

Industry update Test & Measurement Q4 2021



Selected M&A highlights

- Dec 21 **3M** will separate its Food Safety business and simultaneously combine it with **Neogen** (EV/EBITDA 32.0x)
- Dec 21 **Amphenol** acquired **Halo Technology** from **Infexion** for \$715m (EV/Revenue 2.9x)
- Dec 21 **Eurofins Scientific** acquired **GeneticLab**, a molecular biology based testing provider for diagnostics, biomarker development and drug discovery from **Trans Genic**
- Dec 21 **Trescal** acquired **Cleanroom Management International (CMI)**, which specialises in the qualification of cleanrooms, HVAC systems and thermal mapping together with associated calibration services
- Dec 21 **Trescal** acquired **Aviatronik**, a provider of calibration services for avionics equipment
- Dec 21 **ALS** acquired **Min Analytical Laboratory Services** from **Perenti Global** for AUD 43.6m in cash and shares (EV/Revenue 2.4x)
- Dec 21 **Labcorp** acquired **Toxikon**, a contract research organisation delivering best-in-class nonclinical testing services
- Dec 21 **Sensata Technologies** acquired **Sendyne**, a provider of sensing and simulation technologies for next generation e-mobility applications
- Dec 21 **AMETEK** acquired **Alphasense**, a leading provider of gas and particulate sensors
- Nov 21 **Halma** acquired **Clayborn Labs**, a leader in thermal sample gas conditioning products
- Nov 21 **Automation Tooling Systems** acquired **SP Industries**, a designer and manufacturer of high-grade biopharma processing equipment, life sciences equipment, and lab apparatus products for US\$445 million (EV/EBITDA 15.3x)
- Nov 21 **Sensata Technologies** acquired **Spear Power Systems**, a developer of next generation lithium-ion battery storage systems, for \$130m
- Nov 21 **SGS** acquired majority stake in **Sulphur Experts**, a provider of clinical process engineering consulting, specialised testing and training
- Oct-21 **SGS** acquired **Groupe IDEATESTS**, a leading provider of clinical microbiological and in-vitro testing, and regulatory services to the cosmetics and personal care industry in France
- Oct-21 **Keysight Technologies** acquired **SCALABLE Network Technologies**, a provider of communications network simulation and modelling solutions for design, test and analysis, as well as cyber assessment and training
- Oct 21 **Sensata Technologies** acquired **SmartWitness Holdings**, an innovator of video telematics technology for commercial fleets, for \$190m
- Oct 21 **Littelfuse** acquired **Carling Technologies**, a provider of switching and circuit protection technologies, for \$315 million (EV/Revenue 1.9x)

Public company valuations

Sensors

Company	Country	Year End Date	Market Cap (GBPm)	Net Debt / (Cash)	EV (GBPm)	Net debt / EBITDA (2021)	EV/Revenue			EV/EBITDA			EV/EBIT			2 Year CAGR 2020-2022
							2020	2021	2022	EBITDA (GBPm)	EBITDA %	2022	2020	2021	2022	
Amphenol Corporation		Dec-20	38,627	2,923	41,596	1.5x	6.6x	5.3x	5.0x	27.7x	21.8x	20.2x	32.1x	26.6x	24.5x	15% 17%
							6,298	7,829	8,349	1,501	1,910	2,064	1,295	1,566	1,700	
							2%	24%	7%	24%	24%	25%	21%	20%	20%	
ams AG		Dec-20	3,504	1,581	4,984	1.9x	1.6x	1.1x	1.2x	7.7x	5.8x	5.6x	31.7x	18.1x	12.0x	17% 17%
							3,139	4,336	4,300	650	854	895	157	276	414	
							98%	38%	(1%)	21%	20%	21%	5%	6%	10%	
CTS Corporation		Dec-20	874	(38)	836	n/a	2.7x	2.2x	2.1x	14.7x	10.1x	9.1x	23.4x	14.2x	12.7x	13% 27%
							311	372	397	57	83	92	36	59	66	
							(12%)	20%	7%	18%	22%	23%	11%	16%	17%	
discover!E Group plc		Mar-21	972	123	1,096	2.4x	2.4x	2.6x	2.6x	23.4x	21.5x	20.1x	44.3x	30.6x	25.8x	nmf 8%
							457	424	422	47	51	55	25	36	43	
							(1%)	(7%)	(1%)	10%	12%	13%	5%	8%	10%	
Keyence Corporation		Mar-21	112,440	(6,186)	106,253	n/a	29.7x	24.3x	21.1x	56.4x	43.7x	37.2x	55.3x	44.7x	38.0x	19% 23%
							3,582	4,365	5,041	1,884	2,429	2,857	1,920	2,379	2,798	
							(16%)	22%	15%	53%	56%	57%	54%	55%	55%	
Littelfuse, Inc.		Dec-20	5,724	(12)	5,712	n/a	5.3x	3.8x	3.4x	24.8x	15.4x	14.5x	35.1x	19.7x	18.6x	24% 31%
							1,073	1,514	1,659	230	370	393	163	290	306	
							(7%)	41%	10%	21%	24%	24%	15%	19%	19%	
Methode Electronics, Inc.		May-21	1,353	50	1,404	0.3x	1.8x	1.4x	1.6x	9.4x	9.5x	n/a	12.5x	13.7x	12.2x	7% nmf
							772	836	887	149	148	n/a	112	102	115	
							(5%)	8%	6%	19%	18%	n/a	14%	12%	13%	
Murata Manufacturing Co., Ltd.		Mar-21	37,581	(2,307)	35,276	n/a	3.3x	3.2x	3.0x	12.2x	10.6x	9.5x	17.2x	15.0x	13.4x	6% 14%
							10,544	11,027	11,764	2,893	3,340	3,730	2,045	2,349	2,635	
							(9%)	5%	7%	27%	30%	32%	19%	21%	22%	
Sensata Technologies Holding plc		Dec-20	7,220	1,696	8,916	2.5x	4.0x	3.2x	2.9x	18.6x	12.9x	11.5x	29.0x	15.2x	13.5x	17% 27%
							2,231	2,805	3,041	480	689	778	307	586	663	
							(14%)	26%	8%	22%	25%	26%	14%	21%	22%	
Sensirion Holding AG		Dec-20	1,675	(87)	1,584	n/a	7.5x	7.3x	6.7x	29.7x	27.4x	30.1x	38.7x	37.2x	44.4x	6% nmf
							210	216	236	53	58	53	41	43	36	
							(58%)	3%	9%	25%	27%	22%	20%	20%	15%	
TE Connectivity Ltd.		Sep-21	38,968	2,504	42,521	0.9x	4.5x	3.8x	3.6x	20.1x	15.7x	15.0x	26.3x	20.8x	19.2x	12% 16%
							9,445	11,179	11,833	2,114	2,714	2,831	1,619	2,039	2,209	
							(8%)	18%	6%	22%	24%	24%	17%	18%	19%	
TT Electronics plc		Dec-20	448	107	558	2.1x	1.3x	1.2x	1.1x	24.2x	10.7x	9.2x	nmf	15.8x	12.7x	8% nmf
							432	477	503	23	52	61	7	35	44	
							(10%)	10%	5%	11%	12%	12%	2%	7%	9%	
Min							1.3x	1.1x	1.1x	7.7x	5.8x	5.6x	12.5x	13.7x	12.0x	6% 8%
Mean							3.7x	3.2x	3.0x	19.3x	14.7x	14.5x	29.0x	20.6x	19.0x	12% 20%
Median							3.3x	3.2x	2.9x	20.1x	12.9x	13.0x	30.3x	18.1x	13.5x	12% 17%
Max							7.5x	7.3x	6.7x	29.7x	27.4x	30.1x	44.3x	37.2x	44.4x	24% 31%

Note: Multiples are based on enterprise value as of 31 December 2021 and historical and forecast sales, EBITDA and EBIT, calendarised to 31 December. "nmf": not meaningful; "n/a": not available. Enterprise Value is adjusted for minority interest, preference equity, pension deficit and investments in associates.

Keyence shown for reference but removed as an outlier from all averages

Source: CapIQ

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Test & Measurement - Q4 2021 Industry update

Instrumentation – Industrials

Company	Country	Year End Date	Market Cap (GBPm)	Net Debt / (Cash)	EV (GBPm)	Net debt / EBITDA (2021)	EV/Revenue Revenue (GBPm) Revenue growth			EV/EBITDA EBITDA (GBPm) EBITDA %			EV/EBIT EBIT (GBPm) EBIT %			2 Year CAGR 2020-2022	
							2020	2021	2022	2020	2021	2022	2020	2021	2022	Sales	EBITDA
AMETEK, Inc.		Dec-20	25,120	1,830	26,950	1.5x	8.1x	6.6x	6.0x	27.2x	22.2x	20.0x	32.6x	28.1x	24.9x	16%	17%
							3,325	4,072	4,455	991	1,216	1,349	827	959	1,081		
							(14%)	22%	9%	30%	30%	30%	25%	24%	24%		
Fortive Corporation		Dec-20	20,203	1,588	21,795	1.6x	6.4x	5.6x	5.2x	27.6x	21.6x	19.7x	43.6x	33.8x	29.0x	11%	18%
							3,394	3,923	4,202	789	1,007	1,105	500	645	752		
							(1%)	16%	7%	23%	26%	26%	15%	16%	18%		
Halma plc		Mar-21	12,121	280	12,392	0.8x	9.4x	8.5x	7.9x	38.3x	34.5x	31.3x	50.7x	41.3x	36.4x	9%	11%
							1,323	1,452	1,576	323	359	396	245	300	341		
							1%	10%	9%	24%	25%	25%	18%	21%	22%		
HORIBA, Ltd.		Dec-20	1,830	(328)	1,502	n/a	1.1x	1.1x	1.0x	7.2x	5.8x	5.4x	10.6x	7.9x	7.4x	4%	16%
							1,328	1,414	1,449	208	261	281	142	190	203		
							(4%)	7%	2%	16%	18%	19%	11%	13%	14%		
Keysight Technologies, Inc.		Oct-21	27,916	(21)	27,895	n/a	8.8x	7.6x	7.1x	31.4x	25.2x	22.4x	43.4x	32.3x	25.2x	11%	18%
							3,172	3,690	3,928	889	1,105	1,243	643	862	1,108		
							(4%)	16%	6%	28%	30%	32%	20%	23%	28%		
MKS Instruments, Inc.		Dec-20	7,134	116	7,250	0.2x	4.2x	3.3x	3.1x	16.5x	11.1x	10.5x	19.6x	12.5x	11.8x	17%	25%
							1,707	2,177	2,344	440	651	693	369	581	616		
							19%	28%	8%	26%	30%	30%	22%	27%	26%		
National Instruments Corporation		Dec-20	4,253	(66)	4,187	n/a	4.4x	3.9x	3.3x	31.6x	18.9x	15.4x	52.5x	26.4x	19.8x	15%	43%
							942	1,078	1,251	132	221	272	80	159	212		
							(8%)	14%	16%	14%	21%	22%	8%	15%	17%		
Oxford Instruments plc		Mar-21	1,515	(57)	1,457	n/a	4.6x	4.3x	4.0x	23.8x	20.4x	19.4x	31.5x	24.4x	22.8x	7%	11%
							318	342	364	61	71	75	46	60	65		
							1%	8%	6%	19%	21%	21%	15%	17%	18%		
Renishaw plc		Jun-21	3,479	(195)	3,280	n/a	6.1x	5.5x	5.1x	27.1x	19.4x	16.4x	35.9x	25.1x	21.7x	9%	28%
							538	595	644	121	169	200	91	131	151		
							(1%)	11%	8%	23%	28%	31%	17%	22%	23%		
Roper Technologies, Inc.		Dec-20	38,317	5,908	44,225	3.5x	nmf	nmf	9.8x	29.9x	26.2x	25.0x	39.2x	37.9x	34.5x	6%	9%
							4,048	4,309	4,509	1,480	1,689	1,772	1,128	1,166	1,282		
							0%	6%	5%	37%	39%	39%	28%	27%	28%		
Shimadzu Corporation		Mar-21	9,176	(819)	8,356	n/a	3.3x	3.1x	3.0x	20.3x	17.6x	16.4x	25.5x	22.6x	20.8x	5%	11%
							2,570	2,675	2,822	412	474	509	328	370	401		
							(11%)	4%	5%	16%	18%	18%	13%	14%	14%		
Spectris plc		Dec-20	4,052	(234)	3,818	n/a	2.9x	2.9x	2.8x	nmf	14.6x	13.6x	nmf	17.7x	16.3x	0%	nmf
							1,336	1,317	1,348	71	262	282	(14)	215	234		
							(18%)	(1%)	2%	5%	20%	21%	(1%)	16%	17%		
Min							1.1x	1.1x	1.0x	7.2x	5.8x	5.4x	10.6x	7.9x	7.4x	0%	9%
Mean							5.4x	4.8x	4.9x	25.5x	19.8x	17.9x	35.0x	25.8x	22.9x	5%	19%
Median							4.6x	4.3x	4.5x	27.2x	19.9x	17.9x	35.9x	25.7x	22.1x	9%	17%
Max							9.4x	8.5x	9.8x	38.3x	34.5x	31.3x	52.5x	36.4x	31.7x	17%	43%

Note: Multiples are based on enterprise value as of 31 December 2021 and historical and forecast sales, EBITDA and EBIT, calendarised to 31 December. "nfm": not meaningful; "n/a": not available. Enterprise Value is adjusted for minority interest, preference equity, pension deficit and investments in associates.

Source: CapIQ

Instrumentation – Life Sciences

Company	Country	Year End Date	Market Cap (GBPm)	Net Debt / (Cash)	EV (GBPm)	Net debt / EBITDA (2021)	EV/Revenue Revenue (GBPm) Revenue growth			EV/EBITDA EBITDA (GBPm) EBITDA %			EV/EBIT EBIT (GBPm) EBIT %			2 Year CAGR 2020-2022	
							2020	2021	2022	2020	2021	2022	2020	2021	2022	Sales	EBITDA
Agilent Technologies, Inc.		Oct-21	35,607	976	36,583	0.7x	9.1x	7.8x	7.3x	33.9x	27.2x	24.8x	42.8x	33.9x	27.8x	12%	17%
							4,021	4,717	5,028	1,079	1,343	1,478	854	1,081	1,318		
							0%	17%	7%	27%	28%	29%	21%	23%	26%		
Bio-Rad Laboratories, Inc.		Dec-20	16,572	(823)	15,725	n/a	8.4x	7.4x	7.4x	36.4x	27.9x	29.1x	48.8x	35.6x	38.5x	7%	12%
							1,865	2,139	2,125	432	564	540	322	442	408		
							7%	15%	(1%)	23%	26%	25%	17%	21%	19%		
Bruker Corporation		Dec-20	9,398	133	9,541	0.3x	6.6x	5.4x	5.1x	34.7x	24.5x	23.2x	45.5x	27.7x	25.7x	13%	22%
							1,456	1,770	1,872	275	389	412	210	344	371		
							(7%)	22%	6%	19%	22%	22%	14%	19%	20%		
Danaher Corporation		Dec-20	173,628	16,294	192,342	2.1x	11.8x	9.0x	8.5x	39.0x	25.4x	24.2x	51.9x	34.2x	31.8x	18%	27%
							16,322	21,438	22,738	4,937	5,785	5,943	3,708	5,628	6,058		
							21%	31%	6%	30%	35%	35%	23%	26%	27%		
Judges Scientific plc		Dec-20	531	6	538	0.3x	6.7x	6.1x	5.8x	36.0x	27.3x	25.2x	54.3x	31.3x	28.7x	7%	20%
							80	88	92	15	20	21	10	17	19		
							(3%)	10%	5%	19%	22%	23%	12%	20%	20%		
Mettler-Toledo International Inc.		Dec-20	28,811	1,119	29,929	1.3x	13.2x	11.0x	10.4x	nmf	35.7x	33.0x	47.7x	38.5x	35.1x	13%	18%
							2,260	2,726	2,880	655	838	907	628	778	853		
							(0%)	21%	6%	29%	31%	31%	28%	29%	30%		
PerkinElmer, Inc.		Jan-21	18,739	3,544	22,283	2.7x	8.1x	6.2x	7.1x	21.1x	17.3x	25.3x	25.4x	18.4x	27.9x	7%	nmf
							2,762	3,614	3,152	1,058	1,290	1,478	882	1,210	1,799		
							(4%)	31%	(13%)	38%	36%	28%	32%	33%	25%		
Sartorius Aktiengesellschaft		Dec-20	31,436	1,521	33,370	1.6x	15.9x	11.7x	10.3x	nmf	34.1x	30.4x	nmf	44.1x	38.8x	24%	35%
							2,093	2,853	3,235	599	979	1,099	464	756	860		
							36%	36%	13%	29%	34%	34%	22%	27%	27%		
Thermo Fisher Scientific Inc.		Dec-20	194,175	7,148	201,323	0.8x	8.5x	7.3x	6.7x	26.3x	22.0x	23.6x	32.4x	24.1x	26.5x	13%	5%
							23,598	27,514	30,119	7,669	9,164	8,522	6,206	8,361	7,593		
							23%	17%	9%	33%	33%	28%	26%	30%	25%		
Waters Corporation		Dec-20	16,795	779	17,575	1.1x	10.1x	8.6x	8.1x	28.5x	23.9x	22.8x	32.8x	28.7x	27.2x	12%	12%
							1,732	2,045	2,157	617	734	772	536	612	646		
							(5%)	18%	5%	36%	36%	36%	31%	30%	30%		
Min							6.6x	5.4x	5.1x	21.1x	17.3x	22.8x	25.4x	18.4x	25.7x	7%	5%
Mean							9.9x</										

Test & Measurement - Q4 2021 Industry update

Test, Inspection & Certification services

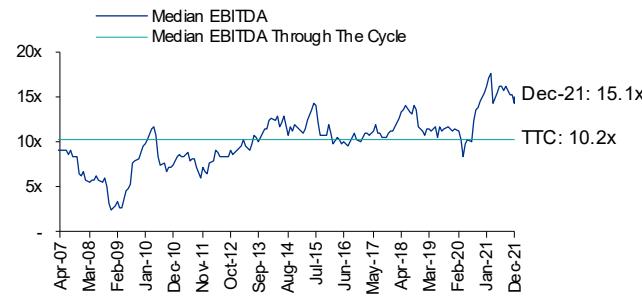
Company	Country	Year End Date	Market Cap (GBPm)	Net Debt / (Cash)	EV (GBPm)	Net debt / EBITDA (2021)	EV/Revenue			EV/EBITDA			EV/EBIT			2 Year CAGR 2020-2022	
							Revenue (GBPm)	Revenue growth 2020	2022	EBITDA (GBPm)	EBITDA % 2020	2022	EBIT (GBPm)	EBIT % 2020	2022	Sales	EBITDA
ALS Limited	NZL	Mar-21	3,397	463	3,856	1.6x	3.9x 986	3.6x 1,069	3.3x 1,165	16.7x 231	13.6x 283	12.1x 320	24.6x 157	19.8x 194	17.3x 223	9%	18%
Applus Services, S.A.	ES	Dec-20	970	669	1,678	2.4x	1.3x 1,288	1.1x 1,480	1.1x 1,579	9.2x 182	6.1x 274	5.6x 300	17.0x 99	11.3x 148	9.9x 169	10%	28%
Bureau Veritas SA	FR	Dec-20	11,079	1,348	12,479	1.4x	3.0x 4,122	3.0x 4,192	3.3x 4,425	17.4x 716	13.3x 941	12.4x 1,008	31.4x 397	18.4x 680	17.0x 733	4%	19%
Eurofins Scientific SE	DE	Dec-20	17,548	1,730	19,299	1.1x	4.0x 4,873	3.6x 5,406	3.8x 5,127	15.4x 1,251	11.9x 1,620	14.0x 1,374	23.4x 823	17.4x 1,106	21.9x 883	3%	5%
Exponent, Inc.	US	Jan-21	4,492	(176)	4,316	n/a	13.6x 316	12.6x 342	11.7x 369	42.7x 101	40.4x 107	37.1x 116	48.9x 88	47.6x 91	43.2x 100	8%	7%
Intertek Group plc	UK	Dec-20	9,069	700	9,800	1.1x	3.6x 2,742	3.5x 2,795	3.2x 3,029	16.8x 584	15.4x 638	13.7x 716	24.5x 399	21.3x 461	18.8x 520	5%	11%
Mistras Group, Inc.	US	Dec-20	162	186	348	3.3x	0.8x 434	0.7x 493	0.7x 533	9.1x 38	6.1x 57	5.1x 68	nmf 5	20.6x 17	13.4x 26	11%	33%
SGS SA	CH	Dec-20	18,501	2,155	20,703	1.6x	4.8x 4,639	4.0x 5,143	3.8x 5,403	20.4x 1,013	16.1x 1,367	14.4x 1,440	32.3x 641	24.5x 846	22.8x 902	8%	19%
Team, Inc.	US	Dec-20	25	307	332	n/a	0.5x 624	n/a n/a	n/a n/a	7.2x 46	n/a n/a	nmf 5	n/a n/a	n/a n/a	nmf n/a	nmf n/a	nmf n/a
Min							0.5x (29%)	0.7x n/a	0.7x n/a	7.2x 7%	n/a n/a	nmf (3%)	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
Mean							0.5x 2.7x	0.7x 2.8x	0.7x 2.7x	7.2x 14.0x	6.1x 11.7x	5.1x 11.0x	17.0x 25.6x	11.3x 19.0x	9.9x 17.3x	3%	5%
Median							3.3x 4.5x	3.5x 4.0x	3.2x 3.8x	16.1x 20.4x	13.3x 15.4x	12.4x 14.4x	24.6x 32.3x	19.8x 24.5x	17.3x 22.9x	8%	19%
Max																11%	33%

Note: Multiples are based on enterprise value as of 31 December and historical and forecast sales, EBITDA and EBIT, calendarised to 31 December. "nmf": not meaningful; "n/a": not available. Enterprise Value is adjusted for minority interest, preference equity, pension deficit and investments in associates. Exponent shown for reference but removed as an outlier from all averages

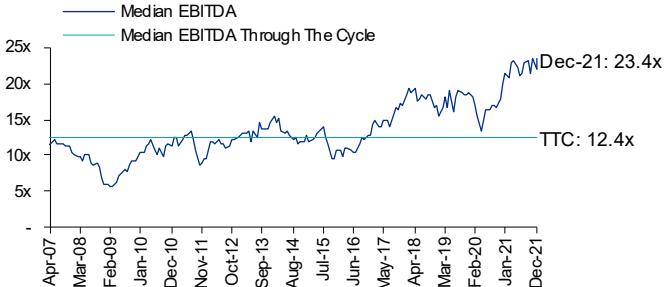
Source: CapIQ

Public company valuations – Through the cycle (EV/LTM EBITDA)

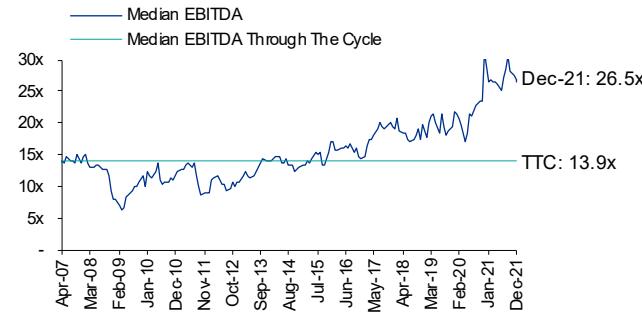
Sensors



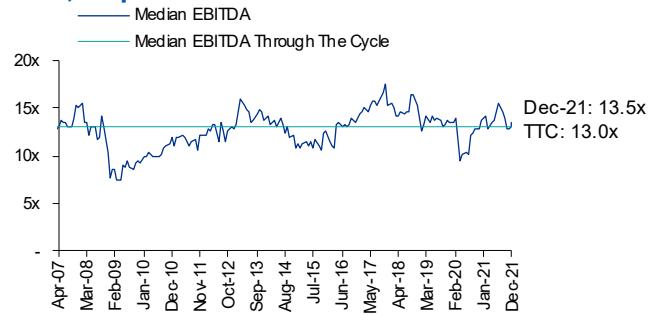
Instrumentation – Industrials



Instrumentation – Life Sciences



Test, Inspection & Certification services



Note: The companies used in the public company valuations make up the constituents of the TTC analysis, excluding Keyence and Exponent. Multiples are based on LTM basis. Enterprise Value is adjusted for minority interest, preference equity, pension deficit and investments in associates.

Source: CapIQ

Test & Measurement - Q4 2021 Industry update

M&A transaction history

Sensors

Target	Country	Target Description	Acquirer	Country	Date	EV	EV/EBITDA
Photon Control Inc.	CAN	Designs, manufactures and distributes a range of optical sensors and systems to measure temperature and position	MKS Instruments, Inc.	USA	Jun-21	USD 312m	15.6x
Diversified Technical Systems	USA	A leading manufacturer of data acquisition systems and sensors for product and safety testing	Vishay Precision Group	USA	Jun-21	USD 47m	5.9x
Xirgo Technologies Inc	USA	Provides telematics & data insight solutions for transport & logistics end markets	Sensata Technologies	UK	Apr-21	USD 400m	16.0x
Flir Systems	USA	Designer, manufacturer and marketer of camera systems for a wide variety of thermography and imaging applications	Teledyne Technologies Incorporated	USA	Jan-21	USD 7,800m	18.9x
MTS Systems Corporation	USA	Supplier of advanced test systems, motion simulators and precision sensors	Amphenol Corporation	USA	Dec-20	USD 1.7bn	14.0x
OptaSense Holdings, Ltd	UK	Fiber optic distributed monitoring solutions	Luna Innovations Incorporated	USA	Dec-20	GBP 29m	13.0x
Sens-Tech Ltd	UK	Manufacturer of x-ray and light detector modules	discoverIE Group plc	UK	Oct-19	GBP 58m	5.9x
Sensys Networks, Inc.	USA	Provides integrated wireless traffic data systems and traffic management solutions	TagMaster AB	Sweden	Jun-19	USD 16m	9.4x
First Sensor AG	Germany	Manufacturer of sensors, detectors and emitters	TE Connectivity Ltd.	Switzerland	Jun-19	EUR 308m	14.5x
Positek Limited	UK	Designer and manufacturer of linear, rotary, tilt and submersible sensors	discoverIE Group plc	UK	Apr-19	GBP 4.6m	7.7x
Variohm Holdings Limited	UK	Manufacturer of position, pressure and temperature sensors	discoverIE Group plc	UK	Jan-17	GBP 13.9m	7.0x
Resideo Technologies, Inc.	USA	Home comfort and security solutions and wholesale distributor of security and low-voltage products	Spin off from Honeywell International Inc.	USA	Oct-18	USD 3,259m	14.0x
Min							5.9x
Mean							11.8x
Median							13.5x
Max							18.9x

Source: MergerMarket and KPMG intel

Instrumentation – Industrials

Target	Country	Target Description	Acquirer	Country	Date	EV	EV/EBITDA
Zetec (Roper Technologies)	USA	Zetec is a global leader in nondestructive testing (NDT) solutions for critical inspection needs	Eddyfi/NDT (Novacap)	Canada	Aug-21	USD 350m	20.6x
NDC Technologies Inc.	USA	A leading global provider of precision measurement solutions for in-line manufacturing process control	Nordson Corporation	USA	Aug-21	USD 180m	13.5x
Concurrent Real-Time, Inc.	USA	Supplier of real-time operating systems for hardware-in-the-loop simulation applications	Spectris Plc	UK	Apr-21	USD 167m	16.0x
Abaco Systems Inc	USA	Provider of mission critical embedded computing systems for aerospace, defense, and industrial applications	AMETEK Inc	USA	Mar-21	USD 1,350m	13.5x
Brielf & Kjær Vibro (Spectris Subsidiary)	Germany	Supplier of machinery protection and condition monitoring systems for rotating and reciprocating industrial machinery	NSK Ltd	Japan	Dec-20	EUR 180m	20.0x
Microwave Vision SA (52.06%)	France	Designs, manufactures and sells microwave test systems	Groupe HLD	France	Jul-20	EUR 145m	10.2x
Sensit Technologies	USA	Manufacturer of gas leak detection instruments for natural gas, fire service, and industrial applications	Halma	UK	Feb-20	USD 51.5m	11.7x
L3Harris Technologies, Inc. (Security & Detection Systems)	USA	Provides airport and critical infrastructure screening products, automated tray return systems and other industrial automation products	Leidos Holdings, Inc	USA	Feb-20	USD 1bn	13.3x
BTC Group Limited (Spectris Subsidiary)	Switzerland	Provider of integrated, highly specialized process measuring instruments for the paper industry	Voith GmbH	Germany	Dec-19	EUR 319m	11.5x
Gatan, Inc.	USA	Manufacturer of instrumentation used to enhance the operation and performance of electron microscopes	AMETEK, Inc.	USA	Oct-19	USD 925m	14.9x
Rudolph Technologies	USA	Manufacturer of process control metrology and defect inspection systems used by semiconductor manufacturers	Naometrics	USA	Oct-19	USD 769m	13.4x
3M Gas and Flame Detection	France	Manufacturer of gas and flame detection products	Teledyne Technologies	USA	Aug-19	USD 230m	11.0x
Spectro Scientific	USA	Supplier of oil, fuel and fluid analysis instruments to industry, military and laboratories	AMETEK, Inc.	USA	Nov-18	USD 190m	16.5x
Oxford Instruments (Industrial Analysis business)	UK	Industrial analysis business of Oxford Instruments Plc	Hitachi High-Technologies Corp	Japan	Jul-17	GBP 80m	9.8x
Min							10.2x
Mean							14.0x
Median							13.5x
Max							20.6x

Source: MergerMarket and KPMG intel

Test & Measurement - Q4 2021 Industry update

M&A transaction history

Instrumentation – Life Sciences

Target	Country	Target Description	Acquirer	Country	Date	EV	EV/EBITDA
Food Safety Business of 3M	USA	Food safety business of 3M which sells test kits and other products to help foodmakers monitor sanitation and allergens	Neogen	USA	Dec-21	US 5.300m	32.0x
SP Industries	USA	Designer and manufacturer of high-grade biopharma processing equipment, life sciences equipment, and lab apparatus products	ATS	Canada	Nov-21	USD 445m	15.3x
Luminex Corporation	USA	Develops, manufactures, and sells biological testing technologies and products for the diagnostics, pharmaceutical, and research industries	DiaSorin S.p.A.	USA	Jul-21	USD 1800bn	19.8x
Advanced Instruments	USA	Provider of scientific and analytical instruments	Patricia Industries	USA	Sep-20	GBP 608m	24.1x
Danaher Corporation (Life Science business)	USA	Life Sciences business of Danaher Corporation (FortéBio, Pall-Chromatography and Solchill)	Sartorius AG	Sweden	Oct-19	USD 750m	20.0x
BioTek Instruments Inc	USA	Design, manufacture and distribution of innovative life science instrumentation	Agilent Technologies	USA	Aug-19	USD 1.17bn	22.0x
Roper Technologies (Scientific Imaging businesses)	USA	Scientific Imaging businesses (analytical and scientific instrumentation) of Roper Technologies, Inc.	Teledyne Technologies	USA	Feb-19	USD 225m	11.0x
GE Biopharma	USA	Provider of instruments, consumables, and software that support the workflows of drugs manufacturers	Danaher	USA	Feb-19	USD 21.4bn	17.0x
EUROIMMUN Medical Laboratory	Germany	Develops, produces and distributes devices, software and consumables for human and veterinary medical diagnostics	PerkinElmer, Inc.	USA	Dec-17	EUR 1.2bn	19.2x
FEI Company	USA	Supplier of instruments for nanoscale imaging, analysis and prototyping	Thermo Fisher Scientific	USA	Sep-16	USD 4.4bn	19.3x
Newport Corporation	USA	Supplier of technology products to scientific research, microelectronics, life and health sciences industries	MKS Instruments	USA	Apr-16	USD 980m	17.5x
Min							11.0x
Mean							19.7x
Median							19.3x
Max							32.0x

Source: MergerMarket and KPMG intel

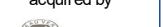
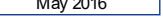
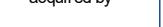
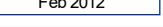
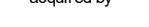
Test, Inspection & Certification services

Target	Country	Target Description	Acquirer	Country	Date	EV	EV/EBITDA
Institute of Calibration & Technology	South Korea	Provides measuring instrument calibrations, repair of dysfunctional measuring instruments	Trescal	France	Aug-21	AUD 60m	9.2x
SAI Global Assurance	Australia	Provides assurance services, including management systems certification and second party audits across a wide variety of end-markets	Intertek Group Plc	UK	May-21	AUD 855m	15.5x
SYNLAB Analytics & Services B.V.	Germany	Provides inspection, verification, testing and certification and other laboratory services for Environmental, Food and Chemical industries	SGS SA	Switzerland	Dec-20	GBP 491m	16.2x
Millbrook (Spectris Subsidiary)	UK	Provides vehicle test, validation and engineering services to customers in the automotive, transport, tyre and petrochemical industries	UTAC CERAM	France	Dec-20	GBP 133m	12.0x
QPS Evaluation Services	Canada	Product certification company for a wide range of industrial, medical and electrical and electronic (E&E) products	Applus Services S.A	Spain	Dec-20	EUR 42m	9.0x
LGC Group	UK	Provider of proficiency testing schemes, genomics reagents and instrumentation, research and measurement services	Cinven Partners LLP and Astorg Partners	France	Apr-20	GBP 3.0bn	17.5x
Onstream Pipeline Inspection	Canada	Provider of pipeline inspection and data analytics services	MISTRAS Group	USA	Feb-19	USD 190m	11.9x
Covance Inc.	USA	Provider of innovative product design and product integrity services	Eurofins Scientific	Netherlands	Aug-18	USD 670m	23.6x
Alchemy Systems	USA	Provider of web-based training, coaching and communication platform focusing on workplace injuries and food safety	Intertek Group Plc	UK	Aug-18	USD 480m	21.8x
CLS	UK	Provider of scientific laboratory and consultancy services	Spectris	UK	Jan-18	GBP 163m	18.0x
Trescal SAS	France	Engaged in providing verification, calibration and measurement services	Omers Private Equity	Canada	Jan-18	EUR 670m	14.9x
EAG Laboratories	USA	Surface analysis and materials characterization provider delivering innovative analytical services and solutions	Eurofins Scientific	Netherlands	Dec-17	USD 780m	11.8x
Exova Group plc	UK	Provider of testing, calibration and consulting services	Element Materials Technology	Netherlands	Jun-17	USD 1.06bn	12.5x
Millbrook Group	UK	Vehicle test, validation and engineering service provider for the automotive and markets such as tyres, defence and security	Spectris Plc	UK	Sep-16	GBP 122m	12.5x
WIL Research Laboratories	USA	Provider of safety assessment and manufacturing services to biopharmaceutical and agricultural companies	Charles River Laboratories	USA	Apr-16	USD 585m	12.9x
Min							9.0x
Mean							14.6x
Median							12.9x
Max							23.6x

Source: MergerMarket and KPMG intel

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KPMG's global test & measurement credentials

     (subsidiaries of Western energy Support and Technology) acquired by  Dec 2021	    acquired by  Dec 2021	    acquired by  Dec 2021	    acquired by  Dec 2021	    acquired by  Dec 2021	    acquired by  Sep 2021
     acquired by  Jul 2021	    acquired by  Jun 2021	    acquired by  May 2021	    portfolio company of   acquired by  Oct 2020	    acquired by  Nov 2019	    acquired by  Nov 2019
     portfolio company of   acquired by  Jan 2019	     acquired by  Jun 2018	    acquired by  Dec 2017	    Analytics laboratory business in Finland & Estonia acquired by  Apr 2017	    acquired by  Mar 2017	    acquired by  May 2016
     acquired by  May 2016	     acquired by  Nov 2015	     acquired by  Sep 2013	     acquired by  Dec 2012	    acquired by  Jun 2012	    acquired by  Jun 2012
     acquired by  Feb 2012	     acquired by  Oct 2011	     Materials Testing subsidiary acquired by  May 2011	     acquired by  Feb 2010	     acquired by  Oct 2008	     acquired by  Jul 2008

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