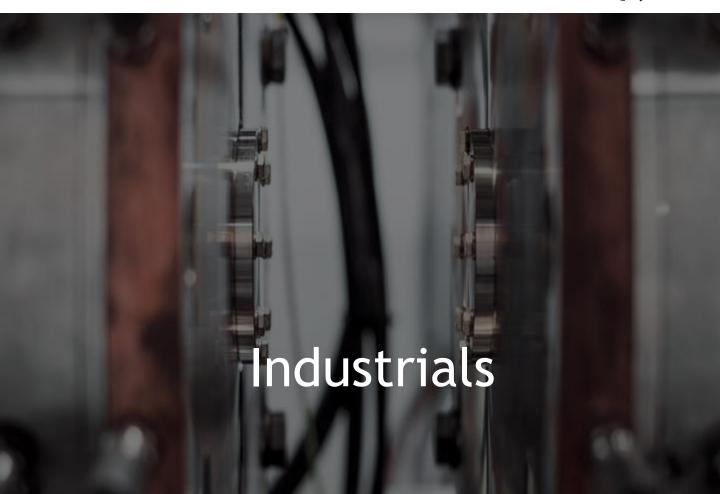




Industrial Technology Q4, 2017



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Industry News
Transactions
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About Mirus
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Industrial Technology

Industry News

What are the IoT Industrial Automation Standards to Watch?

TechTarget Full Article

IoT industrial automation messaging standards accelerate the integration between applications and equipment from a wide range of vendors. Tony Paine, CTO of Industrial Automation at PTC discusses the top IoT industrial automation standards, including: OPC (Open Platform Communications), MQTT (Message Queuing Telemetry Transport) and AMPQP (Advanced Message Queuing Protocol).

Adapt or Die Is Marchionne's Stark Farewell Message to Carmakers

Industry Week Full Article

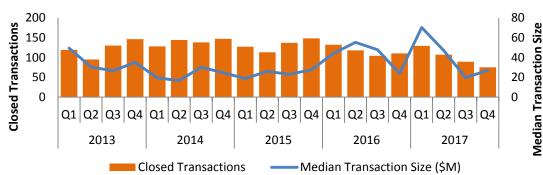
Sergio Marchionne, CEO of Fiat, warns that automakers must reinvent themselves over the next decade due to rapidly developing technologies, including ride-sharing, electrification and self driving cars. "Auto companies need to quickly separate the stuff that will be swallowed by commodity from the brand stuff," Marchionne said.

Applying Industry X.0 to Compete in Today's Digital Market

Automation World Full Article

According to Accenture, industrial manufacturers are finding new opportunities and challenges driven by the accelerating pace of digital advances. Accenture defines the market leading organizations which can optimize their digital capabilities as Industry X.0 companies, and lays out six imperatives for their approach.

Industrial Technology M&A Environment



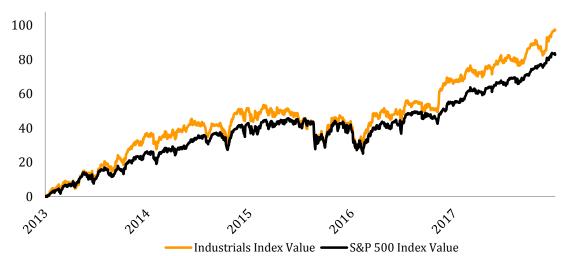
^{*}For the purposes of compiling data, we define constituents in the Industrial Technology sector as companies that make production faster and more efficient through the use of engineering. The data contains global deals of all sizes. Transaction values of less than \$1 million have been excluded from the median calculation.

Selected Q4 2017 Industrial Technology Transactions

				Enterprise	terpriseEV/LTM	
Date Closed	Target	Buyers/Investors	Sector	Value (\$M)	Revenue	EBITDA
12/29/2017	C&M Corporation	Winchester Electronics Corporation	Electrical Components and Equipment	-	-	-
12/21/2017	Famostar emergency lighting BV	Lightronics B.V.	Electrical Components and Equipment	10	1.2x	
12/20/2017	Triton Manufacturing Co. Inc.	Molex, LLC	Electrical Components and Equipment	-	-	-
12/15/2017	Vergnet SA	GEM Capital Management, Inc.	Energy Management	-	-	-
12/12/2017	Eagle Filters Oy	Loudspring Oyj	Industrial Filtration	-		
12/12/2017	Boilermech Holdings Berhad	Undisclosed	Machinery Components	90	1.7x	9.9x
11/29/2017	The Gem City Engineering Co.	CapitalWorks, LLC	Precision Machining	-	-	
11/14/2017	Faber SAS	elcom SAS	Conveyor Systems	-	-	-
11/7/2017	Advanced Production Systems, Inc.	Material Handling Systems, Inc.	Electrical Components and Equipment	-	-	-
11/1/2017	Visedo Oy	Danfoss Power Solutions Inc.	Power Solutions	-		-
10/13/2017	Jiangsu Zealink Electrical Technology Co.	Sichuan Jinyu Automobile City	Energy Management	106	1.4x	
10/5/2017	Luxo Corporation, Microscope Division	UNITRON Ltd.	Test & Measurement	-		-
9/29/2017	Glamox AS	Triton	Electrical Components and Equipment	462	1.4x	10.5x



While largely mirroring the S&P 500, the Industrials market has been strong from an M&A and valuation perspective. Industry valuations are at an all time high and transaction volume is reaching new heights. There are major trends in the industry contributing to growth, including digital integration, rising U.S. defense spending budget, and increasing investment in infrastructure.

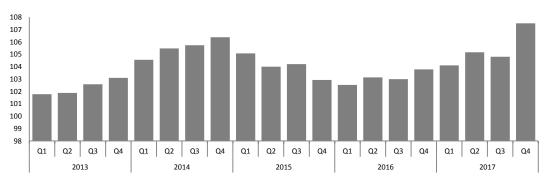


As of 12/31/2017	LTM Financials			Valuation Metrics			/ TN / N	1arains		
Company Name	Ticker	Enterprise Value Revenue Gross Profit EBITDA			FV / Revenue	EV / Gross Profit		LTM Margins Gross Margin EBITDA Margi		
3M Company	NYSE:MMM	\$148,493	\$31,657	\$15,656	\$8,641	4.7x	9.5x	17.2x	49.5%	27.3%
Alaska Air Group	NYSE:ALK	\$10,006	\$7,933	\$2,665	\$1,738	1.3x	3.8x	5.8x	33.6%	21.9%
American Airlines Group	NasdagGS:AAL	\$43,812	\$42,207	\$12,755	\$6,757	1.0x	3.4x	6.5x	30.2%	16.0%
Arconic	NYSE:ARNC	\$18,229	\$12,656	\$2,580	\$1,707	1.0x 1.4x	7.1x	10.7x	20.4%	13.5%
Boeing Company	NYSE:BA	\$176,437	\$91,310	\$16,207	\$11,209	1.9x	10.9x	15.7x	17.7%	12.3%
C. H. Robinson Worldwide	NasdaqGS:CHRW	\$13,618	\$14,325	\$1,169	\$838	1.0x	11.6x	16.3x	8.2%	5.8%
Caterpillar	NYSE:CAT	\$121,009	\$45,462	\$12,035	\$7,375	2.7x	10.1x	16.4x	26.5%	16.2%
CSX	NasdaqGS:CSX	\$60,282	\$11,408	\$5,088	\$5,088	5.3x	11.8x	11.8x	44.6%	44.6%
Cummins	NYSE:CMI	\$31,060	\$19,455	\$4,836	\$2,463	1.6x	6.4x	12.6x	24.9%	12.7%
Deere & Co.	NYSE:DE	\$82,368	\$29,071	\$6,710	\$4,524	2.8x	12.3x	18.2x	23.1%	15.6%
Delta Air Lines	NYSE:DAL	\$46,145	\$41,244	\$12,126	\$8,054	1.1x	3.8x	5.7x	29.4%	19.5%
Dover	NYSE:DOV	\$18,880	\$7,591	\$2,783	\$1,297	2.5x	6.8x	14.6x	36.7%	17.1%
Eaton Corporation	NYSE:ETN	\$41,998	\$20,058	\$6,511	\$3,277	2.1x	6.5x	12.8x	32.5%	16.3%
Emerson Electric Company	NYSE:EMR	\$46,153	\$15,264	\$6,478	\$3,241	3.0x	7.1x	14.2x	42.4%	21.2%
Expeditors International	NasdaqGS:EXPD	\$10,465	\$6,662	\$904	\$722	1.6x	11.6x	14.5x	13.6%	10.8%
FedEx Corporation	NYSE:FDX	\$79,522	\$62,335	\$17,129	\$8,485	1.3x	4.6x	9.4x	27.5%	13.6%
Fluor	NYSE:FLR	\$6,988	\$19,483	\$653	\$724	0.4x	10.7x	9.6x	3.3%	3.7%
Fortive	NYSE:FTV	\$27,911	\$6,476	\$3,193	\$1,515	4.3x	8.7x	18.4x	49.3%	23.4%
General Dynamics	NYSE:GD	\$62,907	\$30,973	\$4,177	\$4,618	2.0x	15.1x	13.6x	13.5%	14.9%
General Electric	NYSE:GE	\$296,278	\$120,467	\$11,544	-\$675	2.5x	25.7x	-438.9x	9.6%	-0.6%
Grainger (W.W.)	NYSE:GWW	\$15,634	\$10,425	\$4,098	\$1,313	1.5x	3.8x	11.9x	39.3%	12.6%
Honeywell Int'l	NYSE:HON	\$122,834	\$40,534	\$12,959	\$8,266	3.0x	9.5x	14.9x	32.0%	20.4%
Illinois Tool Works	NYSE:ITW	\$62,518	\$14,314	\$6,005	\$3,858	4.4x	10.4x	16.2x	42.0%	27.0%
Ingersoll-Rand	NYSE:IR	\$25,158	\$13,938	\$4,344	\$1,978	1.8x	5.8x	12.7x	31.2%	14.2%
J. B. Hunt Transport Services	NasdagGS:JBHT	\$13,698	\$7,190	\$1,302	\$999	1.9x	10.5x	13.7x	18.1%	13.9%
Jacobs Engineering Group	NYSE:JEC	\$7,473	\$10,023	\$1,777	\$637	0.7x	4.2x	11.7x	17.7%	6.4%
Johnson Controls International		\$49,650	\$30,172	\$9,339	\$4,571	1.6x	5.3x	10.9x	31.0%	15.1%
L-3 Communications Holdings	NYSE:LLL	\$18,436	\$9,573	\$1,079	\$1,304	1.9x	17.1x	14.1x	11.3%	13.6%
Lockheed Martin	NYSE:LMT	\$103,459	\$49,663	\$5,282	\$6,204	2.1x	19.6x	16.7x	10.6%	12.5%
Masco	NYSE:MAS	\$15,909	\$7,529	\$2,568	\$1,249	2.1x	6.2x	12.7x	34.1%	16.6%
Nielsen Holdings	NYSE:NLSN	\$20,951	\$6,467	\$3,766	\$1,675	3.2x	5.6x	12.5x	58.2%	25.9%
Norfolk Southern	NYSE:NSC	\$50,899	\$10,551	\$4,641	\$4,645	4.8x	11.0x	11.0x	44.0%	44.0%
Northrop Grumman	NYSE:NOC	\$58,638	\$25,803	\$5,954	\$3,774	2.3x	9.8x	15.5x	23.1%	14.6%
PACCAR	NasdaqGS:PCAR	\$30,494	\$18,073	\$2,674	\$2,462	1.7x	11.4x	12.4x	14.8%	13.6%
Parker-Hannifin	NYSE:PH	\$31,553	\$12,651	\$3,072	\$1,957	2.5x	10.3x	16.1x	24.3%	15.5%
Quanta Services	NYSE:PWR	\$6,744	\$9,091	\$1,227	\$677	0.7x	5.5x	10.0x	13.5%	7.5%
Raytheon	NYSE:RTN	\$57,432	\$25,348	\$6,272	\$3,868	2.3x	9.2x	14.8x	24.7%	15.3%
Republic Services	NYSE:RSG	\$30,393	\$9,861	\$3,774	\$2,741	3.1x	8.1x	11.1x	38.3%	27.8%
Robert Half International	NYSE:RHI	\$6,493	\$5,186	\$2,130	\$577	1.3x	3.0x	11.2x	41.1%	11.1%
Rockwell Automation	NYSE:ROK	\$24,523	\$6,408	\$2,679	\$1,236	3.8x	9.2x	19.8x	41.8%	19.3%
Rockwell Collins	NYSE:COL	\$28,663	\$7,640	\$2,074	\$1,675	3.8x	13.8x	17.1x	27.1%	21.9%
Ryder System	NYSE:R	\$9,741	\$7,119	\$1,460	\$1,774	1.4x	6.7x	5.5x	20.5%	24.9%
Southwest Airlines	NYSE:LUV	\$38,897	\$21,171	\$7,265	\$4,577	1.8x	5.4x	8.5x	34.3%	21.6%
Textron	NYSE:TXT	\$18,086	\$14,006	\$2,398	\$1,506	1.3x	7.5x	12.0x	17.1%	10.8%
Union Pacific	NYSE:UNP	\$120,455	\$21,240	\$11,114	\$10,166	5.7x	10.8x	11.8x	52.3%	47.9%
United Continental Holdings	NYSE:UAL	\$29,582	\$37,736	\$12,829	\$5,821	0.8x	2.3x	5.1x	34.0%	15.4%
United Parcel Service	NYSE:UPS	\$117,173	\$63,974	\$12,712	\$7,846	1.8x	9.2x	14.9x	19.9%	12.3%
United Rentals	NYSE:URI	\$22,586	\$6,641	\$2,851	\$1,948	3.4x	7.9x	11.6x	42.9%	29.3%
United Technologies	NYSE:UTX	\$122,850	\$59,837	\$15,884	\$10,812	2.1x	7.7x	11.0x	26.5%	18.1%
	INIUL.UIA	∪دی,ع≥ددِ	722,037	91J,004	210,012	2.11	7.78	11.4V	20.370	10.170

<u>Industrials</u>

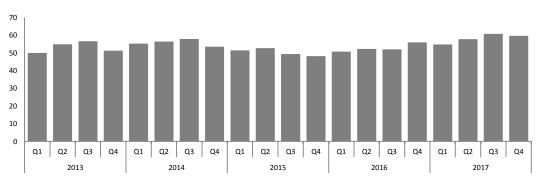
State of the Industry

U.S. Industrial Production Index (Seasonally Adjusted)



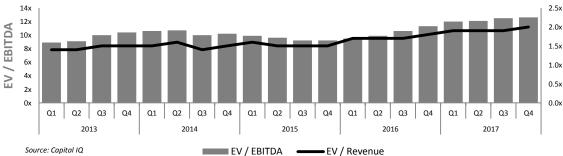
Source: Federal Reserve

Purchasing Managers Index

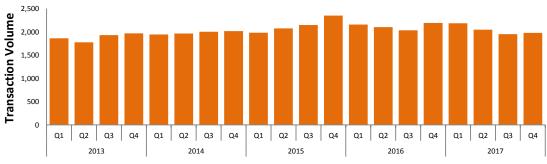


Source: Institution For Supply Management

Industry Valuations



Industrials Transaction Volume



Source: Capital IQ



Contact Information

"The Mirus team successfully guided us through every aspect of the transaction, from identifying prospective buyers through closing. They conducted a thorough process and we are delighted by the outcome."

Please contact one of our partners today to answer any questions you may have to discuss the future of your business.



Alan Fullerton 781-418-5954



781-418-5950 gin <mark>@merger.com</mark>

About Mirus

Mirus' Industrial team has experience working with owners of growth industrial businesses and distressed industrials, executing corporate carve-outs, strategic sales and leveraged buy-outs. Much of our work is with closely-held companies – niche leaders who have the industry leading solution in a sub \$200 million market. The companies often have strategic value to large corporations serving the broader market - acquirers who can integrate a product line into their portfolio. For larger industrial companies, Mirus has advised buyers and sellers on M&A, including leveraged buy-outs, and has executed corporate divestitures and restructurings.

Alan Fullerton and Andrew Crain are the leaders of our Industrial team. Alan and Andrew have decades of experience advising companies in the Industrial space. They have a demonstrated record of managing and closing dozens of engagements with companies in the industry. Alan has been nationally recognized by M&A Advisor as a sector finalist across multiple industries and has an MBA from Ecole des Ponts (France), an MS in Electrical Engineering from Brown University, and a BS in Mechanical Engineering from MIT. Andrew began his career as an attorney at Foley Hoag LLP and has prior experience as a fifth-generation family business owner and CEO. Andrew graduated from Williams College and the University of Michigan Law School.

Mirus Industrial Spotlight



AIC is a leading specialty chemical and ingredients distributor based in Framingham, Massachusetts. LeBaronBrown is a private investment firm with a multi-decade orientation and a strategy to bring capital and resources to company management teams to enable growth over a multi-decade period. AIC joins Charkit Chemical Company LLC, acquired in June of 2017, under the same parent company. This transaction positions AIC for long-term, continued growth, building upon the success of its dedicated team.



MagneMotion is a provider of intelligent transport systems based on patent protected linear synchronous motor (LSM) technology. Rockwell Automation Inc. (NYSE: ROK), the world's largest company dedicated to industrial automation and information, makes its customers more productive and the world more sustainable. The acquisition of MagneMotion expands Rockwell Automation's independent cart technology and complements its acquisitions of iTRAK Technology and Jacobs Automation.



FleetLogix provides outsourced labor to rental car agencies across the U.S.. The company uses a proprietary technology platform to track and analyze performance at each site, to ensure quality and efficiency in its service delivery, and to provide data and metrics to its managers and its clients. Striker Partners is a private, family-based investment firm formed to make majority equity investments in profitable and growing businesses. Striker Partners brings technology expertise to the company and represents a great cultural fit.



Newcan supplies components to the automotive and trucking industries and is a leader in manufacturing precision metal stampings and perforated components. Falls Stamping & Welding is located in Cuyahoga Falls, Ohio and operates in the metal parts industry. Falls Stamping is recognized for the breadth of manufacturing capabilities. The acquisition of Newcan expands the company's offerings.



Spire Corporation (Nasdaq: SPIR), a leading technology and equipment supplier to the solar photovoltaic (PV) industry located in Bedford, Massachusetts, sold its sun simulator business, a supplier of critical tools for both PV module production lines and testing/certification laboratories, in a cross border transaction to Eternal Sun, a company based in The Hague, the Netherlands that specializes in solar simulation technology for the purpose of product and material testing.