



TKH
VISION

MACHINE VISION SOLUTIONS. UNITED. <

Introducing the global technology leader in state-of-the-art
integrated 2D/3D machine vision solutions

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> About TKH Vision

Founded by the TKH Group in 2021, TKH Vision is a partnership of eight proven machine vision technology providers under the TKH Group brand, working both collaboratively and independently to deliver integrated smart vision systems to the global market.

Our combination of complementary technologies are the first step in providing customers with complete 2D/3D solutions, under one umbrella of trusted and cooperating companies, with the goal of offering easy access to the highest quality products through a simpler and more integrated purchase, implementation, and support experience.

The companies of TKH Vision are all aligned around a common mission to build long-term partnerships with our customers. By being a reliable partner that provides the best technology with excellent support, the existence of TKH Vision improves our ability to deliver this experience to our customers, while operating the companies individually allows for entrepreneurship and agility in responding to customer needs.



Mark Radford
Vice President of TKH Vision

As the machine vision arm of the TKH Group, TKH Vision is at the forefront of developing and deploying high-performance, integrated 2D/3D vision solutions, while leveraging a synergistic approach that reflects both the organization's ongoing commitment to better serving its customers and its role as a global technology leader.



Alexander van der Lof
CEO of TKH Group

I am delighted to join the TKH Vision group in early 2023 as CEO of the 2D companies, including Allied Vision, Chromasens and SVS Vistek, to name a few. There is so much potential in this group! We will continue to focus on our customers problems and solving them. The latest addition of Euresys allows us to do so by providing even more value, especially in the software field.



Robert Franz
CEO of TKH 2D Vision

> Member Companies



www.alliedvision.com



AREA SCAN LEADER IN SWIR, INDUSTRIAL AND EMBEDDED

By focusing on what counts for each customer, Allied Vision finds solutions for every application, a practice which has made Allied Vision one of the leading camera manufacturers worldwide in the machine vision market.

Originally built with the needs of factory automation in mind, our camera portfolio now extends to a wide variety of sectors including science and research, medical imaging, traffic monitoring, and sports analytics. To address the wide variety of application challenges, we design our cameras in a modular way. The result is a diversity of interfaces, sensors, lens mounts, filters, housing variants, and many more options tailored to customers' applications.

Industrial Inspection Applications:

- factory automation
- automotive
- robotics and drones
- semiconductors
- photovoltaic and battery inspection
- electronics
- sort and pack
- laser beam profiling
- medical imaging equipment
- lab automation and microscopy
- intelligent traffic systems
- sport and motion analytics
- logistics and warehouse automation



www.chromasens.de



LINE SCAN AND OEM CUSTOMIZING SOLUTION EXPERT

Our main focus is the development and delivery of a comprehensive line scan portfolio that includes 2D and 3D technology, multi-spectral technology and high-intensity LED light sources.

The fully-configurable and scalable line scan vision platform allows unlimited use of our standard portfolio. We also specialize in customized vision OEM solutions without limitation – both area-scan and line-scan.

As application experts, we don't just supply products, we understand our customers' applications and develop high-performance, cost-optimized image processing solutions that are perfectly matched to the individual application.

Industrial Inspection Applications:

- print & packaging inspection
- electronics & semiconductor wafer inspection
- solar cells inspection
- sorting
- food & beverage inspection
- medical engineering
- archiving & digitalization
- automotive
- security technology
- road inspection
- train and rail inspection



www.svs-vistek.com



HIGH QUALITY CAMERAS FOR MACHINE VISION

SVS-Vistek is a manufacturer of high-end cameras for machine vision applications in the areas of high-resolution and now, with the acquisition of Mikrotron GmbH, also high-speed. Our cameras are used where a closer look is needed and first-class images are required.

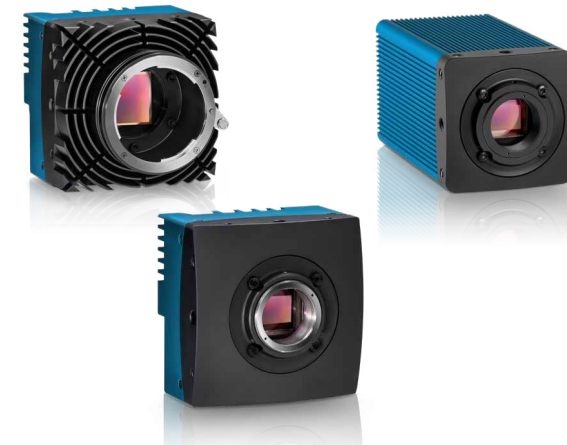
Our industrial cameras are used, for example, to inspect the quality of industrially manufactured goods, help to regulate traffic and make it safer, or offer the film industry opportunities for exciting scenes from unusual angles. Cameras from SVS-Vistek offer you more than just state-of-the-art technology: Efficient, lean and customer-oriented processes in production, administration and service ensure on-time delivery, the highest quality standards and easy integration of our cameras. To ensure this, we work closely with renowned and reliable suppliers and are in constant dialog with our business partners.

Industrial Inspection Applications:

- aerial imaging
- agriculture
- electronics & semiconductor
- wafer inspection
- food & beverage inspection
- print & packaging inspection
- medical engineering
- speed enforcement
- solar cells inspection
- sorting



www.mikrotron.de



PRECISION, PERFORMANCE, AND RELIABILITY!

SVS-Vistek GmbH has acquired 100% of the shares of Mikrotron GmbH retroactively as of 01 January 2022. Mikrotron cameras will continue to be developed, produced, distributed and supported under the well-known brand Mikrotron by the extended team of SVS-Vistek.

With the Mikrotron brand, we offer small, particularly robust digital high-speed cameras that are used worldwide in industrial and scientific applications as well as in sports analysis, advertising or documentary film.

Industrial Inspection Applications:

- meltpool monitoring
- laser triangulation / 3d
- predictive maintenance
- pcb inspection
- aoi
- surface inspection
- train and rail inspection
- medical laser positioning
- surveillance
- motion analysis
- metrology
- process analysing
- troubleshooting





www.lmi3d.com

THE GLOBAL LEADER IN 3D SCANNING AND INSPECTION

LMI Technologies' primary focus is the advancement 3D smart sensor technology for fast and accurate measurement. We offer a wide range of smart 3D sensor product families designed to help factories achieve 100% inline inspection, reduce waste through material optimization, and improve production efficiency by simplifying factory automation processes.

Our award-winning FactorySmart® laser, snapshot, and line confocal sensors are deployed worldwide to improve the quality and efficiency of production by providing fast, accurate, reliable inspection solutions that leverage smart 3D technologies. Unlike contact based measurement or 2D vision, our non-contact solutions add 3D shape information that is critical to achieving 100% quality control. We also offer full-service AI-based solutions for deep-learning driven industrial inspection.



Industrial Inspection Applications:

- automotive inspection
- consumer electronics inspection
- ev battery inspection
- food processing inspection
- packaging & logistics inspection
- road & rail inspection
- rubber & tire inspection
- semiconductor inspection
- wood inspection



www.nerian.com

HIGH-SPEED STEREO VISION SOLUTIONS FOR REAL-TIME 3D DEPTH MEASUREMENTS

With the focus on the development of innovative 3D depth sensors, Nerian revolutionizes the 3D depth camera market for machine vision solutions.

Nerian Vision Technologies specializes in the development of innovative 3D depth sensor systems. The technology behind our devices is stereo vision, which like the human depth perception works by comparing two images.

Our innovative approach of using an FPGA for image processing makes our cameras some of the fastest 3D sensors on the market. The capability of operating in presence of bright daylight and over long measurement distances allows our cameras to be used even in challenging outdoor applications.



Industrial Applications:

- factory automation
- mobile robotics
- bin picking
- autonomous vehicles
- agriculture automation
- construction automation
- logistics





www.net-gmbh.com

CUSTOMIZED AND EMBEDDED VISION SOLUTIONS

The demand of each customer is key for NET's camera development. We listen, understand and provide camera platforms that deliver the added value to the application.

Our customers around the world appreciate the understanding of transferring customized application requirements into a product design where they can integrate their IP into the camera. Customers in the industrial and medical environment confirm the added value that this creates every day anew.

Benefit from NET's know-how to develop a unique solution in your application!



Industrial Inspection Applications:

- factory automation
- industrial inspection
- robotics
- print & packaging
- electronics
- semiconductor
- food & beverage
- recycling
- transport & logistics

Medical Inspection Applications:

- pharmaceutical
- endoscopy
- dental
- microscopy



www.tattile.com

LEADERS IN ANPR CAMERAS AND SOFTWARE APPLICATIONS FOR SMART CITIES

Since 1988 Tattile has successfully developed embedded License Plate Reader cameras and software applications for the ITS & Mobility markets. Today, the extensive implementation of AI-based applications makes Tattile one of the leading companies in the Smart City & Traffic Monitoring industry.



www.tkhvision-italy.com

TECHNOLOGICAL PARTNER FOR MACHINE VISION APPLICATIONS

TKH Vision Italy is the direct channel of TKH Vision group in Italy. Our mission is to serve OEM customer and System Integrator with our bundle solutions, both hardware and software, offering always value-add thanks to our application know-how. Our experts can support customers in every phase of a project, from requirements definition, feasibility study to project delivery.



Industrial Inspection Applications:

- tolling
- vehicle tracking
- enforcement
- railway

Industrial Inspection Applications:

- printing & packaging
- sorting & recycling
- electronics and semiconductor
- automotive
- food & beverage
- steel & textile
- medical & pharma

> Technologies at a Glance

> TKH Vision Solution Center

Located in Konstanz, Germany



Area Scan	✓		✓	✓	✓ ¹	✓	✓	✓
Line Scan		✓			✓ ¹		✓	✓
3D		✓			✓	✓		
Embedded	✓			✓	✓	✓	✓	✓
High-Speed		✓		✓	✓ ¹	✓		
SWIR	✓	✓	✓					
UV	✓	✓	✓					
Polarized	✓	✓	✓					

¹ Based on 3D Line and Area Scanner



Camera Link	✓	✓	✓	✓				✓
CoaXPress	✓	✓	✓	✓				
GigE ² Vision	✓	✓	✓	✓				✓
USB	✓		✓			✓	✓	
CSI-2	✓							
GigE		✓			✓ ³	✓		

² 1GigE, 5GigE, 10GigE, 25GigE

³ Supporting Profinet, ModBus, ASCII, EthernetIP

> WE MANAGE COMPLEXITY IN MACHINE VISION

The TKH Vision Solution Center is based in Konstanz, Germany, serving as a dedicated location for customers to meet with TKH representatives in-person, and experience LIVE product demonstrations from all member companies in the TKH Vision group.

Based on our wide TKH Vision portfolio and know-how, we provide integrated, turnkey vision solutions for machine builders and system integrators. We manage the complexity of machine vision for our customers and develop, in close coordination, a unique series production solution that is perfectly designed to their application requirements.

The TKH Vision Solution Center is an extensively equipped demo and experience center in which we bundle the capabilities, expertise, products and technologies of our TKH Vision members.



Together with our customers, we discuss their individual requirements and work out the best possible solution for their tasks, with the aim of developing and delivering highly optimized customer-specific products and complete solutions.

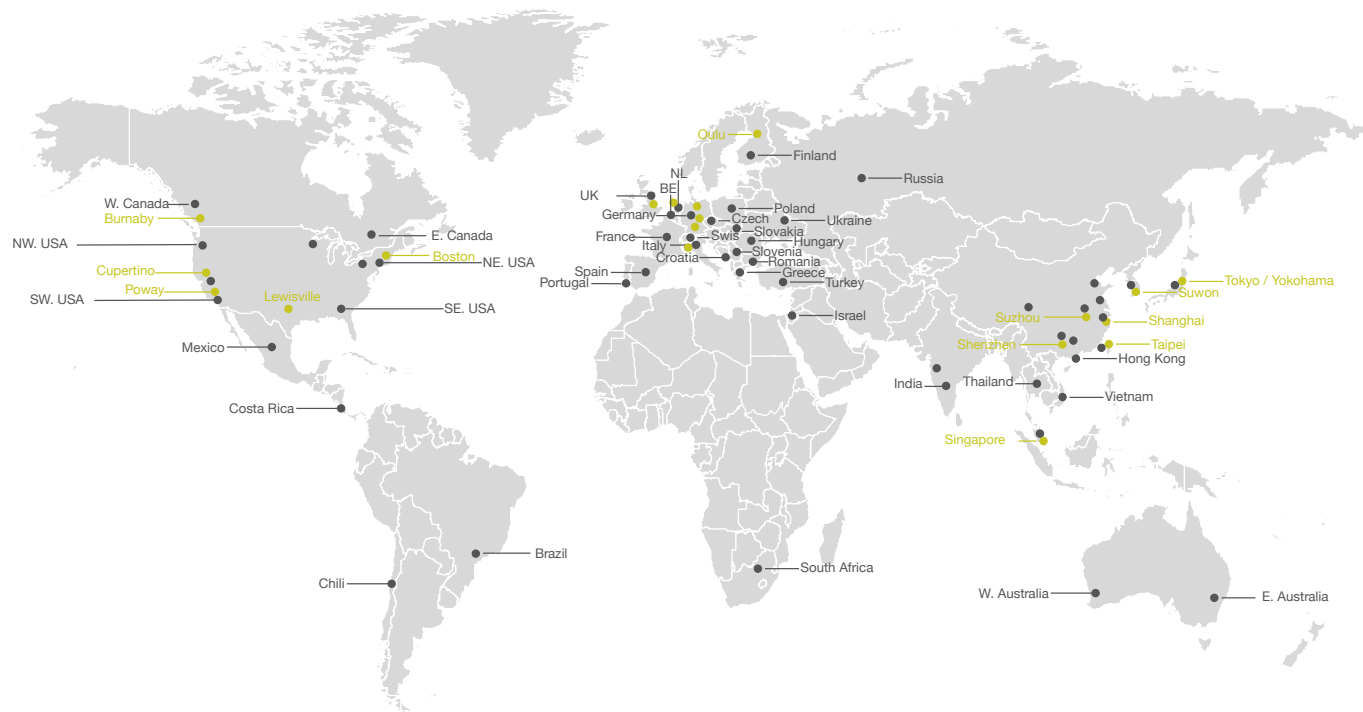
With our internal extensive scientific and engineering capabilities we develop and integrate area scan,

line scan and 3D stereo, confocal and laser sensor technologies to system solutions and support all spectra from UV to SWIR using highly sophisticated light and optic sub-systems. We offer comprehensive software design services, enabling superior hardware/software solutions.

> Machine Vision with Global Reach

> Contact Us

● TKH Vision companies ● Sales Partners



Allied Vision
 Stadtroda, Germany
www.alliedvision.com



LMI Technologies
 Vancouver, Canada
www.lmi3d.com



SVS-Vistek GmbH
 Gilching, Germany
www.svs-vistek.com



Nerian
 Vision Technologies
 Stuttgart, Germany
www.nerian.com



Chromasens GmbH
 Konstanz, Germany
www.chromasens.com



NET GmbH
 Finning, Germany
www.net-gmbh.com



SVS-Vistek GmbH
 Gilching, Germany
www.mikrotron.de



Tattile S.r.l.
 Mairano, Italy
www.tattile.com



TKH Vision Solution Center
 Konstanz, Germany
www.tkhvision.com



TKH Vision Italy
 Brescia, Italy
www.tkhvision-italy.com



www.tkhvision.com