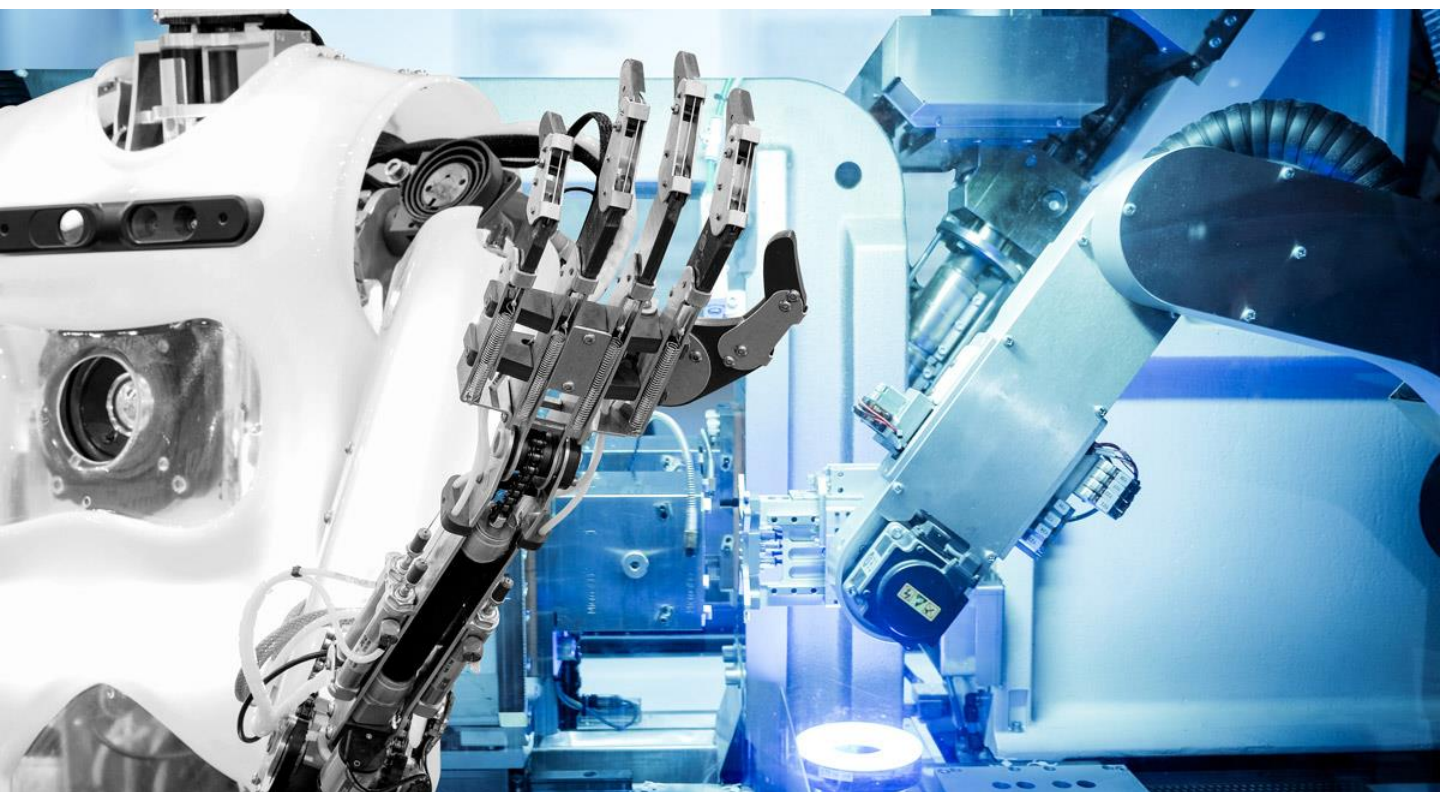


INDUSTRIAL TECHNOLOGY – INDUSTRY UPDATE

Q1 2019



www.harriswilliams.com

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Industrial Technology - Update



Introduction

Harris Williams is pleased to present our industrial technology industry update for Q1 2019. This report provides commentary and analysis on current capital market trends and dynamics within the industrial technology space.

Overall, the key trends in the industrial technology space are strongly influenced by the convergence of information technology (IT) and operational technology (OT), ultimately allowing real-time improvements in industrial operations. As an example of this process, we have put a spotlight on the “digital twin” in our Know-How section.

Stock markets and consequently market valuations have declined in the last 2 months due to macro-economic and political reasons. 2019 should hold the opportunity for improvement if political turmoil can be averted.

We hope you find this edition helpful and encourage you to contact us directly if you would like to discuss our perspective on current industry trends or our relevant industry experience.

Industry Events

SPS IPC Drives 2018



sps ipc drives

Harris Williams again attended the SPS IPC Drives in Nürnberg, Germany, late last year. “There's a difference between using Industry 4.0 as a buzzword and actually being involved with the companies active in smart production, smart connectivity, etc. The trade fair allows us to talk directly to the decision makers and keep up-to-date with the most recent industry trends,” said Jeffery Perkins, managing director in Harris Williams’ Industrial Group.

Coming up: Trade Fairs 2019

February/Stuttgart, Germany: The LogiMAT is the largest annual trade fair for intralogistics solutions and process management in Europe.

April/Chicago, Illinois: Held biennial in the United States, Automate is the broadest automation solutions event in North America.

April/Hannover, Germany: The world’s largest industrial trade fair combines a total of six trade shows in one place.

April/Las Vegas, Nevada: ISC West is the largest converged security industry trade show in the U.S.



Let the team know if you will be at one of the conferences and would like to connect.

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HW Deal Spotlight: IQMS & Trafficware

IQMS, Inc., (IQMS) is a leading provider of fully-integrated software solutions that manage and optimize mission-critical operations for manufacturers of all sizes globally. IQMS’ all-in-one software solution digitally connects order processing, scheduling, production, and logistics processes, enabling manufacturers to gain efficiencies across engineering, manufacturing, and business ecosystems.

Harris Williams exclusively advised IQMS, a portfolio company of TCV and Banneker Partners, on its sale to Dassault Systèmes for \$425 million.

Read the full press release [here](#).

Trafficware provides a fully integrated, innovative suite of software, Internet of Things (IoT) devices and hardware solutions that provide customers with enhanced mobility and improved safety. As a company driving innovation in the traffic industry, Trafficware builds traffic management infrastructure for the next generation of Smart Cities, including Connected Vehicle Technology.

Harris Williams exclusively advised Trafficware, a portfolio company of KRG Capital Partners, on its sale to Cubic Corporation for \$236 million.

Read the full press release [here](#).

IQMS
Manufacturing Software

a portfolio company of

TCV



has been acquired by



Trafficware
Engineered by **Nautica**

a portfolio company of



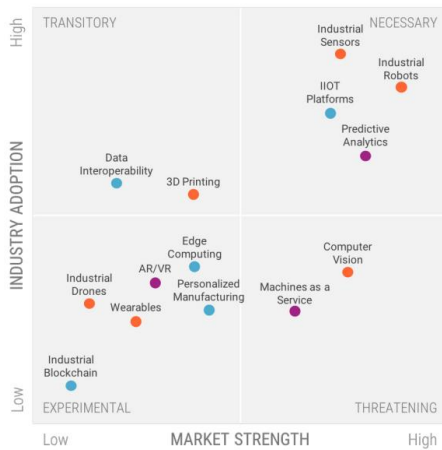
has been acquired by



Industrial Technology - Update



Emerging Trends in Advanced Manufacturing



A recent whitepaper by CB Insights has analyzed 14 of the largest advanced manufacturing trends for 2019, covering a range from Industrial Sensors to the Industrial Blockchain. CB Insights categorized these trends into groups from necessary to experimental.

Those trends that should experience wide-spread industry and customer adoption are Industrial Sensors, Industrial Robots, IIoT Platforms, and Predictive Analytics. CB Insights believes that market participants

should have a clear strategy regarding these topics. Others, such as Wearables or Industrial Drones attract media attention, but can be regarded only as “proof-of-concept” for now. Download the full report [here](#).

Real-Time Monitoring is Revolutionizing Manufacturing

Among manufacturers surveyed by a recent study from IQMS, 81 percent reported that real-time monitoring is improving their business. Among others, respondents see improvements of around 50% in both scheduling accuracy and inventory control. One interviewee mentioned the more accurate assessment of established metrics such as OEE, but also remarked that the additional information allows for new strategies and metrics not possible before. Read more [here](#).

Why 2019 will be the Year of the Manufacturing Platform

According to an article published by Forbes, 2019 may turn out to be the rise of the manufacturing platforms. As manufacturing companies have been increasingly separating design and marketing from the actual production process, outsourced production is becoming more feasible: Connected platforms, such as 3D Hubs or Xometry can access the manufacturability and pricing of a product across all network partners instantly, requiring only a CAD file and material selection. Read more [here](#).

Private Equity and IIoT: Finding the Best Fit

Recommended Reading

Due to meteoric growth, the Industrial Internet of Things (IIoT) is attracting strong attention from large corporations and venture capital firms. To date, however, many private equity firms have treaded carefully in the IIoT space due to intimidating valuations, uncertain returns, technical complexity and participation by large strategic acquirers.

This [article](#) by Harris Williams identifies five segments that provide a good fit for the private equity model, and three principles that can help investors make the most of the potential within those segments.

Practical Innovation: Tapping into Data Center Growth

As the global economy continues to be driven by everything digital, data is proliferating at an unprecedented rate. As data is produced, it must be sent, stored, secured and processed, all of which is leading to substantial growth in data center construction. In fact, global data center construction is expected to generate revenues of approximately \$45 billion by 2023.

In this [report](#), Harris Williams Director Eric Logue and Associate Michael Gessner of the firm’s Industrials Group share their thoughts on where the opportunities are in this growth market for acquirers and investors with industrial expertise.

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Industrial Technology - Update

Our Know-How section presents one trending strategic concept in the industrial technology space.

Know-How: The Digital Twin



Digital twins are virtual models of physical processes, products, or devices to run simulations before they are built or an update takes place. They allow the user to better understand, predict, and optimize performance through changes in product design before the physical unit or entity is available. Depending on the case, the digital twin mirrors a process or machine, but can also be used at plant level or even mimic entire cities.

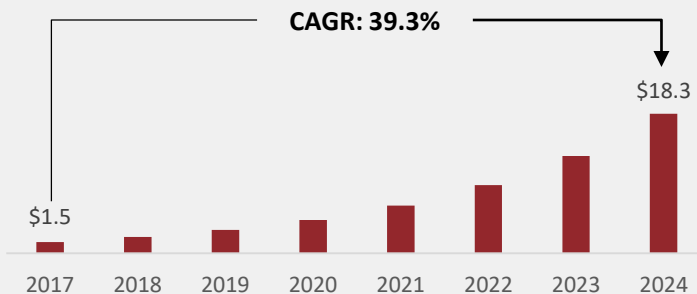
With the increasing availability of continuous, high-quality data from IIoT devices, digital twins are becoming more accurate, easier to create and maintain. Artificial intelligence (AI), machine learning, and other advanced technologies can then be used to improve the digital model and actual operations based on the input data provided. With the recurring input from the physical product paired with further application of the digital twin, operations can be improved continuously.

According to Gartner, an estimated 21 billion connected sensors and endpoints will be installed by 2020, resulting in the availability of billions of digital twins. The company predicts that by 2021, 50% of large industrial companies will be using digital twins with those organizations realizing a gain of 10% in effectiveness.

Market forecast

According to a report by WiseGuy Reports, the global digital twin market is forecast to grow to c. \$ 18.3bn in 2024 - a CAGR rate of 39.3% over the forecast period from 2017 to 2024. You can find the report [here](#). A similar [report](#) from MarketsandMarkets sees a CAGR rate of 37.9% from 2017 to 2023.

Digital Twin sales; Source: WiseGuy Reports



Further Reading

- [Prepare for the Impact of the Digital Twin](#) - Gartner
- [Where Do Digital Twins Fit In?](#) – IndustryWeek
- [Busting the Myth of Digital Twins and Planning Them Realistically](#) - Gartner
- [A primer on digital twins in the IIoT](#) – Bosch
- [Signals for Strategists - Expecting digital twins](#) – Deloitte
- [Twins with potential](#) – Siemens
- [Digital Twin for the Digital Power Plant](#) – GE

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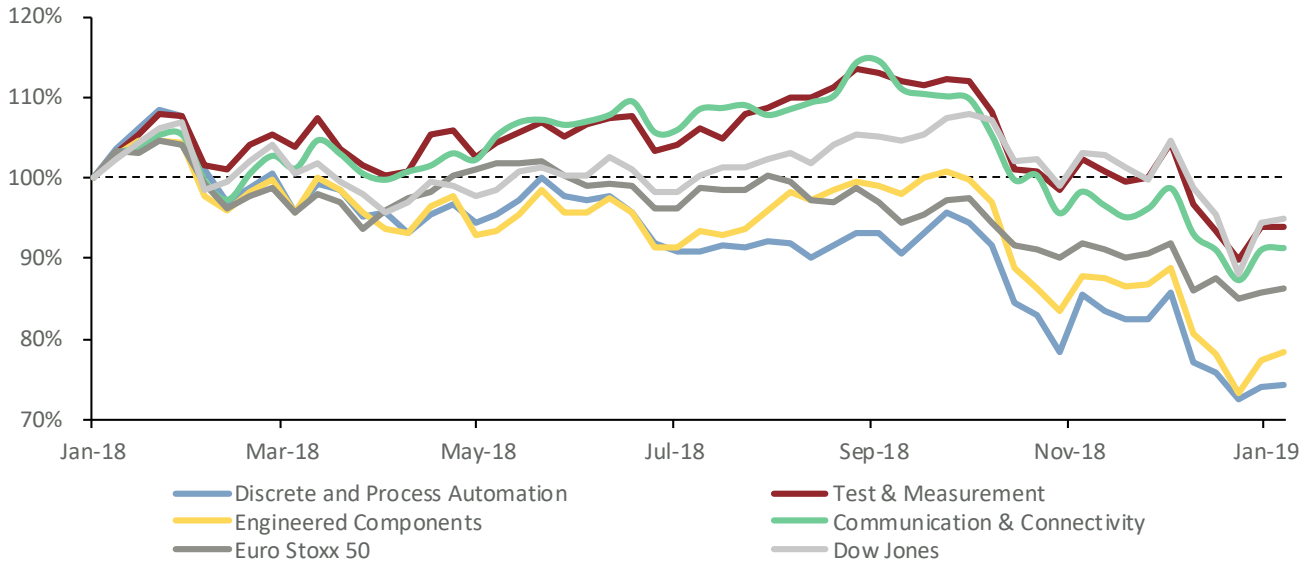
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Valuation Metrics Overview

Peer group trailing average LTM share price; indexed; Source: FactSet (as of January 7, 2019)



Due to a underperforming Q4, the 2018 stock market was the worst year in a decade

At least according to one metric, 2018 was the worst year in trading history: As tracked by Deutsche and cited [here](#), 93% of all asset classes were down last year. For comparison: the previous record holder was 1920 – with “only” 84% of asset classes posting negative total returns. According to [Quartz](#), several reasons were responsible for the development: Slowing global growth, a strong dollar, struggling commodities, political turmoil (a potential no-Deal Brexit, US-China trade war, etc.). As can be seen from the chart above, the development did not leave industrial technology stocks unscathed.

However, with the potential of a solution to Brexit and an end to the US-China trade war in the near future, 2019 may turn better than many are currently expecting.

Source: FactSet (as of January 7, 2019)

Public Markets | Key Trading Statistics

| Sub-Sector Median | Stock Price % Change | | TEV / Revenue | | TEV / EBITDA | | TEV / LTM EBITDA | | LTM Margins | |
|---|----------------------|----------|---------------|------|--------------|-------|------------------|--------|-------------|--------|
| | 1 Month | 12 Month | LTM | 2019 | LTM | 2019 | Jan-18 | Jul-18 | Gross | EBITDA |
| Discrete and Process Automation | | | | | | | | | | |
| Automation and Robotics | (2.4%) | (42.0%) | 1.0x | 0.9x | 9.1x | 7.6x | 14.7x | 12.1x | 28.2% | 10.9% |
| Automation Components | (4.0%) | (23.0%) | 1.9x | 1.7x | 10.7x | 9.1x | 14.6x | 11.5x | 32.9% | 17.3% |
| Test & Measurement | | | | | | | | | | |
| Sensors and Instrumentation | (2.9%) | (10.1%) | 2.4x | 2.3x | 11.9x | 11.2x | 15.7x | 16.1x | 37.8% | 18.4% |
| Condition Monitoring | (8.2%) | (12.0%) | 0.8x | 0.7x | 14.0x | 7.8x | 16.2x | 17.1x | 26.0% | 8.9% |
| Engineered Components | | | | | | | | | | |
| Pumps and Filtration | (3.2%) | (13.0%) | 1.6x | 1.6x | 11.3x | 10.7x | 15.5x | 13.6x | 33.3% | 16.8% |
| Valves and Fittings | (4.0%) | (26.4%) | 1.6x | 1.5x | 10.0x | 8.4x | 13.9x | 12.1x | 31.8% | 16.3% |
| Communication & Connectivity | | | | | | | | | | |
| Connectivity / Smart City | (2.9%) | (23.0%) | 1.3x | 1.2x | 11.4x | 9.3x | 14.1x | 12.2x | 30.0% | 12.2% |
| ERP & Business Management Software | (1.2%) | (11.3%) | 4.4x | 3.9x | 18.1x | 17.0x | 19.8x | 20.5x | 57.1% | 26.0% |

Public Markets Overview

Source: FactSet (as of January 7, 2019)

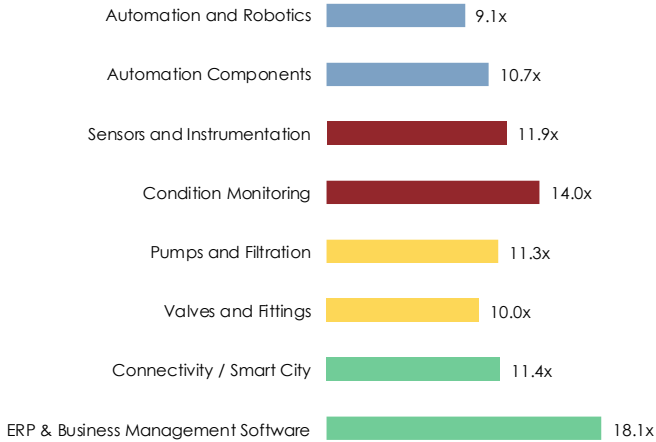
Discrete and Process Automation

Test & Measurement

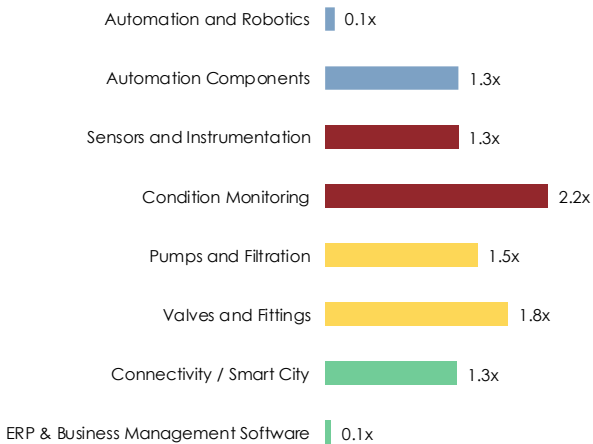
Engineered Components

Communication & Connectivity

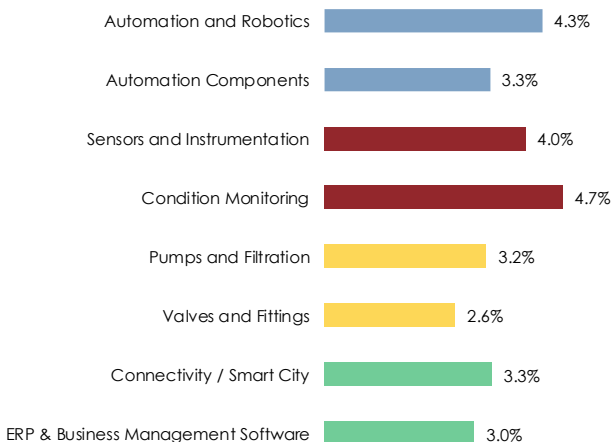
TEV / LTM EBITDA



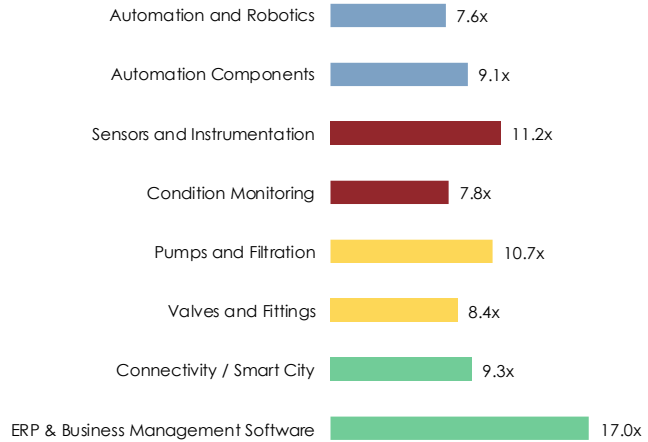
NET DEBT / LTM EBITDA



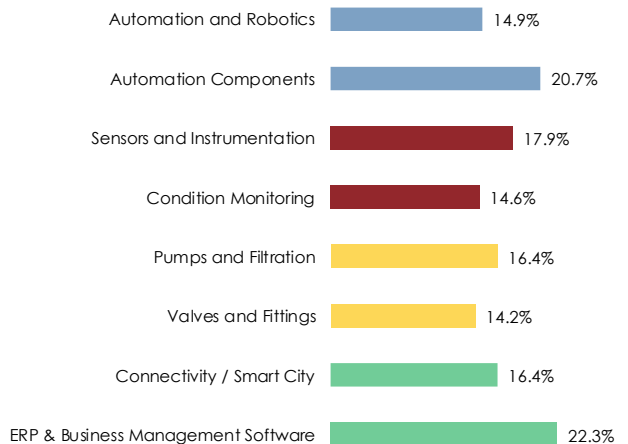
AVERAGE CAPEX / REVENUE (2015 – 2017)



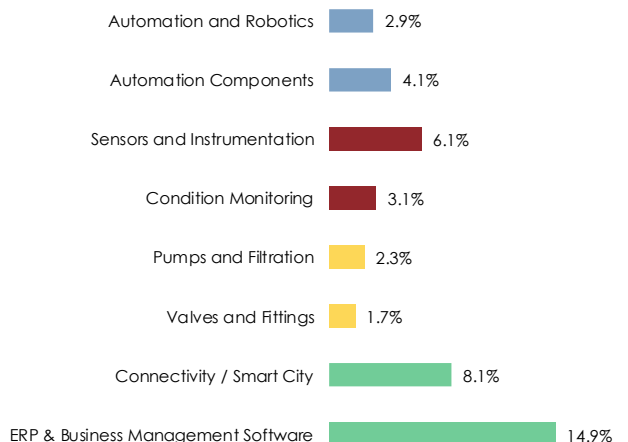
TEV / 2019E EBITDA



AVERAGE EBITDA MARGIN (2015 – 2017)



LTM RESEARCH & DEVELOPMENT / REVENUE



Public Comparables Detail

Source: FactSet (as of January 7, 2019); \$ in Millions, except per share amounts

| Discrete and Process Automation | | | | | | | | | |
|-------------------------------------|-------------|-------|-----------|-------------------|---------|---------|----------|-------|--------|
| | | | | Stock Performance | | | | | |
| | LTM Margins | | TEV | Current | 1-Month | 1-Year | % of | TEV / | EBITDA |
| | EBITDA | Gross | | Price | Change | Change | LTM High | LTM | 2019 |
| Automation and Robotics | | | | | | | | | |
| ATS Automation Tooling Systems Inc. | 12.4% | 24.0% | \$994 | \$10.83 | (12.5%) | (17.2%) | 56.3% | 9.2x | 7.3x |
| Durr AG | 8.5% | 21.5% | \$2,635 | \$37.42 | 6.3% | (43.7%) | 53.0% | 6.9x | 6.3x |
| GEA Group | 9.4% | 29.9% | \$5,132 | \$26.21 | 3.3% | (46.9%) | 51.2% | 9.6x | 7.9x |
| Fanuc Corporation | 36.2% | 45.2% | \$23,247 | \$153.69 | (2.3%) | (41.4%) | 50.9% | 9.8x | 11.9x |
| Krones AG | 7.8% | 28.3% | \$2,514 | \$78.32 | (6.0%) | (42.7%) | 54.0% | 7.0x | 6.0x |
| Metso Oyj | 13.1% | 28.1% | \$4,214 | \$6.58 | (2.5%) | (26.2%) | 70.8% | 9.0x | 8.1x |
| | Median | 10.9% | 28.2% | | (2.4%) | (42.0%) | 53.5% | 9.1x | 7.6x |
| | Mean | 14.6% | 29.5% | | (2.3%) | (36.3%) | 56.0% | 8.6x | 7.9x |
| Automation Components | | | | | | | | | |
| ABB Ltd. | 11.8% | 30.0% | \$47,089 | \$19.09 | (0.1%) | (30.8%) | 66.0% | 10.8x | 8.3x |
| Altra Industrial Motion Corp. | 13.8% | 31.5% | \$974 | \$26.44 | (3.3%) | (46.4%) | 49.2% | 7.6x | 2.3x |
| AMETEK, Inc. | 26.2% | 37.0% | \$17,255 | \$68.05 | (4.0%) | (7.8%) | 83.1% | 13.9x | 12.3x |
| CKD Corporation | 14.4% | 30.6% | \$595 | \$8.92 | (7.5%) | (61.9%) | 30.9% | 4.0x | 4.4x |
| Danaher Corporation | 24.4% | 56.1% | \$81,233 | \$100.45 | (1.4%) | 6.1% | 90.6% | 17.0x | 16.2x |
| Keyence Corporation | 56.9% | 82.1% | \$52,953 | \$505.61 | (5.0%) | (13.3%) | 76.2% | 19.6x | 15.7x |
| Moog Inc. Class A | 13.0% | 29.0% | \$3,522 | \$77.24 | (0.1%) | (12.0%) | 82.2% | 10.0x | 8.6x |
| Nidec Corporation | 15.9% | 24.0% | \$35,262 | \$116.31 | (7.2%) | (19.7%) | 68.2% | 16.6x | 12.3x |
| Parker-Hannifin Corporation | 17.6% | 25.5% | \$24,502 | \$151.33 | (3.6%) | (25.7%) | 71.1% | 12.6x | 9.1x |
| Rexnord Corporation | 17.9% | 35.1% | \$3,950 | \$22.98 | (10.3%) | (12.7%) | 71.6% | 10.7x | 8.5x |
| Rockwell Automation, Inc. | 21.8% | 48.9% | \$19,918 | \$150.13 | (7.1%) | (24.9%) | 71.7% | 13.7x | 12.3x |
| SMC Corporation | 35.1% | 51.5% | \$15,863 | \$304.98 | (4.4%) | (30.3%) | 59.9% | 8.5x | 8.5x |
| Schneider Electric SE | 17.3% | 39.1% | \$46,735 | \$67.85 | (2.9%) | (23.0%) | 71.6% | 9.1x | 8.8x |
| Siemens AG | 11.8% | 29.9% | \$117,553 | \$111.35 | 0.1% | (23.0%) | 71.6% | 10.1x | 9.1x |
| Yaskawa Electric Corporation | 15.2% | 32.9% | \$6,310 | \$24.10 | (17.1%) | (48.2%) | 43.7% | 9.4x | 9.6x |
| | Median | 17.3% | 32.9% | | (4.0%) | (23.0%) | 71.6% | 10.7x | 9.1x |
| | Mean | 20.9% | 38.9% | | (4.9%) | (24.9%) | 67.2% | 11.6x | 9.7x |
| Overall Median | 15.2% | 30.6% | | | (3.6%) | (25.7%) | 68.2% | 9.8x | 8.6x |
| Overall Mean | 19.1% | 36.2% | | | (4.2%) | (28.2%) | 64.0% | 10.7x | 9.2x |

Public Comparables Detail

Source: FactSet (as of January 7, 2019); \$ in Millions, except per share amounts

| Test & Measurement | | | | | | | | | |
|------------------------------------|-------------|-------|-----------|-------------------|---------|---------|----------|--------------|-------|
| | | | | Stock Performance | | | | | |
| | LTM Margins | | TEV | Current | 1-Month | 1-Year | % of | TEV / EBITDA | |
| | EBITDA | Gross | | Price | Change | Change | LTM High | LTM | 2019 |
| Sensors and Instrumentation | | | | | | | | | |
| AMETEK, Inc. | 26.2% | 37.0% | \$17,255 | \$68.05 | (4.0%) | (7.8%) | 83.1% | 13.9x | 12.3x |
| Badger Meter, Inc. | 18.8% | 37.8% | \$1,457 | \$49.05 | (8.7%) | 4.1% | 85.9% | 18.2x | 16.0x |
| Danaher Corporation | 24.4% | 56.1% | \$81,233 | \$100.45 | (1.4%) | 6.1% | 90.6% | 17.0x | 16.2x |
| ESCO Technologies Inc. | 17.9% | 34.1% | \$1,888 | \$64.50 | (2.2%) | 5.2% | 90.2% | 13.7x | 12.2x |
| First Sensor AG | 8.5% | 16.7% | \$266 | \$22.43 | 1.0% | (19.3%) | 57.2% | 17.2x | 10.0x |
| FLIR Systems, Inc. | 23.3% | 50.0% | \$5,916 | \$43.38 | 0.1% | (10.1%) | 67.9% | 13.9x | 12.6x |
| Honeywell International Inc. | 21.2% | 36.7% | \$108,016 | \$134.62 | (2.9%) | (13.5%) | 80.3% | 11.9x | 12.2x |
| Itron, Inc. | 10.7% | 29.3% | \$2,877 | \$48.50 | (6.7%) | (30.9%) | 62.7% | 11.4x | 9.6x |
| JENOPTIK AG | 15.0% | 33.8% | \$1,561 | \$26.94 | (10.9%) | (23.0%) | 57.9% | 10.7x | 10.2x |
| Meggitt PLC | 22.6% | 33.5% | \$6,182 | \$6.00 | (2.2%) | (9.9%) | 79.3% | 10.1x | 10.0x |
| MTS Systems Corporation | 13.2% | 39.5% | \$1,113 | \$41.28 | (13.3%) | (22.6%) | 72.4% | 10.8x | NA |
| National Instruments Corporation | 19.4% | 75.4% | \$5,456 | \$44.58 | (5.1%) | 2.6% | 83.2% | 20.8x | 19.2x |
| Oxford Instruments plc | 18.4% | 47.6% | \$676 | \$11.45 | (1.1%) | (1.9%) | 77.5% | 8.8x | 8.8x |
| Sensata Technologies Holding PLC | 26.1% | 31.9% | \$9,908 | \$44.35 | 0.3% | (15.0%) | 77.3% | 11.0x | 10.0x |
| Spectris plc | 16.9% | 54.0% | \$3,769 | \$28.94 | (6.5%) | (17.6%) | 72.7% | 10.8x | 10.1x |
| Teledyne Technologies Incorporated | 17.9% | 38.2% | \$8,367 | \$205.81 | 0.9% | 10.5% | 82.0% | 16.4x | 14.9x |
| Yokogawa Electric Corp. | 12.5% | 43.2% | \$4,186 | \$17.08 | (6.2%) | (15.6%) | 76.5% | 9.1x | 7.5x |
| | Median | 18.4% | 37.8% | | (2.9%) | (10.1%) | 77.5% | 11.9x | 11.2x |
| | Mean | 18.4% | 40.9% | | (4.1%) | (9.3%) | 76.3% | 13.3x | 12.0x |
| Condition Monitoring | | | | | | | | | |
| Hexagon AB | 31.0% | 56.8% | \$19,175 | \$46.05 | (0.4%) | (12.0%) | 74.0% | 14.0x | 12.6x |
| Mistras Group, Inc. | 8.9% | 26.0% | \$567 | \$14.78 | (8.4%) | (35.6%) | 62.6% | 8.5x | 6.0x |
| Team, Inc. | 2.6% | 25.9% | \$817 | \$15.20 | (8.2%) | (6.7%) | 59.5% | 24.8x | 7.8x |
| | Median | 8.9% | 26.0% | | (8.2%) | (12.0%) | 62.6% | 14.0x | 7.8x |
| | Mean | 14.2% | 36.2% | | (5.7%) | (18.1%) | 65.4% | 15.8x | 8.8x |
| Overall Median | 18.2% | 37.4% | | | (3.5%) | (11.0%) | 76.9% | 12.8x | 10.2x |
| Overall Mean | 17.8% | 40.2% | | | (4.3%) | (10.6%) | 74.6% | 13.7x | 11.5x |

Public Comparables Detail

Source: FactSet (as of January 7, 2019); \$ in Millions, except per share amounts

| Engineered Components | | | | | | | | | |
|--------------------------------|-------------|-------|----------|-------------------|---------|---------|----------|-------|--------|
| | | | | Stock Performance | | | | | |
| | LTM Margins | | TEV | Current | 1-Month | 1-Year | % of | TEV / | EBITDA |
| | EBITDA | Gross | | Price | Change | Change | LTM High | LTM | 2019 |
| Pumps and Filtration | | | | | | | | | |
| Colfax Corporation | 12.9% | 29.3% | \$3,578 | \$21.15 | (8.2%) | (48.1%) | 50.3% | 7.8x | 6.7x |
| Donaldson Company, Inc. | 16.7% | 34.0% | \$6,170 | \$43.11 | (11.9%) | (13.0%) | 72.5% | 13.3x | 11.6x |
| ESCO Technologies Inc. | 17.9% | 34.1% | \$1,888 | \$64.50 | (2.2%) | 5.2% | 90.2% | 13.7x | 12.2x |
| Essentra plc | 11.8% | 6.2% | \$1,531 | \$4.53 | (1.9%) | (37.7%) | 60.1% | 9.4x | 8.5x |
| Flowserve Corporation | 10.5% | 31.3% | \$6,015 | \$38.24 | (15.8%) | (11.9%) | 67.3% | 14.8x | 10.7x |
| Franklin Electric Co., Inc. | 13.3% | 33.3% | \$2,240 | \$43.69 | 7.1% | (3.8%) | 84.9% | 13.3x | 11.9x |
| Graco Inc. | 29.3% | 53.9% | \$7,326 | \$41.57 | (1.1%) | (10.0%) | 83.7% | 15.4x | 14.2x |
| IDEX Corporation | 26.4% | 48.1% | \$10,409 | \$129.35 | (3.2%) | (4.0%) | 81.9% | 16.0x | 14.8x |
| IMI plc | 16.8% | 42.0% | \$3,890 | \$12.15 | 7.0% | (35.8%) | 60.7% | 9.5x | 9.1x |
| ITT, Inc. | 17.2% | 32.1% | \$3,966 | \$48.85 | (3.4%) | (9.7%) | 77.5% | 8.4x | 7.6x |
| Pentair plc | 18.8% | 35.8% | \$7,437 | \$38.15 | (4.0%) | (47.5%) | 51.0% | 11.3x | 12.0x |
| SPX Flow, Inc. | 11.6% | 30.7% | \$1,942 | \$30.33 | (8.5%) | (35.9%) | 55.2% | 8.0x | 7.2x |
| Sulzer AG | 9.7% | 30.6% | \$3,209 | \$82.76 | (6.4%) | (35.9%) | 55.8% | 10.0x | 7.4x |
| Trelleborg AB | 16.8% | 31.6% | \$5,578 | \$16.01 | 2.8% | (34.0%) | 59.1% | 8.4x | 7.5x |
| Xylem Inc. | 18.5% | 39.1% | \$14,263 | \$66.94 | 1.9% | (3.3%) | 81.2% | 15.1x | 13.0x |
| Median | 16.8% | 33.3% | | | (3.2%) | (13.0%) | 67.3% | 11.3x | 10.7x |
| Mean | 16.6% | 34.1% | | | (3.2%) | (21.7%) | 68.8% | 11.6x | 10.3x |
| Valves and Fittings | | | | | | | | | |
| Aalberts Industries N.V. | 15.9% | 19.8% | \$4,527 | \$32.84 | (1.0%) | (38.2%) | 59.1% | 8.8x | 8.4x |
| CIRCOR International, Inc. | 9.1% | 28.4% | \$1,190 | \$23.18 | (17.7%) | (54.3%) | 42.2% | 12.2x | 8.3x |
| Crane Co. | 17.3% | 35.9% | \$5,146 | \$72.38 | (8.6%) | (20.8%) | 70.5% | 9.2x | 7.7x |
| Curtiss-Wright Corporation | 20.3% | 36.6% | \$5,129 | \$102.89 | (0.7%) | (16.6%) | 71.8% | 10.7x | 9.8x |
| Indutrade AB | 13.1% | 33.1% | \$3,421 | \$24.27 | 4.6% | (13.3%) | 76.6% | 13.5x | 12.4x |
| Mueller Industries, Inc. | 7.4% | 12.4% | \$1,784 | \$23.67 | 5.2% | (35.1%) | 63.0% | 9.7x | NA |
| Mueller Water Products, Inc. | 18.2% | 31.6% | \$1,567 | \$9.19 | (8.3%) | (27.0%) | 71.6% | 9.4x | 7.4x |
| Parker-Hannifin Corporation | 17.6% | 25.5% | \$24,502 | \$151.33 | (3.6%) | (25.7%) | 71.1% | 12.6x | 9.1x |
| Watts Water Technologies, Inc. | 15.4% | 41.3% | \$2,460 | \$65.05 | (7.4%) | (14.9%) | 69.7% | 10.3x | 9.6x |
| Weir Group PLC | 16.7% | 31.9% | \$4,712 | \$17.16 | (4.4%) | (44.5%) | 53.2% | 9.0x | 7.2x |
| Median | 16.3% | 31.8% | | | (4.0%) | (26.4%) | 70.1% | 10.0x | 8.4x |
| Mean | 15.1% | 29.6% | | | (4.2%) | (29.0%) | 64.9% | 10.5x | 8.9x |
| Overall Median | 16.7% | 32.1% | | | (3.4%) | (25.7%) | 69.7% | 10.3x | 9.1x |
| Overall Mean | 16.0% | 32.3% | | | (3.6%) | (24.6%) | 67.2% | 11.2x | 9.8x |

Public Comparables Detail

Source: FactSet (as of January 7, 2019); \$ in Millions, except per share amounts

| Communication & Connectivity | | | | | | | | | |
|---|-------------|-------|-----------|-------------------|---------|---------|----------|--------------|-------|
| | | | | Stock Performance | | | | | |
| | LTM Margins | | TEV | Current | 1-Month | 1-Year | % of | TEV / EBITDA | |
| | EBITDA | Gross | | Price | Change | Change | LTM High | LTM | 2019 |
| Connectivity / Smart City | | | | | | | | | |
| ABB Ltd. | 11.8% | 30.0% | \$47,089 | \$19.09 | (0.1%) | (30.8%) | 66.0% | 10.8x | 8.3x |
| Cisco Systems, Inc. | 31.3% | 63.1% | \$181,004 | \$42.92 | (7.6%) | 8.6% | 86.8% | 11.5x | 9.8x |
| Cubic Corporation | 6.6% | 28.3% | \$1,594 | \$54.88 | (0.5%) | (7.5%) | 71.0% | 20.2x | 9.9x |
| FLIR Systems, Inc. | 23.3% | 50.0% | \$5,916 | \$43.38 | 0.1% | (10.1%) | 67.9% | 13.9x | 12.6x |
| Fortive Corp. | 23.2% | 50.3% | \$27,845 | \$67.46 | (3.5%) | (8.1%) | 76.4% | 16.6x | 15.2x |
| init innovation in traffic systems SE | 8.4% | 32.5% | \$192 | \$16.36 | (5.2%) | (30.6%) | 60.3% | 14.1x | NA |
| Itron, Inc. | 10.7% | 29.3% | \$2,877 | \$48.50 | (6.7%) | (30.9%) | 62.7% | 11.4x | 9.6x |
| Kapsch TrafficCom AG | 9.0% | 23.6% | \$525 | \$37.19 | 8.5% | (37.2%) | 61.5% | 7.2x | 6.5x |
| Kyosan Electric Manufacturing Co., Ltd. | 9.2% | 22.6% | \$393 | \$3.84 | (5.6%) | (41.3%) | 49.3% | 6.4x | 6.0x |
| QUALCOMM Incorporated | 27.4% | 57.1% | \$87,088 | \$56.60 | 1.1% | (14.8%) | 74.0% | 14.0x | 13.2x |
| SAP SE | 27.3% | 69.8% | \$122,088 | \$99.18 | (1.8%) | (14.6%) | 77.8% | 15.6x | 12.3x |
| Schneider Electric SE | 17.3% | 39.1% | \$46,735 | \$67.85 | (2.9%) | (23.0%) | 71.6% | 9.1x | 8.8x |
| Siemens AG | 11.8% | 29.9% | \$117,553 | \$111.35 | 0.1% | (23.0%) | 71.6% | 10.1x | 9.1x |
| Thales SA | 12.2% | 24.5% | \$22,332 | \$114.71 | (3.3%) | 4.4% | 78.8% | 9.7x | 8.0x |
| TKH Group NV | 12.4% | 17.5% | \$2,285 | \$46.84 | (3.1%) | (27.9%) | 66.1% | 9.9x | 8.4x |
| | Median | 12.2% | 30.0% | | (2.9%) | (23.0%) | 71.0% | 11.4x | 9.3x |
| | Mean | 16.1% | 37.8% | | (2.0%) | (19.1%) | 69.4% | 12.0x | 9.8x |
| ERP & Business Management Software | | | | | | | | | |
| American Software, Inc. | 13.7% | 53.5% | \$245 | \$10.34 | 0.0% | (15.7%) | 54.6% | 15.6x | 13.2x |
| Constellation Software Inc. | 24.8% | 38.4% | \$13,307 | \$630.61 | (6.9%) | 6.8% | 73.3% | 18.4x | 14.7x |
| Dassault Systemes SA | 30.5% | 80.5% | \$28,568 | \$117.06 | (1.9%) | 7.4% | 71.3% | 23.4x | 19.4x |
| Descartes Systems Group Inc. | 32.0% | 58.2% | \$2,072 | \$26.38 | (4.8%) | (8.0%) | 73.4% | 24.2x | 19.7x |
| Manhattan Associates, Inc. | 27.2% | 56.1% | \$2,713 | \$42.60 | (9.1%) | (17.0%) | 68.3% | 17.9x | 21.2x |
| QAD Inc. | 2.7% | 52.0% | \$631 | \$40.32 | (0.6%) | 0.9% | 65.2% | 71.7x | 24.8x |
| Sage Group plc | 28.5% | 89.3% | \$9,179 | \$7.65 | 3.4% | (30.1%) | 66.1% | 13.0x | 13.9x |
| salesforce.com, inc. | 11.0% | 72.6% | \$109,240 | \$137.96 | 1.5% | 27.6% | 85.6% | 79.2x | 28.3x |
| SAP SE | 27.3% | 69.8% | \$122,088 | \$99.18 | (1.8%) | (14.6%) | 77.8% | 15.6x | 12.3x |
| TOTVS S.A. | 13.8% | 56.1% | \$1,345 | \$8.11 | 8.0% | (16.1%) | 75.5% | 14.9x | 12.7x |
| | Median | 26.0% | 57.1% | | (1.2%) | (11.3%) | 72.3% | 18.1x | 17.0x |
| | Mean | 21.1% | 62.6% | | (1.2%) | (5.9%) | 71.1% | 29.4x | 18.0x |
| Overall Median | 13.8% | 50.3% | | | (1.8%) | (14.8%) | 71.3% | 14.1x | 12.5x |
| Overall Mean | 18.1% | 47.8% | | | (1.7%) | (13.8%) | 70.1% | 19.0x | 13.2x |

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a portfolio company of
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has been acquired by
DASSAULT SYSTEMES

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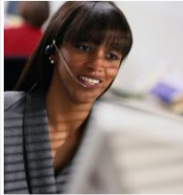
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