

Industry update Test & Measurement Q1 2022

Selected M&A highlights

- Mar 22: **National Instruments** acquired the test systems business of **Kratzer Automation**, a Europe based provider of test solutions for the automotive industry
- Mar 22: **Apax Partners** acquired **Alcumus**, UK based provider of technology-enabled compliance risk management and certification services, for **GBP 600m**
- Mar 22: **Keysight Technologies** acquired **JSCnets**, Germany based developer of automated test equipment for verification of smart communication systems
- Mar 22: **Thermo Fisher Scientific** acquired **Max Analytical Technologies**, US based provider of FTIR gas analysers and continuous monitoring systems
- Mar 22: **SGS** acquired **Gas Analysis Services**, Ireland based provider of gas testing, lab services and related instruments
- Feb 22: **CTS Corporation** acquired **Tewa Temperature Sensors**, Poland based manufacturer of thermistor and temperature probe sensors, for **USD 25m**
- Feb 22: **Laboratory Corporation of America** acquired **Personal Genome Diagnostics**, US based provider of genetic analysis for diagnosis of cancers, for **USD 575m**
- Feb 22: **Applus Services** acquired **Lightship Security**, Spain based provider of IT product security certifications
- Feb 22: Consortium of companies led by **FS Investments Solutions** acquired **LeddarTech**, Canada based provider of detection and ranging systems, for **USD 116m**
- Feb 22: **IXO Private Equity** along with **IDIA Capital Investissement** acquired a stake in **Acœm France**, a France-based provider of smart monitoring, diagnosis, vibrations and acoustics solutions for **EUR 35m**
- Feb 22: **Limerston Capital** acquired **Wickham Laboratories**, UK based pharmaceutical and medical device testing company in the fields of microbiology and toxicology
- Feb 22: **Eurofins Scientific** acquired **SPW Analytical**, Australia based provider of soil, plant and water analytical testing services, for **USD 11m**
- Jan 22: **Trescal** acquired **Classic Technology**, Ireland based provider of UKAS calibration laboratory for pressure, temperature, electrical and mass
- Jan 22: **Temasek Holdings** acquired **Element Materials Technology**, UK based company offering testing, inspection and certification services for various materials and products, for **USD 7bn**
- Jan 22: **Eddyfi NDT** acquired **Zetec**, US based provider of non-destructive testing (NDT) solutions, for **USD 350m (20.6x EV/EBITDA)**
- Jan 22: **Leonard Green & Partners** acquired **Pace Analytical Services**, US based provider of analytical testing and emergency disaster response services
- Jan 22: **Spectris** acquired **Creoptix**, Switzerland based provider of bioanalytical instruments for drug discovery and life sciences
- Jan 22: **Bruker** acquired **Prolab Instruments**, Switzerland based provider of automation devices and analytical instruments to the pharmaceutical industry

Public company valuations Sensors

Company	Country	Year End Date	Market Cap (GBPm)	Net Debt / (Cash)	EV (GBPm)	Net debt / EBITDA (2022)	EV/Revenue Revenue growth			EV/EBITDA EBITDA (GBPm) EBITDA %			EV/EBIT EBIT (GBPm) EBIT %			2 Year CAGR		
							2021	2022	2023	2021	2022	2023	2021	2022	2023	Sales	EBITDA	
Amphenol Corporation	USA	Dec-21	34,332	2,813	37,301	1.3x	4.6x 8,032 28%	4.1x 9,028 6%	3.9x 9,578 6%	18.8x 1,981 25%	16.7x 2,236 25%	15.5x 2,411 25%	22.8x 1,635 20%	20.4x 1,826 20%	18.9x 1,975 21%	9%	10%	
ams-OSRAM AG	Germany	Dec-21	3,078	1,729	4,862	2.1x	1.1x 4,231 35%	1.2x 4,179 (1%)	1.1x 4,286 3%	7.2x 672 16%	5.9x 830 20%	5.2x 940 22%	nmf 66 2%	13.7x 54 9%	9.8x 69 12%	1%	18%	
CTSCorporation	USA	Dec-21	864	(49)	815	n/a	2.2x 379 22%	2.0x 415 10%	1.8x 444 7%	10.5x 78 21%	8.5x 96 23%	7.9x 103 23%	15.1x 54 14%	11.9x 69 17%	10.8x 75 17%	8%	15%	
discoverIE Group plc	UK	Mar-21	749	123	873	2.3x	2.3x 403 (12%)	2.2x 392 (3%)	2.1x 406 4%	17.3x 51 13%	16.2x 54 14%	15.5x 56 14%	24.5x 36 9%	20.8x 42 11%	19.4x 45 11%	0%	6%	
Keyence Corporation	Japan	Mar-21	86,982	(6,003)	80,979	n/a	nmf 4,595 11%	nmf 5,003 9%	nmf 5,534 11%	31.4x 2,576 56%	28.5x 2,838 57%	25.8x 3,144 57%	30.7x 2,637 57%	29.1x 2,786 56%	26.1x 3,102 56%	10%	10%	
Littelfuse, Inc.	USA	Jan-22	4,685	140	4,856	0.3x	2.7x 1,791 18%	2.5x 1,929 8%	2.3x 2,081 8%	11.7x 414 23%	10.8x 450 23%	10.8x 448 22%	15.0x 325 18%	13.8x 352 18%	13.4x 362 17%	8%	4%	
Methode Electronics, Inc.	USA	May-21	1,215	61	1,276	0.4x	1.5x 826 (3%)	1.4x 913 11%	1.3x 961 5%	8.7x 147 18%	7.7x 165 18%	6.9x 184 18%	12.1x 105 19%	11.1x 115 19%	9.7x 131 18%	8%	12%	
Murata Manufacturing Co., Ltd.	Japan	Mar-21	32,536	(2,441)	30,096	n/a	2.6x 11,404 (5%)	2.6x 11,564 1%	2.4x 12,292 6%	8.6x 3,513 31%	8.0x 3,741 32%	7.4x 4,062 33%	11.5x 2,621 23%	11.3x 2,654 23%	10.4x 2,894 24%	4%	8%	
Sensata Technologies Holding plc	UK	Dec-21	6,098	1,910	8,035	2.4x	2.8x 2,822 26%	2.5x 3,212 14%	2.3x 3,476 8%	12.0x 670 24%	10.2x 788 25%	9.1x 879 25%	16.6x 483 17%	12.0x 670 21%	10.7x 750 22%	11%	15%	
Sensirion Holding AG	Switzerland	Dec-21	1,476	(91)	1,382	n/a	5.9x 233 11%	5.2x 265 14%	4.6x 299 13%	19.4x 71 21%	20.6x 67 22%	21.5x 71 22%	23.1x 60 26%	30.1x 46 17%	32.6x 42 14%	13%	nmf	
TE Connectivity Ltd.	Switzerland	Sep-21	32,441	2,282	34,803	0.8x	3.1x 11,090 9%	2.8x 12,269 11%	2.6x 13,185 7%	12.8x 2,717 24%	11.5x 3,032 25%	10.6x 3,290 25%	15.5x 2,245 20%	15.0x 2,317 19%	13.6x 2,551 19%	9%	10%	
TT Electronics plc	UK	Dec-21	362	103	467	1.7x	1.0x 476 10%	0.9x 524 10%	0.9x 543 4%	12.9x 36 8%	7.8x 60 8%	6.8x 69 11%	23.2x 20 13%	10.9x 43 8%	9.0x 52 9%	7%	38%	
Min							1.0x 10%	0.9x 10%	0.9x 11%	7.2x 8%	5.9x 11%	5.2x 13%	11.5x 13%	10.9x 20	9.0x 43	8.0x 52	0%	4%
Mean							2.7x 10%	2.5x 10%	2.3x 11%	14.3x 8%	12.7x 11%	11.9x 9%	19.1x 13%	16.7x 20	15.4x 43	13.7x 52	7%	13%
Median							2.6x 10%	2.5x 10%	2.3x 11%	12.4x 8%	10.5x 11%	9.9x 10%	16.6x 13%	13.7x 20	12.1x 43	10.8x 52	8%	10%
Max							5.9x 10%	5.2x 10%	4.6x 11%	31.4x 8%	28.5x 11%	25.8x 13%	30.7x 13%	30.1x 20	32.6x 43	13%	38%	

Note: Multiples are based on enterprise value as of 31 March 2022 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.

Test & Measurement - Q1 2022 Industry update

Instrumentation – Industrials

Company	Country	Year End Date	Market Cap (GBPm)	Net Debt / (Cash)	EV (GBPm)	Net debt / EBITDA (2022)	EV/Revenue			EV/EBITDA			EV/EBIT			2 Year CAGR			
							2021	2022	2023	2021	2022	2023	2021	2022	2023	Sales	EBITDA		
AMETEK, Inc.	USA	Dec-21	23,421	1,753	25,174	1.2x	6.1x 4,096 23%	5.4x 4,653 14%	5.1x 4,940 6%	20.4x 1,233 30%	17.9x 1,403 30%	16.8x 1,497 30%	25.5x 987 24%	22.5x 1,120 24%	20.7x 1,216 25%	10%	10%		
Fortive Corporation	USA	Dec-21	16,643	2,455	19,200	2.1x	4.9x 3,881 14%	4.3x 4,418 14%	4.1x 4,680 6%	19.3x 992 26%	16.3x 1,180 27%	14.9x 1,290 28%	28.7x 767 17%	24.3x 789 18%	21.4x 897 19%	10%	14%		
Halma plc	UK	Mar-21	9,507	280	9,778	0.7x	6.7x 1,452 10%	6.2x 1,582 9%	5.8x 1,692 7%	27.1x 361 25%	24.5x 399 25%	22.7x 431 25%	32.6x 300 21%	28.6x 342 22%	26.3x 371 22%	8%	9%		
HORIBA, Ltd.	Japan	Dec-21	1,771	(365)	1,418	n/a	1.0x 1,439 8%	0.9x 1,514 5%	0.9x 1,532 1%	5.2x 273 12%	4.8x 295 13%	4.9x 291 19%	6.4x 222 15%	6.4x 220 15%	6.4x 221 14%	3%	3%		
Keystream Technologies, Inc.	USA	Oct-21	21,869	28	21,896	0.0x	6.0x 3,652 9%	5.4x 4,057 11%	5.1x 4,279 5%	20.2x 1,085 30%	17.0x 1,286 32%	16.0x 1,371 32%	24.5x 893 24%	19.2x 1,143 28%	17.8x 1,229 29%	8%	12%		
MKS Instruments, Inc.	USA	Dec-21	6,335	(8)	6,346	n/a	2.9x 2,178 28%	2.6x 2,403 10%	2.5x 2,516 5%	9.8x 647 30%	9.1x 699 29%	8.7x 726 29%	11.4x 558 26%	10.2x 620 26%	9.7x 657 26%	7%	6%		
National Instruments Corporation	USA	Dec-21	4,077	98	4,175	0.3x	3.8x 1,085 15%	3.2x 1,307 20%	3.0x 1,379 6%	23.3x 179 17%	14.3x 292 22%	13.0x 322 23%	37.9x 110 10%	18.6x 225 17%	16.6x 251 18%	13%	34%		
Oxford Instruments plc	UK	Mar-21	1,215	(57)	1,158	n/a	3.4x 342 7%	3.2x 364 6%	3.0x 380 4%	16.4x 71 21%	15.5x 80 21%	14.5x 80 21%	19.5x 60 17%	17.9x 65 18%	16.8x 69 18%	5%	6%		
Renishaw plc	UK	Jun-21	2,816	(203)	2,595	n/a	4.2x 617 15%	3.8x 680 10%	3.6x 717 5%	14.6x 177 29%	12.2x 212 31%	11.7x 222 31%	18.2x 143 23%	15.4x 169 25%	14.9x 174 24%	8%	12%		
Roper Technologies, Inc.	USA	Dec-21	37,937	5,762	43,700	3.1x	10.2x 4,267 20%	9.3x 4,696 10%	8.8x 4,975 6%	26.0x 1,683 39%	23.4x 1,870 40%	21.6x 2,027 41%	36.7x 1,191 28%	32.9x 1,327 28%	30.2x 1,448 29%	8%	10%		
Shimadzu Corporation	Japan	Mar-21	7,817	(836)	6,982	n/a	2.5x 2,753 (6%)	2.5x 2,768 1%	2.4x 2,889 4%	14.1x 495 18%	13.7x 511 18%	12.9x 541 18%	17.2x 406 15%	17.3x 405 15%	16.2x 430 15%	2%	4%		
Spectris plc	UK	Dec-21	2,879	(102)	2,800	n/a	2.2x 1,292 (3%)	2.1x 1,329 3%	2.0x 1,389 4%	12.3x 228 18%	10.3x 272 20%	9.7x 290 21%	16.1x 174 13%	12.3x 227 17%	11.3x 247 18%	4%	13%		
Min							1.0x 1.0x 4.5x 4.0x	0.9x 0.9x 4.1x 3.5x	0.9x 0.9x 3.9x 3.3x	5.2x 5.2x 17.4x 17.9x	4.8x 4.8x 14.9x 14.9x	4.9x 4.9x 13.9x 13.7x	6.4x 6.4x 22.9x 20.0x	17.9x 17.9x 18.3x 18.2x	6.4x 6.4x 18.7x 18.2x	2%	3%		
Mean							10.2x 10.2x 9.3x 9.3x	9.3x 9.3x 8.7x 8.7x	9.3x 9.3x 8.7x 8.7x	23.7x 23.7x 29.7x 29.7x	20.8x 20.8x 19.2x 19.2x	19.0x 19.0x 19.2x 19.2x	29.8x 29.8x 27.1x 27.1x	32.9x 32.9x 24.5x 24.5x	30.2x 30.2x 29.8x 29.8x	7%	11%		
Median																8%	10%		
Max																32.9x 32.9x 30.2x 30.2x	30.2x 30.2x 29.8x 29.8x	13%	34%

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Source: CapIQ

Instrumentation – Life Sciences

Company	Country	Year End Date	Market Cap (GBPm)	Net Debt / (Cash)	EV (GBPm)	Net debt / EBITDA (2022)	EV/Revenue			EV/EBITDA			EV/EBIT			2 Year CAGR	
							2021	2022	2023	2021	2022	2023	2021	2022	2023	Sales	EBITDA
Agilent Technologies, Inc.	USA	Oct-21	30,212	1,301	31,513	0.9x	6.8x 4,667 10%	6.1x 5,181 11%	5.7x 5,552 7%	23.7x 1,327 28%	20.8x 1,518 29%	19.0x 1,660 30%	27.9x 1,131 24%	23.2x 1,360 26%	21.2x 1,486 27%	9%	12%
Bio-Rad Laboratories, Inc.	USA	Dec-21	12,919	(477)	12,457	n/a	5.8x 2,158 16%	5.6x 2,220 3%	5.2x 2,383 7%	22.9x 545 25%	20.9x 596 27%	19.2x 650 27%	29.8x 418 19%	27.1x 459 21%	24.5x 509 21%	5%	9%
Bruker Corporation	USA	Dec-21	7,375	180	7,644	0.4x	4.3x 1,786 23%	3.9x 1,950 9%	3.7x 2,074 6%	19.0x 402 23%	16.5x 463 24%	15.5x 493 24%	23.8x 321 18%	19.7x 388 20%	17.9x 427 21%	8%	11%
Danaher Corporation	USA	Dec-21	159,750	15,277	178,049	1.8x	8.2x 21,752 33%	7.6x 23,555 8%	7.2x 24,726 5%	22.7x 7,859 36%	21.1x 8,450 36%	20.1x 8,850 36%	28.9x 6,158 28%	27.7x 6,417 27%	26.3x 6,769 27%	7%	6%
Judges Scientific plc	UK	Dec-21	432	3	437	0.1x	4.8x 91 14%	4.6x 95 4%	4.4x 99 4%	21.9x 21 22%	20.5x 21 22%	18.2x 24 24%	28.7x 15 17%	21.8x 20 22%	20.0x 22 22%	4%	10%
Mettler-Toledo International Inc.	USA	Dec-21	23,751	1,257	25,043	1.3x	9.1x 2,746 22%	8.3x 3,002 9%	7.9x 3,179 6%	30.4x 824 30%	26.4x 950 32%	24.3x 1,030 32%	33.0x 758 28%	28.7x 874 29%	26.4x 940 30%	8%	12%
PerkinElmer, Inc.	USA	Jan-22	16,741	3,391	20,273	3.3x	6.1x 3,306 (11%)	5.8x 3,478 5%	5.4x 3,733 7%	20.6x 985 30%	19.9x 1,019 29%	18.3x 1,108 30%	22.0x 920 28%	22.0x 922 27%	19.9x 1,017 27%	6%	6%
Sartorius Aktiengesellschaft	Germany	Dec-21	21,585	1,440	23,480	1.2x	8.1x 2,897 38%	6.8x 3,450 19%	6.2x 3,763 9%	24.5x 957 33%	19.9x 1,181 34%	18.4x 1,274 34%	29.9x 786 27%	25.5x 921 27%	22.9x 1,025 27%	14%	15%
Thermo Fisher Scientific Inc.	USA	Dec-21	175,775	23,531	199,651	2.6x	28.958 2,057 23%	32.064 2,233 11%	26.8x 2,358 6%	20.6x 733 38%	18.8x 800 38%	21.8x 847 31%	24.2x 623 32%	22.3x 676 30%	20.9x 720 31%	8%	nmf
Waters Corporation	USA	Dec-21	14,289	766	15,067	1.0x	7.3x 2,057 19%	6.7x 2,233 9%	6.4x 2,358 6%	20.6x 733 36%	18.8x 800 36%	17.8x 847 36%	24.2x 623 30%	22.3x 676 30%	20.9x 720 31%	7%	8%
Min							4.3x 4.3x 6.8x 9.1x	3.9x 3.9x 6.2x 8.3x	3.7x 3.7x 5.9x 7.9x	18.4x 18.4x 18.4x 30.4x	16.5x 16.5x 18.8x 24.3x	15.5x 15.5x 18.8x 24.3x	21.8x 21.8x 24.6x 28.7x	19.7x 19.7x 23.1x 26.4x	17.9x 17.9x 23.1x 26.4x	4%	6%
Mean							6.7x 6.8x 6.8x 9.1x	6.2x 6.2x 5.8x 8.3x	5.8x 22.5x 22.3x 7.9x	20.7x 20.7x 20.6x 20.4x	19.0x 19.0x 18.6x 24.3x	19.0x 19.0x 18.6x 24.3x	27.0x 27.0x 24.3x 33.0x	24.3x 24.3x 22.3x 28.7x	22.3x 22.3x 20.9x 26.4x	8%	10%
Median																	
Max																	

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Source: CapIQ

Test & Measurement - Q1 2022 Industry update

Test, Inspection & Certification services

Company	Country	Year End Date	Market Cap (GBPm)	Net Debt / (Cash)	EV (GBPm)	Net debt / EBITDA (2022)	EV/Revenue			EV/EBITDA			EV/EBIT			2 Year CAGR 2021-2023		
							2021	2022	2023	Revenue (GBPm)	Revenue growth	EBITDA (GBPm)	EBITDA %	2021	2022	2023	Sales	EBITDA
ALS Limited	NZL	Mar-21	3,699	463	4,157	1.4x	3.7x 27%	3.3x 13%	3.1x 6%	14.9x 25%	12.8x 26%	12.2x 26%	20.6x 18%	17.0x 19%	16.0x 19%	9%	11%	
Applus Services, S.A.	ES	Dec-21	902	663	1,605	2.5x	1.1x 7%	1.0x 9%	0.9x 5%	6.8x 16%	6.2x 16%	5.8x 16%	15.3x 7%	9.6x 10%	8.8x 11%	7%	8%	
Bureau Veritas SA	FR	Dec-21	9,912	1,233	11,359	1.3x	2.7x 1%	2.5x 8%	2.4x 5%	13.5x 20%	12.1x 21%	11.5x 21%	18.6x 15%	15.4x 16%	14.4x 17%	6%	9%	
Eurofins Scientific SE	DE	Dec-21	14,610	1,880	16,572	1.4x	2.9x 16%	3.1x 5.433	3.0x 5,615	10.5x 1.578	12.3x 1.309	14.6x 1.348	14.6x 1.139	18.3x 20%	18.1x 17%	18.1x 16%	nmf	nmf
Exponent, Inc.	US	Dec-21	4,284	(209)	4,075	n/a	nmf 321 16%	nmf 351 9%	nmf 376 7%	nmf 92 29%	nmf 108 31%	nmf 117 31%	nmf 82 26%	nmf 93 27%	nmf 103 28%	8%	13%	
Intertek Group plc	UK	Dec-21	8,417	1,026	9,475	1.4x	3.4x 2%	3.1x 10%	3.0x 5%	15.2x 22%	13.3x 23%	12.5x 24%	21.3x 16%	17.9x 17%	16.6x 18%	7%	10%	
Mistras Group, Inc.	US	Dec-21	149	174	323	2.7x	0.6x 15%	0.6x 8%	0.6x 7%	6.3x 10%	5.1x 12%	4.6x 12%	19.8x 3%	13.9x 4%	10.3x 5%	8%	18%	
SGS SA	CH	Dec-21	15,942	1,885	17,875	1.4x	3.4x 12%	3.2x 8%	3.0x 5%	15.3x 23%	13.4x 24%	12.7x 24%	23.6x 15%	19.1x 17%	17.9x 17%	6%	10%	
Min							0.6x	0.6x	6.3x	5.1x	4.6x	14.6x	9.6x	8.8x	6%	8%		
Mean							2.6x	2.4x	3.0x	11.8x	10.8x	10.2x	19.1x	15.9x	14.6x	7%	11%	
Median							2.9x	3.1x	3.0x	13.5x	12.7x	12.2x	19.8x	17.0x	16.0x	7%	10%	
Max							3.7x	3.3x	3.1x	15.3x	13.4x	12.7x	23.6x	19.1x	18.1x	9%	18%	

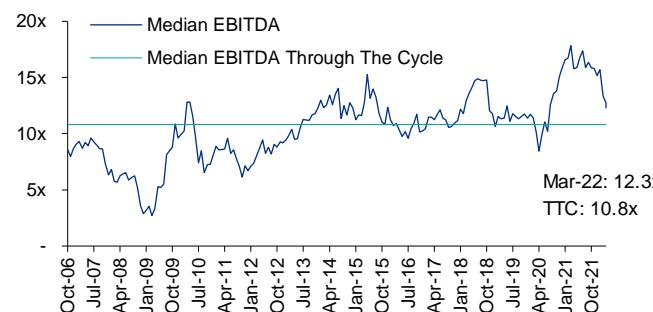
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Exponent Inc: Considered as an outlier and excluded from calculations

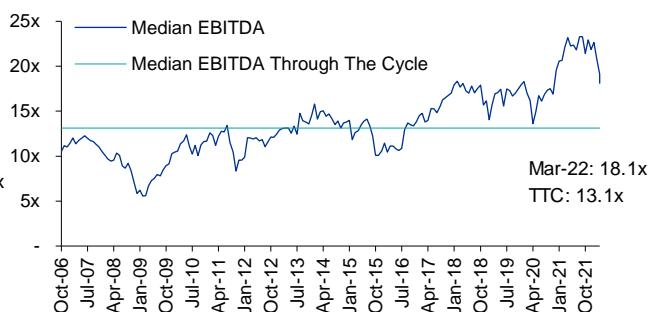
Source: CapIQ

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

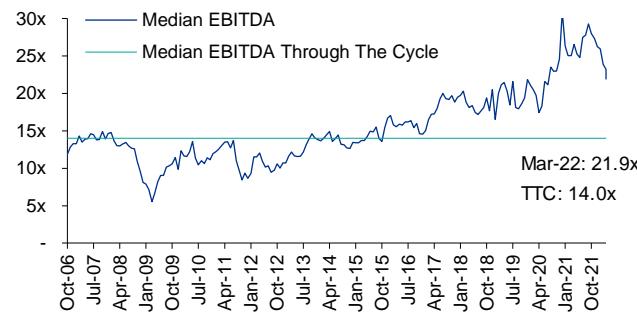
Sensors



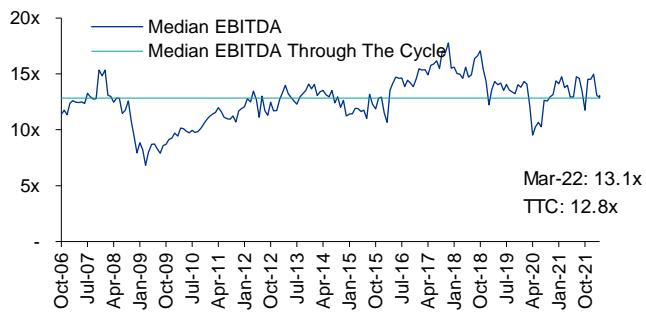
Instrumentation – Industrials



Instrumentation – Life Sciences



Test, Inspection & Certification services



Note: The companies used in the public company valuations make up the constituents of the TTC analysis. 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 - Q1 2022 Industry update

M&A transaction history

Sensors

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

Source: CapIQ, MergerMarket and KPMG intel

Instrumentation – Industrials

Target	Country	Target Description	Acquirer	Country	Date	EV	EV/EBITDA
Zetec (Roper Technologies)	US	Zetec is engaged in nondestructive testing (NDT) solutions for critical inspection needs	Eddyfi/NDT (Novacap)	CA	Jan-22	USD 350m	20.6x
NDC Technologies Inc.	US	Provider of precision measurement solutions for in-line manufacturing process control	Nordson Corporation	US	Aug-21	USD 180m	13.5x
Concurrent Real-Time, Inc.	US	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	US	Provider of mission critical embedded computing systems for aerospace, defense and industrial applications	AMETEK Inc	US	Mar-21	USD 1,350m	13.5x
Brüel & Kjaer Vibro (Spectris Subsidiary)	DE	Supplier of machinery protection and condition monitoring systems for rotating and reciprocating industrial machinery	NSK Ltd	JP	Dec-20	EUR 180m	20.0x
Microwave Vision SA (52.06%)	FR	Designs, manufactures and sells microwave test systems	Groupe HLD	FR	Jul-20	EUR 145m	10.2x
Sensit Technologies	US	Manufacturer of gas leak detection instruments for natural gas, fire services and industrial applications	Halma	UK	Feb-20	USD 51.5m	11.7x
L3Harris Technologies (Security & Detection)	US	Provides airport and critical infrastructure screening products and other industrial automation products	Leidos Holdings	US	Feb-20	USD 1bn	13.3x
BTG Group Limited (Spectris Subsidiary)	UK	Provider of integrated, highly specialised process measuring instruments for the paper industry	Voith GmbH	DE	Dec-19	EUR 319m	11.5x
Gatan, Inc.	US	Manufacturer of instrumentation used to enhance the operation and performance of electron microscopes	AMETEK, Inc.	US	Oct-19	USD 925m	14.9x
Rudolph Technologies	US	Manufacturer of process control metrology and defect inspection systems used by semiconductor manufacturers	Naometrics	US	Oct-19	USD 769m	13.4x
3M Gas and Flame Detection	FR	Manufacturer of gas and flame detection products	Teledyne Technologies	US	Aug-19	USD 230m	11.0x
Spectro Scientific	US	Supplier of oil, fuel and fluid analysis instruments to industry, military and laboratories	AMETEK, Inc.	US	Nov-18	USD 190m	16.5x
Oxford Instruments (Industrial Analysis Part)	UK	Industrial analysis business of Oxford Instruments Plc	Hitachi High-Technologies Corp	JP	Jul-17	GBP 80m	9.8x
Min							9.8x
Mean							14.0x
Median							13.5x
Max							20.6x

Source: CapIQ, MergerMarket and KPMG intel

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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 & allergies	Neogen	USA	Dec-21	US 5,300m	32.0x
SP Industries	USA	Designer and manufacturer of high-grade biopharma processing equipment & life sciences equipment	ATS	Canada	Nov-21	USD 445m	15.3x
Luminex Corporation	USA	Develops, manufactures and sells biological testing technologies and products	DiSorin S.p.A.	USA	Jul-21	USD 1,800bn	19.8x
Advanced Instruments	USA	Provider of scientific and analytical instruments	Patricia Industries	Sweden	Sep-20	GBP 608m	24.1x
Danaher Corporation (Life Science business)	USA	Life Sciences business of Danaher Corporation (FortéBio, Pall-Chromatography and SolisHill)	Sartorius AG	Germany	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)	USA	Scientific Imaging business (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 drug 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

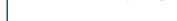
Test, Inspection & Certification services

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	Intertek Group Plc	UK	May-21	AUD 856m	15.5x
SYNLAB Analytics & Services B.V.	Germany	Provides inspection, verification, testing and certification and other laboratory services	SGS SA	Switzerland	Dec-20	GBP 491m	16.2x
Millbrook (Spectris Subsidiary)	UK	Provides vehicle test, validation and engineering services to 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 & 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	Ciriven Partners LLP and Astorg Partners	UK	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 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 characterisation 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	UK	Jun-17	USD 1.06bn	12.5x
Millbrook Group	UK	Vehicle test, validation and engineering service provider for the automotive markets	Spectris Plc	UK	Sep-16	GBP 122m	12.5x
WIL Research Laboratories	USA	Provider of safety assessment and manufacturing services to pharmaceutical 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: CapIQ, 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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