## **FLOW CONTROL**

# Industry In-Sight

**SECOND QUARTER 2018** 









#### IN THIS REPORT

Introduction	1
Current Events / Trends	3
Mergers & Acquisitions Activity	5
Public Equity and Valuation Analysis	7
Economic Indicators	19



## Introduction

BY G. COOK JORDAN, JR.

#### Who is JKC and What Do We Do?

Jordan Knauff & Company (JKC) was founded in 2001 to undertake a distinct mission: to assemble and maintain a staff of top-notch investment banking personnel and offer their knowledge and experience to provide the best available investment banking services to middle-market companies, the entrepreneurs that lead them and the financial entities that transact with them. On a combined basis, over the course of their careers our employees have completed over 200 transactions as investors, owners, operators, investment bankers, buyers of middle-market businesses or sellers of middle-market businesses across a variety of industries. The majority of our firm's broad transaction experience has been with private companies owned by one shareholder, a partnership, a family or private equity investors.

Experience has taught us that the owners and executives of middle-market businesses tend to have very different needs and goals in capital transactions from those that are common to capital events related to larger companies. Our personnel apply their considerable expertise to accomplish important goals: delivery of successful outcomes for our clients. Pursuant to that, we direct and manage all aspects of the capital transaction process, assist our clients with the management of important constituents (employees, customers, vendors and lenders), act as a teammate to other important client advisors (legal counsel, accountant, tax advisor) and collaborate with transaction counsel in the negotiations with the parties on the other side of the transaction.

that the owners and executives of middle-market businesses tend to have very different needs and goals ... than... larger companies.

Experience has taught us

#### The Services We Provide

#### Sell Companies

Representation of owners who are seeking the sale of their business – ranging from the sale of part of the equity of a company to a full liquidity transaction involving the sale of the entire business. In either case, our objective is to transfer the inherent value of the business into an exchange which yields the best price and structure that meet the specific transaction goals of our client.

#### Raise Debt and Equity Capital

 We represent clients in the raising of all forms of capital: senior debt, mezzanine debt and equity capital. Proceeds may be typically used for a variety of applications, including: funding growth, recapitalization, expansion of assets, acquisitions or partial liquidity for shareholders.

#### Acquisition Advisory

 Assistance to clients in the successful closing of an acquisition. Pertinent services include: valuation, optimization of structure, direction of the due diligence process and negotiation of transaction documents. Acquisition advisory services encompass work on a standalone target or a series of acquisitions that form a strategic consolidation plan.

#### Strategic Business Services

- A suite of consulting projects designed specifically for middlemarket business owners and executives to enable them to make better decisions about their companies or industries. Services include:
  - Company Specific Valuations
  - Capital Road Maps®
  - Strategic Industry Analyses

#### Areas of Expertise

Our team of professionals has notable experience in a broad portfolio of industries. While each project is evaluated on a case-by-case basis and the firm has the capabilities to service middle-market companies in almost any industry, JKC has significant expertise in the following industries:

#### Manufacturing & Distribution

- Manufacturing / Valued Added Manufacturing
- Manufacturing Process Technology
- Distribution / Value Added
   Distribution

#### **Building Products & Services**

- Windows & Doors
- Pre-fabricated Forms and Components
- Caulks & Sealants
- Flooring Products

#### **Energy Logistics & Distribution**

- Natural Gas Liquids: Direct to Consumer, Wholesale & Midstream
- Light Fuels
- Lubricants
- Petro Chemicals

#### Flow Control

- Pumps, Valves & Filtration
- Water Management
- Related Technology

**Business Services** 

Real Estate

#### Closing Thoughts

Thank you for taking the time to review this quarterly publication. We hope that you will find it to be relevant and informative. With that purpose in mind, we would welcome any thoughts or comments that you may have about it. To view our previous quarterly publications, as well as our other Flow Control related publications, visit our research portal at www.jordanknauff.com/research-library. Should you desire more information about our firm and its mission, please contact any member of our team listed on the back cover of this report. Our website is www.jordanknauff.com and our main telephone number is (312) 254-5900.

... please contact any member of our team listed on the back cover of this report.

2 Jordan Knauff & Company



### Current Events / Trends

BY G. COOK JORDAN, JR. LORI A. CALLAWAY





Worldwide demand for air and fluid filters is forecast to grow 5.4% per year through 2020 to \$44.9 billion. [1] Fluid filters accounted for 54% of total global filter sales in 2015, and will remain the larger product category through 2020. Advances in manufacturing activity, particularly in industries that use process fluids, will support this demand. Driven by rising income levels and expanding industrial sectors, the world's emerging markets, especially those in the Asia/Pacific region, will post the fastest gains. Solid gains in manufacturing output are also expected to spur demand for air and fluid filters installed in goods at the point of manufacture, and for filters used to purify liquid and gas streams during manufacturing processes. While China will contribute the most growth, Indonesia and India are projected to achieve the fastest average annual gains worldwide through 2020, driven by their increasingly sophisticated manufacturing sectors.

In June, Smiths Group plc completed the acquisition of Seebach GmbH, a provider of highly-engineered filtration solutions, from Avedon Capital Partners for approximately \$74 million. Seebach will be integrated into Smiths' largest division, John Crane Inc., which supplies engineered technologies and services to energy services and other major process industries.

Seebach designs and manufactures filtration systems for the automotive, oil and gas, chemical, mining, pharmaceutical, and food and drink industries. It also removes particles from hot or chemically aggressive gases and fluids. The company was founded in 1970 and is based in Vellmar, Germany, with locations in the United States, the Netherlands, India and China.

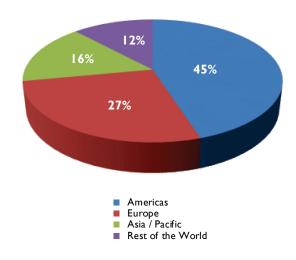
John Crane designs and manufactures mechanical seals and systems, couplings, filtration systems and predictive digital monitoring technologies. The company serves a wide range of process industries, including oil and gas, chemical, power, pharmaceutical and general industry. Founded in 1917 and based in Chicago, Illinois, John Crane operates more than 200 facilities in 50 countries, including sales and service locations in the United States and Malaysia; a customer service center in Perth, Australia; a manufacturing and customer service center in Tianjin, China; and a service super center in Singapore.

With more than 6,500 employees, John Crane had revenue of more than \$1.1 billion in 2017 and receives approximately 55% of its revenue from the oil and gas sector, including 85% in the downstream market and 15% in midstream. The remaining 45% of the company's revenue comes from the pharmaceutical, chemical, pulp and paper, and water treatment markets. The company added filtration systems to its product offering in 2008 with the purchase of the Netherlands-based Indufil BV, a manufacturer of systems used for rotating equipment in the petrochemical and power sectors.

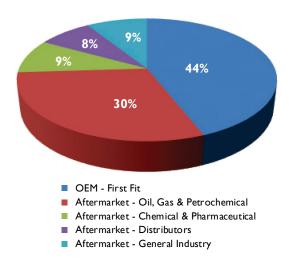
<sup>(</sup>I) The Freedonia Group.

Based in London, Smiths Group designs, manufactures and sells various products and services for threat and contraband detection, medical devices, energy, communications and engineered components markets worldwide. It operates through five divisions -- John Crane Inc., Smiths Medical, Smiths Detection, Smiths Interconnect and Flex-Tek. The Smiths Medical division provides specialty medical devices and consumables. The Smiths Detection division offers detection technologies comprising sensors and systems that detect and identify explosives, narcotics, weapons, chemical agents, biohazards and contraband. The Smiths Interconnect division provides electronic and radio frequency board-level and waveguide devices, connectors, cables, test sockets, and sub-systems for the defense, aerospace, space, rail, medical, and semiconductor test end markets. The Flex-Tek division offers engineered components that heat and move fluids and gases for aerospace, consumer products, construction, medical, and industrial applications.

#### John Crane Inc. Revenue by Geography(1)



#### John Crane Inc. Revenue by Sector<sup>(2)</sup>



<sup>(</sup>I) Source: Smiths Group plc.

<sup>(2)</sup> Source: John Crane Inc.



## Mergers & Acquisitions Activity

BY DAVID A. KAKAREKA

Flow Control M&A activity continues to be resilient as evidenced by the recent transactions listed below.

TABLE II: SELECTED VALVE M&A TRANSACTIONS: 2Q 2018(1)

nnounced Date	Target	Acquirer(s)
5/17/2018	Aventics GmbH	Emerson
5/9/2018	Wuxi Deli Fluid Technology Co. Ltd.	Bucher Industries
4/11/2018	OCV Control Valves	MAT Holding
4/9/2018	Cephas Pipelines Corp.	KITZ Corporation
4/4/2018	Valve Automation Division of Rotex Manufacturers and Engineers Private Ltd.	Metso Corporation
4/3/2018	The Oilgear Company	Texas Hydraulics Inc.

#### TABLE III: SELECTED PUMP M&A TRANSACTIONS: 2Q 2018(1)

nnounced Date	Target	Acquirer(s)
6/15/2018	Ace Pump Corporation	Annovi Reverberi SpA
6/7/2018	Hydratron Ltd.	Pryme Group Ltd.
5/9/2018	Wuxi Deli Fluid Technology Co. Ltd.	Bucher Industries
4/30/2018	Piab Group AB	Patricia Industries AB
4/10/2018	Dubric Industries Inc.	KSB Group
4/3/2018	The Oilgear Company	Texas Hydraulics Inc.

#### TABLE IV: SELECTED FILTER M&A TRANSACTIONS: 2Q 2018(1)

nnounced Date	Target	Acquirer(s)
5/10/2018	UV Flu Technologies Inc.	Vystar Corporation
5/7/2018	Aqua Invent AB	NielNord Invest
5/6/2018	Hydra-Fab Fluid Power Inc.	HAWE Hydraulik SE
5/1/2018	M.C. Air Filtration Ltd.	Camfil AB
4/30/2018	Facet Filtration Business of Parker Hannifin Corporation	Filtration Group Corporation
4/11/2018	Etablissements Chimbault-Peyridieux	Camfil AB
4/3/2018	Biological Controls Inc.	RGF Environmental Group Inc.

<sup>(</sup>I) Source: S&P Capital IQ and JKC research.

This page has been intentionally left blank.



## Public Equity and Valuation Analysis

BY DAVID A. KAKAREKA

#### Wall Street Valve Watch

The JKC Valve Stock Index was up 10.1% over the last 12 months, while the broader S&P 500 Index gained 11.9%.

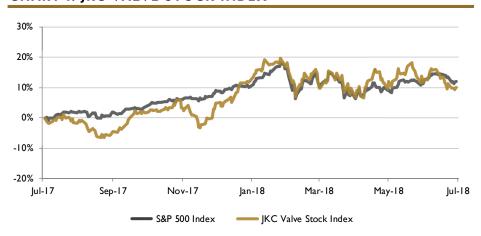
Reaching a record high of almost 60 quadrillion BTUs in 2017, the U.S. remained the world's top producer of petroleum and natural gas hydrocarbons, followed by Russia and Saudi Arabia. U.S. petroleum and natural gas production has increased by almost 60% since 2008. The U.S. has been the top producer of natural gas since 2009 and the top producer of petroleum hydrocarbons since 2013.<sup>(1)</sup>

Based on the combined value of energy exports and imports, Canada is the largest energy trading partner with the United States. Canada is the top source of U.S. energy imports and the second-largest destination for U.S. energy exports, behind only Mexico. In 2017 the value of all U.S. energy imports from Canada totaled \$73 billion, or 24% of the value of all U.S. imports from Canada. Energy accounted for \$18 billion, or 6% of the value of all U.S. exports to Canada last year.

Both U.S. and Organization for Economic Cooperation and Development (OECD) member countries' total liquid fuel inventories have returned to their five-year averages after above average levels since the end of 2014. As a result of the OPEC and Russian agreement to reduce crude oil production, global petroleum inventories declined through 2017 and the first quarter of 2018, ending an extended period of oversupply in the market.

Trade war fears continued throughout the second quarter and increased volatility in the markets. The Dow Jones Industrial Average gained 0.7%, the S&P 500 Index increased 2.9% and the NASDAQ Composite grew 6.3% for the second quarter. The Federal Reserve Bank increased interest rates by 0.25% and talked about two more rate increases by the end of the year. Markets saw a large selloff when the Administration threatened to impose tariffs on \$200 billion worth of goods imported from China.

#### CHART I: JKC VALVE STOCK INDEX(2)



<sup>(</sup>I) See Economic Indicators section of this report for more detailed information on these indicators.

www.jordanknauff.com

... in 2017, the U.S.

world's top producer

of petroleum and

followed by Russia

and Saudi Arabia.

remained the

natural gas

hydrocarbons,

7

<sup>(2)</sup> Source: S&P Capital IQ and JKC research. Local currency converted to USD using historical spot rates. The JKC Valve Stock Index includes a select list of publicly-traded companies involved in the valve industry weighted by market capitalization.

#### **Valve Companies**

As shown in Tables V and VI, as of June 30, 2018, domestic and international Valve companies were trading at median total enterprise value / latest twelve months ("TEV/LTM") EBITDA multiples of 12.7x and 10.9x, respectively, while both groups have median EBITDA margins of 16.9% and 11.9%, respectively. The median stock price as a percentage of the 52-week high for both groups is 84% and 83%, respectively, of their 52-week highs. With the exception of a few companies, we believe both groups are fairly well capitalized.

TABLE V: SELECTED DOMESTIC VALVE COMPANIES(1)

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

		Stock					Total			
	LTM			Price	52-Week	Market	Enterprise	TEV /	LTM	Net Debt <sup>(4)</sup> /
Company	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin	6/30/2018	High	Сар	Value <sup>(3)</sup>	Revenues	EBITDA	EBITDA
Badger Meter Inc. (BMI)	\$415	\$69	16.7%	\$44.70	85.8%	\$1,301	\$1,336	3.2x	19.3x	0.4x
CIRCOR International Inc. (CIR)	792	77	9.7	36.96	60.4	733	1,425	1.8	18.5	9.0
Crane Co. (CR)	3,060	540	17.6	80.13	78.1	4,784	5,556	1.8	10.3	1.5
Curtiss-Wright Corp. (CW)	2,348	480	20.5	119.02	83.0	5,262	5,680	2.4	11.8	1.2
Dover Corp. (DOV)	7,946	1,412	17.8	73.20	67.1	11,322	14,413	1.8	10.2	2.1
Emerson Electric Co. (EMR)	16,955	3,603	21.3	69.14	92.9	43,564	46,355	2.7	12.9	0.7
Flowserve Corp. (FLS)	3,714	406	10.9	40.40	84.0	5,286	6,341	1.7	15.6	2.6
General Electric Co. (GE)	124,038	5,703	4.6	13.61	49.3	118,207	252,151	2.0	44.2	17.9
Honeywell International Inc. (HON)	42,275	8,704	20.6	144.05	87.2	107,595	115,786	2.7	13.3	0.8
ITT Corporation (ITT)	2,715	458	16.9	52.27	90.7	4,569	4,388	1.6	9.6	(0.5)
Mueller Water Products, Inc. (MWA)	889	159	17.9	11.72	90.2	1,853	2,010	2.3	12.6	0.7
Parker Hannifin Corporation (PH)	14,302	2,348	16.4	155.85	73.2	20,722	25,411	1.8	10.8	1.7
Schlumberger Limited (SLB)	32,215	7,009	21.8	67.03	83.4	92,845	107,194	3.3	15.3	2.1
SPX Flow Inc. (FLOW)	2,042	229	11.2	43.77	79.7	1,861	2,489	1.2	10.9	2.8
TechnipFMC plc (FTI)	13,910	1,905	13.7	31.74	90.7	14,560	12,119	0.9	6.4	(0.9)
Watts Water Technologies, Inc. (WTS)	1,488	231	15.5	78.40	93.1	2,677	2,939	2.0	12.7	1.1
Xylem Inc. (XYL)	5,006	882	17.6	67.38	84.4	12,123	14,441	2.9	16.4	2.5
Median			16.9%		84.0%			2.0x	12.7x	1.5x
Mean			15.9		80.8			2.1	14.8	2.7

<sup>(1)</sup> Source: S&P Capital IQ and JKC research.

<sup>(2)</sup> Revenues and EBITDA are for the latest twelve months as of 6/30/18.

<sup>(3)</sup> Total enterprise value is defined as market capitalization plus total debt less cash and cash equivalents.

<sup>(4)</sup> Net debt is defined as total debt less cash and cash equivalents.



#### TABLE VI: SELECTED INTERNATIONAL VALVE COMPANIES(1)

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

				Stock	% of		Total			
	LTM			Price	52-Week	Market	Enterprise	TEV /	LTM	Net Debt <sup>(4)</sup> /
Company	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin	6/30/2018	High	Сар	Value <sup>(3)</sup>	Revenues	EBITDA	EBITDA
Aalberts Industries NV (AALB)	\$3,143	\$496	15.8%	\$47.86	91.1%	\$5,292	\$5,984	1.9x	12.1x	1.8x
Alfa Laval AB (ALFA)	4,022	723	18.0	23.73	90.5	9,952	10,961	2.7	15.2	1.5
Georg Fischer AG (FI-N)	4,195	485	11.6	1,279.28	89.5	5,237	5,474	1.3	11.3	1.0
Hisaka Works Ltd. (6247)	243	26	10.7	9.46	82.9	283	144	0.6	5.6	(5.6)
Hitachi Ltd. (6501)	84,524	10,299	12.2	7.05	82.8	34,043	44,984	0.5	4.4	0.0
IMI plc (IMI)	2,310	404	17.5	14.94	77.9	4,023	4,355	1.9	10.8	1.5
Kitz Corp. (6498)	1,124	134	11.9	8.20	81.0	798	907	0.8	6.8	1.4
KSB Aktiengesellschaft (KSB)	2,579	164	6.4	400.19	66.0	712	652	0.3	4.0	(1.6)
Kubota Corp. (6326)	16,017	2,275	14.2	15.73	73.6	19,381	25,252	1.6	11.1	2.1
Lupatech S.A. (LUPA3)	27	(53)	(196.1)	0.35	28.7	5	59	2.2	NM	(1.0)
Metso Corp. (METSO)	3,235	341	10.5	33.49	89.6	5,023	5,051	1.6	14.8	0.6
Okano Valve Manufacturing Co. (6492)	78	5	6.6	23.46	86.8	41	35	0.4	6.7	(0.1)
Saint Gobain (SGO)	47,614	4,845	10.2	44.65	74.5	24,583	31,979	0.7	6.6	2.2
SMC Corp. (6273)	5,332	1,874	35.1	366.56	72.8	24,640	19,823	3.7	10.6	(2.7)
Spirax-Sarco Engineering plc (SPX)	1,318	340	25.8	86.03	99.3	6,330	6,824	5.2	20.1	1.4
The Weir Group PLC (WEIR)	3,109	443	14.2	26.39	85.7	6,392	7,506	2.4	16.9	1.7
Velan, Inc. (VLN)	329	4	1.3	10.64	68.3	230	190	0.6	43.8	(7.9)
Median			11.9%		82.8%			1.6x	10.9x	1.0x
Mean			1.5		78.9			1.7	12.5	

<sup>(1)</sup> Source: S&P Capital IQ and JKC research.
(2) Revenues and EBITDA are for the latest twelve months as of 6/30/18.
(3) Total enterprise value is defined as market capitalization plus total debt less cash and cash equivalents.
(4) Net debt is defined as total debt less cash and cash equivalents.

This page has been intentionally left blank.

© Jordan Knauff & Company



#### Wall Street Pump Watch

The [PMI] New

**Orders Index has** 

been above 60% for

14 straight months.

The JKC Pump Stock Index was down 11.6% over the last twelve months, while the S&P 500 Index gained 11.9% over the same time period.

The Institute for Supply Management's Purchasing Managers' Index (PMI) increased from 58.7% in May to 60.2% in June. The New Orders Index registered 63.5% in June, a slight dip from May but still very solid. The New Orders Index has been above 60% for 14 straight months. The Backlog of Orders Index continued to expand, reaching 60% or above for the third consecutive month. Respondents are concerned about the impact and uncertainties surrounding tariffs and a possible trade war, as well as rising transportation costs.<sup>(1)</sup>

The J.P. Morgan Global Manufacturing PMI fell to an II-month low of 53.0% in June. Six nations covered by the survey reported deteriorations, while rates of expansion remained above the global average in the U.S. and the Euro zone. Growth was higher in Japan, but eased in China. Developed markets saw a modest increase in new export business, while emerging markets saw a decline for the third straight month.

The U.S. created 213,000 new jobs in June. Education and health services added 54,000 jobs, professional and business services added 50,000 jobs, and manufacturing added 36,000. The unemployment rate rose to 4.0% from 3.8% in May, as about 600,000 people entered the labor force.

Trade war fears continued throughout the second quarter and increased volatility in the markets. The Dow Jones Industrial Average gained 0.7%, the S&P 500 Index increased 2.9% and the NASDAQ Composite grew 6.3% for the second quarter. The Federal Reserve Bank increased interest rates by 0.25% and talked about two more rate increases by the end of the year. Markets saw a large selloff when the Administration threatened to impose tariffs on \$200 billion worth of goods imported from China.

#### CHART II: JKC PUMP STOCK INDEX(2)



<sup>(</sup>I) See Economic Indicators section of this report for more detailed information on these indicators.

<sup>(2)</sup> Source: S&P Capital IQ and JKC research. Local currency converted to USD using historical spot rates. The JKC Pump Stock Index includes a select list of publicly-traded companies involved in the pump industry weighted by market capitalization.

#### Pump Companies

Domestic Pump companies (as listed in Table VII) and international Pump companies (in Table VIII) were trading at median TEV/LTM EBITDA multiples of 13.1x and 12.7x, respectively, as of June 30, 2018. As you can see, both groups are similarly leveraged with a median net debt/LTM EBITDA ratio of 1.5x for domestic Pump companies compared to 0.6x for international Pump companies. In our assessment, both groups are extremely well capitalized and could afford to take on additional indebtedness.

TABLE VII: SELECTED DOMESTIC PUMP COMPANIES(1)

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

				Stock	% of	% of				
	LTM			Price	52-Week	Market	Enterprise	TEV / LTM		Net Debt <sup>(4)</sup> /
Company	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin	6/30/2018	High	Сар	Value <sup>(3)</sup>	Revenues	EBITDA	EBITDA
Ampco-Pittsburgh Corp. (AP)	\$444	\$16	3.6%	\$10.25	55.1%	\$127	\$190	0.4x	11.9x	3.8x
Baker Hughes Inc. (BHGE)	22,127	2,355	10.6	33.03	57.2	13,754	39,438	1.8	16.7	1.1
Colfax Corporation (CFX)	3,525	436	12.4	30.65	70.8	3,785	4,746	1.3	10.9	1.9
Crane Co. (CR)	3,060	540	17.6	80.13	78.1	4,784	5,556	1.8	10.3	1.5
Curtiss-Wright Corp. (CW)	2,348	480	20.5	119.02	83.0	5,262	5,680	2.4	11.8	1.2
Danaher Corp. (DHR)	19,290	4,782	24.8	98.68	94.1	68,935	78,411	4.1	16.4	2.2
Dover Corp. (DOV)	7,946	1,412	17.8	73.20	67.1	11,322	14,413	1.8	10.2	2.1
Energy Recovery, Inc. (ERII)	69	9	12.6	8.08	71.5	432	345	5.0	39.6	(8.6)
Flowserve Corp. (FLS)	3,714	406	10.9	40.40	84.0	5,286	6,341	1.7	15.6	2.6
Franklin Electric Co. Inc. (FELE)	1,239	163	13.1	45.10	92.4	2,098	2,312	1.9	14.2	1.2
General Electric Co. (GE)	124,038	5,703	4.6	13.61	49.3	118,207	252,151	2.0	44.2	17.9
Gorman-Rupp Co. (GRC)	397	63	15.9	35.00	97.5	914	825	2.1	13.1	(1.3)
Graco Inc. (GGG)	1,586	445	28.0	45.22	91.0	7,579	7,762	4.9	17.5	0.4
IDEX Corp. (IEX)	2,407	629	26.1	136.48	90.6	10,471	10,918	4.5	17.4	0.6
Illinois Tool Works Inc. (ITW)	14,819	4,035	27.2	138.54	77.4	46,932	52,545	3.5	13.0	1.4
Ingersoll-Rand Co. Ltd. (IR)	15,031	2,190	14.6	89.73	91.9	22,250	25,485	1.7	11.6	1.5
ITT Corporation (ITT)	2,715	458	16.9	52.27	90.7	4,569	4,388	1.6	9.6	(0.5)
National Oilwell Varco, Incorporated (NOV)	7,705	627	8.1	43.40	96.3	16,580	18,126	2.4	28.9	2.5
Pentair, Inc. (PNR)	5,012	1,018	20.3	42.08	56.2	7,506	9,272	1.8	9.1	0.7
Roper Technologies Inc. (ROP)	4,883	1,664	34.1	275.91	94.2	28,463	32,719	6.7	19.7	3.1
Schlumberger Limited (SLB)	32,215	7,009	21.8	67.03	83.4	92,845	107,194	3.3	15.3	2.1
SPX Flow Inc. (FLOW)	2,042	229	11.2	43.77	79.7	1,861	2,489	1.2	10.9	2.8
Standex International Corp. (SXI)	858	118	13.8	102.20	92.9	1,311	1,420	1.7	12.0	0.9
United Technologies Corp. (UTX)	62,689	10,535	16.8	125.03	89.8	100,031	121,804	1.9	11.6	1.6
Weatherford International Ltd. (WFT)	5,821	(174)	(3.0)	3.29	69.7	3,279	10,656	1.8	NM	NM
Xylem Inc. (XYL)	5,006	882	17.6	67.38	84.4	12,123	14,441	2.9	16.4	2.5
Median			16.4%		83.7%			1.9x	13.1x	1.5x
Mean			16.1		80.3			2.6	16.3	1.8

<sup>(</sup>I) Source: S&P Capital IQ and JKC research.

<sup>(2)</sup> Revenues and EBITDA are for the latest twelve months as of 6/30/18.

<sup>(3)</sup> Total enterprise value is defined as market capitalization plus total debt less cash and cash equivalents.

<sup>(4)</sup> Net debt is defined as total debt less cash and cash equivalents.



#### TABLE VIII: SELECTED INTERNATIONAL PUMP COMPANIES(1)

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

				Stock	% of		Total			
		LTM		Price	52-Week	Market	Enterprise	TEV /	LTM	Net Debt <sup>(4)</sup> /
Company	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin	6/30/2018	High	Сар	Value <sup>(3)</sup>	Revenues	EBITDA	EBITDA
Alfa Laval AB (ALFA)	\$4,022	\$723	18.0%	\$23.73	90.5%	\$9,952	\$10,961	2.7x	15.2x	1.5x
Andritz AG (ANDR)	6,767	476	7.0	53.04	82.8	5,360	4,689	0.7	9.9	(1.1)
DMW Corp. (6365)	156	18	11.5	21.98	97.5	97	66	0.4	3.7	(1.8)
Ebara Corp. (6361)	4,965	511	10.3	31.08	72.6	3,162	2,864	0.6	5.6	(0.5)
FLSmidth & Co. A/S (FLS)	2,797	251	9.0	59.80	85.2	2,969	3,165	1.1	12.6	1.3
Gevelot SA (ALGEV)	104	33	32.1	232.18	90.5	191	4	0.0	0.1	(5.8)
GUD Holdings Ltd. (GUD)	329	67	20.3	10.47	96.1	903	1,047	3.2	15.6	1.0
Hyundai Heavy Industries Co. Ltd. (A009540)	12,767	231	1.8	91.69	55.1	6,337	7,070	0.6	30.6	(1.5)
John Wood Group plc (WG)	5,266	323	6.1	8.28	83.3	5,539	7,183	1.4	22.3	5.2
Kirloskar Brothers Ltd. (500241)	405	23	5.7	4.22	66.9	335	369	0.9	16.1	1.6
KSB Aktiengesellschaft (KSB)	2,579	164	6.4	400.19	66.0	712	652	0.3	4.0	(1.6)
Kubota Corp. (6326)	16,017	2,275	14.2	15.73	73.6	19,381	25,252	1.6	11.1	2.1
Metso Corp. (METSO)	3,235	341	10.5	33.49	89.6	5,023	5,051	1.6	14.8	0.6
Nikkiso Co. Ltd. (6376)	1,312	116	8.8	10.14	82.8	722	1,542	1.2	13.3	7.2
Pfeiffer Vacuum Technology AG (PFV)	724	120	16.5	162.64	79.7	1,605	1,556	2.1	13.0	(0.4)
SKF AB (SKF B)	8,805	1,217	13.8	18.60	82.8	8,473	9,775	1.1	8.0	0.6
Spirax-Sarco Engineering plc (SPX)	1,318	340	25.8	86.03	99.3	6,330	6,824	5.2	20.1	1.4
Sulzer, Ltd. (SUN)	3,069	295	9.6	121.39	86.2	3,525	3,774	1.2	12.8	1.8
Teikoku Electric Mfg.Co.,Ltd. (6333)	188	32	16.9	12.22	77.5	241	172	0.9	5.4	(2.3)
The Weir Group PLC (WEIR)	3,109	443	14.2	26.39	85.7	6,392	7,506	2.4	16.9	1.7
Torishima Pump Manufacturing Co. Ltd. (6363)	409	27	6.6	9.36	85.I	254	290	0.7	10.8	(0.9)
Tsurumi Manufacturing Co. Ltd. (6351)	364	47	13.0	16.82	83.9	421	305	0.8	6.5	(2.7)
Median			11.0%		83.6%			l.lx	12.7x	0.6x
Mean			12.6		82.4			1.4	12.2	0.3

<sup>(1)</sup> Source: S&P Capital IQ and JKC research.
(2) Revenues and EBITDA are for the latest twelve months as of 6/30/18.
(3) Total enterprise value is defined as market capitalization plus total debt less cash and cash equivalents.
(4) Net debt is defined as total debt less cash and cash equivalents.

This page has been intentionally left blank.

© Jordan Knauff & Company



#### Wall Street Filter Watch

Amid rising

gasoline prices,

trucks accounted

for a record share of light vehicle

sales at 67% during

the month [of

June].

The JKC Filter Stock Index was up 0.3% over the last twelve months, while the S&P 500 Index gained 11.9%.

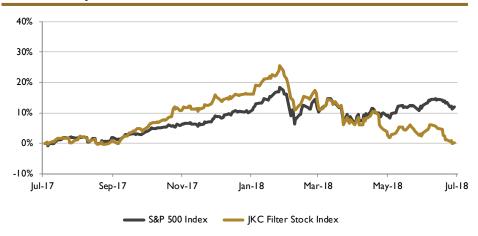
Single-family housing starts fell by 9.1% in the month of June following two consecutive months of increases. Over the quarter, single-family starts rose by 1.2% to a seasonally adjusted annual rate of 900,000. This is the first time since the third quarter of 2007 that single-family starts averaged at or above the 900,000 level in a quarter. Over the first half of the year, single-family starts are 8.1% ahead of their level a year ago on a not seasonally adjusted basis.<sup>(1)</sup>

Multifamily housing starts fell by 19.8% in June. Over the second quarter they were 15.4% lower than their level in the first quarter. However, over the first half of 2018, multifamily starts are up 7.2% ahead of the first six months of 2017.

Boosted by an extra weekend of sales and healthy incentives, U.S. light vehicle sales increased 5.2% in June. The seasonally adjusted sales rate for June was 17.47 million, up from May's 16.91 million rate and June 2017's pace of 16.72 million. Sales continue to be driven by a strong economy, job growth and light truck demand. Amid rising gasoline prices, trucks accounted for a record share of light vehicle sales at 67% during the month. FCA US had its best June since 2004, with an overall 8% increase, including a 19% increase at Jeep and 6% increase at Ram. Toyota sales increased 3.6%, with a 13% gain in light truck sales vs. a 9.2% fall in car demand. Honda Motor Company's light truck sales grew 12%, with a 4.8% overall gain. Ford Motor Company's sales increased 1% for the month.

Trade war fears continued throughout the second quarter and increased volatility in the markets. The Dow Jones Industrial Average gained 0.7%, the S&P 500 Index increased 2.9% and the NASDAQ Composite grew 6.3% for the second quarter. The Federal Reserve Bank increased interest rates by 0.25% and talked about two more rate increases by the end of the year. Markets saw a large selloff when the Administration threatened to impose tariffs on \$200 billion worth of goods imported from China.

#### CHART III: JKC FILTER STOCK INDEX(2)



<sup>(</sup>I) See Economic Indicators section of this report for more detailed information on these indicators.

<sup>(2)</sup> Source: S&P Capital IQ and JKC research. Local currency converted to USD using historical spot rates. The JKC Filter Stock Index includes a select list of publicly-traded companies involved in the filter industry weighted by market capitalization.

#### Filter Companies

As of June 30, 2018, domestic and international Filter companies (listed in Table IX and Table X, respectively) were trading at medians of 12.7x and 9.9x, respectively, of TEV/LTM EBITDA with median LTM EBITDA margins of 17.3% and 12.6%, respectively. With the exception of a few companies, both the domestic and international Filter companies are conservatively capitalized.

TABLE IX: SELECTED DOMESTIC FILTER COMPANIES(1)

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

				Stock	% of		Total			
		LTM		Price	52-Week	Market	Enterprise	TEV /	LTM	Net Debt <sup>(4)</sup> /
Company	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin	6/30/2018	High	Сар	Value <sup>(3)</sup>	Revenues	EBITDA	EBITDA
3M Co. (MMM)	\$32,830	\$8,530	26.0%	\$196.72	75.7%	\$116,791	\$128,438	3.9x	15.1x	1.3x
Cantel Medical Corp. (CMD)	849	164	19.4	98.36	75.1	4,103	4,220	5.0	25.7	0.7
CECO Environmental Corp. (CECE)	314	20	6.5	6.14	57.4	213	270	0.9	13.2	2.5
Corning Inc. (GLW)	10,491	2,825	26.9	27.5	78.4	22,843	27,321	2.6	9.7	1.2
Crane Co. (CR)	3,060	540	17.6	80.13	78. I	4,784	5,556	1.8	10.3	1.5
Cummins Inc. (CMI)	21,409	2,938	13.7	133.00	68.5	21,848	23,640	1.1	8.0	0.3
Donaldson Company Inc. (DCI)	2,670	446	16.7	45.12	86.4	5,819	6,199	2.3	13.9	0.8
Eaton Corporation (ETN)	21,162	3,657	17.3	74.74	83.2	32,684	39,811	1.9	10.9	2.0
Entegris, Inc. (ENTG)	1,446	407	28.1	33.90	85.7	4,805	4,905	3.4	12.1	1.0
ESCO Technologies Inc. (ESE)	748	126	16.8	57.70	86.4	1,495	1,742	2.3	13.8	1.7
General Electric Co. (GE)	124,038	5,703	4.6	13.61	49.3	118,207	252,151	2.0	44.2	17.9
Honeywell International Inc. (HON)	42,275	8,704	20.6	144.05	87.2	107,595	115,786	2.7	13.3	0.8
Illinois Tool Works Inc. (ITW)	14,819	4,035	27.2	138.54	77.4	46,932	52,545	3.5	13.0	1.4
Lydall Inc. (LDL)	736	90	12.2	43.65	72.8	758	786	1.1	8.7	0.3
Parker Hannifin Corporation (PH)	14,302	2,348	16.4	155.85	73.2	20,722	25,411	1.8	10.8	1.7
Pentair, Inc. (PNR)	5,012	1,018	20.3	42.08	56.2	7,506	9,272	1.8	9.1	0.7
Tenneco Inc. (TEN)	9,776	862	8.8	43.96	67.0	2,261	3,567	0.4	4.1	1.4
Watts Water Technologies, Inc. (WTS)	1,488	231	15.5	78.40	93.1	2,677	2,939	2.0	12.7	1.1
Xylem Inc. (XYL)	5,006	882	17.6	67.38	84.4	12,123	14,441	2.9	16.4	2.5
Median			17.3%		77.4%			2.0x	12.7x	1.3x
Mean			17.5		75.6			2.3	14.0	2.2

<sup>(</sup>I) Source: S&P Capital IQ and JKC research.

<sup>(2)</sup> Revenues and EBITDA are for the latest twelve months as of 6/30/18.

<sup>(3)</sup> Total enterprise value is defined as market capitalization plus total debt less cash and cash equivalents.

<sup>(4)</sup> Net debt is defined as total debt less cash and cash equivalents.



#### TABLE X: SELECTED INTERNATIONAL FILTER COMPANIES(1)

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

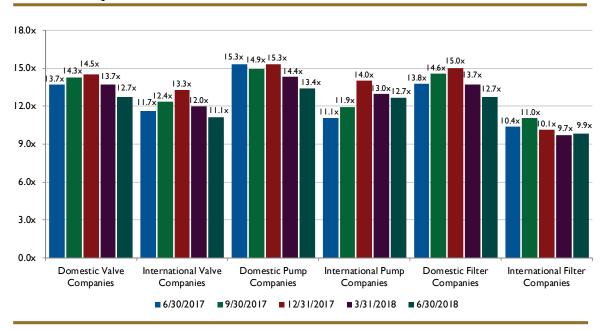
				Stock	% of		Total			
	LTM			Price	52-Week	Market	Enterprise	TEV / LTM		Net Debt <sup>(4)</sup> /
Company	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin	6/30/2018	High	Сар	Value <sup>(3)</sup>	Revenues	EBITDA	EBITDA
Ahlstrom-Munksjo Oyj (AMI)	\$2,611	\$279	10.7%	\$18.06	77.0%	\$1,735	\$2,207	0.8x	7.9x	1.8x
Alfa Laval AB (ALFA)	4,022	723	18.0	23.73	90.5	9,952	10,961	2.7	15.2	1.5
Amiad Filtration Systems Ltd (AFS)	110	8	7.0	2.43	97.1	55	67	0.6	8.7	1.3
Andritz AG (ANDR)	6,767	476	7.0	53.04	82.8	5,360	4,689	0.7	9.9	(1.1)
Asahi Kasei Corp. (3407)	18,425	2,931	15.9	12.70	89.6	17,735	19,208	1.0	6.6	0.5
Daikin Industries Ltd. (6367)	20,665	3,168	15.3	119.72	93.0	35,011	37,028	1.8	11.7	0.5
Denso Corp. (6902)	46,087	6,128	13.3	48.83	75.0	38,072	36,867	0.8	6.0	(0.3)
Faurecia SA (EO)	23,546	1,895	8.0	71.31	79.4	9,785	10,641	0.5	5.6	0.3
FLSmidth & Co. A/S (FLS)	2,797	251	9.0	59.80	85.2	2,969	3,165	1.1	12.6	1.3
GEA Group AG (GIA)	5,414	354	6.5	34.06	68.3	6,147	6,094	1.1	17.2	0.4
GUD Holdings Ltd. (GUD)	329	67	20.3	10.47	96.1	903	1,047	3.2	15.6	1.0
Hyflux Ltd. (600)	245	(58)	(23.5)	0.15	36.5	121	1,406	5.7	NM	(17.5)
Ibiden Co., Ltd. (4062)	2,710	374	13.8	16.01	87.0	2,237	1,866	0.7	5.0	(0.9)
Johnson Matthey plc (JMAT)	18,634	877	4.7	47.75	93.4	9,167	10,059	0.5	11.5	1.1
NGK Insulators Ltd. (5333)	4,070	924	22.7	17.80	85.6	5,728	5,910	1.5	6.4	0.3
Nitto Denko Corp. (6988)	7,725	1,558	20.2	75.63	71.3	11,961	9,255	1.2	5.9	(1.6)
Porvair plc (PRV)	159	21	12.9	6.44	86.2	294	291	1.8	14.2	(0.1)
Sartorius AG (SRT)	1,664	415	24.9	130.67	85.2	9,578	10,817	6.5	26.1	2.6
Siemens AG (SIE)	97,614	11,156	11.4	132.07	90.0	110,005	136,368	1.4	12.2	2.2
Toray Industries Inc. (3402)	19,892	2,439	12.3	7.89	72.4	12,612	19,366	1.0	7.9	2.5
Median			12.6%		85.4%			l.lx	9.9x	0.5x
Mean			11.5		82. I			1.7	10.8	

<sup>(1)</sup> Source: S&P Capital IQ and JKC research.
(2) Revenues and EBITDA are for the latest twelve months as of 6/30/18.
(3) Total enterprise value is defined as market capitalization plus total debt less cash and cash equivalents.
(4) Net debt is defined as total debt less cash and cash equivalents.

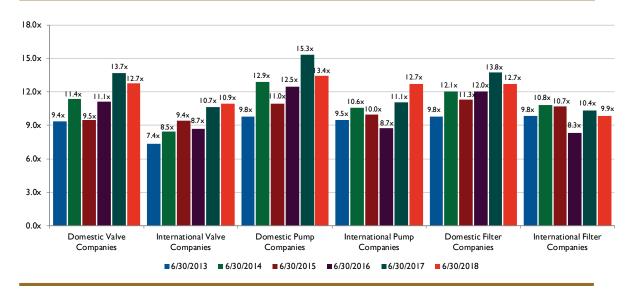
#### Valuation Trends over Time

Quarterly median TEV/LTM EBITDA valuation multiples have declined over last quarter levels for domestic companies and international companies. Annual multiples for domestic and international companies are generally at lower levels than last year at this time.

#### CHART IV: QTRLY MEDIAN TEV/LTM EBITDA VALUATION MULTIPLES(1)



#### CHART V: ANNUAL MEDIAN TEV/LTM EBITDA VALUATION MULTIPLES(1)



18

<sup>(</sup>I) Source: S&P Capital IQ and JKC research.

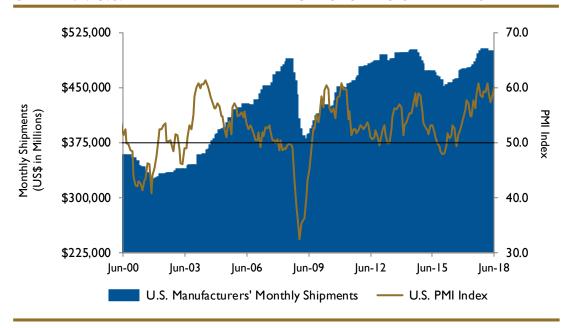


## Economic Indicators — Valves and Pumps(1)

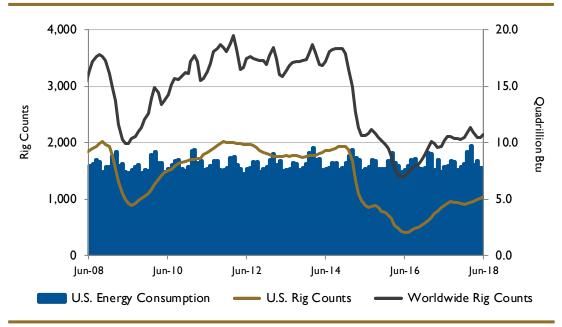
BY DAVID A. KAKAREKA

19

#### CHART VI: U.S. PMI INDEX<sup>(2)</sup> AND MANUFACTURING SHIPMENTS<sup>(3)</sup>



#### CHART VII: U.S. ENERGY CONSUMPTION(4) AND RIG COUNTS(5)



<sup>(1)</sup> Economic indicators used in Public Equity and Valuation Analysis section of this report.

<sup>(2)</sup> Source: Institute for Supply Management Manufacturing Report on Business®. A PMI Index above 50 represents expansion within the manufacturing sector compared with the prior month.

<sup>(3)</sup> Source: U.S. Census Bureau; Manufacturers' Shipments, Inventories and Orders Survey.

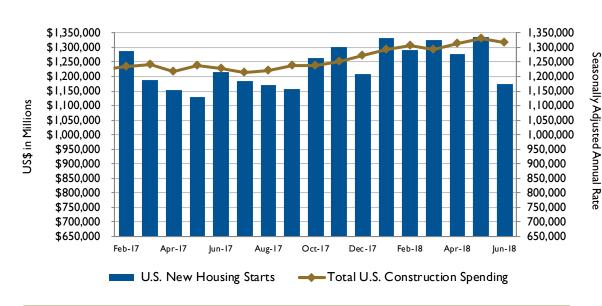
<sup>(4)</sup> Source: U.S. Energy Information Administration, Short-term Energy Outlook.

<sup>(5)</sup> Source: Baker Hughes Inc.

## Economic Indicators — Filters(1)

BY DAVID A. KAKAREKA

#### CHART VIII: U.S. HOUSING STARTS AND CONSTRUCTION SPENDING(2)



#### CHART IX: U.S. MOTOR VEHICLE SALES(3)



<sup>(1)</sup> Economic indicators used in Public Equity and Valuation Analysis section of this report.

<sup>2)</sup> Source: U.S. Census Bureau; Manufacturing, Mining and Construction Statistics.

<sup>(3)</sup> Source: U.S. Department of Commerce, Bureau of Economic Analysis.

# JORDAN KNAUFF & COMPANY FLOW CONTROL TEAM



G. COOK JORDAN, JR. Managing Principal Office (312) 254-5901 cj@jordanknauff.com



**DAVID A. KAKAREKA**Vice President of Transaction Management
Office (312) 254-5907
dkakareka@jordanknauff.com



LORI A. CALLAWAY

Vice President of Research and Publications

Office (312) 254-5914

Icallaway@jordanknauff.com

#### **ABOUT JORDAN KNAUFF & COMPANY**

Jordan Knauff & Company was founded in 2001 to undertake a distinct mission: to assemble and maintain a staff of top-notch investment banking personnel and offer their knowledge and experience to provide the best available investment banking services to middle-market companies, the entrepreneurs that lead them and the financial entities that transact with them. On a combined basis, over the course of their careers our employees have completed over 200 transactions as investors, owners, operators, buyers, sellers and investment bankers of middle-market businesses across a variety of industries. The majority of our firm's broad transaction experience has been with private companies owned by one shareholder, a partnership, a family or private equity investors.



200 West Madison Street, Suite 980
Chicago, Illinois 60606-3414
tel: (312) 254-5900 ■ fax: (312) 254-5999
email: info@jordanknauff.com ■ web: www.jordanknauff.com

MEMBER FINRA, SIPC

These materials were prepared for informational purposes from sources that are believed to be reliable but which could change without notice. Jordan Knauff & Company shall not in any way be liable for claims relating to these materials and the firm makes no warranties, express or implied, or representations as to their accuracy or completeness or for errors or omissions contained herein. Legal, accounting and tax restrictions, transaction costs and changes to any assumptions may significantly affect the outcome and suitability of the various scenarios described. This information is not intended to be construed as tax, legal or investment advice and may not be suitable for a given individual's circumstances. A consultation with one's own tax, legal, investment and other advisors to determine suitability should be undertaken. These materials do not constitute an offer to buy or sell any financial security or participate in any investment offering or deployment of capital.