTRIAL GROWTH SECTOR					Mean	2.1x	12.0x	11.1x	25.2x		

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### **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.

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