

Q2 2025

Industry Insight: Vision Technology Sector Report

M&A Consolidation Heats Up in Vision Technology

Introduction to the ARTHOS Vision Technology Sector Report

We are pleased to present the ARTHOS Vision Technology Sector Report for Q2 2025. This report provides comments and analysis on current market trends, valuation developments, and M&A transactions, focusing on machine vision and metrology vision market segments.

In 2024 and the beginning of 2025, many significant M&A transactions took place. These transactions occurred despite a challenging market environment, but nevertheless, prices paid were pretty attractive, which indicates strong investors' conviction in the long-term growth of Vision Technology markets. In this M&A environment, we expect continuing consolidation and attractive valuations for sellers. If this is of interest to you, we are happy to provide more background.

ARTHOS is an international M&A advisory firm focusing on international technology transactions. Its managing partners have closed more than 200 M&A transactions over the past 20 years. In 2024, ARTHOS and its international AICA M&A alliance partners advised on 64 technology M&A transactions.

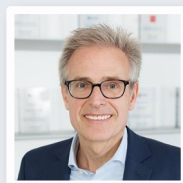
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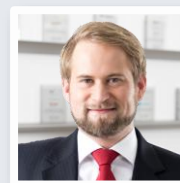
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M&A Consolidation Heats Up in Vision Technology



Personal Note

Looking back at the last 12 months I am genuinely astonished that so **many significant M&A transactions took place**. These include public takeovers (e.g. Stemmer, FARO),

businesses backed by financial sponsors (Vrtek Vision, Photoneo), and founder-owned businesses (Adimec, JAI, Vitronic). What unites them is their role as a major player and recognised center of excellence in their respective sub-segment of the vision industry.

What surprised me most was that these **transactions occurred despite a challenging market environment**, characterised by declining growth rates and an increasing sense of uncertainty about the future. Certainty became almost a foreign concept! Valuations of publicly listed companies in the sector dropped significantly, impacted by macroeconomic and geopolitical headwinds. In particular, U.S.–China trade tensions — including stricter export controls on semiconductor metrology equipment — and rising interest rates dampened market sentiment. As a result, share prices fell, which historically would also suppress M&A activity, since private market valuations often follow public trends.

However, upon analysing the prices paid, enterprise values in many of these transactions were clearly above current public market valuations. This indicates strong investors' conviction in the sector's long-term growth potential.

In 2024, growth took place in other market segments. E.g., the global semiconductor market experienced its highest-ever sales year in 2024, and according to John Neuffer, SIA president and CEO, “double-digit market growth is projected for 2025”. This growth has not yet arrived in the industrial sector, but this is a question of time. **The long-term market outlook for the Vision industry remains highly favourable.** Vision Research, e.g. projects the machine vision market to grow from \$21 billion to \$61 billion by 2033 (CAGR 12.7%), and The Business Research Company expects industrial metrology to grow at a CAGR of 9.0 % until 2029. Growth drivers are the increased R&D in 3D metrology, IoT sensor integration, and an emphasis on quality control in aerospace, automotive, electronics, and life science.

In this environment, we expect continuing consolidation and attractive valuation for sellers. If this is of interest to you, we are happy to provide more background.

Market trends



Machine Vision market size estimated to grow at a CAGR of 12.7% between 2024 and 2033
(Vision Research Reports 2024)



Industrial Metrology market to grow at CAGR of 9.0% until 2029
(The Business Research Company, March 2025)



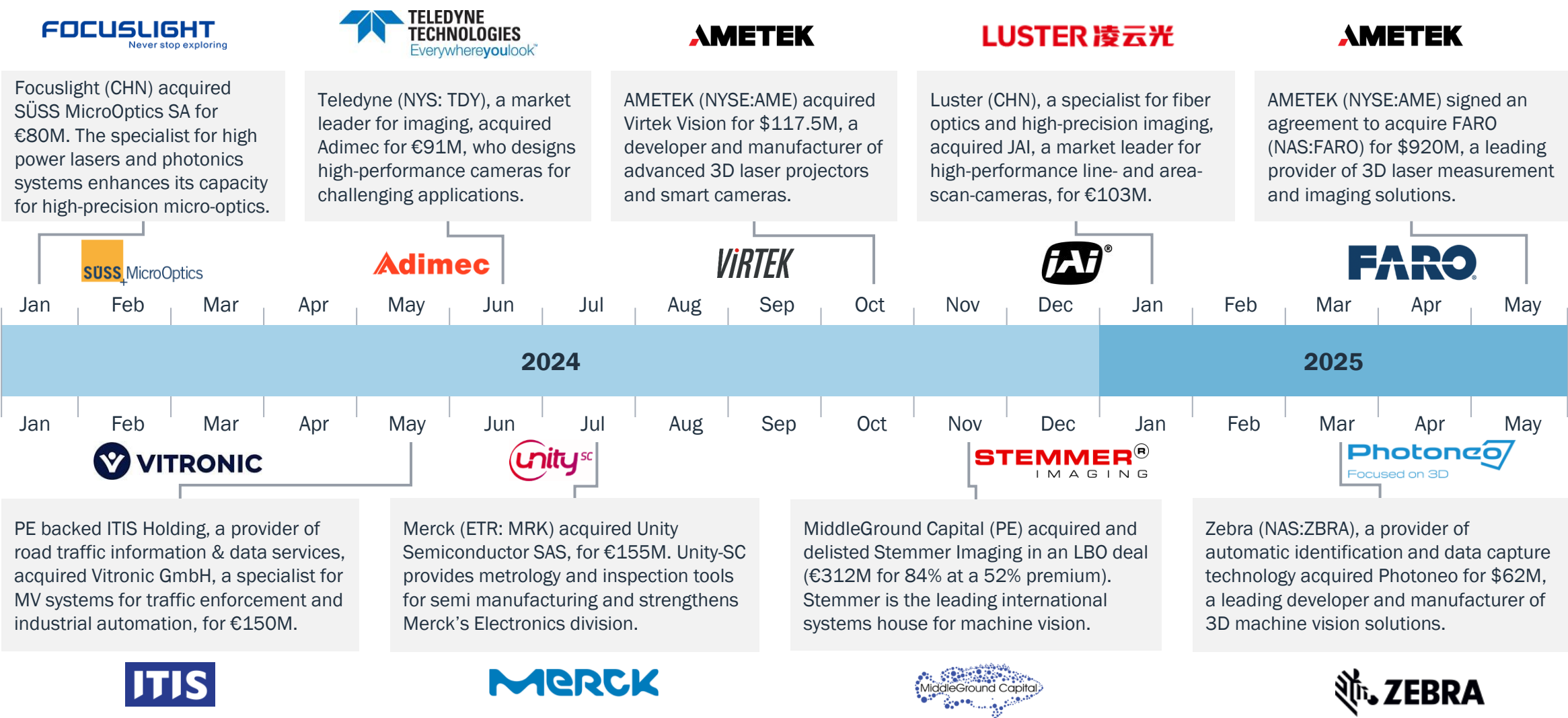
AI integration and edge computing are key growth drivers
(Global Market Insights, 2025)



Global Semiconductor Sales grew 19% in 2024, double-digit growth projected for 2025
(Semiconductor Industry Association, March 2025)

* CAGR: Compound annual growth rate

Many significant Vision M&A Transactions announced in 2024 and the beginning of 2025



Sources: Capital IQ & PitchBook (as of May 13 2025)

Valuation multiples for all Vision sub-sectors are currently trading at 11-14x EBITDA

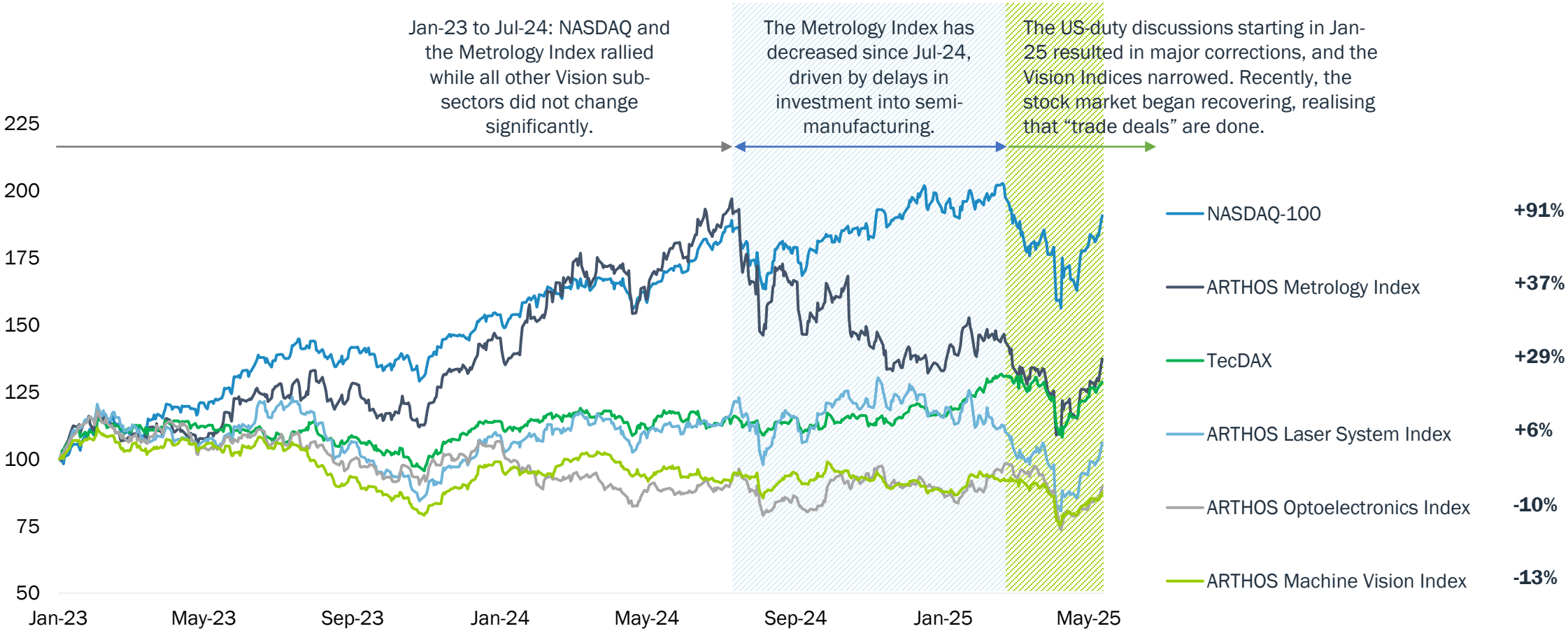
Vision technology sub-sectors	■ NTM EV/Sales* ■ NTM EV/EBITDA*	5y. EPS p.a. growth	Important players
Laser Systems Laser System technology companies utilize laser components for applications in material processing, communications, sensing, medical, instrumentation & many other segments. Laser System companies have moderate valuation multiples and maintain robust growth prospects.	■ 1,8x ■ 10,9x	15%	 COHERENT  KEYENCE  IPG LASER  Novanta
Machine Vision Machine Vision companies provide imaging-based automatic inspection and analysis for process control in industry and other markets. Machine Vision companies were highly valued in 2021 but have come down to a more reasonable level since then.	■ 1,9x ■ 10,7x	10%	 COGNEX  HEXAGON  TELEDYNE TECHNOLOGIES Everywhere you look  T&H GROUP
Vision Metrology Vision companies in this segment master high-end vision technologies, including metrology, nano inspection, and/or lithography, for semiconductor equipment or low-light life science applications. Leading firms in this segment saw substantial reductions during the last 12 months.	■ 3,7x ■ 14,0x	14%	 APPLIED MATERIALS  ASML  KLA  OLYMPUS
Optoelectronics The Optoelectronics sub-sector includes optoelectronic components & systems companies offering components for vision applications. Market sentiment in this area is more cautious, valuations and EBITDA multiples are over time more stable compared with other vision sub-segments.	■ 1,7x ■ 11,7x	8% 2y. Rev. growth	 ROHM SEMICONDUCTOR  三安光电 Sanan Optoelectronics  HAMAMATSU  amul

Sources: Capital IQ (as of May 13 2025)

* NTM EV/Sales; NTM EV/EBITDA: Current enterprise value/next twelve months median estimates

Despite its correction in 2024, the Metrology Index is still moving above its peers

Stock market performance by vision technology sub-sector indices since January 2023



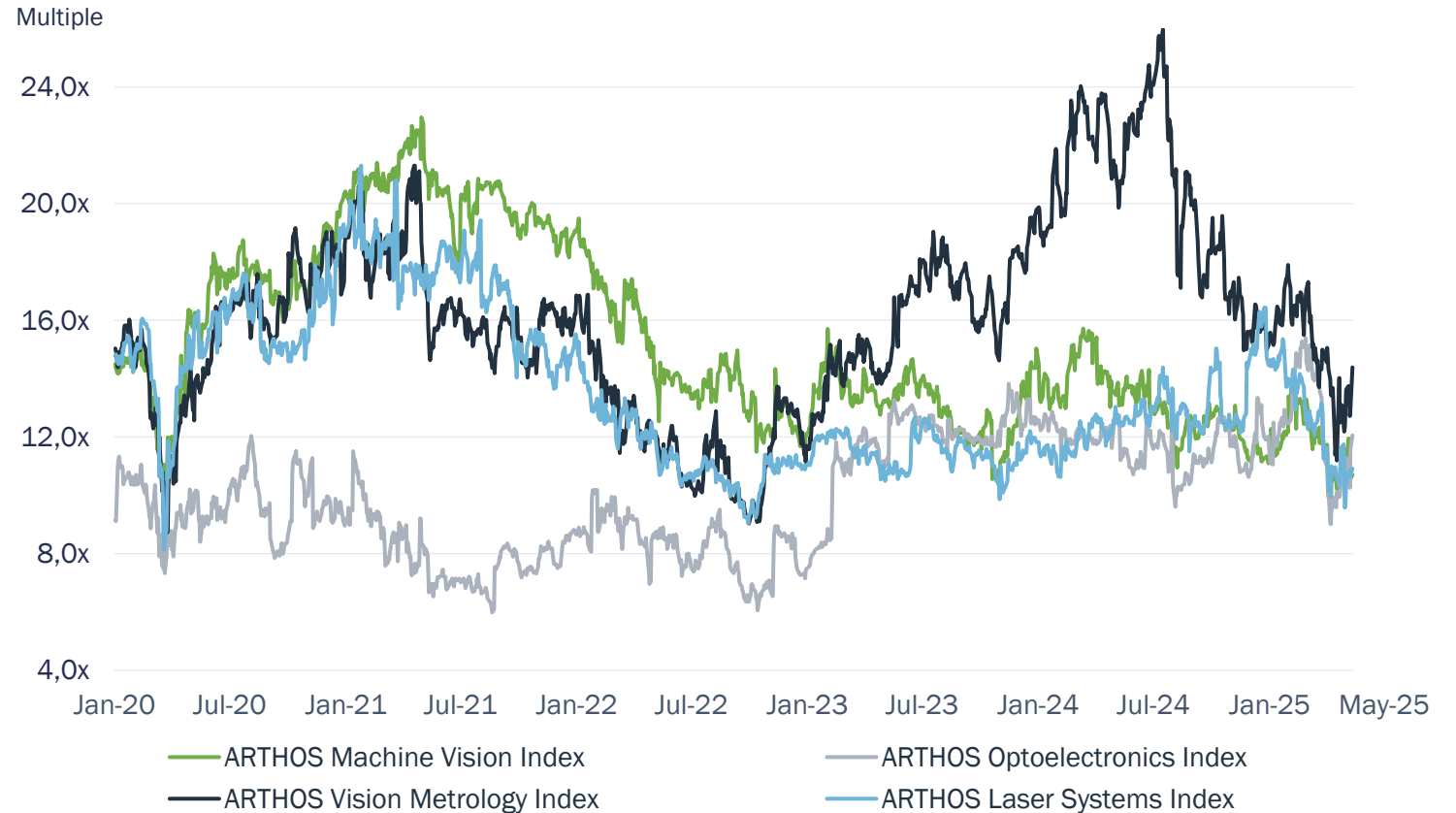
Sources: Capital IQ (as of May 13 2025)
The composition of ARTHOS vision indices is outlined in the appendix, p. 24ff.

NTM EV/EBITDA multiples of Vision Metrology are above all other Vision sectors

NTM EV/EBITDA multiple development

- ➔ Most technology indices usually trade between 12x and 16x EV/NTM EBITDA. They vary significantly over time and are mainly driven by the expectation of individual company performance and industry growth expectations.
- ➔ When valuations in specific industry segments are high, the appetite for acquisitions and the willingness to pay higher prices increase. **As a result, purchase prices for private companies are also influenced by stock market valuations in the same industry.**
- ➔ During 2023, NTM EV/EBITDA multiples of the ARTHOS Vision Metrology Index driven by the expected high demand for semiconductor applications, rose to above 20x, leaving all other sub-sectors behind.
- ➔ **After reaching a peak of over 24x in July 2024, the sub-sector gradually corrected to 14x, driven by delays in new semiconductor manufacturing investments.**

NTM EV/EBITDA* multiple development since January 2020



Sources: Capital IQ (as of May 13 2025)

* NTM EV/EBITDA: Current enterprise value / next twelve months EBITDA estimates [median]

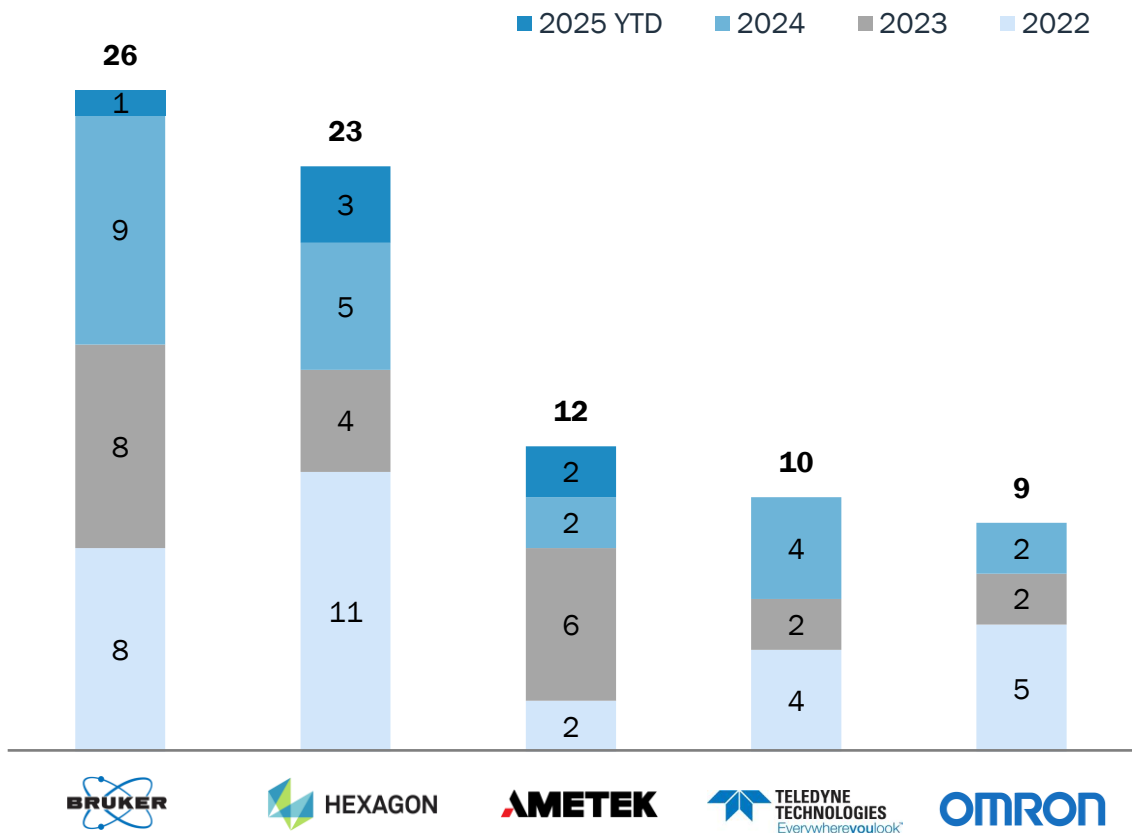
Machine Vision sub-sector analysis: Many Machine Vision Players are very acquisitive

ARTHOS Machine Vision peers

in € mn

Company Name	EV	LTM Sales	Exp. 5Y EPS	EBITDA Margin	NTM	
					EV/Sales	EV/EBITDA
AMETEK, Inc.	38,837	6,418	9%	31%	6.1x	18.8x
Antares Vision S.p.A.	353	208	NM	2%	1.6x	9.0x
Basler Aktiengesellschaft	327	200	NM	4%	1.7x	11.7x
Bruker Corporation	7,261	3,188	5%	17%	2.3x	12.2x
Carl Zeiss Meditec AG	6,019	2,082	10%	10%	2.7x	14.8x
Cognex Corporation	4,659	849	NM	17%	5.3x	27.7x
Datalogic S.p.A.	264	494	NM	5%	0.5x	4.8x
FARO Technologies, Inc.	720	316	NM	9%	N/A	N/A
Hexagon AB (publ)	27,952	5,424	9%	29%	5.0x	13.3x
Jenoptik AG	1,516	1,103	11%	18%	1.3x	6.7x
Kapsch TrafficCom AG	201	549	NM	0%	0.4x	7.3x
Nynomic AG	94	114	NM	15%	0.9x	7.8x
Olympus Corporation	13,893	6,103	35%	20%	2.2x	9.5x
OMRON Corporation	6,236	4,954	56%	11%	1.2x	9.8x
OPT Machine Vision Tech	1,227	121	55%	13%	8.2x	39.0x
Teledyne Inc.	23,071	5,327	10%	24%	4.2x	16.8x
TKH Group N.V.	2,059	1,713	NM	12%	1.2x	7.0x
Tomra Systems ASA	4,229	1,363	9%	16%	2.7x	12.3x
Varex Imaging Corporation	627	753	12%	10%	0.9x	8.3x
Viscom SE	55	86	NM	-4%	0.6x	4.8x
Zebra Technologies Corporation	15,058	4,721	NM	19%	3.1x	15.6x
Mean			20%	13%	2.6x	12.9x
Median			10%	13%	1.9x	10.7x

No. of acquisitions per year of most active buyers



Sources: Capital IQ (as of May 13 2025)

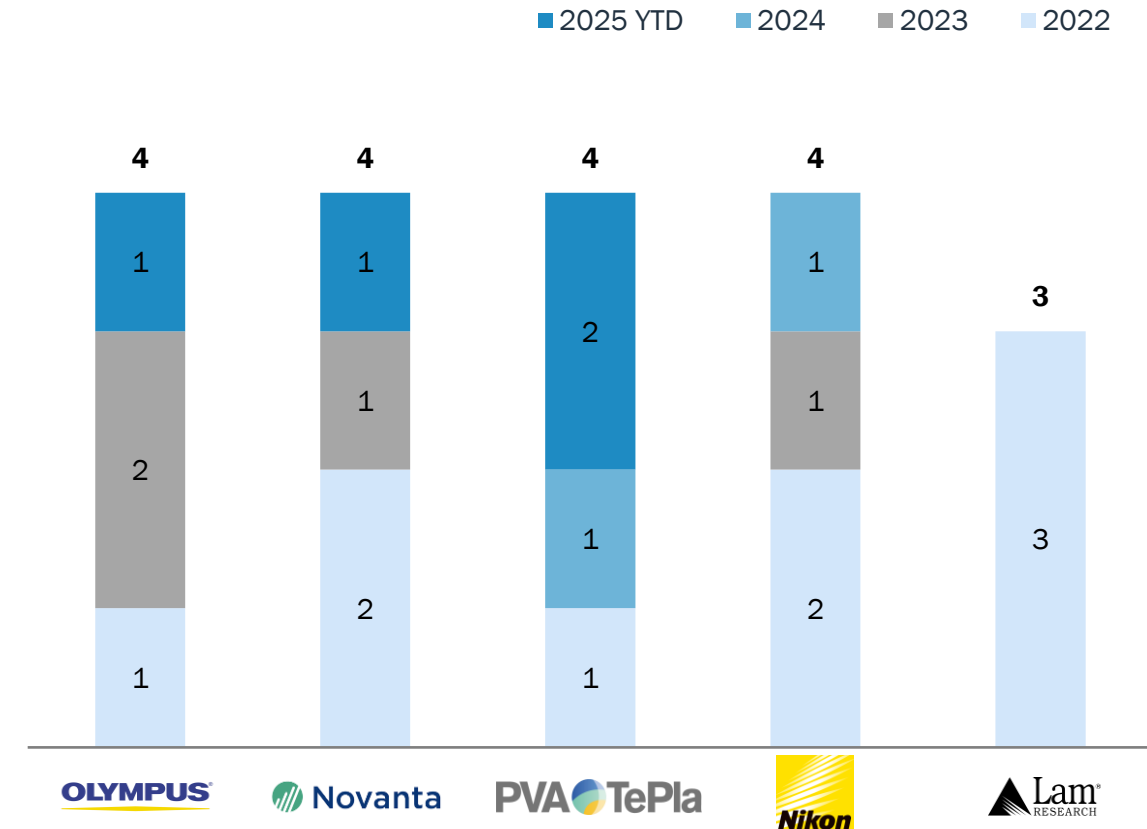
Vision Metrology sub-sector analysis: Fewer M&A Transactions than in other Vision segments

ARTHOS Vision Metrology peers

in € mn

Company Name	EV	LTM Sales	Exp. 5Y EPS	EBITDA Margin	NTM	
					EV/Sales	EV/EBITDA
Park Systems Corp.	1,006	114	N/A	26%	7.2x	21.6x
AUROS Technology, Inc.	136	40	N/A	17%	2.8x	10.5x
Renishaw plc	2,102	849	7%	19%	2.4x	11.9x
Onto Innovation Inc.	3,357	946	16%	26%	3.7x	14.0x
Camtek Ltd.	2,596	415	14%	28%	5.8x	18.3x
Lasertec Corporation	7,853	1,391	16%	48%	5.3x	10.1x
Applied Materials, Inc.	121,277	26,284	9%	31%	4.7x	15.1x
KLA Corporation	92,292	10,686	15%	44%	8.4x	18.2x
Lam Research Corporation	93,744	15,820	16%	33%	5.5x	16.4x
Nova Ltd.	4,642	688	15%	31%	5.9x	17.9x
NEXTIN, Inc.	341	74	N/A	45%	4.1x	9.0x
Tokyo Seimitsu Co., Ltd.	1,962	930	13%	23%	2.1x	9.0x
JEOL Ltd.	1,363	1,252	8%	22%	1.1x	5.4x
ASML Holding N.V.	256,858	30,714	19%	37%	7.9x	21.6x
Cohu, Inc.	585	361	N/A	-6%	1.4x	19.4x
FormFactor, Inc.	1,995	707	N/A	10%	2.8x	16.2x
PVA TePla AG	343	270	11%	17%	1.3x	9.6x
Novanta Inc.	4,562	879	13%	19%	5.1x	21.1x
Nikon Corporation	3,127	4,419	6%	8%	0.7x	7.4x
Olympus Corporation	13,893	6,103	35%	20%	2.2x	9.5x
Priortech Ltd	513	NM	N/A	NM	N/A	N/A
Jenoptik AG	1,516	1,103	11%	18%	1.3x	6.7x
Mean			14%	25%	3.9x	13.8x
Median			14%	23%	3.7x	14.0x

No. of acquisitions per year of most active buyers



Sources: Capital IQ (as of May 13 2025)

Notable Vision M&A transactions in 2024/25 (1 of 9)

Date	Buyer	Target	Comment	Country*
May 2025	 → 	- AMETEK (NYS:AME) signed an agreement to acquire FARO (NAS: FARO) for \$920M on May 6, 2025. The transaction needs shareholder approval and is expected to close by the end of 2025. - FARO Technologies is a leading provider of 3D measurement and imaging solutions, including portable measurement arms, laser scanners and trackers, and software solutions.		
Apr 2025	 → 	- DIVE imaging systems GmbH was acquired by PVA TePla (ETR: TPE) on April 29, 2025. - DIVE is a manufacturer and developer of hyperspectral vision systems and software intended to support non-contact inspection in production environments like bipolar plates, printed circuit boards and wafer-based products.		
Mar 2025	 → 	- autoVimation GmbH was acquired by Exaktera LLC, backed by Union Park Capital, focusing on laser-based solutions for positioning and measurement on March 31, 2025. - autoVimation is a manufacturer of industrial camera enclosures, mounting systems, and accessories intended to protect and support imaging systems in extreme conditions.		
Mar 2025	 → 	- Sandvik (STO: SAND) announced to acquire Verisurf Software Inc. for an undisclosed amount on March 10, 2025. - Verisurf provides real-time metrology software, cad software, tool inspection software, measurement platform, maintenance software and other related services to its clients.		
Mar 2025	 → 	- Photoneo, a sub of the venture backed Photoneo Brightpick Group, was acquired by Zebra (NAS: ZBRA) for \$62M on March 3, 2025. The sister company Brightpick stays with Brightpick Group. - Photoneo is a leading developer and manufacturer of advanced 3D machine vision solutions. Their scanners are used in robot pick-and-place operations in bin picking installations.		
Mar 2025	 → 	- Carl Zeiss Automated Inspection GmbH, a sub of Carl Zeiss, was sold to Callista PE on March 1, 2025. The company will change its name to “Newston Automated Solutions GmbH”. - The target specialises in the development and installation of automated inline measurement systems in the production lines of automotive OEMs.		

Sources: PitchBook & Capital IQ (as of May 13 2025)

*Country of target

 Vision Products/Systems

 Vision Machines/Solutions

 Software

 Service/Distribution

Notable Vision M&A transactions in 2024/25 (2 of 9)

Date	Buyer	Target	Comment	Country*
Feb 2025	 NOVA	→  sentronics METROLOGY	➤ Sentronics Metrology GmbH was acquired by Nova Ltd. (NAS: NVMI) for €58M on February 3, 2025. ➤ Adding Sentronics' modular metrology technology to Nova's portfolio will enable Nova to diversify its offering in the rapidly growing field of advanced wafer-level packaging and specialty devices.	
Jan 2025	 TRIGO	→  CONTROREUPE	➤ Controreupe SASU was acquired by Trigo, on January 20, 2025 for an undisclosed amount. ➤ Controreupe is a provider of non-destructive testing with annual revenues of €3M, intended to offer calibration, measurement control, and expertise in metrology.	
Jan 2025	 Headwall	→  EVK	➤ EVK DI Kerschhaggl GmbH was acquired by Headwall Photonics, via its financial sponsor Arsenal Capital Partners, through an LBO on January 14, 2025 for an undisclosed amount. ➤ EVK develops and manufactures hyperspectral imaging systems, cameras and analysis systems for the analysis and sorting of bulk materials and classifying objects in the material flow.	
Jan 2025	 HEXAGON	→  CAD Service	➤ CAD Service was acquired by Hexagon (STO: HEXA B) on January 21, 2025. ➤ CAD is a developer of visualization tools designed to integrate CAD drawings, BIM models and reality capture data into EAM solutions. The acquisition enables Hexagon to strengthen their industry leading EAM Solution designed to extend asset lifecycles and improve productivity.	
Jan 2025	 LUSTER 凌云光	→  JAI	➤ JAI A/S was acquired by Luster Inc (SHG: 688400) for €103M on January 8, 2025. ➤ The acquisition will help combine JAI's optical imaging technology with Luster's strengths in AI algorithms, thereby enhancing Luster's core competencies in the "Vision + AI" field.	
Jan 2025	 ADVANTEST	→  FORMFACTOR™	➤ FormFactor Inc. (NAS: FORM) is in talks to receive approximately \$15M of development capital from Advantest through a private placement as of January 7, 2025. ➤ FormFactor Inc is a provider of electrical and optical test and measurement technologies along the full semiconductor product lifecycle e. g. manual and automated on-wafer test.	

Sources: PitchBook & Capital IQ (as of May 13 2025)

*Country of target

 Vision Products/Systems

 Vision Machines/Solutions

 Software

 Service/Distribution

Notable Vision M&A transactions in 2024/25 (3 of 9)

Date	Buyer	Target	Comment	Country*
Dec 2024			3D.aero GmbH, a subsidiary of ESPACE 2001, was acquired by MTU Aero Engines (ETR: MTX) for an undisclosed amount on December 17, 2024. 3d.aero is a developer of inspection software and products. The company offers digital inspection, optical measuring devices and image processing applications along with system intelligence.	
Nov 2024			- VisionTools Bildanalyse Systeme GmbH was acquired by Atlas Copco (STO: ATCO A) for an undisclosed amount on November 15, 2024. - VisionTools is a developer of industrial image processing software and fully automatic optical inspection systems enabling organizations to improve product and process quality.	
Nov 2024			- Fairchild Imaging Inc., a subsidiary of BAE Systems, was acquired by Hamamatsu Photonics (TKS: 6965) for an undisclosed amount on November 5, 2024. - Their two-dimensional CMOS sensors capture low-light images, complementing Hamamatsu Photonics' one-dimensional sensors used in analytical instruments and factory automation.	
Nov 2024			- Nanosystec GmbH was acquired by Addtech Electrification, a subsidiary of Addtech (STO: ADDT B) for an undisclosed amount on November 5, 2024. - Nanosystec offers customized systems for industrial manufacturing, including active alignment in the nano-range e. g. correcting smallest imbalances with laser ablation.	
Nov 2024			- Stemmer Imaging AG was taken private by MiddleGround Capital for €312M (84% and 52% premium) on November 5, 2024. The stock was delisted on Nov 29. - Stemmer is the leading international systems house for machine vision technology, offering the entire spectrum of machine vision services for industrial and non-industrial applications.	
Oct 2024			- Virtek Vision International Inc., backed by PE investor AIP LLC, was acquired by AMETEK (NYS: AME) for \$117.5M on October 31, 2024. - Virtek specializes in the development and manufacturing of advanced 3D laser projectors, smart cameras, and quality control inspection systems, powered by AI-driven software and algorithms.	

Sources: PitchBook & Capital IQ (as of May 13 2025)

*Country of target

 Vision Products/Systems

 Vision Machines/Solutions

 Software

 Service/Distribution

Notable Vision M&A transactions in 2024/25 (4 of 9)

Date	Buyer	Target	Comment	Country*
Oct 2024	 SDIGROUP →		- InspecVision Ltd. was acquired by SDI Group (LON: SDI) for \$7.9M on October 30, 2024. - The acquisition of InspecVision enhances SDI Group's technical capabilities with advanced computer vision systems, AI and machine learning, precision metrology equipment, and valuable IP for smart manufacturing and automated inspection.	
Oct 2024	 MYCRONIC →		- Modus High-Tech Electronics GmbH was acquired by Mycronic (STO: MYCR) for €8M on October 16, 2024. - Modus is a manufacturer of automatic optical inspection systems intended for quality control in mass production with fast scan speed.	
Oct 2024			- Prophesee SA was reorganised due to a delayed round of fundraising on October 15, 2024, and is still in process to raise additional funds. - Prophesee is a developer of event-based imaging sensors to enhance the efficiency and speed of video processing. They raised €136M from notable investors, including Intel, Bosch and Xiaomi.	
Oct 2024	 Oxford Metrics →		- The Sempire Group Ltd was acquired by Oxford Metrics (LON: OMG) for £5.5M on October 11, 2024. - This acquisition enhances Oxford's smart manufacturing, complements IVS, and provides industry expertise, sales infrastructure, and access to new customers, partners, products, and markets.	
Oct 2024	 RUTRONIK →		- Rutronik acquired 30% in Collective mind solutions GmbH on October 8, 2024. - Collective mind solutions is a developer of machine vision applications in the Artificial Intelligence environment.	
Sep 2024	 EXAKTERA →		- iiM GmbH was acquired by Exaktera, backed by Union Park Capital, through an LBO on September 30, 2024 for an undisclosed amount. - Exaktera's acquisition of iiM expands its European presence, integrating LED technologies and expertise to serve industries including automotive, medical, and logistics.	

Sources: PitchBook & Capital IQ (as of May 13 2025)

*Country of target

 Vision Products/Systems

 Vision Machines/Solutions

 Software

 Service/Distribution

Notable Vision M&A transactions in 2024/25 (5 of 9)

Date	Buyer	Target	Comment	Country*
Sep 2024	 CAPVEST	→ 	- Invicro LLC. was acquired by Calyx, backed by CapVest Partners, through a \$115M LBO on September 30, 2024. Both companies rebrand together under the name Perceptive. - Invicro is a developer of imaging and analytics software designed to identify effective biomarkers of disease using imaging technology.	
Sep 2024		→ 	- DWFritz Automation LLC, a subsidiary of Sandvik, was acquired by Balmoral Funds through an LBO on September 27, 2024 for an undisclosed amount. - DWFritz is a leading global provider of engineer-to-order automation systems focused on precision metrology, inspection and assembly solutions for advanced manufacturing.	
Sep 2024		→ 	- Vispiron Rotec GmbH was acquired by Klingelberg (SWX: KLIN) for €3.6M on September 2, 2024. - With the acquisition of Vispiron, an expert in rotational analysis, Klingelberg is expanding its leading role as a high-tech gear manufacturer and strengthening its successful business.	
Aug 2024		→ 	- SIGA Vision Ltd. was acquired by Mpac Group (LON: MPAC) for an undisclosed amount on August 15, 2024. - SIGA is a manufacturer and designer of automated visual inspection solutions like cameras for production line issues intended to serve its clients in the food, beverage and healthcare markets.	
Aug 2024		→ 	- OCS Technologies Inc. was acquired by Aldinger, which are backed by Fidus Capital and Incline Equity Partners, through an LBO on August 5, 2024 for an undisclosed amount. - OCS is a provider of calibration services and various devices like dimensional metrology devices and optical vision systems intended for precise measurements and quality control.	
Aug 2024		→ 	- Basler (FRA: BSL) acquired the remaining 74.9% of i2S on Aug. 1, 2024. - Basler acquired 25.1% of its long-time distribution partner in France on July 1, 2022, which proves their strategy to expand its direct business.	

Sources: PitchBook & Capital IQ (as of May 13 2025)

*Country of target

 Vision Products/Systems

 Vision Machines/Solutions

 Software

 Service/Distribution

Notable Vision M&A transactions in 2024/25 (6 of 9)

Date	Buyer	Target	Comment	Country*
Jul 2024			- New Imaging Technology SA was acquired by Lynred for an undisclosed amount on July 31, 2024. - Lynred is consolidating its leadership in infrared sensors by expanding its portfolio with high-definition, large-array SWIR sensors in small pixel pitch, strengthening its product offering across all wavelength bands from short to very longwave.	
Jul 2024			- Unity Semiconductor SAS, a subsidiary of FOGALE Sensors, was acquired by Merck (ETR: MRK) for €155M on July 18, 2024. - Merck's acquisition of Unity-SC enhances its portfolio with advanced measurement technology, enabling production of faster, smaller chips essential for AI innovation and applications.	
Jul 2024			- Qualisys AB received an undisclosed amount of development capital from Swedbank, Svenska Handelsbanken and Spiltan on July 8, 2024. Spiltan has 5.1% stake of the company. - Qualisys is a leading provider of precision motion capture and 3D positioning tracking systems with high-end cameras.	
Jul 2024			- Inrad Optics Inc. was acquired by Luxium Solutions, backed by PE, through a \$19M public-to-private LBO on July 2, 2024 for an undisclosed amount. - Inrad develops, manufactures, and markets products and services for use in photonics industry sectors focusing on crystal based optical components.	
Jul 2024			- SWIR Vision Systems Inc. was acquired by onsemi (NAS: ON) on July 2, 2024. - onsemi acquires SWIR Vision to integrate CQD SWIR technology into CMOS sensors, extending spectral sensitivity and enabling imaging through challenging materials or environments.	
Jun 2024			- Lambda-X S.A., a subsidiary of Verhaert Masters In Innovation, was acquired by Whitestone Partners through an LBO on June 30, 2024, for an undisclosed amount. - Whitestone acquires profitable, high-growth LXO, a global leader in ophthalmic metrology, well-positioned in a growing market with strong strategic and expansion potential.	

Sources: PitchBook & Capital IQ (as of May 13 2025)

*Country of target

 Vision Products/Systems

 Vision Machines/Solutions

 Software

 Service/Distribution

Notable Vision M&A transactions in 2024/25 (7 of 9)

Date	Buyer	Target	Comment	Country*
Jun 2024	 INDUSTRIAL PHYSICS	→ 	- Torus Technology Group Ltd. was acquired by Industrial Physics, backed by Main Street Capital and KKR, through an LBO on June 28, 2024, for an undisclosed amount. - The acquisition enhances Industrial Physics' capabilities in precision metrology and quality control, expanding solutions for metal, plastic packaging, and medical device measurements.	
Jun 2024	 RORZE RORZE ROBOTECH CO., LTD.	→ 	- Rorze (TKS:6323) acquired 33% in Nanoverse Technologies Ltd. for \$70M on June 24, 2024. - Nanoverse provides laser processing and metrology services specifically for the semiconductor industry. The acquisition helps Rorze to grow by utilizing the management resources of the company in the semiconductor-related equipment business.	
Jun 2024	 FONDS de solidarité FTQ	→ 	- InnovMetric Software Inc. received \$45M of development capital from Fonds de solidarité FTQ on June 13, 2024. - InnovMetric specializes in designing and developing 3D metrology software system to serve the manufacturing sector.	
Jun 2024	 TELEDYNE TECHNOLOGIES Everywhere you look	→ 	- Adimec Advanced Image System BV was acquired by Teledyne Technologies (NYS: TDY) for €91M on June 11, 2024. - Adimec is a leading developer and manufacturer of machine vision cameras for challenging applications in the manufacturing process of semiconductors, electronics, healthcare and security.	
May 2024	 sparing CAPITAL	→ 	- In-Vision Technologies AG received \$3M of development capital from Sparring Capital Partners, Cudos Capital and ASP Consulting on May 3, 2024. - In-Vision develops UV light projector combined with a CMOS camera to serve a projector with an integrated microscope for a closed-loop image recognition system.	
May 2024	 ITIS HOLDING	→ 	- Vitronic Machine Vision GmbH was acquired by ITIS Holding, backed by PPF Group, with a €50M LBO on May 1, 2024. The transaction was supported by €100M of debt financing. - PPF Group enhances ITS capabilities by combining ITIS's tolling systems with VITRONIC's machine vision tech, creating a global, end-to-end provider of intelligent mobility and automation solutions.	

Sources: PitchBook & Capital IQ (as of May 13 2025)

*Country of target

 Vision Products/Systems

 Vision Machines/Solutions

 Software

 Service/Distribution

Notable Vision M&A transactions in 2024/25 (8 of 9)

Date	Buyer	Target	Comment	Country*
Mar 2024	MYCRONIC	vanguard AUTOMATION	➤ Mycronic AB (OM:MYCR) signed an agreement on March 22, 2024 to acquire the 3D microfabrication equipment supplier Vanguard Automation GmbH for an undisclosed amount. ➤ With this acquisition, Mycronic can offer a wider range of die bonding and optical packaging-related solutions to its customers.	
Mar 2024	NEWSPACE CAPITAL KNIFE CAPITAL	SIMERA SENSE	➤ Simera Sense, world leader in providing end-to-end optical payload solutions for satellite earth observations, has raised €13.5M from NewSpace Capital and Knife Capital on March 12, 2024. ➤ Simera will use the funds to further develop its product range, increase production capacity and accelerate on-board processing to meet the growing demand for its high-resolution cameras.	
Mar 2024	GreatStar	TESA TECHNOLOGY	➤ TESA Technology SA, a subsidiary of Hexagon (STO: HEXA B), was acquired by Hangzhou Great Star Industrial Company (SHE: 002444) for an undisclosed amount. ➤ TESA is an Innovator and manufacturer of precision measuring instruments like micrometers, calipers, measuring probes and clamping equipment for mechanical engineering.	
Mar 2024	VECTOR	EYES	➤ VECTOR Informatik GmbH acquires the majority of EYES GmbH, an Austrian specialist for intelligent camera solutions for an undisclosed amount on March 4, 2024. ➤ With the acquisition of EYES, VECTOR realizes synergies especially in the technological environment of driver assistance systems for rail and commercial vehicles.	
Feb 2024	SIEMENS	INSPEKTO	➤ On Feb 13, Siemens (XTRA:SIE) has acquired the AI-enabled machine vision software company Inspekto for an undisclosed transaction value. ➤ Siemens leverages Inspekto's technology globally and utilizes the easy-to-use automated visual quality inspection software based on image processing, to drive digital transformation forward.	
Feb 2024	Pinnacle X-Ray Solutions	WILICK ENGINEERING	➤ Pinnacle X-Ray Solutions LLC acquired Willick Engineering Co, Inc., a supplier of nondestructive testing (NDT) X-ray equipment and provider of related services on February 6, 2024. ➤ The acquisition expands Pinnacle's product and service portfolio, and Willick's west coast presence and diversified customer base, will enhance Pinnacle's capacity and national footprint.	

Sources: PitchBook & Capital IQ (as of May 13 2025)

*Country of target

 Vision Products/Systems

 Vision Machines/Solutions

 Software

 Service/Distribution

Notable Vision M&A transactions in 2024/25 (9 of 9)

Date	Buyer		Target	Comment	Country*
Feb 2024		➡		➤ Nanophoton Co. Ltd. was acquired by Bruker (NAS: BRKR) for \$13.3M on February 5, 2024. ➤ Bruker gains advanced Raman microscopy technology from Nanophoton, enhancing molecular imaging capabilities for life sciences, semiconductors, materials science, and pharmaceutical research with high speed, sensitivity, and resolution.	
Jan 2024		➡		➤ Headwall Photonics, Inc. acquired Inno-Spec GmbH, the manufacturer of industrial hyperspectral imaging systems, from Oliver Grass and Assemblify GmbH for an undisclosed amount on Jan 23. ➤ Headwall's cutting-edge optical components and remote sensing technologies together with inno-spec's industrial applications enables the development of powerful hyperspectral imaging systems.	
Jan 2024		➡		➤ China based Focuslight (SHG: 688167) acquired SÜSS MicroOptics SA, a subsidiary of Suss Microtec (ETR: SMHN), for €80M on January 16, 2024. ➤ The developer and manufacturer of diode lasers and photonics systems enhances its front-end manufacturing capacity for high-precision photolithography and reactive ion-etching micro-optics.	
Jan 2024		➡		➤ ABB Ltd (SWX:ABBN) acquired the remaining majority stake in Sevensense Robotics AG, a leading provider of AI-enabled 3D vision navigation technology for autonomous mobile robots, on Jan 11. ➤ The acquisition makes ABB a leader in next-generation AMR with Visual SLAM for autonomous mobile robots and provides a comprehensive portfolio of robotics and automation solutions.	
Jan 2024		➡		➤ On Jan 10, Oxford Instruments plc (LSE:OXIG) acquired First Light Imaging SAS for €18.7M, consisting of €15.7M on a cash and debt free basis and a €3 million earn-out. ➤ First Light's high-speed, low-noise scientific cameras for infrared and visible imaging complement Oxford Instruments' existing portfolio and enable the expansion into adjacent markets.	
Jan 2024		➡		➤ Xovis AG signed an agreement to acquire the "People Sensing Business" of Hella Aglaia Mobile Vision GmbH for an undisclosed amount on January 9, 2024. ➤ The acquisition enhances Xovis' capabilities in the people sensing business through Hella Aglaia's leading high-precision people counting sensors product offering.	

Sources: PitchBook & Capital IQ (as of May 13 2025)

*Country of target

 Vision Products/Systems

 Vision Machines/Solutions

 Software

 Service/Distribution

ARTHOS – International Tech M&A advisory

ARTHOS – International M&A advisory firm with a focus on technology transactions



Partner-led and global

ARTHOS Corporate Finance is an independent, owner-managed M&A advisory firm based in Munich and part of a global alliance of 40 M&A advisory firms with 200 managing partners. All our projects are managed by an experienced managing partner who has successfully closed more than 100 company disposals, acquisitions or fundraisings. The majority of ARTHOS transactions have a volume between 10 and 100 million euros.



M&A 360°

With our 360° approach we can advise our customers in a targeted and comprehensive manner – from the initial planning through the detailed preparation to the efficient execution of a transaction. That is why we see ourselves not only as deal makers, but rather as competent M&A experts, experienced process managers and financial advisers for our client's long-term goals.



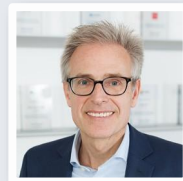
Technology

Our focus on digital media, information technology and high-tech industries provides several powerful advantages to our customers: we know the M&A terms and conditions, business models and decision-makers within these industry sectors. With this knowledge, we are able to implement sustainable, creative solutions. This is why our M&A projects achieve above average results.

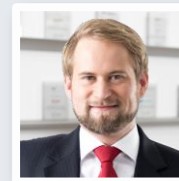
ARTHOS TECHNOLOGY TEAM



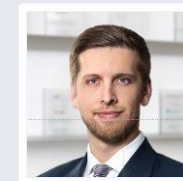
Arne Tödt
Managing Partner



Arno Pätzold
Managing Partner



Thomas Grauvogl
Director



Mattis Menebröcker
Associate

ARTHOS – 20-year track record in international technology M&A transactions



KETEK
Munich, Germany

has sold assets to



Worldwide leading 3D-wideband
Silicon Photomultiplier Technology



Munich, Germany

has been acquired by



Accelerating market presence
in Structured Light Technology



Nürnberg, Germany

has been acquired by



Accelerating growth of inno-spec's
industrial hyperspectral imaging solutions



Amaro, Italy

has acquired



Taufkirchen, Germany

Accelerating Eurotech's growth strategy
in the Edge Computing market in AIoT

MaxxVision

Stuttgart, Germany

has been acquired by



Stockholm, Sweden

Selling to a strategic investor targeting
buy and build in Vision Technology

tacterion

Munich, Germany

has received growth capital from



Gütersloh, Germany

Creating the leading tactile sensor company
to enable the tactile internet of the future

Indutrade

Stockholm, Sweden

has acquired



Villingen-Schwenningen, Germany

Expansion in industry 4.0 conveyor systems
for production process optimization



Munich, Germany

has acquired

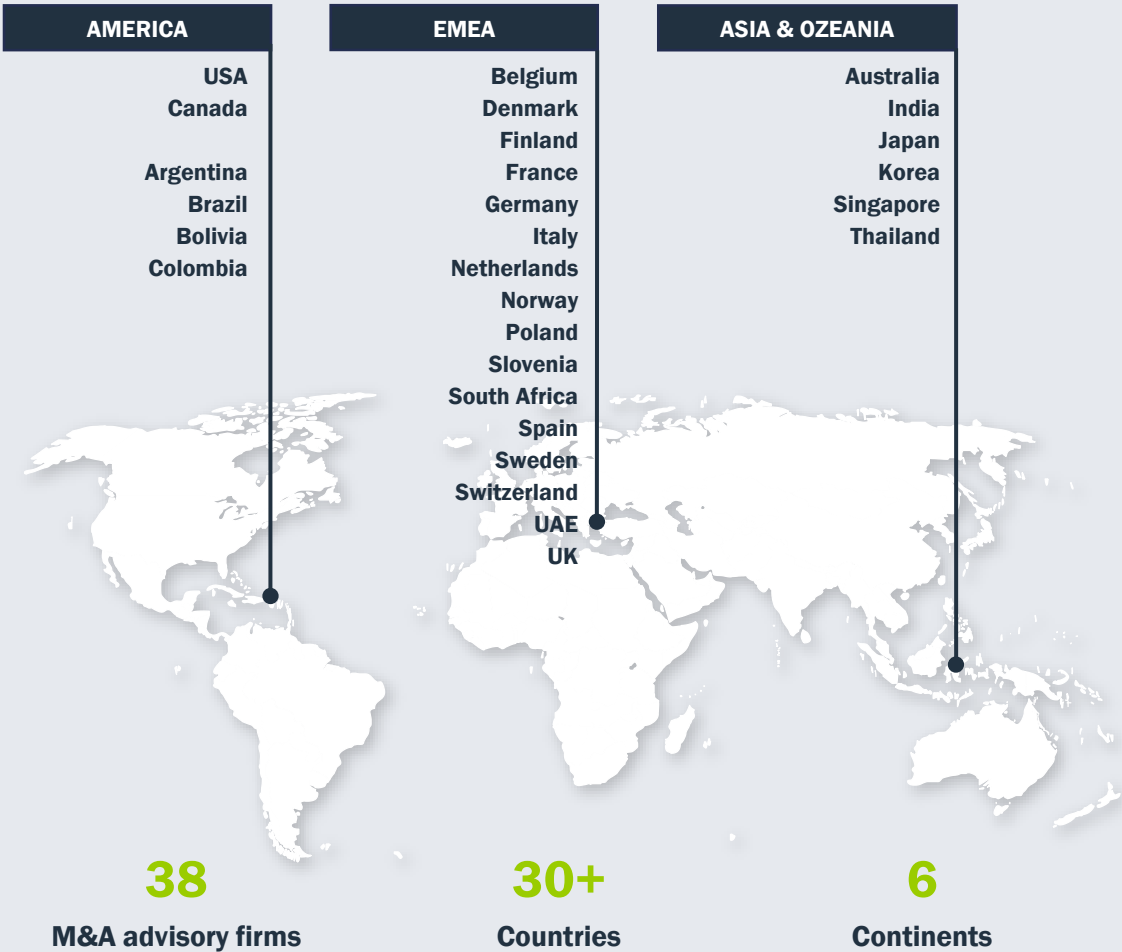


Copenhagen, Denmark

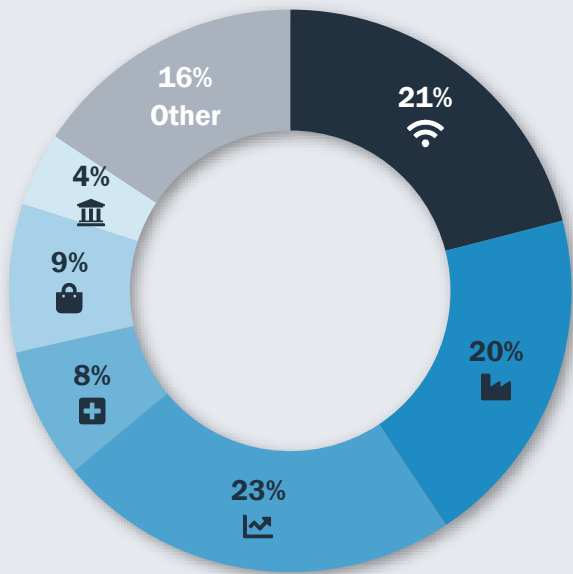
Energy-efficient integrated
audio amplifier solutions

ARTHOS worldwide – partner within the global AICA alliance

Global reach – international cooperation



Transactions by sector in 2024



- Technology
- Industrials
- Business Services
- Healthcare
- Consumer Products
- Financial Services

\$8.5bn
Total transaction value

~\$28m
Ø deal value

305
Deals closed

Contact us for technology M&A advice



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Appendix: Public comps by sub-sector

Public stock comparison – ARTHOS Laser Systems Index

Currency in EUR

Company Name	HQ	Employees	Share	Mkt Cap	EV	Cash	NTM		Exp. 5Y EPS	Margin		NTM Multiples	
			Price	€ mn	€ mn	€ mn	Sales	EBITDA	Growth	Gross	EBITDA	EV/Sales	EV/EBITDA
Bystronic AG	Switzerland	3,268	300.1	604	259	344	661	NM	NM	56%	(5%)	0.4x	NM
Coherent Corp.	USA	26,157	69.9	10,871	16,151	824	5,557	1,258.1	47%	34%	18%	2.9x	12.8x
EL.En. S.p.A.	Italy	2,080	9.7	768	683	157	578	91.5	NM	42%	15%	1.2x	7.5x
Gooch & Housego PLC	UK	911	5.3	136	167	8	178	28.1	26%	31%	12%	0.9x	5.9x
Hamamatsu Photonics K.K.	Japan	6,395	9.2	2,758	2,504	616	1,354	311.5	NM	50%	21%	1.8x	8.0x
Han's Laser Technology	China	16,866	3.1	3,204	3,157	1,150	1,995	184.7	(3%)	31%	6%	1.6x	17.1x
IPG Photonics Corporation	USA	4,740	58.3	2,479	1,660	858	863	115.7	7%	35%	7%	1.9x	14.4x
Jenoptik AG	Germany	4,359	19.2	1,113	1,516	50	1,135	224.8	11%	33%	18%	1.3x	6.7x
Keyence Corporation	Japan	12,286	390.3	94,656	87,252	7,552	6,902	3,712.3	8%	84%	53%	12.6x	23.5x
LPKF Laser & Electronics SE	Germany	773	8.4	207	203	4	141	18.7	NM	68%	3%	1.4x	10.9x
Lumentum Holdings Inc.	USA	7,257	64.5	4,477	6,044	800	1,779	377.8	69%	30%	(2%)	3.4x	16.0x
Lumibird SA	France	1,027	12.0	265	355	71	225	38.9	NM	NM	10%	1.6x	9.1x
MKS Instruments, Inc.	USA	10,200	81.6	5,474	9,112	606	3,423	834.6	17%	48%	24%	2.7x	10.9x
NKT A/S	Denmark	5,904	70.0	3,708	2,755	1,194	3,464	373.9	25%	32%	19%	0.8x	7.4x
nLIGHT, Inc.	USA	800	11.2	555	479	108	202	NM	NM	19%	(19%)	2.4x	NM
Novanta Inc.	USA	3,000	118.4	4,260	4,562	98	902	216.4	13%	45%	19%	5.1x	21.1x
Wuhan Raycus Fiber Laser	China	3,449	2.7	1,535	1,464	136	475	57.3	NM	17%	3%	3.1x	25.5x
Mean									22%	41%	12%	2.7x	13.1x
Median									15%	35%	12%	1.8x	10.9x

Abbreviations:

HQ: Headquarter; NTM: Next twelve months; EPS: Earnings per share; NTM multiples - EV/Estimates: EV as of May 13 2025 divided by NTM estimates (mean of analysts)

EV: Enterprise Value = share price * outstanding shares + total debt + preferred stock + minority interest – cash & short-term investments

Sources: Capital IQ (as of May 13 2025)

Public stock comparison – ARTHOS Machine Vision Index

Currency in EUR

Company Name	HQ	Employees	Share	Mkt Cap	EV	Cash	NTM		Exp. 5Y EPS	Margin		NTM Multiples	
			Price	€ mn	€ mn	€ mn	Sales	EBITDA	Growth	Gross	EBITDA	EV/Sales	EV/EBITDA
AMETEK, Inc.	USA	21,500	161.3	37,245	38,837	369	6,402	2,067.9	9%	36%	31%	6.1x	18.8x
Antares Vision S.p.A.	Italy	1,133	3.8	263	353	62	224	39.2	NM	78%	2%	1.6x	9.0x
Basler Aktiengesellschaft	Germany	881	9.3	283	327	16	197	28.1	NM	47%	4%	1.7x	11.7x
Bruker Corporation	USA	11,396	36.2	5,486	7,261	179	3,190	594.1	5%	50%	17%	2.3x	12.2x
Carl Zeiss Meditec AG	Germany	5,730	64.3	5,471	6,019	20	2,232	407.2	10%	52%	10%	2.7x	14.8x
Cognex Corporation	USA	2,914	28.4	4,773	4,659	185	880	168.3	NM	68%	17%	5.3x	27.7x
Datalogic S.p.A.	Italy	2,683	4.6	251	264	81	524	55.0	NM	42%	5%	0.5x	4.8x
FARO Technologies, Inc.	USA	1,181	37.9	729	720	95	N/A	N/A	NM	56%	9%	N/A	N/A
Hexagon AB (publ)	Sweden	25,091	9.1	24,445	27,952	549	5,582	2,097.5	9%	67%	29%	5.0x	13.3x
Jenoptik AG	Germany	4,359	19.2	1,113	1,516	50	1,135	225	11%	33%	18%	1.3x	6.7x
Kapsch TrafficCom AG	Austria	3,197	7.3	103	201	NM	561	27.5	NM	60%	(0%)	0.4x	7.3x
Nynomic AG	Germany	587	12.6	82	94	15	NM	12.1	NM	29%	15%	0.9x	7.8x
Olympus Corporation	Japan	28,838	12.2	13,814	13,893	1,353	6,292	1,456.0	35%	67%	20%	2.2x	9.5x
OMRON Corporation	Japan	28,450	25.6	5,035	6,236	921	5,141	639.0	56%	45%	11%	1.2x	9.8x
OPT Machine Vision Tech	China	2,268	11.2	1,372	1,227	150	150	31.4	55%	NM	13%	8.2x	39.0x
Teledyne Technologies Inc.	USA	14,900	444.2	20,814	23,071	426	5,522	1,376.4	10%	43%	24%	4.2x	16.8x
TKH Group N.V.	Netherlands	5,834	37.9	1,474	2,059	126	1,783	293.3	NM	52%	12%	1.2x	7.0x
Tomra Systems ASA	Norway	5,300	12.8	3,784	4,229	91	1,562	343.5	9%	60%	16%	2.7x	12.3x
Varex Imaging Corporation	USA	2,300	6.8	281	627	203	728	75.2	12%	34%	10%	0.9x	8.3x
Viscom SE	Germany	526	3.6	32	55	6	90	11.3	NM	62%	(4%)	0.6x	4.8x
Zebra Technologies Corp.	USA	9,900	269.9	13,725	15,058	811	4,793	966.3	NM	49%	19%	3.1x	15.6x
Mean									20%	51%	13%	2.6x	12.9x
Median									10%	51%	13%	1.9x	10.7x

Abbreviations:

HQ: Headquarter; NTM: Next twelve months; EPS: Earnings per share; NTM multiples - EV/Estimates: EV as of May 13 2025 divided by NTM estimates (mean of analysts)

EV: Enterprise Value = share price * outstanding shares + total debt + preferred stock + minority interest – cash & short-term investments

Sources: Capital IQ (as of May 13 2025)

Public stock comparison – ARTHOS Metrology Index

Currency in EUR

Company Name	HQ	Employees	Share	Mkt Cap	EV	Cash	NTM		Exp. 5Y EPS	Margin		NTM Multiples	
			Price	€ mn	€ mn	€ mn	Sales	EBITDA	Growth	Gross	EBITDA	EV/Sales	EV/EBITDA
Advanced Process Corp.	South Korea	349	149.5	1,038	1,006	61	140	46.5	NM	65%	26%	7.2x	21.6x
AUROS Technology, Inc.	South Korea	203	14.9	137	136	9	49	13.0	NM	59%	17%	2.8x	10.5x
Renishaw plc	UK	5,256	32.5	2,359	2,102	282	867	176.7	7%	47%	19%	2.4x	11.9x
Onto Innovation Inc.	US	1,551	84.1	4,109	3,357	785	900	239.6	16%	53%	26%	3.7x	14.0x
Camtek Ltd.	Israel	656	62.2	2,837	2,596	375	445	142.1	14%	49%	28%	5.8x	18.3x
Circuit Fabology Microelec.	Japan	1,017	90.7	8,180	7,853	333	1,485	780.1	16%	57%	48%	5.3x	10.1x
Applied Materials, Inc.	US	35,700	151.1	122,738	121,277	7,811	25,996	8,032.0	9%	48%	31%	4.7x	15.1x
KLA Corporation	US	15,115	683.9	90,439	92,292	3,727	11,036	5,065.4	15%	61%	44%	8.4x	18.2x
Lam Research Corporation	US	18,600	74.0	94,613	93,744	5,032	16,916	5,715.1	16%	48%	33%	5.5x	16.4x
Nova Ltd.	Israel	1,177	175.9	5,151	4,642	501	783	258.7	15%	57%	31%	5.9x	17.9x
NEXTIN, Inc.	South Korea	125	34.8	358	341	25	84	37.9	NM	70%	45%	4.1x	9.0x
Tokyo Seimitsu Co., Ltd.	Japan	2,658	53.5	2,165	1,962	337	949	217.7	13%	41%	23%	2.1x	9.0x
JEOL Ltd.	Japan	3,435	29.5	1,506	1,363	202	1,239	253.3	8%	47%	22%	1.1x	5.4x
ASML Holding N.V.	Netherlands	43,129	666.0	262,281	256,858	9,104	32,516	11,888.2	19%	52%	37%	7.9x	21.6x
Cohu, Inc.	US	2,986	15.8	737	585	185	410	30.2	NM	44%	(6%)	1.4x	19.4x
FormFactor, Inc.	US	2,238	28.9	2,230	1,995	276	708	123.5	NM	40%	10%	2.8x	16.2x
PVA TePla AG	Germany	811	16.8	352	343	31	265	35.7	11%	33%	17%	1.3x	9.6x
Novanta Inc.	US	3,000	118.4	4,260	4,562	98	902	216.4	13%	45%	19%	5.1x	21.1x
Nikon Corporation	Japan	19,444	8.9	2,937	3,127	1,011	4,390	425.0	6%	44%	8%	0.7x	7.4x
Olympus Corporation	Japan	28,838	12.2	13,814	13,893	1,353	6,292	1,456.0	35%	67%	20%	2.2x	9.5x
Priortech Ltd	Israel	2,067	37.6	448	513	2	NM	NM	NM	NM	NM	N/A	N/A
Jenoptik AG	Germany	4,359	19.2	1,113	1,516	50	1,135	224.8	11%	33%	18%	1.3x	6.7x
Mean									14%	50%	25%	3.9x	13.8x
Median									14%	48%	23%	3.7x	14.0x

Abbreviations:

HQ: Headquarter; NTM: Next twelve months; EPS: Earnings per share; NTM multiples - EV/Estimates: EV as of May 13 2025 divided by NTM estimates (mean of analysts)

EV: Enterprise Value = share price * outstanding shares + total debt + preferred stock + minority interest – cash & short-term investments

Sources: Capital IQ (as of May 13 2025)

Public stock comparison – ARTHOS Optoelectronics Index

Currency in EUR

Company Name	HQ	Employees	Share	Mkt Cap	EV	Cash	NTM		Exp. 2Y	Margin		NTM Multiples	
			Price	€ mn	€ mn	€ mn	Sales	EBITDA	Rev. Growth	Gross	EBITDA	EV/Sales	EV/EBITDA
ams-OSRAM AG	Austria	19,700	8.6	850	2,943	573	3,425	647.9	1%	29%	(2%)	0.9x	4.5x
Everlight Electronics Co., Ltd.	Taiwan	4,312	2.3	1,024	702	368	647	111.8	4%	30%	16%	1.1x	6.3x
Focuslight Technologies Inc	China	733	9.0	794	769	NM	114	26.4	43%	NM	NM	6.7x	29.2x
GalaxyCore Inc.	China	2,073	1.8	4,540	5,535	651	997	178.3	19%	NM	18%	5.6x	31.0x
Hamamatsu Photonics K.K.	Japan	6,395	9.2	2,758	2,504	616	1,354	311.5	6%	50%	21%	1.8x	8.0x
Himax Technologies, Inc.	Taiwan	2,177	7.3	1,285	1,521	260	772	93.9	6%	31%	10%	2.0x	16.2x
Jiangxi Lian Chuang OE	China	4,449	7.4	3,357	3,328	NM	469	108.1	17%	17%	5%	7.1x	30.8x
LG Innotek Co., Ltd.	South Korea	10,255	97.2	2,301	3,068	769	13,100	1,218.8	2%	100%	NM	0.2x	2.5x
Lumentum Holdings Inc.	USA	7,257	64.5	4,477	6,044	800	1,779	377.8	24%	30%	(2%)	3.4x	16.0x
OFILM Group Co., Ltd.	China	11,133	1.5	4,955	5,492	276	3,778	201.7	19%	11%	6%	1.5x	27.2x
Radiant Opto-Electronics	Taiwan	733	4.4	2,051	1,337	892	1,422	214.0	(2%)	21%	14%	0.9x	6.2x
ROHM Co., Ltd.	Japan	23,014	8.6	3,335	4,094	1,694	2,775	428.4	1%	23%	18%	1.5x	9.6x
Samsung Electromechanics	South Korea	11,805	80.0	6,149	6,044	1,326	7,166	1,251.2	7%	19%	15%	0.8x	4.8x
Sanan Optoelectronics Co.	China	15,828	1.6	7,533	7,859	1,104	2,332	565.2	21%	10%	21%	3.4x	13.9x
Sunny Optical Technology	China	33,884	7.9	8,555	6,745	2,834	5,416	734.6	13%	18%	12%	1.2x	9.2x
Universal Display Corp.	USA	468	139.3	6,623	6,129	529	608	256.7	8%	76%	45%	10.1x	23.9x
Mean									12%	33%	14%	3.0x	15.0x
Median									8%	26%	15%	1.7x	11.7x

Abbreviations:

HQ: Headquarter; NTM: Next twelve months; EPS: Earnings per share; NTM multiples - EV/Estimates: EV as of May 13 2025 divided by NTM estimates (mean of analysts)

EV: Enterprise Value = share price * outstanding shares + total debt + preferred stock + minority interest – cash & short-term investments

Sources: Capital IQ (as of May 13 2025)