

Test & Measurement

Q4 2023 Industry Update

December 2023



Selected M&A highlights

| | |
|--|---|
| Dec 23: Sandvik (STO:SAND) agreed to acquire pro-micron , a Germany based supplier of sensorised tools and automation software | Nov 23: Millar acquired Sentron Europe , a Netherlands based manufacturer of pressure and pH sensors for laboratory, agriculture and industrial applications |
| Dec 23: Bruker Corporation (NASDAQ:BRKR) , agreed to acquire ELITech , a France based integrated in-vitro diagnostics company that serves hospitals and diagnostic laboratories | Nov 23: Oxford Metrics (AIM:OMG) acquired Industrial Vision Systems , a UK based developer of machine vision software and technology for high precision, automated quality control systems, for GBP 8.1m |
| Dec 23: Luna Innovations (NASDAQ:LUNA) acquired Silixa , a UK based developer and seller of optical sensing solutions for energy and security applications, for up to USD 38m | Nov 23: Petroleum Analyzer , a subsidiary of CD&R backed Indicor , acquired Icon Scientific , a UK based manufacturer of process instrumentation including blending optimizers and physical property analyzers for midstream and downstream processing applications |
| Dec 23: Enpro (NYSE:NPO) agreed to acquire Advanced Micro Instruments , a US based provider of analysers and sensing technologies to monitor critical parameters for infrastructure integrity, process efficiency, safety and clean energy transition, for USD 210m (c. EV/EBITDA: 13.0x) | Nov 23: SDI Group (AIM:SDI) acquired Peak Sensors , a UK based manufacturer of temperature sensors, for GBP 2.4m |
| Dec 23: Bruker Corporation (NASDAQ:BRKR) , through its subsidiary Bruker UK , agreed to acquire Phasefocus , a UK based developer & seller of computational imaging and analysis systems for live cell imaging, engineering metrology and electron microscopy applications, for USD 5m | Nov 23: Phenna Group acquired Australian Soil & Concrete Testing , an Australia based Geotechnical testing company that offers soil testing, concrete testing & related services |
| Dec 23: AMETEK (NYSE:AME) acquired Paragon Medical , a US based provider of engineered medical components and instruments, for USD 1.9bn | Oct 23: AMETEK (NYSE:AME) acquired AR WorldWide , a US based manufacturer of amplifier and radio frequency test instruments, for USD 110m |
| Dec 23: Eurofins Scientific (ENXTPA:ERF) , agreed to acquire SGS' crop science operations in 14 countries that comprises contract research services in agricultural input testing agronomy and precision agriculture services | Oct 23: Amphenol Corporation (NYSE:APH) acquired PCTEL (Nasdaq:PCTI) , a US based provider of wireless technology solutions, including purpose-built Industrial IoT devices, antenna systems and test & measurement products, for USD 140m (EV/EBITDA: 13.5x) |
| Dec 23: Dwyer Instruments acquired Automation Components , a US based designer, manufacturer, and distributor of sensors and instruments for the building automation, data center, and indoor air quality markets | Oct 23: Halma (LSE:HLMA) acquired Alpha Instrumetrics , a UK based designer and manufacturer of devices for high-precision measurement of trace moisture found in gases, for up to GBP 36.5m |
| Dec 23: Phenna Group acquired CEIMIC , a US based life science testing company that offers quality analytical services, sampling, technology, and quality monitoring solutions | Oct 23: Fortive Corporation (NYSE:FTV) agreed to acquire EA Elektro-Automatik , a Germany based specialist in high-power electronic test solutions for energy storage, mobility, hydrogen, and renewable energy applications, for USD 1.45bn |
| Nov 23: May River Capital acquired RLE Technologies , a US based provider of facility environment monitoring, fluid leak detection, and airflow management products | Oct 23: Teledyne Technologies (NYSE:TDY) acquired Xena Networks , a Denmark based provider of high-speed Terabit Ethernet validation, quality assurance, and production test solutions |
| Nov 23: Lifco (STO:LIFCO B) acquired Green Instruments , a Denmark based developer and manufacturer of systems for measuring and monitoring emissions from vessels | Oct 23: NMi Group acquired Avon Dynamic , a US based UKAS-accredited calibration and dimensional measurement specialist |
| | Oct 23: HORIBA (TSE:6856) acquired Process Instruments , a US based developer and manufacturer of Raman process spectroscopy for environmental and process markets |

Public company valuations

Sensors

| Company | Country | Year End Date | Market Cap (GBPm) | Net Debt / (Cash) | EV (GBPm) | Net debt / EBITDA (2023) | EV/Revenue | | | EV/EBITDA | | | EV/EBIT | | | 2 Year CAGR 2022-2024 | | |
|----------------------------------|---------|---------------|-------------------|-------------------|-----------|--------------------------|----------------|----------------|--------------|--------------|--------------|---------------|--------------|----------------|--------------|-----------------------|-------|--------|
| | | | | | | | Revenue growth | Revenue (GBPm) | 2022 | 2023 | 2024 | EBITDA (GBPm) | EBITDA % | 2022 | 2023 | 2024 | Sales | EBITDA |
| Amphenol Corporation | USA | Dec-22 | 46,563 | 2,008 | 48,636 | 0.8x | 4.9x 16% | 5.0x (2%) | 4.7x 7% | 19.9x 25% | 20.3x 25% | 18.9x 25% | 23.8x 21% | 24.4x 21% | 22.5x 21% | 2% | 3% | |
| ams-OSRAM AG | CHN | Dec-22 | 1,942 | 2,197 | 4,127 | 3.8x | 1.0x (4%) | 1.3x (25%) | 1.3x 1% | 5.3x 19% | 7.1x 19% | 6.3x 21% | 21.2x 5% | nmf (1,207) | nmf 39% | nmf 3% | nmf | nmf |
| CTS Corporation | USA | Dec-22 | 1,070 | (43) | 1,027 | n/a | 2.2x 14% | 2.4x (6%) | 2.4x 0% | 9.5x 23% | 10.5x 23% | 10.3x 23% | 13.0x 17% | 14.9x 16% | 14.3x 17% | nmf | nmf | |
| discoverIE Group plc | UK | Mar-23 | 757 | 131 | 887 | 1.9x | 2.1x 20% | 2.0x 5% | 1.9x 5% | 14.5x 14% | 13.0x 15% | 12.1x 16% | 25.0x 16% | 17.0x 8% | 14.7x 12% | 14.7x 13% | 5% | 10% |
| Keyence Corporation | JP | Mar-23 | 83,908 | (5,515) | 78,392 | n/a | 15.9x 25% | 14.7x 8% | 13.5x 9% | 28.6x 56% | 27.8x 53% | 25.3x 53% | 29.2x 54% | 28.4x 54% | 25.9x 52% | 9% | 6% | |
| Littlefuse, Inc. | USA | Dec-22 | 5,231 | 380 | 5,611 | 0.9x | 2.8x 21% | 3.0x (6%) | 3.0x 0% | 10.6x 27% | 13.1x 23% | 13.5x 22% | 12.1x 21% | 13.4x 16% | 18.5x 16% | 18.1x 17% | nmf | nmf |
| Methode Electronics, Inc. | USA | Apr-23 | 635 | 187 | 822 | 2.0x | 0.9x 3% | 0.9x (1%) | 0.9x (0%) | 6.2x 14% | 8.8x 10% | 8.2x 11% | 9.7x 11% | 19.7x 9% | 18.5x 5% | 18.5x 5% | nmf | nmf |
| Murata Manufacturing Co., Ltd. | JP | Mar-23 | 31,492 | (2,226) | 29,265 | n/a | 3.1x (3%) | 3.2x (4%) | 3.0x 6% | 10.7x 29% | 11.7x 27% | 10.3x 29% | 15.9x 19% | 18.8x 17% | 15.8x 17% | 1% | 2% | |
| Sensata Technologies Holding plc | USA | Dec-22 | 4,464 | 2,283 | 6,747 | 3.2x | 2.1x 5% | 2.1x 0% | 2.1x 3% | 9.7x 22% | 9.3x 23% | 8.7x 24% | 14.4x 15% | 11.1x 15% | 10.3x 19% | 2% | 6% | |
| Sensirion Holding AG | CHN | Dec-22 | 1,210 | (95) | 1,110 | n/a | 3.7x 12% | 5.0x (25%) | 4.3x 15% | 13.8x 27% | nmf 8% | nmf 12% | 16.0x 23% | nmf 1% | nmf 7% | nmf | nmf | |
| TE Connectivity Ltd. | USA | Sep-23 | 34,280 | 2,325 | 37,351 | 0.8x | 2.9x 6% | 3.0x (1%) | 2.9x 3% | 12.3x 24% | 12.9x 23% | 12.1x 24% | 16.4x 18% | 17.5x 17% | 16.1x 18% | 1% | 1% | |
| TT Electronics plc | UK | Dec-22 | 276 | 139 | 415 | 2.0x | 0.7x 30% | 0.7x 1% | 0.7x 0% | nmf 2% | 6.1x 11% | 5.6x 12% | nmf (0%) | 7.9x 8% | 7.2x 9% | 1% | nmf | |
| Min | | | | | | | 0.7x | 0.7x | 0.7x | 5.3x | 6.1x | 5.6x | 9.7x | 7.9x | 7.2x | 1% | 1% | |
| Mean | | | | | | | 2.4x | 2.6x | 2.5x | 11.2x | 11.3x | 10.6x | 16.9x | 16.6x | 15.3x | 2% | 4% | |
| Median | | | | | | | 2.2x | 2.4x | 2.4x | 10.7x | 11.1x | 10.3x | 16.0x | 17.5x | 15.8x | 2% | 3% | |
| Max | | | | | | | 4.9x | 5.0x | 4.7x | 19.9x | 20.3x | 18.9x | 25.0x | 24.4x | 22.5x | 5% | 10% | |

Note: Multiples are based on enterprise value as of 29 December 2023 and historical and forecast sales, EBITDA and EBIT, calendarised to December end. "nmf": not meaningful; "n/a": not available. Enterprise Value is adjusted for minority interest, preference equity, pension deficit and investments in associates.

Highlighted values are considered as outliers and are not included in calculations

Source: CapIQ/Broker Reports

Instrumentation

Industrials

| | | | | | | | EV/Revenue | | | EV/EBITDA | | | EV/EBIT | | | 2 Year CAGR 2022-2024 | |
|------------------------------------|---------|---------------|-------------------|-------------------|-----------|--------------------------|----------------------------------|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|--------|
| | | | | | | | Revenue (GBPm) Revenue growth | | | EBITDA (GBPm) EBITDA % | | | EBIT (GBPm) EBIT % | | | | |
| Company | Country | Year End Date | Market Cap (GBPm) | Net Debt / (Cash) | EV (GBPm) | Net debt / EBITDA (2023) | 2022 | 2023 | 2024 | 2022 | 2023 | 2024 | 2022 | 2023 | 2024 | Sales | EBITDA |
| AMETEK, Inc. | USA | Dec-22 | 29,877 | 1,168 | 31,045 | 0.7x | 6.4x 4,829 11% | 6.0x 5,175 7% | 5.3x 5,851 13% | 20.9x 1,484 31% | 18.9x 1,639 32% | 17.2x 1,803 31% | 26.4x 1,178 24% | 23.2x 1,338 26% | 21.0x 1,477 25% | 10% | 10% |
| Fortive Corporation | USA | Dec-22 | 20,315 | 1,714 | 22,033 | 1.3x | 4.8x 4,574 11% | 4.6x 4,751 4% | 4.4x 4,963 4% | 18.1x 1,215 27% | 16.6x 1,326 28% | 15.5x 1,418 29% | 27.3x 806 18% | 24.0x 918 19% | 22.0x 1,001 20% | 4% | 8% |
| Halma plc | UK | Mar-23 | 8,615 | 619 | 9,213 | 1.4x | 5.2x 1,772 20% | 4.7x 1,950 10% | 4.4x 2,073 6% | 22.7x 406 23% | 20.3x 453 23% | 18.8x 490 24% | 28.9x 319 18% | 23.4x 394 20% | 21.0x 439 21% | 8% | 10% |
| HORIBA, Ltd. | Japan | Dec-22 | 2,597 | (382) | 2,215 | n/a | 1.5x 1,504 20% | 1.4x 1,560 4% | 1.4x 1,628 4% | 7.0x 319 21% | 7.2x 307 20% | 6.5x 340 21% | 8.7x 255 17% | 9.4x 235 15% | 8.6x 257 16% | 4% | 3% |
| Keysight Technologies, Inc. | USA | Oct-23 | 21,863 | (350) | 21,513 | n/a | 5.0x 4,261 8% | 5.1x 4,259 (0%) | 5.2x 4,156 (2%) | 16.4x 1,311 31% | 16.5x 1,308 31% | 16.2x 1,330 32% | 19.9x 1,083 25% | 19.7x 1,095 25% | 18.3x 1,175 26% | nmf | 1% |
| MKS Instruments, Inc. | USA | Dec-22 | 5,401 | 3,337 | 8,738 | 5.2x | 3.1x 2,785 20% | 3.1x 2,807 1% | 3.0x 2,884 3% | 12.3x 710 26% | 13.5x 646 23% | 12.7x 689 24% | 16.8x 520 19% | 16.5x 530 19% | 15.3x 570 20% | 2% | nmf |
| Oxford Instruments plc | UK | Mar-23 | 1,328 | (44) | 1,284 | n/a | 3.0x 426 20% | 2.8x 454 7% | 2.7x 471 4% | 16.3x 79 19% | 14.4x 89 20% | 13.4x 96 20% | 20.4x 63 15% | 16.7x 77 17% | 15.3x 84 18% | 5% | 10% |
| Renishaw plc | UK | Jun-23 | 2,602 | (193) | 2,386 | n/a | 3.5x 680 10% | 3.5x 681 0% | 3.4x 694 2% | 13.8x 173 25% | 14.5x 165 24% | 13.3x 180 26% | 16.4x 145 21% | 18.1x 132 19% | 17.4x 137 20% | 1% | 2% |
| Shimadzu Corporation | Japan | Mar-23 | 6,471 | (836) | 5,635 | n/a | 2.2x 2,612 12% | 2.0x 2,799 7% | 1.9x 2,913 4% | 12.0x 470 18% | 11.3x 500 18% | 10.6x 533 18% | 15.1x 374 14% | 14.0x 401 14% | 13.2x 426 15% | 6% | 6% |
| Spectris plc | UK | Dec-22 | 3,838 | (152) | 3,683 | n/a | 2.8x 1,327 14% | 2.5x 1,469 11% | 2.4x 1,533 4% | 15.4x 239 18% | 12.0x 306 21% | 11.4x 322 21% | 20.4x 181 14% | 14.7x 250 17% | 13.5x 272 18% | 7% | 16% |
| Teledyne Technologies Incorporated | USA | Jan-23 | 16,532 | 2,148 | 18,683 | 1.9x | 4.2x 4,447 4% | 4.0x 4,632 4% | 3.8x 4,871 5% | 17.3x 1,078 24% | 16.2x 1,154 25% | 15.0x 1,243 26% | 22.6x 827 19% | 20.8x 899 19% | 19.2x 975 20% | 5% | 7% |
| Min | | | | | | | 1.5x | 1.4x | 1.4x | 7.0x | 7.2x | 6.5x | 8.7x | 9.4x | 8.6x | 1% | 1% |
| Mean | | | | | | | 3.8x | 3.6x | 3.5x | 15.7x | 14.7x | 13.7x | 20.3x | 18.2x | 16.8x | 5% | 7% |
| Median | | | | | | | 3.5x | 3.5x | 3.4x | 16.3x | 14.5x | 13.4x | 20.4x | 18.1x | 17.4x | 5% | 7% |
| Max | | | | | | | 6.4x | 6.0x | 5.3x | 22.7x | 20.3x | 18.8x | 28.9x | 24.0x | 22.0x | 10% | 16% |

Note: Multiples are based on enterprise value as of 29 December 2023 and historical and forecast sales, EBITDA and EBIT, calendarised to December end. "nmf": not meaningful; "n/a": not available. Enterprise Value is adjusted for minority interest, preference equity, pension deficit and investments in associates.

Highlighted values are considered as outliers and are not included in calculations

Source: CapIQ/Broker Reports

Instrumentation

Life Sciences

| | | | | | | | EV/Revenue | | | EV/EBITDA | | | EV/EBIT | | | 2 Year CAGR 2022-2024 | |
|-----------------------------------|---------|---------------|-------------------|-------------------|-----------|--------------------------|----------------------------------|-------------------------|-------------------------|---------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|--------|
| | | | | | | | Revenue (GBPm) Revenue growth | | | EBITDA (GBPm) EBITDA % | | | EBIT (GBPm) EBIT % | | | | |
| Company | Country | Year End Date | Market Cap (GBPm) | Net Debt / (Cash) | EV (GBPm) | Net debt / EBITDA (2023) | 2022 | 2023 | 2024 | 2022 | 2023 | 2024 | 2022 | 2023 | 2024 | Sales | EBITDA |
| Agilent Technologies, Inc. | USA | Oct-23 | 31,981 | 1,028 | 33,009 | 0.7x | 6.1x 5,374 7% | 6.2x 5,357 0% | 6.1x 5,381 0% | 21.0x 1,574 29% | 23.3x 1,414 26% | 20.0x 1,649 31% | 25.8x 1,281 24% | 28.4x 1,163 22% | 22.3x 1,478 27% | nmf | 2% |
| Bio-Rad Laboratories, Inc. | USA | Dec-22 | 7,379 | (278) | 7,102 | n/a | 3.2x 2,200 (4%) | 3.4x 2,101 (5%) | 3.3x 2,159 3% | 13.3x 533 24% | 15.6x 454 22% | 15.1x 471 22% | 18.6x 382 17% | 23.6x 301 14% | 21.9x 325 15% | nmf | nmf |
| Bruker Corporation | USA | Dec-22 | 7,985 | 669 | 8,682 | 1.4x | 4.4x 1,987 5% | 3.8x 2,279 15% | 3.5x 2,446 7% | 19.4x 447 23% | 17.9x 486 21% | 16.4x 528 22% | 24.2x 358 18% | 20.6x 421 18% | 19.0x 456 19% | 11% | 9% |
| Danaher Corporation | USA | Dec-22 | 134,204 | 8,544 | 142,754 | 1.3x | 5.8x 24,707 7% | 6.7x 21,230 (14%) | 7.5x 18,938 (11%) | 16.1x 8,853 36% | 21.1x 6,770 32% | 22.2x 6,436 34% | 20.8x 6,863 28% | 24.2x 5,898 28% | 26.0x 5,481 29% | nmf | nmf |
| Judges Scientific plc | UK | Dec-22 | 603 | 55 | 659 | 1.5x | 5.8x 113 24% | 5.2x 128 13% | 4.9x 135 6% | 20.6x 32 28% | 18.1x 36 29% | 16.6x 40 29% | 31.2x 21 19% | 19.1x 35 27% | 18.0x 37 27% | 9% | 11% |
| Mettler-Toledo International Inc. | USA | Dec-22 | 20,649 | 1,601 | 22,249 | 1.6x | 7.2x 3,077 5% | 7.4x 3,014 (2%) | 7.5x 2,968 (2%) | 22.5x 989 32% | 22.3x 996 33% | 22.4x 992 33% | 24.8x 897 29% | 24.1x 925 31% | 24.6x 906 31% | nmf | nmf |
| Revvity, Inc. | USA | Jan-23 | 10,590 | 2,029 | 12,619 | 2.8x | 5.9x (18%) | 5.8x 2,140 1% | 5.4x 2,349 8% | 17.9x 706 33% | 17.7x 713 33% | 16.0x 788 34% | 21.0x 600 28% | 20.8x 607 28% | 18.6x 678 29% | 5% | 6% |
| Sartorius Aktiengesellschaft | Germany | Dec-22 | 17,756 | 4,400 | 22,744 | 5.2x | 6.3x 3,623 21% | 7.7x 2,945 (19%) | 7.1x 3,202 9% | 18.3x 1,240 34% | 27.1x 839 28% | 23.5x 969 30% | 22.3x 1,020 28% | nmf | nmf | nmf | nmf |
| Thermo Fisher Scientific Inc. | USA | Dec-22 | 161,006 | 22,991 | 184,103 | 2.6x | 5.2x 35,262 15% | 5.5x 33,565 (5%) | 5.5x 33,745 1% | 18.9x 9,757 28% | 20.8x 8,848 26% | 20.6x 8,924 26% | 27.3x 6,741 19% | 24.0x 7,674 19% | 23.9x 7,697 23% | nmf | nmf |
| Waters Corporation | USA | Dec-22 | 15,283 | 1,771 | 17,053 | 2.1x | 7.3x 2,333 7% | 7.4x 2,319 (1%) | 7.2x 2,381 3% | 20.7x 824 35% | 20.3x 842 35% | 19.5x 873 37% | 24.6x 694 30% | 24.1x 707 30% | 23.5x 725 30% | 1% | 3% |
| Min | | | | | | | 3.2x | 3.4x | 3.3x | 13.3x | 15.6x | 15.1x | 18.6x | 19.1x | 18.0x | 1% | 2% |
| Mean | | | | | | | 5.7x | 5.9x | 5.8x | 18.9x | 20.4x | 19.2x | 24.1x | 23.2x | 22.0x | 6% | 6% |
| Median | | | | | | | 5.9x | 6.0x | 5.8x | 19.1x | 20.5x | 19.8x | 24.4x | 24.0x | 22.3x | 7% | 6% |
| Max | | | | | | | 7.3x | 7.7x | 7.5x | 22.5x | 27.1x | 23.5x | 31.2x | 28.4x | 26.0x | 11% | 11% |

Note: Multiples are based on enterprise value as of 29 December 2023 and historical and forecast sales, EBITDA and EBIT, calendarised to December end. "nmf": not meaningful; "n/a": not available. Enterprise Value is adjusted for minority interest, preference equity, pension deficit and investments in associates.

Highlighted values are considered as outliers and are not included in calculations

Source: CapIQ/Broker Reports

Test, Inspection & Certification services

| Company | Country | Year End Date | Market Cap (GBPm) | Net Debt / (Cash) | EV (GBPm) | Net debt / EBITDA (2023) | EV/Revenue | | | EV/EBITDA | | | EV/EBIT | | | 2 Year CAGR 2022-2024 | |
|------------------------|---------|---------------|-------------------|-------------------|-----------|--------------------------|----------------------|-----------------------|---------------------|-----------------------|-----------------------|-----------------------|---------------------|---------------------|-----------------------|-----------------------|------|
| | | | | | | | Revenue (GBPm) | Revenue growth | EBITDA (GBPm) | EBITDA % | EBIT (GBPm) | EBIT % | Sales | EBITDA | | | |
| ALS Limited | AU | Mar-23 | 3,329 | 748 | 3,932 | 2.1x | 3.3x 1.177 15% | 2.9x 1,346 14% | 2.7x 1,440 7% | 12.4x 317 27% | 11.1x 353 26% | 10.5x 375 26% | 16.5x 238 20% | 14.9x 263 20% | 14.1x 279 19% | 11% | 9% |
| Applus Services, S.A. | ES | Dec-22 | 1,119 | 788 | 1,941 | 2.7x | 1.1x 1,779 15% | 1.1x 1,783 0% | 1.0x 1,860 4% | 7.1x 272 15% | 6.6x 295 17% | 6.3x 310 17% | 16.2x 120 7% | 10.3x 189 11% | 9.6x 203 11% | 2% | 7% |
| Bureau Veritas SA | FR | Dec-22 | 9,003 | 1,150 | 10,216 | 1.1x | 2.1x 4,903 13% | 2.0x 5,075 3% | 1.9x 5,297 4% | 10.7x 952 19% | 10.1x 1,008 20% | 9.6x 1,068 20% | 14.7x 695 14% | 12.9x 794 16% | 12.2x 841 16% | 4% | 6% |
| Eurofins Scientific SE | DE | Dec-22 | 9,837 | 2,246 | 12,137 | 2.0x | 2.1x 5,825 (%) | 2.1x 5,658 (3%) | 2.0x 6,075 7% | 9.4x 1,292 22% | 10.7x 1,133 20% | 9.5x 1,274 21% | 15.4x 789 14% | 17.7x 687 12% | 15.3x 794 13% | 2% | (1%) |
| Exponent, Inc. | US | Dec-22 | 3,499 | (86) | 3,413 | n/a | 9.4x 364 7% | 8.7x 395 8% | 8.1x 423 7% | 27.7x 123 34% | 29.2x 117 30% | 26.8x 127 30% | 30.9x 111 30% | 35.7x 96 24% | 30.8x 111 26% | 8% | 2% |
| Intertek Group plc | UK | Dec-22 | 6,847 | 1,090 | 7,972 | 1.5x | 2.5x 3,193 15% | 2.4x 3,334 4% | 2.3x 3,470 4% | 11.7x 680 21% | 10.9x 728 22% | 10.3x 771 22% | 16.4x 485 15% | 14.9x 536 16% | 13.9x 573 17% | 4% | 6% |
| Mistras Group, Inc. | US | Dec-22 | 174 | 191 | 365 | 3.0x | 0.7x 540 2% | 0.7x 550 2% | 0.6x 569 4% | 7.2x 50 9% | 5.8x 63 11% | 4.7x 78 14% | 24.6x 15 3% | 16.5x 22 4% | 10.8x 34 6% | 3% | 24% |
| SGS SA | CH | Dec-22 | 12,465 | 3,115 | 15,645 | 2.2x | 2.5x 6,193 4% | 2.5x 6,242 1% | 2.4x 6,486 4% | 12.2x 1,287 21% | 11.0x 1,420 23% | 10.5x 1,494 23% | 18.5x 845 14% | 16.2x 965 15% | 15.2x 1,028 16% | 2% | 8% |
| Min | | | | | | | 0.7x | 0.7x | 0.6x | 7.1x | 5.8x | 4.7x | 14.7x | 10.3x | 9.6x | 2% | 6% |
| Mean | | | | | | | 2.0x | 2.0x | 1.9x | 10.1x | 9.5x | 8.8x | 17.5x | 14.8x | 13.0x | 4% | 10% |
| Median | | | | | | | 2.1x | 2.1x | 2.0x | 10.7x | 10.7x | 9.6x | 16.4x | 14.9x | 13.9x | 3% | 7% |
| Max | | | | | | | 3.3x | 2.9x | 2.7x | 12.4x | 11.1x | 10.5x | 24.6x | 17.7x | 15.3x | 11% | 24% |

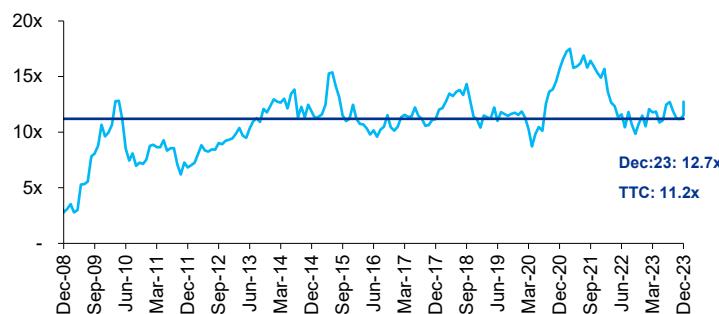
Note: Multiples are based on enterprise value as of 29 December 2023 and historical and forecast sales, EBITDA and EBIT, calendarised to December end. "nmf": not meaningful; "n/a": not available. Enterprise Value is adjusted for minority interest, preference equity, pension deficit and investments in associates.

Highlighted values are considered as outliers and are not included in calculations

Source: CapIQ/Broker Reports

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

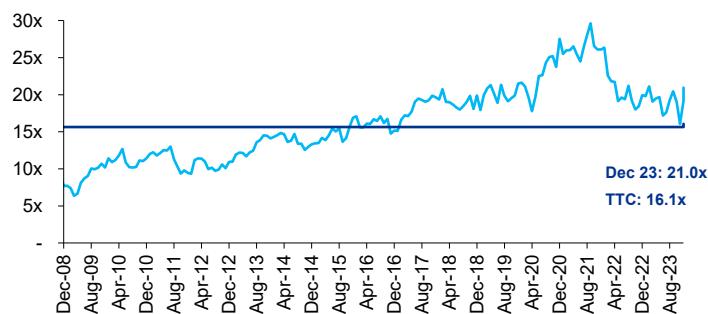
Sensors



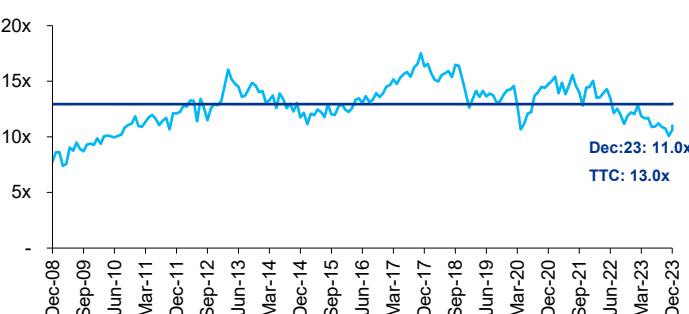
Instrumentation – Industrials



Instrumentation – Life Sciences



Test, Inspection & Certification services



— Median EBITDA — Median EBITDA through the cycle

M&A Transaction History

Sensors

| Date | Target | Country | Target Description | Acquirer | Country | EV | EV/EBITDA |
|--------|-------------------------------|---------|---|--|-------------|------------|-----------|
| May 22 | OMEGA Engineering | USA | Provider of a broad range of process measurement and control instrumentation to industrial | Dwyer Instruments (Arcline) | USA | USD 525m | 20.5x |
| Jun-21 | Photon Control Inc. | Canada | Designs, manufactures and distributes a range of optical sensors and systems to measure temperature and position | MKS Instruments, Inc. | USA | USD 312m | 15.6x |
| Jun-21 | Diversified Technical Systems | USA | Manufacturer of data acquisition systems and sensors for product and safety testing | Vishay Precision Group | USA | USD 47m | 5.9x |
| Apr-21 | Xirgo Technologies Inc | USA | Provides telematics & data insight solutions for transport & logistics end markets | Sensata Technologies | UK | USD 400m | 16.0x |
| Jan-21 | Flir Systems | USA | Designer, manufacturer and marketer of camera systems for a wide variety of thermography and imaging applications | Teledyne Technologies Inc | USA | USD 7,800m | 18.9x |
| Dec-20 | MTS Systems Corporation | USA | Supplier of advanced test systems, motion simulators and precision sensors | Amphenol Corporation | USA | USD 1.7bn | 14.0x |
| Dec-20 | OptaSense Holdings, Ltd | UK | Fiber optic distributed monitoring solutions | Luna Innovations Incorporated | USA | GBP 29m | 13.0x |
| Oct-19 | Sens-Tech Ltd | UK | Manufacturer of x-ray and light detector modules | discoverIE Group plc | UK | GBP 58m | 5.9x |
| Jun-19 | Sensys Networks, Inc. | USA | Provides integrated wireless traffic data systems and traffic management solutions | TagMaster AB | Sweden | USD 16m | 9.4x |
| Jun-19 | First Sensor AG | Germany | Manufacturer of sensors, detectors and emitters | TE Connectivity Ltd. | Switzerland | EUR 308m | 14.5x |
| Apr-19 | Positek Limited | UK | Designer and manufacturer of linear, rotary, tilt and submersible sensors | discoverIE Group plc | UK | GBP 4.6m | 7.7x |
| Oct-18 | Resideo Technologies | USA | Home comfort and security solutions and wholesale distributor of security and low-voltage products | Spin off from Honeywell International Inc. | USA | USD 3,259m | 14.0x |
| Jan-17 | Variohm Holdings Limited | UK | Manufacturer of position, pressure and temperature sensors | discoverIE Group plc | UK | GBP 13.9m | 7.0x |
| Min | | | | | | | 5.9x |
| Mean | | | | | | | 12.5x |
| Median | | | | | | | 14.0x |
| Max | | | | | | | 20.5x |

Source: CapitalIQ Prowess, MergerMarket and KPMG intel

Instrumentation — Industrials

| Date | Target | Country | Target Description | Acquirer | Country | EV | EV/EBITDA |
|--------|--|---------|---|-----------------------|---------|------------|-----------|
| Dec-23 | PCTEL | USA | Provider of wireless technology solutions, including purpose-built Industrial IoT devices, antenna systems and test & measurement products, for USD140m | Amphenol Corporation | USA | USD 140m | 13.5x |
| Dec-23 | Advanced Micro Instruments, Inc. | USA | Provider of analysers & sensing technologies that monitor critical parameters to maintain infrastructure integrity, enhance safety & facilitate clean energy transition | Enpro Inc. | USA | USD 210m | 13.0x |
| Apr-23 | National Instruments Corporation | USA | Provider of software-connected automated test and measurement systems | Emerson Electric Co | USA | USD 8.2bn | 21.5x |
| Nov-22 | CyberOptics Corporation | USA | Developer and manufacturer of high-precision 3D optical sensing technology solutions | Nordson Corporation | USA | USD 380m | 18.5x |
| Jun-22 | Industrial business segment of Roper tech. | USA | Company engaged in designing and developing software and engineered products and solutions | CD&R | USA | USD 5.1bn | 19.6x |
| May-22 | Dytran Instruments | USA | Manufacturer of piezoelectric, MEMS-based and digital accelerometers | Spectris | UK | USD 82m | 15.8x |
| Jan-22 | Zetec (Roper Technologies) | USA | Zetec is engaged in nondestructive testing (NDT) solutions for critical inspection needs | Eddyfi/NDT (Novacap) | Canada | USD 350m | 20.6x |
| Aug-21 | NDC Technologies Inc. | USA | Provider of precision measurement solutions for in-line manufacturing process control | Nordson Corporation | USA | USD 180m | 13.5x |
| Apr-21 | Concurrent Real-Time, Inc. | USA | Supplier of real-time operating systems for hardware-in-the-loop simulation applications | Spectris Plc | UK | USD 167m | 16.0x |
| Mar-21 | Abaco Systems Inc | USA | Provider of mission critical embedded computing systems for aerospace, defense and industrial applications | AMETEK Inc | USA | USD 1,350m | 13.5x |
| Dec-20 | Brüel & Kjaer Vibro (Spectris Subsidiary) | Germany | Supplier of machinery protection & condition monitoring systems for rotating & reciprocating industrial machinery | NSK Ltd | Japan | EUR 180m | 20.0x |
| Jul-20 | Microwave Vision SA (52.06%) | France | Designs, manufactures and sells microwave test systems | Groupe HLD | France | EUR 145m | 10.2x |
| Feb-20 | Sensit Technologies | USA | Manufacturer of gas leak detection instruments for natural gas, fire services and industrial applications | Halma | UK | USD 51.5m | 11.7x |
| Feb-20 | L3Harris Technologies (Security & Detection) | USA | Provides airport and critical infrastructure screening products and other industrial automation products | Leidos Holdings | USA | USD 1bn | 13.3x |
| Dec-19 | BTG Group Limited (Spectris Subsidiary) | UK | Provider of integrated, highly specialised process measuring instruments for the paper industry | Voith GmbH | Germany | EUR 319m | 11.5x |
| Oct-19 | Gatan, Inc. | USA | Manufacturer of instrumentation used to enhance the operation and performance of electron microscopes | AMETEK, Inc. | USA | USD 925m | 14.9x |
| Oct-19 | Rudolph Technologies | USA | Manufacturer of process control metrology and defect inspection systems used by semiconductor manufacturers | Naometrics | USA | USD 769m | 13.4x |
| Aug-19 | 3M Gas and Flame Detection | France | Manufacturer of gas and flame detection products | Teledyne Technologies | USA | USD 230m | 11.0x |
| Nov-18 | Spectro Scientific | USA | Supplier of oil, fuel and fluid analysis instruments to industry, military and laboratories | AMETEK, Inc. | USA | USD 190m | 16.5x |
| Min | | | | | | | 10.2x |
| Mean | | | | | | | 15.2x |
| Median | | | | | | | 13.5x |
| Max | | | | | | | 21.5x |

Source: CapitalIQ Prowess, MergerMarket and KPMG intel

© 2024 KPMG LLP, a UK limited liability partnership and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. Document classification: KPMG Confidential

M&A Transaction History

Instrumentation – Life Sciences

| Date | Target | Country | Target Description | Acquirer | Country | EV | EV/EBITDA |
|--------|---|---------|---|-----------------------------|---------|------------|-----------|
| Dec-23 | Abcam | USA | Life science company that focuses on identifying, developing, and distributing reagents and tools for scientific research, diagnostics and drug discovery | Danaher Corporation | USA | USD 5.7bn | 32.0x |
| Aug-22 | Frontage Clinical Services(88.1%) | USA | Offers services in analytical testing and formulation development, drug metabolism and pharmacokinetics | Frontage Laboratories, Inc. | USA | USD 15m | 11.4x |
| Dec-21 | 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 | USD 5bn | 32.0x |
| Nov-21 | SP Industries | USA | Designer and manufacturer of high-grade biopharma processing equipment & life sciences equipment | ATS | Canada | USD 445m | 15.3x |
| Jul-21 | Luminex Corporation | USA | Develops, manufactures and sells biological testing technologies and products | DiaSorin S.p.A. | USA | USD 1.8bn | 19.8x |
| Sep-20 | Advanced Instruments | USA | Provider of scientific and analytical instruments | Patricia Industries | Sweden | GBP 608m | 24.1x |
| Oct-19 | Danaher Corporation (Life Science business) | USA | Life Sciences business of Danaher Corporation (FortéBio, Pall-Chromatography and SoloHill) | Sartorius AG | USA | USD 750m | 20.0x |
| Aug-19 | BioTek Instruments Inc | USA | Design, manufacture and distribution of innovative life science instrumentation | Agilent Technologies | USA | USD 1bn | 22.0x |
| Feb-19 | Roper Technologies (Scientific-Imaging) | USA | Scientific Imaging business (analytical and scientific instrumentation) of Roper Technologies, Inc. | Teledyne Technologies | USA | USD 225m | 11.0x |
| Feb-19 | GE Biopharma | USA | Provider of instruments, consumables and software that support the workflows of drug manufacturers | Danaher | USA | USD 21.4bn | 17.0x |
| Dec-17 | EUROIMMUN Medical Laboratory | Germany | Develops, produces and distributes devices, software and consumables for human and veterinary medical diagnostics | PerkinElmer, Inc. | USA | EUR 1.2bn | 19.2x |
| Sep-16 | FEI Company | USA | Supplier of instruments for nanoscale imaging, analysis and prototyping | Thermo Fisher Scientific | USA | USD 4.4bn | 19.3x |
| Apr-16 | Newport Corporation | USA | Supplier of technology products to scientific research, microelectronics, life and health sciences industries | MKS Instruments | USA | USD 980m | 17.5x |
| Min | | | | | | | 11.0x |
| Mean | | | | | | | 20.0x |
| Median | | | | | | | 19.3x |
| Max | | | | | | | 32.0x |

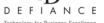
Source: CapitalIQ Prowess, MergerMarket and KPMG intel

Test, Inspection & Certification services

| Date | Target | Country | Target Description | Acquirer | Country | EV | EV/EBITDA |
|--------|---------------------------------------|-------------|---|---|-------------|------------|-----------|
| Jun-23 | Applus Services SA | Spain | Provider of testing, inspection and certification services to the infrastructure, building, energy, power and oil & gas sectors | Apollo Global Management | USA | EUR 1.2bn | 5.9x |
| Aug-21 | Institute of Calibration & Technology | South Korea | Provides measuring instrument calibrations, repair of dysfunctional measuring instruments | Trescal | France | AUD 60m | 9.2x |
| May-21 | SAI Global Assurance | Australia | Provides assurance services, including management systems certification and second party audits | Intertek Group Plc | UK | AUD 855m | 15.5x |
| Dec-20 | SYNLAB Analytics & Services B.V. | Germany | Provides inspection, verification, testing and certification and other laboratory services | SGS SA | Switzerland | GBP 491m | 16.2x |
| Dec-20 | Millbrook (Spectris Subsidiary) | UK | Provides vehicle test, validation and engineering services to automotive, transport, tyre and petrochemical industries | UTAC CERAM | France | GBP 133m | 12.0x |
| Dec-20 | 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 | GBP 42m | 9.0x |
| Apr-20 | LGC Group | UK | Provider of proficiency testing schemes, genomics reagents and instrumentation, research and measurement services | Cinven Partners LLP and Astorg Partners | UK | GBP 3.0bn | 17.5x |
| Feb-19 | Onstream Pipeline Inspection | Canada | Provider of pipeline inspection and data analytics services | MISTRAS Group | USA | USD 190m | 11.9x |
| Aug-18 | Covance Inc. | USA | Provider of innovative product design and product integrity services | Eurofins Scientific | Germany | USD 670m | 23.6x |
| Aug-18 | Alchemy Systems | USA | Provider of web-based training and communication platform focusing on workplace injuries and food safety | Intertek Group Plc | UK | USD 480m | 21.8x |
| Jan-18 | CLS | UK | Provider of scientific laboratory and consultancy services | Spectris | UK | GBP 163m | 18.0x |
| Jan-18 | Trescal SAS | France | Engaged in providing verification, calibration and measurement services | Omers Private Equity | Canada | EUR 670m | 14.9x |
| Dec-17 | EAG Laboratories | USA | Surface analysis and materials characterisation provider delivering innovative analytical services and solutions | Eurofins Scientific | Netherlands | USD 780m | 11.8x |
| Jun-17 | Exova Group plc | UK | Provider of testing, calibration and consulting services | Element Materials Technology | Netherlands | USD 1.06bn | 12.5x |
| Sep-16 | Millbrook Group | UK | Vehicle test, validation and engineering service provider for the automotive markets | Spectris Plc | UK | GBP 122m | 12.5x |
| Apr-16 | WIL Research Laboratories | USA | Provider of safety assessment and manufacturing services to biopharmaceutical and agricultural companies | Charles River Laboratories | USA | USD 585m | 12.9x |
| Min | | | | | | | 5.9x |
| Mean | | | | | | | 14.1x |
| Median | | | | | | | 12.7x |
| Max | | | | | | | 23.6x |

Source: CapitalIQ Prowess, MergerMarket and KPMG intel

KPMG's global test & measurement credentials

| | | | | | |
|---|--|---|---|--|---|
|    acquired by  Dec 2023 |    acquired by  Mar 2023 |    Dorilton. acquired by TXE Capital |    Dorilton. acquired by TXE Capital |    acquired by  Aug 2022 |     (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  AsureQuality |
|    acquired by  Nov 2015 |    acquired by  Sep 2013 |    acquired by  Dec 2012 |    acquired by  Jun 2012 |    acquired by  Jun 2012 |    acquired by  Feb 2012 |

Contact us



Simon Davis
Managing Director

T: +44 (0)7798 877478
E: simon.davis@kpmg.co.uk



Patrick Palicica
Associate Director

T: +44 (0)7464 510458
E: Patrick.palicica@kpmg.co.uk



Conly Manolas
Associate

T: +44 (0)7510 374653
E: Conly.manolas@kpmg.co.uk



Pratiksha Deskar
Analyst

T: +91 (0)9175948302
E: pratiksha.rajendra.Deshkar@kpmg.co.uk

kpmg.com/uk



The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2024 KPMG LLP, a UK limited liability partnership and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organisation.

Produced be Create | CRT144277 | January 2024