

Industrial Insights

Industrial Technology

2021 Year End Review

Executive Summary

The industrial technology market continues to be characterized by a resumption of more stable revenue growth from the depths of COVID-19. The related macro-operating head winds of both labor and supply chain constraints as well as inflation are expected to persist in the near term to varying degrees. The industrial technology market continues to be characterized by a resumption of more stable revenue growth from the depths of COVID-19. The related macro-operating head winds of both labor and supply chain constraints as well as inflation are expected to persist in the near term to varying degrees. The improved backdrop has resulted in a resumption of strong industry M&A volume, with 2021 volumes returning to pre-COVID-19 levels.

Our Industrials M&A Advisory team remains very active in this space, having recently closed several relevant M&A assignments that benefited from both strong strategic and financial buyer demand, resulting in favorable valuations for our clients.

The market backdrop remains conducive for industrial technology M&A with support from interest rates near historic lows, significant dry powder from corporates and financial sponsors and a stable U.S. economic outlook. Conditions are supportive for divestitures, as sponsors and corporates with noncore assets seek to lock in attractive market valuation levels.

Supply chain disruptions and related inflation will likely drive some level of vertical consolidation and reshoring as companies look to address this recent source of operating volatility. ESG is also an increasing M&A theme as boards will continue to evolve their portfolios to withstand related scrutiny.

Automation as a Driver of M&A

The global Internet of Things (IoT) market is projected to grow at a 22%+ CAGR through 2026 due to underlying market demand and growth once the pandemic is over. Manufacturing automation is expected to capture the maximum market share as IoT spending among manufacturers is primarily focused on solutions that support manufacturing operations and production asset management. The trends are expected to drive significant M&A activity.

Inside



Macroeconomic Backdrop

Manufacturing activity, as reflected in the Purchasing Managers Index (PMI), has been recovering following a large decline during the greatest impacts of COVID-19. The PMI reached 58.7 in December 2021. Despite the increase, companies and suppliers continue to struggle with the rise in overseas shipping and raw materials costs as well as labor force constraints.

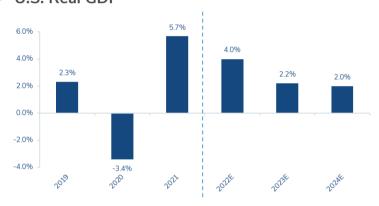
Manufacturing Sector



Source: Institute for Supply Management

The U.S. Real GDP had a sharp decrease in 2020 due to the global pandemic. In 2021, the U.S. saw tremendous economic recovery with Americans returning to work and businesses reopening. Real GDP is currently expected to moderate yet still show growth over the next three years. The geopolitical situation is being closely monitored.

U.S. Real GDP



Source: Bloomberg

The rate of unemployment has declined since April 2020 and has remained below the median since July 2021. The U.S. Labor Department's Job Openings and Labor Turnover Survey (JOLT) for December had a ratio of job openings to hires of 1.7 (from 1.6 in November) with the Manufacturing sector increasing to 2.0 (1.8). The February 2022 unemployment rate fell to 3.8%.

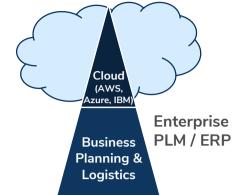
Rate of Unemployment



Source: U.S. Bureau of Labor Statistics

Industrial Technology – Automation Pyramid

The automation pyramid classifies the different IT layers of industrial automated production plants. Every layer or level has its own tasks and IT infrastructure within the production plants. Select industry leading vendors for each category shown below



A software system that integrates internal and external information across an organization. It automates business processes, collecting inputs from departments including manufacturing, supply chain management, sales, marketing, accounting and human resources.









Business Unit MES Manufacturing & **Operations**

within a factory.

@aspentech

A software system that manages manufacturing operations

Honeywell







Plant SCADA / HMI Industrial control software that monitors and controls manufacturing and facility-based processes (HVAC, energy consumption).









Line DCS / PLC Control the devices in the field. Collect operating information from sensors and other input devices to make decisions to initiate or complete tasks.



Management

Monitoring & Supervising













Production Process

Field Valves, Pumps, Sensors, Drives, Motors, Robots, Machines, Vision & Tools, 3D

Printing

The eyes and ears of automation. Technical equipment on the production floor that collect data on temperature, pressure, speeds, etc. The main task of these field devices is to transfer data on processes and machines for monitoring and analysis









Industrial IoT Platforms

Manage the connectivity of the various hardware and software systems to remotely collect data from the devices, secure connectivity, and execute sensor management. Provides organizations with greater intelligence and visibility into operations, which enable better decision making.









We expect continued horizontal and vertical integration within the automation value chain to be a theme in industrial technology M&A.

Select Public Industrial Technology

Companies





































YASKAWA

Test and Measurement

Automation



Amphenol

















Flow Control









































PENTAIR SPXFLOW SULZER











Industrial Software















aspentech AVEVA

























Diversified Industrials











Public Companies Valuation Trends

Equity Market Performance

- Since January 2020, the Industrial Technology subsectors have performed in line with the S&P 500 Index. The Flow Control Index was the most impacted during 2020.
- The Test & Measurement Index grew 22.1%, the most out of the Industrial Technology subsectors, compared to the Automation Index growth of 18.0%, Flow Control Index growth of 18.8%, and Industrial Software Index growth of 21.1%. The S&P 500 grew the most at 31.3%.

Stock Performance Since January 2020

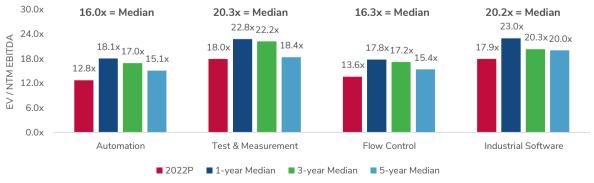


Source: Capital IQ.

Valuation Trends

The sector's one-, three- and five-year median NTM trading multiples below show consistent multiple expansion in recent years. The 2022 forward multiples highlight slight contraction as investors digest slightly lower economic forward growth, varying expectations in interest rate hikes by the U.S. Federal Reserve and the current geopolitical situation.

Historical NTM Median EV/EBITDA Multiple Trends by Industrial Technology Subsector



Source: Capital IQ

Public Companies Trading Analysis

(\$ in millions, except per share amounts)

		MARKET				LTM OF		G PERFORI					UE AS MUI	
	Price at 03/11/22	% of 52- Week High	Equity Value	Enterprise Value	Revenue	EBITDA	Gross Margin	Growth	Margin	Net Debt / EBITDA	LTM EBITDA	2022P EBITDA	LTM Revenue	2022P Revenue
Automation Majors		_					_		_					
ABB Ltd	\$32.78	85.1%	\$59,413	\$60,899	\$28,945	\$4,611	33.0%	72.7%	15.9%	0.3x	13.2x	12.0x	2.1x	2.0x
Cognex Corporation	66.03	71.6%	11,484	11,186	1,037	335	73.3%	44.2%	32.3%	NM	33.4	28.7	NM	9.5
Emerson Electric Co.	94.74	89.4%	56,276	60,895	18,548	3,976	41.3%	7.6%	21.4%	1.2	15.3	12.8	3.3	3.1
Fanuc Corporation	165.30	67.2%	31,709	26,717	6,221	2,012	40.9%	70.9%	32.3%	NM	13.5	12.0	4.4	3.9
Fortive Corporation	56.48	70.7%	20,280	23,609	5,255	1,284	57.3%	26.1%	24.4%	2.6	18.4	15.9	4.5	4.1
Honeywell International Inc.	184.36	77.8%	126,438	136,226	34,392	8,696	32.0%	13.6%	25.3%	1.0	15.7	14.9	4.0	3.8
Rockwell Automation, Inc.	262.55	74.0%	30,507	34,740	7,289	1,387	41.2%	13.9%	19.0%	2.8	25.1	18.7	4.8	4.2
Sandvik AB (publ)	21.41	79.0%	26,862	29,725	10,960	2,726	40.5%	49.4%	24.9%	1.1	11.7	9.9	2.9	2.4
Schneider Electric S.E.	153.43	78.0%	86,869	100,195	32,873	6,068	41.0%	25.4%	18.5%	1.6	17.2	14.4	3.2	2.9
Siemens Aktiengesellschaft	139.35	80.6%	111,607	160,176	72,774	10,123	36.9%	17.9%	13.9%	4.4	16.4	12.4	2.3	2.1
SMC Corporation	535.02	78.8%	34,958	29,231	6,103	2,108	50.3%	52.7%	34.5%	NM	14.1	12.8	4.9	4.3
YASKAWA Electric Corporation	36.97	70.5%	9,665	9,847	4,120	555	33.5%	42.2%	13.5%	0.3	18.3	14.0	2.5	2.3
Mean		76.9%	\$50,506	\$56,954	\$19,043	\$3,657	43.4%	36.4%	23.0%	1.7x	17.7x	14.9x	3.5x	3.7x
Median		77.9%	\$33,334	\$32,232	\$9,125	\$2,417	40.9%	34.2%	22.9%	1.2x	16.1x	13.4x	3.3x	3.4x
Automation Components														
Allied Motion Technologies Inc.	\$32.08	71.8%	\$496	\$650	\$404	\$45	30.0%	NM	11.2%	3.4x	14.4x	9.7x	1.6x	1.4x
Altra Industrial Motion Corp.	38.46	56.5%	2,497	3,715	1,900	365	35.6%	1.4%	19.2%	3.3	10.2	8.9	2.0	1.8
AMETEK, Inc.	128.18	86.6%	29,699	32,073	5,547	1,601	34.5%	20.6%	28.9%	1.5	20.0	18.0	5.8	5.3
IMI plc	17.43	70.8%	4,504	5,313	2,527	437	46.2%	(2.1%)	17.3%	1.9	12.6	9.2	2.2	2.0
Nidec Corporation	75.33	61.5%	43,948	47,225	15,983	2,327	21.9%	23.7%	14.6%	1.4	20.6	16.9	3.0	2.7
Parker-Hannifin Corporation	275.63	81.1%	35,412	43,388	15,293	3,290	28.0%	24.3%	21.5%	2.4	13.2	11.8	2.8	2.7
Regal Rexnord Corporation	156.65	88.5%	10,580	11,981	3,810	554	28.8%	18.6%	14.5%	2.5	21.6	10.9	3.1	2.3
Mean		73.8%	\$18,162	\$20,621	\$6,495	\$1,231	32.1%	14.4%	18.2%	2.3x	16.1x	12.2x	2.9x	2.6x
Median		71.8%	\$10,580	\$11,981	\$3,810	\$554	30.0%	19.6%	17.3%	2.4x	14.4x	10.9x	2.8x	2.3x
Test and Measurement														
AMETEK, Inc.	\$128.18	86.6%	\$29,699	\$32,073	\$5,547	\$1.601	34.5%	20.6%	28.9%	1.5x	20.0x	18.0x	5.8x	5.3x
Amphenol Corporation	74.27	84.0%	44,483	48,370	10,876	2,564	31.3%	31.4%	23.6%	1.5	18.9	17.2	4.4	4.1
Halma plc	30.79	71.8%	11,608	11,975	1,940	462	53.9%	15.6%	23.8%	0.8	26.8	25.8	6.4	6.3
Hexagon AB (publ)	12.83	81.9%	34,586	37,232	480	157	64.4%	22.5%	32.6%	NM	NM	NM	NM	NM
Itron, Inc.	47.39	46.3%	2,133	2,521	1,982	121	28.9%	(32.7%)	6.1%	3.0	20.8	18.7	1.3	1.2
Keyence Corporation	437.17	67.2%	106,025	98,338	6,231	3,514	82.5%	48.3%	56.4%	NM	28.9	25.4	NM	NM
Keysight Technologies, Inc.	146.49	70.1%	26,658	26,695	5,011	1,421	63.2%	24.2%	28.4%	0.0	18.8	16.2	5.3	5.0
Roper Technologies, Inc.	436.39	86.4%	46,084	53,887	5,778	2,214	67.8%	23.0%	38.3%	3.5	24.3	22.7	9.3	8.7
Spectris plc	34.37	62.9%	3,790	3,657	1,749	303	57.2%	362.6%	17.3%	NM	12.5	10.2	2.2	2.1
TE Connectivity Ltd.	130.29	78.3%	42,419	45,586	15,219	3,572	32.7%	38.1%	23.5%	0.9	12.8	12.1	3.0	2.8
Teledyne Technologies Incorporated	425.07	91.3%	20,061	23,853	4,614	1,034	40.0%	64.3%	22.4%	3.7	23.1	17.9	5.2	4.3
Mean		75.1%	\$33,413	\$34,926	\$5,402	\$1,542	50.6%	56.2%	27.4%	1.9x	20.7x	18.4x	4.8x	4.4x
Median		78.3%	\$29,699	\$32,073	\$5,011	\$1,421	53.9%	24.2%	23.8%	1.5x	20.4x	18.0x	5.2x	4.3x

Note: Revenue and EBITDA multiples greater than 10.0x and 35.0x, respectively, shown as "NM"

Public Companies Trading Analysis

(\$ in millions, except per share amounts)

		MARKET	DATA			LTM OF	DED ATINI	G PERFORI	AANCE		ENITEDDI	DICE V/AI	UE AS MUI	TIDI E OE
	Price at	% of 52-	Equity	Enterprise		LIMOR	Gross	EBITDA		Net Debt /	LTM	2022P	LTM	2022P
	03/11/22		Value	Value	Revenue	EBITDA		Growth	Margin	EBITDA			Revenue	
Flow Control														
Donaldson Company, Inc.	\$51.12	73.7%	\$6,316	\$6,764	\$3,102	\$515	33.2%	17.7%	16.6%	0.9x	13.1x	11.5x	2.2x	2.0x
Dover Corporation	151.98	82.6%	21,893	24,819	7,907	1,601	37.7%	26.8%	20.2%	1.8	15.5	13.6	3.1	2.9
Flowserve Corporation	33.93	76.4%	4,425	5,301	3,541	385	30.1%	(18.1%)	10.9%	2.2	13.8	11.7	1.5	1.4
Franklin Electric Co., Inc.	82.65	85.3%	3,842	4,040	1,662	227	34.7%	36.7%	13.7%	0.9	17.8	14.7	2.4	2.0
Graco Inc.	68.63	84.6%	11,691	11,293	1,988	579	52.0%	21.2%	29.1%	NM	19.5	17.4	5.7	5.3
IDEX Corporation	188.84	78.6%	14,374	14,775	2,765	767	44.7%	23.6%	27.7%	0.5	19.3	17.6	5.3	4.9
IMI plc	17.43	70.8%	4,504	5,313	2,527	437	46.2%	(2.1%)	17.3%	1.9	12.6	9.2	2.2	2.0
Ingersoll Rand Inc.	48.57	77.5%	19,815	21,312	5,152	1,045	38.6%	52.1%	20.3%	1.4	20.4	15.2	4.1	3.7
ITT Inc.	78.26	74.2%	6,676	6,325	2,765	551	32.5%	20.5%	19.9%	NM	11.5	10.3	2.3	2.1
Mueller Water Products, Inc.	12.19	70.2%	1,912	2,180	1.146	207	32.6%	6.6%	18.1%	1.3	10.5	9.8	1.9	1.8
Nordson Corporation	215.06	79.0%	12,461	13,234	2,445	761	56.2%	32.8%	31.1%	1.0	17.4	16.3	5.4	5.1
Parker-Hannifin Corporation	275.63	81.1%	35,412	43,388	15,293	3.290	28.0%	24.3%	21.5%	2.4	13.2	11.8	2.8	2.7
Pentair plc	54.65	68.0%	9,023	9,910	3.765	722	35.0%	33.2%	19.2%	1.2	13.7	12.0	2.6	2.5
SPX FLOW, Inc.	85.82	96.9%	3.609	3.753	1.529	187	35.0%	35.0%	12.2%	0.8	20.0	14.8	2.5	2.3
Sulzer Ltd	75.74	48.8%	2,543	2.649	3,461	394	30.0%	2.2%	11.4%	0.3	6.9	6.0	0.8	0.8
The Gorman-Rupp Company	38.83	82.4%	1.014	890	378	49	25.3%	11.7%	12.9%	NM		14.2	2.4	2.2
The Weir Group PLC	22.48	85.0%	5.798	6,820	2.618	505	13.2%	4.9%	19.3%	2.1	14.0	11.8	2.7	2.4
Watts Water Technologies, Inc.	142.34	67.1%	4,783	4.738	1.809	304	42.4%	26.2%	16.8%	NM		14.6	2.6	2.5
Xylem Inc.	83.23	60.0%	14,973	16,384	5,195	827	38.1%	11.5%	15.9%	1.7	19.8	18.8	3.2	3.1
Mean		75.9%	\$9,740	\$10,731	\$3,634	\$703	36.1%	19.3%	18.6%	1.4x	15.4x	13.2x	2.9x	2.7x
Median		77.5%	\$6,316	\$6,764	\$2,765	\$515	35.0%	21.2%	18.1%	1.3x	15.5x	13.6x	2.6x	2.4x
		77.570	40,510	40,704	ŲZ,7 03	4010	33.0 70	22.270	10.170	1.0X	10.00	10.00	2.00	Z.TA
Industrial Software	CC2 1 4	76.10/	\$5,008	Ć4.02.4	\$525	\$43	76.9%	24.7%	8.2%	NM	NM	NM	0.2	0.4
Altair Engineering Inc.	\$63.14 22.46	76.1% 67.8%	2,953	\$4,824 2,766	\$525 147	46	49.3%	34.0%	31.5%	NM			9.2x NM	8.4x NM
Altium Limited														
ANSYS, Inc.	303.56	73.3%	26,480	26,692	1,907	626	89.7%	6.7%	32.8%	0.3	NM 21.0		NM	NM
Aspen Technology, Inc.	140.45	83.0%	9,363	9,470	668	298	91.0%	(15.9%)	44.6%	0.4	31.8	22.9	NM	NM
AVEVA Group plc	33.28	59.8%	9,984	10,814	1,308	249	79.0%	33.8%	19.0%	3.4	NM		8.5	7.4
Bentley Systems, Incorporated	37.25	51.8%	11,521	12,680	965	161	77.6%	(26.9%)	16.6%	7.2	NM		NM	NM
Cadence Design Systems, Inc.	149.46	77.6%	41,451	40,836	2,988	920	89.7%	15.0%	30.8%	NM			NM	NM
Dassault Systèmes SE	45.60	72.9%	59,903	61,551	5,527	1,832	83.7%	68.8%	33.2%	0.9	34.9	28.4	NM	NM
Hexagon AB (publ)	12.83	81.9%	34,586	37,232	480	157	64.4%	22.5%	32.6%	NM				NM
National Instruments Corporation	38.97	84.0%	5,145	5,278	1,470	222	71.4%	39.2%	15.1%	0.6	23.8	14.3	3.6	3.1
Pason Systems Inc.	10.36	91.8%	855	733	163	46	57.6%	95.4%	28.0%	NM		8.2	4.5	3.4
PTC Inc.	106.82	69.5%	12,493	13,755	1,836	458	79.3%	32.2%	25.0%	2.8	30.0	19.1	7.5	7.0
Roper Technologies, Inc.	436.39	86.4%	46,084	53,887	5,778	2,214	67.8%	23.0%	38.3%	3.5	24.3	22.7	9.3	8.7
Trimble Inc.	66.61	69.0%	16,733	17,857	3,659	773	58.0%	16.1%	21.1%	1.5	23.1	17.9	4.9	4.5
Mean		74.6%	\$20,183	\$21,313	\$1,959	\$575	74.0%	26.3%	26.9%	2.3x	26.3x	22.6x	6.8x	6.1x
Median		74.7%	\$12,007	\$13,218	\$1,389	\$273	77.2%	23.8%	29.4%	1.5x	24.3x	22.8x	7.5x	7.0x
Diversified Industrials														
ABB Ltd	\$32.78	85.1%	\$59,413	\$60,899	\$28,945	\$4,611	33.0%	72.7%	15.9%	0.3x	13.2x	12.0x	2.1x	2.0x
Cognex Corporation	66.03	71.6%	11,484	11,186	1.037	335	73.3%	44.2%	32.3%	NM		28.7	NM	9.5
Emerson Electric Co.	94.74	89.4%	56,276	60,895	18,548	3,976	41.3%	7.6%	21.4%	1.2	15.3	12.8	3.3	3.1
Fortive Corporation	56.48	70.7%	20,280	23,609	5,255	1.284	57.3%	26.1%	24.4%	2.6	18.4	15.9	4.5	4.1
General Electric Company	91.33	78.6%	100,401	113,975	71.090	5.713	25.9%	110.1%	8.0%	2.1	20.0	11.7	1.6	1.4
Honeywell International Inc.	184.36	77.8%	126,438	136,226	34,392	8,696	32.0%	13.6%	25.3%	1.0	15.7	14.9	4.0	3.8
OMRON Corporation	63.00	60.9%	12,548	10,866	6,467	928	45.8%	31.7%	14.4%	NM		10.3	1.7	1.6
Rockwell Automation, Inc.	262.55	74.0%	30,507	34,740	7,289	1,387	41.2%	13.9%	19.0%	2.8	25.1	18.7	4.8	4.2
Schneider Electric S.E.	153.43	74.0%	86,869	100,195	32,873	6,068	41.2%	25.4%	18.5%	1.6	17.2	14.4	3.2	2.9
Siemens Aktiengesellschaft	139.35	80.6%	111,607	160,176	72,774		36.9%	17.9%	13.9%	4.4	16.4	12.4	2.3	2.9
	133.33													
Mean		76.7%	\$61,582	\$71,276	\$27,867	\$4,312	42.8%	36.3%	19.3%	2.0x 1.9x	18.6x	15.2x	3.0x	3.5x
Median		77.9%	\$57,844	\$60,897	\$23,747	\$4,294	41.1%	25.8%	18.7%	1.9X	16.8x	13.6x	3.2x	3.0x
Aggregate Mean		75.6%	\$29,920	\$33,247	\$9,706	\$1,835	47.3%	31.1%	22.3%	1.8x	18.4x	15.9x	3.8x	3.6x

\$3,810 \$773 41.0%

24.0% 20.3%

 $LTM = Latest Twelve Months \\ Enterprise Value = (Market Capitalization) + (Debt + Preferred Stock + Non-Controlling Interest) - (Cash \& Equivalents) \\ = (Cash & Equival$

EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization

Source: Capital IQ, SEC filings

Note: Revenue and EBITDA multiples greater than 10.0x and 35.0x, respectively, shown as "NM"

77.6% \$19,815 \$21,312

4Q Supply Chain Commentary from Select Industrial Technology Companies



"While we expect these operational challenges in supply chain and labor availability to continue into early '22, we do expect operating conditions and price material spreads to improve as the year progresses."



"Several key component suppliers have extended lead times and pushed out delivery forecasts, which has increased shortages and decommits to our EMS suppliers... For us, electronic shortages are impacting multiple business units in both platforms, and supply is expected to remain a challenge into fiscal '22."



"So we do expect supply chain as we go through the year to get incrementally better each quarter and would have us exiting the year very strongly."



"Supply chain challenges are expected to continue at least through the first half of '22, which we're actively managing."



"Industry-wide semiconductor, resin, parts and labor shortages continued across all modalities."



Honeywell

"We expect supply chain impacts to remain as challenging in the first half of the year as they were in the third and fourth quarter, and they'll start to abate as the aero supply base ramps up and capacity for electronic components comes online in the third quarter."



"We're not seeing any evidence that things are improving in any dramatic fashion from the standpoint of all the supply chain constraints, there are issues all over the place. We are reacting to those internally very well. Our customers are still challenged. Automotive is just the most visible sort of representation of that, these sorts of issues are applying to all – customers of ours across all 7 of our segments."

4Q Supply Chain Commentary from Select Industrial Technology Companies (Continued)



"The biggest impact to fourth quarter results was the ongoing effects from the well-known global supply chain, raw materials and logistics challenges, which persisted throughout the fourth quarter."



"Looking at trends entering 2022, we anticipate ongoing supply chain and inflationary challenges, particularly in the first half of the year."



"While we expect to see continued top-line growth in Q1 due to the strong demand in many of our businesses, we expect to continue to be challenged with higher inflation and supply chain challenges."



"I would say that I don't see it getting better, as I mentioned earlier, within the fiscal year [ending June 2022]. If I had to say, ... this current quarter we're in is probably the toughest that we're going to experience."



"We saw improvements in the timing of electronic component shipments from our suppliers that resulted in a stronger first quarter than we anticipated. And basically, we were able to get a few more chips in the first quarter than we had originally forecasted, but we're expecting the second quarter to be a little bit lighter, ... Fiscal '22 sales would be higher were it not for the supply chain constraints."



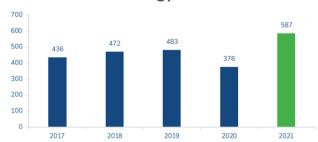
"On our product businesses, it was more about supply chain, less about Omicron and shutdown of facilities. I mean it happened for a week here or there, not an impact really in the quarter. And the issue on supply chain, as you hear it from some of the companies, it's not one thing. It is really sort of a hornet's nest of small things."



"We expect the trend line of orders to be pretty consistent through the year. Why? Because the supply chain will continue to be stressed and the demand continues to be strong."

There was a flood of M&A activity in the Industrial Technology sector in 2021 with \$228 billion increase in total deal value over 2020's depressed activity levels.

Industrial Technology M&A Deal Volume



Note: Above data represents deals involving a U.S. Industrial

Technology target.

Source: Capital IQ and Mergermarket

Select Automation M&A Activity—2H 2021

Announced Date	Target Name	Target Business Description	Acquirer Name
12/16	RESA Power, LLC	Offers mission-critical solutions for electrical power systems. Also provides maintenance and testing services for the energy industry.	Investcorp
11/4	Alio Industries LLC	Produces nanometer-level motion control technologies: cartesian gantries, linear motion systems, z-lift and vertical motion stages, vacuum compatible motion stages, hybrid hexapod, micron 2 motion systems, air bearing systems, rotary motion systems.	Allied Motion Technologies Inc.
11/3	Norberg-IES LLC	Leading provider of hazardous location controls, custom electrical controls and circuit protection devices for the industrial and energy markets.	EIS (Audax)
11/1	Fluence Automation, LLC	Designs, manufactures and integrates material handling solutions to meet diverse customer applications.	BlueCrest (Platinum Equity)
11/1	ecobee Inc.	Provides smart home products such as thermostats, smart camera, accessories, load management and air filter solutions.	Generac Holdings Inc.
10/27	Automated Control Concepts, Inc.	Systems integrator specializing in process control, manufacturing intelligence, cyber security and industrial networking.	Sverica Capital Management LP
10/25	Automation Specialist Services LLC	Designs and builds turnkey custom machinery systems and components.	IAR Group Holding AG
10/20	Carling Technologies Inc	Switch and circuit breaker manufacturer.	Littelfuse, Inc.
10/14	Integro Technologies Corp	Designs and develops custom machine vision inspection solutions – will be a part of KDG's Kaman Automation business.	Kaman Distribution (Genuine Parts Company)
10/5	Sense Photonics Inc	Builds intelligent 3D vision systems that transform what's possible for industrial and automotive use cases.	Ouster, Inc.
9/27	Performix	Offers manufacturing execution software (MES).	Honeywell
9/13	House of Design LLC	Provides automated solutions utilizing software, robotics, machine vision and Al learning to solve customer's needs.	Thomas H. Lee Partners, L.P.

Select Automation M&A Activity—2H 2021 Continued

Announced Date	Target Name	Target Business Description	Acquirer Name
9/9	ECI Transcon Technologies, Inc.	Manufactures custom electromagnetic components.	Quantic Electronics (Arcline)
9/1	NCC Automated Systems	Provides turnkey systems like conveyor systems, packaging line integration, ophthalmic automation systems, and sanitary and non-sanitary equipment.	ATS Automation Tooling Systems Inc.
8/26	US Natural Resources, Inc.	Designs, manufactures, and sells sawmills, planer mills, and other wood processing equipment for the wood processing industry.	One Equity Partners LLC
8/26	Wood Fiber Group	Provides leading timber mill products using various cutting technologies and tooling processes.	One Equity Partners LLC
8/23	MultiCam, Inc.	Supplies innovative CNC cutting solutions for industries ranging from sign making to digital finishing, sheet-metal to plate-steel processing, hardwoods to cabinet making, thermoform trimming to plastics fabrication.	Kongsberg Precision Cutting Systems Belgium BV
8/20	Rollon-iMS	$\label{provides} \mbox{Provides robotic transport units and gantry transport units.}$	The Timken Company
8/19	GEOSTLLC	Designer and integrator of small- to medium-sized electro- optical/infrared sensors for high-value, national security space missions.	ATL Partners
8/18	Myers Emergency Power Systems, LLC	Manufactures and supplies inverter power systems, batteries and battery backup systems, emergency control devices, and commercial backup power systems.	Kohlberg & Company, L.L.C.
8/17	BEI Precision Systems & Space Company, Inc.	Manufactures and supplies optical encoders, accelerometers, optical scanners, and frequency products.	Quantic Electronics (Arcline)
8/2	LW Allen, Inc	Manufactures pump systems for flow control applications. Also provides software and control systems.	S. J. Electro Systems, Inc. (Audax)
7/26	ABB Mechanical Power Transmission Division	Designs, produces and markets mounted bearings, enclosed gearing and power transmission components.	RBC Bearings
7/21	Dwyer Instruments Inc.	Manufactures innovative instrumentation solutions for the worldwide HVAC and process automation markets. Products offered are in these categories: calibration services, pressure, air quality, air velocity, flow, temperature, test equipment and valves.	Arcline Investment Management LP
7/19	ATI Industrial Automation	Engages in designing, manufacturing and selling robotic end effectors to manufacturing companies. Develops robotic accessories and robot arm tooling.	Novanta Inc.
7/12	ServiceChannel	Offers facility management software platforms. The platforms include ServiceChannel Platform (helps in understanding facility performance), ServiceChannel Managed (a solution to schedule preventive and scheduled maintenance programs) and Service Provider Marketplace (provides data on actual performance and invoice cost).	Fortive
7/12	DWFritz Automation Inc.	Provides precision metrology, inspection, and assembly solutions for advanced manufacturing. The company develops, designs, builds, and supports engineered-to-order automation systems for inspections.	Sandvik AB
7/1	Fetch Robotics, Inc.	Provides robotics hardware and software for optimized picking in distribution centers and material delivery in manufacturing facilities.	Zebra Technologies Corporation

Select Test & Measurement M&A Activity—2H 2021

Announced Date	Target Name	Target Business Description	Acquirer Name
12/16	Engineered Controls International, Inc.	Designs, manufactures, and tests a comprehensive portfolio of gas and liquid pressure controls, pressure regulating products, pressure relief devices, and a broad range of ancillary equipment.	Dover Corporation
12/3	Sensors, Inc	Distributes and integrates industrial sensing products and systems, including machine vision, process control and monitoring, barcode scanning, and safety guarding solutions.	John Henry Foster Minnesota, Inc. (High Road Capital)
11/11	Computerized Imaging Reference Systems, Inc.	Manufactures tissue equivalent phantoms for densitometry, calibration, quality control, research and training in medical imaging and radiation therapy.	Mirion Technologies Inc.
11/7	SP Industries Inc.	Designs and manufactures laboratory equipment, pharmaceutical manufacturing solutions, laboratory supplies and instruments, and specialty glassware.	ATS Automation Tooling Systems Inc.
10/28	NH Research, LLC	Manufacturers power test instruments and systems. It offers battery emulators, battery test systems, AC & DC regenerative tests, AC & DC electronic loads, AC & DC sources, power supply test systems and test & measurement systems.	National Instruments Corporation
9/15	The Espy Corporation	Designs and manufactures advanced electronic radio frequency sensor systems used to detect, record, analyze and geolocate signals.	Dover Corporation
9/13	Farrar Scientific Corp	Provides conditional preventive maintenance services, such as data acquisition and storage (cloud base), data transformation—conversion of raw data, condition monitoring.	Trane Technologies plc
9/2	Dynamic Automation and Robotics	Offers automation technology including robot integration, assembly systems, diagnostic test systems, vision inspection and measurement, marking, printing and labeling, feeding systems, dispensing technology, validation and documentation, and reporting and data base integration.	ATC Automation (TASI Group / Berwind)
8/10	Zetec	Offers nondestructive testing (NDT) solutions for industries that includes turnkey systems, instrumentation, software products, and supplies, as well as calibration, repair, training, and inspection services.	EddyFi (CDPQ)
8/9	Phenix Technologies, Inc	Offers operating software that provides automation, data acquisition, remote control, and capabilities to meet demanding testing applications.	ESCO Technologies Inc.

Select Flow Control M&A Activity—2H 2021

Announced Date	Target Name	Target Business Description	Acquirer Name
12/13	SPX Flow, Inc.	Offers products in air treatment, automation, heat transfer, homogenization, hydraulic technologies, mixing and blending, separation and thermal processing	Lone Star
11/15	Adaptas Solutions, LLC	Specializes in liquid handling and lab automation components	IMI Plc
11/4	Networks Electronic Company LLC	Manufactures high-reliability mini-pyrotechnic and ordnance products. Products offered include: ignitors and initiators, piston actuators, retracting actuators, gas generators and pressure cartridges, squib switches, thermal relays / fuses, and cord, wire and tube cutters	ESCO Technologies Inc.
11/1	Tesco Controls Inc	Manufactures equipment for most major water / wastewater and service equipment suppliers	United Flow Technologies (H.I.G. Capital)
11/1	The Henry P. Thompson Company	Distributes water, wastewater, pumping, residuals, and process treatment for municipal, industrial, and utility markets	United Flow Technologies (H.I.G. Capital)
10/18	Clearwater Controls Ltd.	IoT solutions for wastewater network management	Industrial Flow Solutions LLC (May River)
10/13	Control Devices, LLC	Provides valves and other components for flow control systems	HBM Holdings Company
10/7	Fluitron Inc	Manufactures industrial gas compression equipment, with a focus on hydrogen applications. Products offered include: diaphragm compressors, custom pressure vessels, high pressure pumps, custom systems, reactors and pilot plants, isostatic presses, supercritical extraction, containment cells	Ara Partners
9/13	Hunt Valve Company, Inc.	Specializes in severe-duty valves and complementary engineered components and system solutions using advanced manufacturing and testing capabilities	Fairbanks Morse, LLC (Arcline)

Select Industrial Software M&A Activity—2H 2021

Announced Date	Target Name	Target Business Description	Acquirer Name
12/7	AMPLY Power	Provides EV Charging as a Service (CaaS) for charging of customers' fleets. Also offers Software as a Service (SaaS) to help fleet operators manage energy costs and optimize performance.	BP PIc
11/16	Power Line Systems	OEM of software for the design of overhead electric power transmission lines and their structures.	Bentley Systems, Inc.
11/16	FieldWireLabs, Inc.	OEM of software platforms for project management for the construction industry.	Hilti Corporation
11/2	Entercoms, Inc. (Supply Chain Technology business unit)	Offers service supply chain software solutions. Its product, Prophet, allows forecasting demand, optimizing target stock levels, and integration with other systems.	Baxter Planning Systems, Inc.
10/15	BrightSign, LLC	OEM of cloud-based networking solutions, and systems software for the worldwide digital signage market.	Graham Partners LP; Harvey & Company LLC
10/11	Emerson Industrial Software Business	Emerson contributed its industrial software business and 6 billion cash for a 55% stake in new AspenTech, a pure play industrial software vendor. Emerson will retain a software portfolio with $\sim 10^{-5}$ billion in revenue.	Aspen Technology
10/7	Motus, LLC	Offers solutions for vehicle and device management that provide vehicle reimbursement, fleet, and mobile and global positioning system (GPS) services.	Permira Advisers LLP; Thoma Bravo, LLC
10/5	Nintex Global Ltd	Offers workflow automation software and platforms for process management and automation.	TPG Capital LP
9/28	Command Alkon Incorporated	OEM of software systems for producers, suppliers, and haulers of ready-mixed concrete and cement. Thoma Bravo will retain a 55% stake.	HeidelbergCement AG
9/8	Oqton, Inc	Develops artificial-intelligence-powered MES for manufacturers to manage, optimize, and automate their manufacturing workflows.	3D Systems Corporation
8/25	CNC Software Inc	Provider of CAD / CAM software solutions for machine and tooling OEMs.	Sandvik AB
8/6	Amtech Software, LLC	Provider of manufacturing ERP software and technology services for the packaging and broader manufacturing sectors.	Peak Rock Capital LLC
8/4	MDT Software, Inc.	Provides automation change management software for automated manufacturing assets. Specializes in disaster recovery and change management solutions for manufacturers to manage smart devices on the plant floor.	HgCapital LLP
8/3	lmago Inc.	Developer of cloud-based software for the capture and management of geoscientific imagery. Mining companies around the world apply Imago's solution in conjunction with geology data management and modeling tools.	Bentley Systems, Inc.
7/6	Infor	Combines Infor's enterprise asset management technology with Hexagon's industrial software solutions – including sensor, software and autonomous technologies.	Hexagon
7/26	CDS Visual, Inc.	Develops and offers SaaS solutions for 3D visualization and augmented reality applications. $ \\$	Dover Corporation

Select Kroll Industrial Technology **Experience**





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