# **FLOW CONTROL**

# Industry In-Sight"

**THIRD QUARTER 2017** 









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## 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, 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.

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.

#### The Services We Provide

- Mergers and Acquisitions Advisory
  - Selling 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.
  - <u>Acquisitions</u>: 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.

Experience has taught us that the owners and executives of middlemarket businesses tend to have very different needs and goals ... than... larger companies.

#### Capital Formation

- <u>Raising Capital</u>: 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.
- <u>Capital Road Map™</u>: Due to the day-to-day press of managing their organizations, middle-market entrepreneurs often find themselves without the time or resources to develop a capital plan for their businesses. We have learned that capital planning is a critical component of the broader strategic plan for a company and a necessity as an initial step toward the closing of a successful capital raise. We developed a proprietary Capital Road Map™ which: 1) analyzes in detail a client's current capital situation and projects future capital requirements as measured against the functional business plan, 2) provides recommendations as to the available sources of and amounts of capital required that would best satisfy the funding requirements of the business plan and 3) describes and explains the benefits, detriments and ramifications of each.

#### 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:

Medical Plastics Manufacturing

Business and Professional Services

- Flow Control
- Energy Logistics and Distribution
- Natural Resources and Renewables Value Added Manufacturing
- Building and Construction Products Manufacturing Process Technology
- Value Added Distribution

#### **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/flowcontrol. 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.

Due to the day-to-day press of managing their organizations, middlemarket entrepreneurs often find themselves without the time or resources to develop a capital plan ...

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## **Current Events / Trends**

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

#### **CIRCOR to Acquire Colfax Fluid Handling**

CIRCOR International Inc., headquartered in Burlington, Massachusetts, agreed to acquire Colfax Fluid Handling (CFH) from Colfax Corporation for \$855 million in cash and stock. CIRCOR will pay \$542 million in cash, issue approximately 3.3 million new CIRCOR shares to Colfax valued at about \$163 million and assume global pension liabilities of \$150 million. Colfax will own approximately 16% of CIRCOR once the deal closes. The purchase price represents a multiple of 12.3x adjusted EBITDA (earnings before interest, taxes, depreciation and amortization) for the trailing twelve months ended June 30, 2017. After operating synergies and tax benefits, the adjusted EBITDA multiple is 8.3x.

CFH designs, manufactures, distributes and supports specialty pumps for use in severe service applications. Its product range includes two-screw, three-screw (representing 39% of 2016 sales), specialty centrifugal (representing 24% of 2016 sales), progressive cavity, and precision metering pumps. The acquired business had approximately \$463 million in sales and \$64 million of adjusted EBITDA in the twelve months ended June 30, 2017. CFH employs approximately 1,900 globally with 11 production facilities in 8 countries and 26 service centers in 10 countries.

CIRCOR designs and manufactures valves and other highly engineered products and sub-systems for oil and gas, aerospace, power, process and industrial solutions markets worldwide. It operates through two segments, Energy and Advanced Flow Solutions. The Energy segment offers a range of flow control solutions and services, including valves, such as engineered trunion and floating ball valves; gate, globe and check valves; and butterfly valves, as well as fluid catalytic converter valves. It also provides instrumentation fittings and sampling systems. This segment offers its products and services to end-user customers, such as oil companies, as well as engineering, procurement and construction companies.

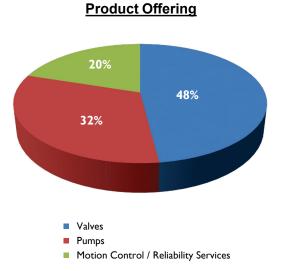
The Advanced Flow Solutions segment manufactures control valves, automatic recirculation valves, regulators, fluid controls, actuation systems, landing gear components, pneumatic controls, electro-mechanical controls, and other flow control products and systems. Its products and services are used by customers in the military and defense, commercial aerospace, business and general aviation, process industries, and power generation markets. This segment serves aircraft manufacturers and Tier I suppliers to aircraft manufacturers, power companies and their contractors, and other industrial customers.

CIRCOR was founded in 1999, has more than 3,000 employees, and operates sales and manufacturing facilities in the United States, Canada, Brazil, Italy, Germany, France, England, the Netherlands, China, India and Morocco.

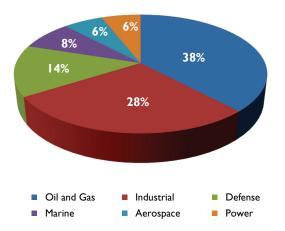


The combined companies would provide a more diverse product portfolio serving a broader range of end markets. On a pro forma basis, the combined companies represent about \$1.1 billion in revenue based on the trailing twelve months ended June 2017.

#### Combined Company Profile(1)







(I) Source: CIRCOR International 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: 3Q 2017(1)

Announced Date	Target	Acquirer(s)
8/14/2017	Delta 2 Srl	Armstrong International, Inc.
7/25/2017	In-Line Valve Company Ltd. and In-Line Valve ME Ltd.	MTQ Corporation Ltd.
7/21/2017	Techinvent AS	Yokogawa Electric Corporation
7/21/2017	IncoValve and Controls	AR Controls (Pty) Ltd.
7/17/2017	Flowserve Corporation / Vogt Valves Division	OMB Valves SpA
7/6/2017	Wapro AB	Lagercrantz Group AB

#### TABLE III: SELECTED PUMP M&A TRANSACTIONS: 3Q 2017(1)

Innounced Date	Target	Acquirer(s)
9/25/2017	Colfax Fluid Handing	CIRCOR International Inc.
9/12/2017	Pumpenfabrik Wangen GmbH	Silverfleet Capital Partners
9/10/2017	CH Spencer & Company	Atlas Copco
8/30/2017	WC Weil and Bartley Pump	PumpMan Holdings
8/29/2017	BJM Pumps LLC	May River Capital
7/4/2017	LGB Elettropompe Srl	Nidec Corporation
7/1/2017	Hayward Tyler Group plc	Avingtrans plc

#### TABLE IV: SELECTED FILTER M&A TRANSACTIONS: 3Q 2017(1)

Announced Date	Target	Acquirer(s)
9/28/2017	Evac Oy	Bridgepoint Advisers Ltd.
9/21/2017	Calgon Carbon Corporation	Kuraray Co. Ltd.
9/12/2017	Dustcheck Ltd.	Filtermist International Ltd.
9/8/2017	Tonka Water	U.S. Water Services, Inc.
7/27/2017	JKF Industri A/S	Delta Neu SAS
7/25/2017	Jack Filter Lufttechnik GmbH and Jack Filter Hungaria Kft	Mann + Hummel Holding GmbH
7/20/2017	Kuss Filtration Inc.	GVS SpA
7/5/2017	DESOTEC NV-SA	EQT Partners AB

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

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## **Public Equity and Valuation Analysis**

BY DAVID A. KAKAREKA

#### Wall Street Valve Watch

The JKC Valve Stock Index was up 6.6% over the last 12 months, while the broader S&P 500 Index gained 16.5%.

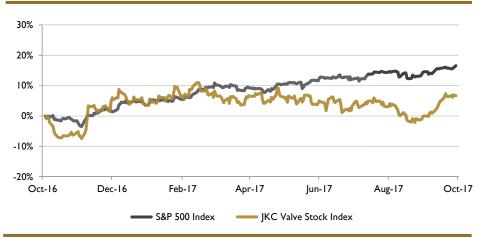
In the first half of the year, U.S. crude oil exports increased 57% over the first half of 2016 and distillate exports grew 14% reaching a record high of 1.3 million barrels per day. Despite strong domestic demand, U.S. exports of motor gasoline averaged a record high of 756,000 barrels per day in the first half of 2017, a 3% gain from the first half of 2016.<sup>(1)</sup>

Total propane exports reached a record high of 913,000 barrels per day in the first half of the year, with most of the increase going to Asian markets which accounted for 74% of the growth. Since 2014, total U.S. propane exports have grown with the expansion of export infrastructure. Lower tanker rates and additional locks in the Panama Canal have also lowered export costs.

Driven by strong economic growth in Asia (especially China and India), the U.S. Energy Information Administration projects that world energy consumption will grow by 28% between 2015 and 2040. Although nonfossil fuels (renewables and nuclear) are expected to grow faster than fossil fuels, fossil fuels will still account for more than three-quarters of world energy consumption through 2040. Natural gas is expected to be the fastest growing fossil fuel with global natural gas consumption increasing by 1.4% per year.

On Wall Street the Dow Jones Industrial Average rose 2.1%, the S&P 500 Index increased 1.9% and the NASDAQ Composite grew 1.0% for the month of September. For the third quarter, the Dow, the S&P 500 and the NASDAQ gained 4.9%, 3.9% and 5.8%, respectively. The markets were boosted by the Federal Reserve Bank's announcement of the unwinding of its \$4.5 trillion balance sheet and the indication that an interest rate increase was likely in December. The administration also unveiled new tax policy reforms intended to decrease corporate and individual taxes.

#### CHART I: JKC VALVE STOCK INDEX<sup>(2)</sup>



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

Driven by strong economic growth in Asia (especially China and India), the U.S. Energy Information Administration projects that world energy consumption will grow by 28% between 2015 and 2040.

<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 September 30, 2017, domestic and international Valve companies were trading at median total enterprise value / latest twelve months ("TEV/LTM") EBITDA multiples of 14.0x and 12.1x, respectively, while both groups have median EBITDA margins of 17.1% and 11.4%, respectively. The median stock price as a percentage of the 52-week high for both groups is 97% and 94%, 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)

Company		LTM		Stock Price 9/30/2017	% of 52-Week High	Market	Total Enterprise	TEV / LTM		Net Debt <sup>(4)</sup> /
	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin			Сар	Value <sup>(3)</sup>	Revenues	EBITDA	EBITDA
Badger Meter Inc. (BMI)	\$399	\$77	19.2	\$49.00	99.1	\$1,427	\$1,458	3.7	19.0	0.4
CIRCOR International Inc. (CIR)	590	57	9.6	54.43	74.6	898	1,074	1.8	18.9	3.1
Crane Co. (CR)	2,753	486	17.6	79.99	94.8	4,767	5,016	1.8	10.3	0.4
Curtiss-Wright Corp. (CW)	2,225	436	19.6	104.54	97.1	4,614	5,237	2.4	12.0	1.2
Dover Corp. (DOV)	7,591	1,298	17.1	91.39	98.5	14,233	17,463	2.3	١3.5	2.4
Emerson Electric Co. (EMR)	15,264	3,214	21.1	62.84	97.6	40,219	42,295	2.8	13.2	0.5
Flowserve Corp. (FLS)	3,698	444	12.0	42.59	81.7	5,564	6,671	1.8	15.0	2.4
General Electric Co. (GE)	121,134	17,726	14.6	24.18	74.7	209,349	334,364	2.8	18.9	7.0
Honeywell International Inc. (HON)	39,676	8,168	20.6	141.74	99.8	107,803	114,620	2.9	14.0	0.8
ITT Corporation (ITT)	2,490	366	14.7	44.27	98.5	3,896	3,746	١.5	10.2	(0.6)
Mueller Water Products, Inc. (MWA)	826	147	17.8	12.80	90.1	2,030	2,163	2.6	4.7	0.8
Parker Hannifin Corporation (PH)	12,651	۱,999	15.8	175.02	98.5	23,3 3	28,265	2.2	14.1	2.5
Schlumberger Limited (SLB)	29,368	6,594	22.5	69.76	79.4	96,930	109,996	3.7	16.7	1.9
SPX Flow Inc. (FLOW)	1,918	196	10.2	38.56	94.8	1,633	2,417	١.3	12.4	3.7
TechnipFMC plc (FTI)	14,048	1,634	11.6	27.92	77.3	13,045	9,636	0.7	5.9	(2.0)
Watts Water Technologies, Inc. (WTS)	1,409	203	14.4	69.20	97.4	2,366	2,697	1.9	3.3	1.6
Xylem Inc. (XYL)	4,525	788	17.4	62.63	96.7	11,246	13,386	3.0	17.0	2.5
Median			17.1%		96.7%			2.3x	l 4.0x	1.6x
Mean			16.2		91.2			2.3	14.1	1.7

(4) Net debt is defined as total debt less cash and cash equivalents.

<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 9/30/17.

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



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

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

Company		LTM		Stock Price 5 9/30/2017	% of 52-Week High	Market	Total Enterprise	TEV / LTM		Net Debt <sup>(4)</sup> /
	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin			Сар	Value <sup>(3)</sup>	Revenues	EBITDA	EBITDA
Aalberts Industries NV (AALB)	\$3,091	\$490	15.9	\$48.35	100.0	\$5,346	\$6,314	2.0	12.9	1.9
Alfa Laval AB (ALFA)	4,356	746	17.1	24.39	99.9	10,231	11,594	2.7	15.5	1.7
Georg Fischer AG (FI-N)	4,013	457	11.4	1,232.20	98.9	5,038	5,414	1.3	11.8	0.7
Hisaka Works Ltd. (6247)	227	20	8.8	8.49	93.6	253	32	0.6	6.6	(6.1)
Hitachi Ltd. (6501)	80,995	8,659	10.7	7.04	98.8	33,996	44,830	0.6	5.2	0.2
IMI plc (IMI)	2,336	396	16.9	16.67	93.8	4,487	4,889	2.1	12.4	1.0
Kitz Corp. (6498)	1,030	120	11.7	8.14	85.0	815	903	0.9	7.5	0.7
KSB Aktiengesellschaft (KSB)	2,600	215	8.3	549.23	89.5	958	1,049	0.4	4.9	(0.4)
Kubota Corp. (6326)	14,617	2,075	14.2	18.17	98.3	22,447	28,496	1.9	13.7	2.6
Lupatech S.A. (LUPA3)	39	(46)	(118.2)	1.03	45.0	10	60	1.6	NM	(1.1)
Metso Corp. (METSO)	3,117	354	11.3	36.69	92.0	5,503	5,633	1.8	15.9	0.2
Okano Valve Manufacturing Co. (6492)	67	2	3.5	25.73	92.6	45	23	0.3	9.7	(4.9)
Saint Gobain (SGO)	47,220	4,861	10.3	59.59	96.2	32,994	41,475	0.9	8.5	1.6
SMC Corp. (6273)	4,588	1,466	32.0	352.47	96.9	23,685	19,366	4.2	13.2	(3.1)
Spirax-Sarco Engineering plc (SPX)	1,129	299	26.5	74.08	94.0	5,443	5,597	5.0	18.7	0.5
The Weir Group PLC (WEIR)	2,775	376	13.5	26.35	93.8	5,881	7,058	2.5	18.8	3.0
Velan, Inc. (VLN)	352	22	6.4	14.24	89.9	308	265	0.8	11.8	(2.4)
Median			11.4%		<b>93.8</b> %			1.6x	12.1x	0.5x
Mean			5.9		91.7			1.7	11.7	

Source: S&P Capital IQ and JKC research.
Revenues and EBITDA are for the latest twelve months as of 9/30/17.
Total enterprise value is defined as market capitalization *plus* total debt *less* cash and cash equivalents.
Net debt is defined as total debt *less* cash and cash equivalents.

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#### Wall Street Pump Watch

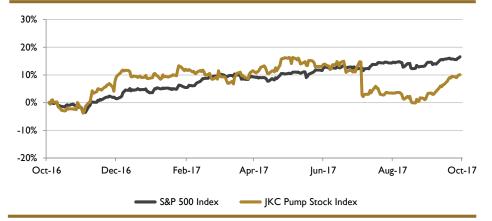
The JKC Pump Stock Index rose 10.1% over the last twelve months, while the S&P 500 Index gained 16.5% over the same time period.

The Institute for Supply Management's Purchasing Managers' Index (PMI) increased 2.0% to 60.8% in September. The production index recorded its fourth consecutive month of above-60 readings, increasing 1.2% to 62.2%. The new orders index improved 4.3% to 64.6% and suggests strength in manufacturing will continue for the next couple of months. The prices paid index jumped 9.5% to 71.5% with survey respondents citing higher input costs due to recent hurricanes.<sup>(1)</sup>

The U.S. unemployment rate fell to 4.2% in September, the lowest level since December 2000. Major hurricanes Harvey and Irma halted hiring during the month and temporarily prevented as many as 1.5 million people from getting to their jobs. The economy lost 33,000 jobs in September, the first decline since 2010, with the restaurant industry losing 105,000 jobs.

The U.S. gross domestic product (GDP) rose 3.0% in the third quarter of the year despite the effects of two hurricanes. Consumer spending rose at a 2.4% rate after a 3.3% gain in the second quarter. Business investment rose 3.9%. Government spending was also up following the hurricanes. Housing investment was down for the second quarter in a row.

On Wall Street the Dow Jones Industrial Average rose 2.1%, the S&P 500 Index increased 1.9% and the NASDAQ Composite grew 1.0% for the month of September. For the third quarter, the Dow, the S&P 500 and the NASDAQ gained 4.9%, 3.9% and 5.8%, respectively. The markets were boosted by the Federal Reserve Bank's announcement of the unwinding of its \$4.5 trillion balance sheet and the indication that an interest rate increase was likely in December. The administration also unveiled new tax policy reforms intended to decrease corporate and individual taxes.



#### CHART II: JKC PUMP STOCK INDEX<sup>(2)</sup>

The U.S. gross domestic product (GDP) rose 3.0% in the third quarter of the year despite the effects of two hurricanes.

<sup>(1)</sup> 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 14.9x and 11.9x, respectively, as of September 30, 2017. As you can see, both groups are similarly leveraged with a median net debt/LTM EBITDA ratio of 1.6x for domestic Pump companies compared to 0.4x 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		Total			
		LTM		Price	52-Week	Market	Enterprise	TEV /	LTM	Net Debt <sup>(4)</sup> /
Company	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin	9/30/2017	High	Сар	Value <sup>(3)</sup>	Revenues	EBITDA	EBITDA
Ampco-Pittsburgh Corp. (AP)	\$410	\$7	1.7	\$17.40	95.3	\$215	\$249	0.6	35.3	5.8
Baker Hughes Inc. (BHGE)	15,012	1,409	9.4	36.62	53.4	15,675	14,134	0.9	10.0	0.1
Colfax Corporation (CFX)	3,700	447	12.1	41.64	97.0	5,123	6,389	1.7	14.3	2.4
Crane Co. (CR)	2,753	486	17.6	79.99	94.8	4,767	5,016	1.8	10.3	0.4
Curtiss-Wright Corp. (CW)	2,225	436	19.6	104.54	97.1	4,614	5,237	2.4	12.0	1.2
Danaher Corp. (DHR)	17,828	4,342	24.4	85.78	96.8	59,590	70,461	4.0	16.2	2.4
Dover Corp. (DOV)	7,591	1,298	17.1	91.39	98.5	14,233	17,463	2.3	13.5	2.4
Energy Recovery, Inc. (ERII)	59	6	10.4	7.90	48.5	423	333	5.7	54.4	(15.0)
Flowserve Corp. (FLS)	3,698	444	12.0	42.59	81.7	5,564	6,671	1.8	15.0	2.4
Franklin Electric Co. Inc. (FELE)	1,076	151	14.0	44.85	96.5	2,085	2,305	2.1	15.3	1.1
General Electric Co. (GE)	121,134	17,726	14.6	24.18	74.7	209,349	334,364	2.8	18.9	7.0
Gorman-Rupp Co. (GRC)	379	57	15.0	32.57	94.5	850	783	2.1	13.8	(1.3)
Graco Inc. (GGG)	1,449	414	28.6	123.69	99.1	6,926	7,173	5.0	17.3	0.4
IDEX Corp. (IEX)	2,232	567	25.4	121.47	97.5	9,283	9,954	4.5	17.6	1.0
Illinois Tool Works Inc. (ITW)	I 4,084	3,814	27.1	147.96	98.4	50,920	56,478	4.0	14.8	1.4
Ingersoll-Rand Co. Ltd. (IR)	13,938	١,978	14.2	89.17	94.5	22,620	25,448	1.8	12.9	1.4
ITT Corporation (ITT)	2,490	366	14.7	44.27	98.5	3,896	3,746	1.5	10.2	(0.6)
Layne Christensen Co. (LAYN)	595	14	2.4	12.55	99.4	250	380	0.6	26.9	9.2
National Oilwell Varco, Incorporated (NOV)	7,027	(241)	(3.4)	35.73	81.9	13,579	15,332	2.2	NM	NM
Pentair, Inc. (PNR)	4,864	945	19.4	67.96	98.4	12,333	13,855	2.8	14.7	١.5
Roper Technologies Inc. (ROP)	4,392	1,483	33.8	243.40	98.3	24,880	29,859	6.8	20.1	3.2
Schlumberger Limited (SLB)	29,368	6,594	22.5	69.76	79.4	96,930	109,996	3.7	16.7	1.9
SPX Flow Inc. (FLOW)	1,918	196	10.2	38.56	94.8	1,633	2,417	1.3	12.4	3.7
Standex International Corp. (SXI)	790	105	13.2	106.20	97.2	1,357	1,460	1.8	14.0	1.2
United Technologies Corp. (UTX)	58,816	10,288	17.5	116.08	93.0	92,722	112,122	1.9	10.9	1.8
Weatherford International Ltd. (WFT)	5,615	99	1.8	4.58	64.6	4,530	11,693	2.1	118.1	75.5
Xylem Inc. (XYL)	4,525	788	17.4	62.63	96.7	11,246	13,386	3.0	17.0	2.5
Median			14.7%		96.5%			2. l x	14.9x	1.6x
Mean			15.3		89.7			2.6	21.3	4.4

(1) Source: S&P Capital IQ and JKC research.

(2) Revenues and EBITDA are for the latest twelve months as of 9/30/17.

(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.



#### TABLE VIII: SELECTED INTERNATIONAL PUMP COMPANIES<sup>(1)</sup>

(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	9/30/2017	High	Сар	Value <sup>(3)</sup>	Revenues	EBITDA	EBITDA
Alfa Laval AB (ALFA)	\$4,356	\$746	17.1	\$24.39	99.9	\$10,231	\$11,594	2.7	15.5	1.7
Andritz AG (ANDR)	7,168	628	8.8	57.80	88.5	5,899	5,081	0.7	8.1	(1.4)
DMW Corp. (6365)	160	17	10.3	17.00	92.9	75	11	0.1	0.7	(3.9)
Ebara Corp. (6361)	4,325	409	9.5	33.17	96.8	3,369	3,051	0.7	7.5	(0.7)
FLSmidth & Co. A/S (FLS)	3,058	274	9.0	66.12	94.8	3,251	3,667	1.2	13.4	1.3
Gevelot SA (ALGEV)	232	36	15.4	248.20	95.5	204	79	0.3	2.2	(3.9)
GUD Holdings Ltd. (GUD)	334	68	20.5	8.55	79.3	737	864	2.6	12.6	1.8
Hyundai Heavy Industries Co. Ltd. (A009540)	31,385	2,287	7.3	126.78	77.3	5,356	7,142	0.2	3.1	0.3
John Wood Group plc (WG)	4,030	278	6.9	9.12	74.9	3,414	3,952	1.0	14.2	1.8
Kirloskar Brothers Ltd. (500241)	395	19	4.9	3.62	79.5	287	331	0.8	17.2	0.0
KSB Aktiengesellschaft (KSB)	2,600	215	8.3	549.23	89.5	958	1,049	0.4	4.9	(0.4)
Kubota Corp. (6326)	14,617	2,075	14.2	18.17	98.3	22,447	28,496	1.9	13.7	2.6
Metso Corp. (METSO)	3,117	354	11.3	36.69	92.0	5,503	5,633	1.8	15.9	0.2
Nikkiso Co. Ltd. (6376)	1,192	95	7.9	9.28	80.4	661	1,059	0.9	11.2	4.1
Pfeiffer Vacuum Technology AG (PFV)	624	113	18.1	155.58	90.8	1,535	1,525	2.4	13.5	(0.3)
SKF AB (SKF B)	9,396	1,275	13.6	21.77	87.4	9,913	11,555	1.2	9.1	1.1
Spirax-Sarco Engineering plc (SPX)	1,129	299	26.5	74.08	94.0	5,443	5,597	5.0	18.7	0.5
Sulzer, Ltd. (SUN)	3,018	311	10.3	118.06	96.5	4,024	4,327	1.4	13.9	0.9
Teikoku Electric Mfg.Co.,Ltd. (6333)	170	24	14.3	10.40	98.3	211	155	0.9	6.4	(2.4)
The Weir Group PLC (WEIR)	2,775	376	13.5	26.35	93.8	5,881	7,058	2.5	18.8	3.0
Torishima Pump Manufacturing Co. Ltd. (6363)	385	28	7.2	10.58	98.0	287	271	0.7	9.8	1.0
Tsurumi Manufacturing Co. Ltd. (6351)	351	43	12.3	17.75	96.3	444	323	0.9	7.4	(3.1)
Median			10.8%		93.3%			0.9x	11.9x	0.4x
Mean			12.1		90.7			1.4	10.8	0.2

Source: S&P Capital IQ and JKC research.
Revenues and EBITDA are for the latest twelve months as of 9/30/17.
Total enterprise value is defined as market capitalization *plus* total debt *less* cash and cash equivalents.
Net debt is defined as total debt *less* cash and cash equivalents.

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#### Wall Street Filter Watch

The JKC Filter Stock Index was up 22.0% over the last twelve months, while the S&P 500 Index gained 16.5%.

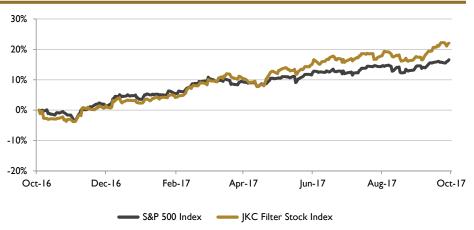
Total housing starts fell by 4.7% in September, according to the U.S. Census Bureau. Single-family starts declined 4.6% and multifamily starts dropped 5.1%. The South saw a 15.3% monthly drop in single-family starts due to the impact of hurricanes, while the other three regions of the country saw month-over-month increases. Over the first three quarters of the year, single-family starts are 9.1% above the same period in 2016. Multifamily starts are 9.2% below their level over the first nine months of last year. Decreases were seen in three of the four regions of the country, with multifamily starts increasing 4.3% in the West over the same period last year.

Contracts for new home sales grew by 18.9% in September. Through September, new home sales are running 8.6% higher than last year with growth seen in all regions. New home sales were up 28% in the Northeast, 12% in the West, 6% in the South and 4% in the Midwest compared to 2016.

U.S. light vehicle sales rose for the first time this year gaining 6.3% in September. Truck sales advanced 12%, while car demand was down 3.3%. Gains were seen at General Motors (12%), Toyota Motor Corp. (15%), Ford Motor Co. (8.9%) and Nissan Motor Co. (9.5%). The effect of hurricanes Harvey and Irma is expected to boost retail light vehicle demand through the remainder of 2017 and into 2018. Up to 500,000 cars were damaged or destroyed during Harvey and another 200,000 cars during Irma, according to industry estimates.

On Wall Street the Dow Jones Industrial Average rose 2.1%, the S&P 500 Index increased 1.9% and the NASDAQ Composite grew 1.0% for the month of September. For the third quarter, the Dow, the S&P 500 and the NASDAQ gained 4.9%, 3.9% and 5.8%, respectively. The markets were boosted by the Federal Reserve Bank's announcement of the unwinding of its \$4.5 trillion balance sheet and the indication that an interest rate increase was likely in December. The administration also unveiled new tax policy reforms intended to decrease corporate and individual taxes.

#### CHART III: JKC FILTER STOCK INDEX<sup>(2)</sup>



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

U.S. light vehicle sales rose for the first time this year gaining 6.3% in September.

<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 September 30, 2017, domestic and international Filter companies (listed in Table IX and Table X, respectively) were trading at medians of 14.1x and 11.0x, respectively, of TEV/LTM EBITDA with median LTM EBITDA margins of 17.0% and 12.4%, 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	TEV / LTM		Net Debt <sup>(4)</sup> /
Company	Revenues <sup>(2)</sup>	LTM EBITDA <sup>(2)</sup>	Margin	Price 9/30/2017	52-Week High	Market Cap	Enterprise Value <sup>(3)</sup>	TEV /	EBITDA	
3M Co. (MMM)	\$30,996	\$8,752	28.2	\$209.90	97.8	\$125,261	\$133,825	4.3	15.3	0.9
Calgon Carbon Corp. (CCC)	596	81	13.6	21.40	99.8	1,087	1,310	2.2	16.2	2.7
Cantel Medical Corp. (CMD)	770	147	19.1	94.17	99.6	3,930	4,019	5.2	27.3	0.6
CECO Environmental Corp. (CECE)	371	40	10.7	8.46	56.9	293	386	1.0	9.7	2.5
Corning Inc. (GLW)	9,955	2,786	28.0	29.92	93.0	27,023	29,140	2.9	10.5	0.3
Crane Co. (CR)	2,753	486	17.6	79.99	94.8	4,767	5,016	1.8	10.3	0.4
Cummins Inc. (CMI)	18,357	2,694	14.7	168.03	98.4	28,064	28,723	1.6	10.7	0.1
Donaldson Company Inc. (DCI)	2,372	406	17.1	45.94	93.9	5,968	6,275	2.6	15.5	0.7
Eaton Corporation (ETN)	20,058	3,277	16.3	76.79	94.1	34,156	41,973	2.1	12.8	2.2
Entegris, Inc. (ENTG)	1,300	330	25.4	28.85	99.5	4,091	4,221	3.2	12.8	0.2
ESCO Technologies Inc. (ESE)	686	116	17.0	59.95	94.0	1,549	١,765	2.6	15.2	2.0
General Electric Co. (GE)	121,134	17,726	14.6	24.18	74.7	209,349	334,364	2.8	18.9	7.0
Honeywell International Inc. (HON)	39,676	8,168	20.6	4 .74	99.8	107,803	114,620	2.9	14.0	0.8
Illinois Tool Works Inc. (ITW)	14,084	3,814	27.1	147.96	98.4	50,920	56,478	4.0	14.8	1.4
Lydall Inc. (LDL)	665	90	13.6	57.30	88.4	988	1,031	۱.6	11.4	0.3
Parker Hannifin Corporation (PH)	2,65	۱,999	15.8	175.02	98.5	23,313	28,265	2.2	14.1	2.5
Pentair, Inc. (PNR)	4,864	945	19.4	67.96	98.4	12,333	13,855	2.8	14.7	١.5
Tenneco Inc. (TEN)	9,038	620	6.9	60.67	85.5	3,279	4,610	0.5	7.4	2.3
Watts Water Technologies, Inc. (WTS)	1,409	203	14.4	69.20	97.4	2,366	2,697	1.9	13.3	۱.6
Xylem Inc. (XYL)	4,525	788	17.4	62.63	96.7	11,246	13,386	3.0	17.0	2.5
Median			17.0%		97.0%			2.6x	14.1x	I.4x
Mean			17.9		93.0			2.6	14.1	1.6

(1) Source: S&P Capital IQ and JKC research.

(2) Revenues and EBITDA are for the latest twelve months as of 9/30/17.

(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.



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

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

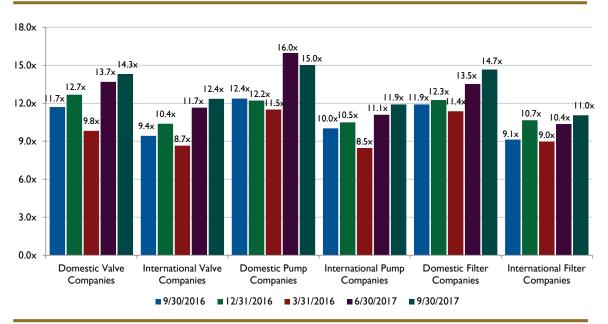
				Stock	% of		Total			
		LTM		Price	52-Week	Market	Enterprise	TEV /	LTM	Net Debt <sup>(4)</sup> /
Company	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin	9/30/2017	High	Сар	Value <sup>(3)</sup>	Revenues	EBITDA	EBITDA
Ahlstrom-Munksjo Oyj (AMI)	\$1,682	\$185	11.0	\$20.75	85.7	\$1,994	\$2,500	1.5	13.5	2.6
Alfa Laval AB (ALFA)	4,356	746	17.1	24.39	99.9	10,231	11,594	2.7	15.5	1.7
Amiad Filtration Systems Ltd (AFS)	112	8	6.9	1.61	82.8	36	47	0.4	6.1	1.0
Andritz AG (ANDR)	7,168	628	8.8	57.80	88.5	5,899	5,081	0.7	8.1	(1.4)
Asahi Kasei Corp. (3407)	16,926	2,531	15.0	12.30	98.8	17,178	19,630	1.2	7.8	0.8
Daikin Industries Ltd. (6367)	18,606	2,859	15.4	101.19	93.9	29,590	32,189	1.7	11.3	0.6
Denso Corp. (6902)	40,844	5,467	13.4	50.56	98.9	39,422	36,958	0.9	6.8	(0.4)
Faurecia SA (EO)	23,016	١,776	7.7	69.41	99.4	9,459	10,243	0.4	5.8	0.3
FLSmidth & Co. A/S (FLS)	3,058	274	9.0	66.12	94.8	3,251	3,667	1.2	13.4	1.3
GEA Group AG (GIA)	5,361	448	8.4	45.36	77.1	8,335	7,692	1.4	17.2	(1.1)
GUD Holdings Ltd. (GUD)	334	68	20.5	8.55	79.3	737	864	2.6	12.6	1.8
Hyflux Ltd. (600)	520	39	7.4	0.37	79.4	289	1,414	2.7	36.7	22.4
Ibiden Co., Ltd. (4062)	2,385	329	13.8	15.92	85.2	2,228	1,843	0.8	5.6	(1.5)
Johnson Matthey plc (JMAT)	16,130	876	5.4	45.85	95.9	8,794	9,746	0.6	11.1	1.0
NGK Insulators Ltd. (5333)	3,662	804	22.0	18.72	81.8	6,021	6,040	۱.6	7.5	(0.0)
Nitto Denko Corp. (6988)	7,109	1,393	19.6	83.32	89.4	3,53	11,097	1.6	8.0	(1.9)
Porvair plc (PRV)	151	18	11.9	6.44	78.7	293	288	1.9	16.0	(0.3)
Sartorius AG (SRT)	1,630	393	24.1	92.54	86.2	6,433	7,687	4.7	19.6	2.6
Siemens AG (SIE)	97,746	12,392	12.7	141.17	89.5	113,676	135,869	1.4	11.0	1.4
Toray Industries Inc. (3402)	18,262	2,219	12.1	9.69	98.4	١5,472	21,551	١.2	9.7	2.7
Median			12.4%		89.0%			I.4x	11.0x	0.9x
Mean			13.1		89.2			1.6	12.2	1.7

Source: S&P Capital IQ and JKC research.
Revenues and EBITDA are for the latest twelve months as of 9/30/17.
Total enterprise value is defined as market capitalization *plus* total debt *less* cash and cash equivalents.
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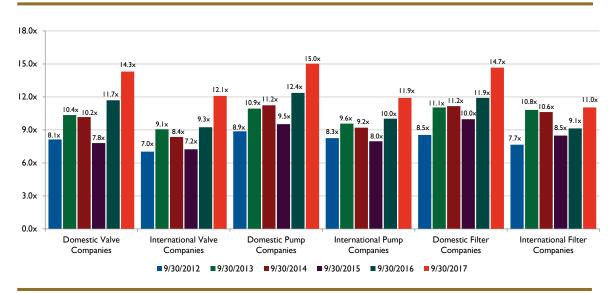
#### THE FLOW CONTROL INDUSTRY - QUARTERLY UPDATE

#### Valuation Trends over Time

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



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



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

(1) Source: S&P Capital IQ and JKC research.



## Economic Indicators – Valves and Pumps<sup>(1)</sup>

BY DAVID A. KAKAREKA

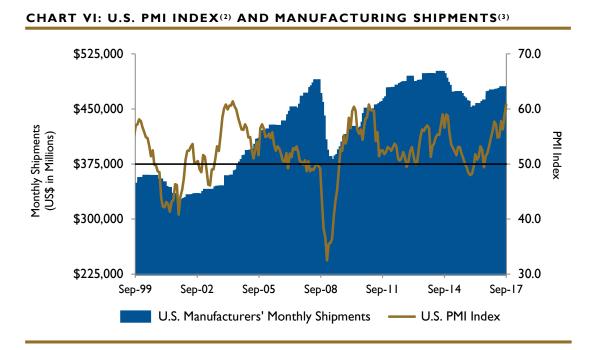
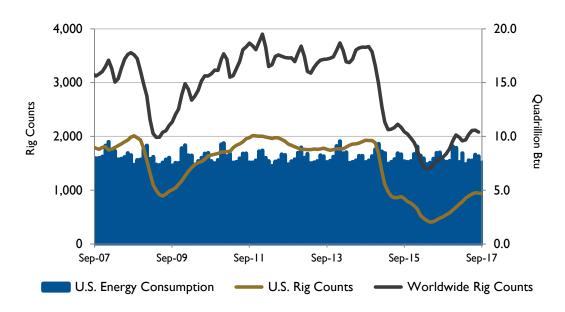


CHART VII: U.S. ENERGY CONSUMPTION<sup>(4)</sup> AND RIG COUNTS<sup>(5)</sup>



<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.

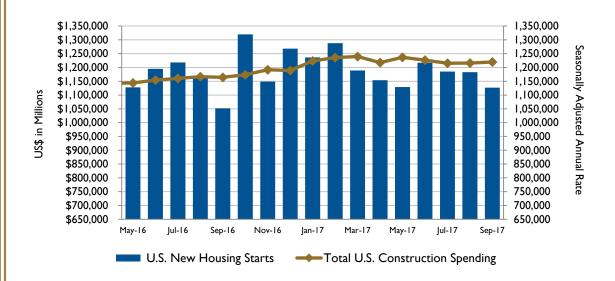
<sup>(3)</sup> Source: U.S. Census Bureau; Manufacturers' Shipments, Inventories and Orders Survey.

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

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

## **Economic Indicators** — Filters<sup>(1)</sup>

BY DAVID A. KAKAREKA



#### CHART VIII: U.S. HOUSING STARTS AND CONSTRUCTION SPENDING<sup>(2)</sup>

#### 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.

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#### 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.



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