



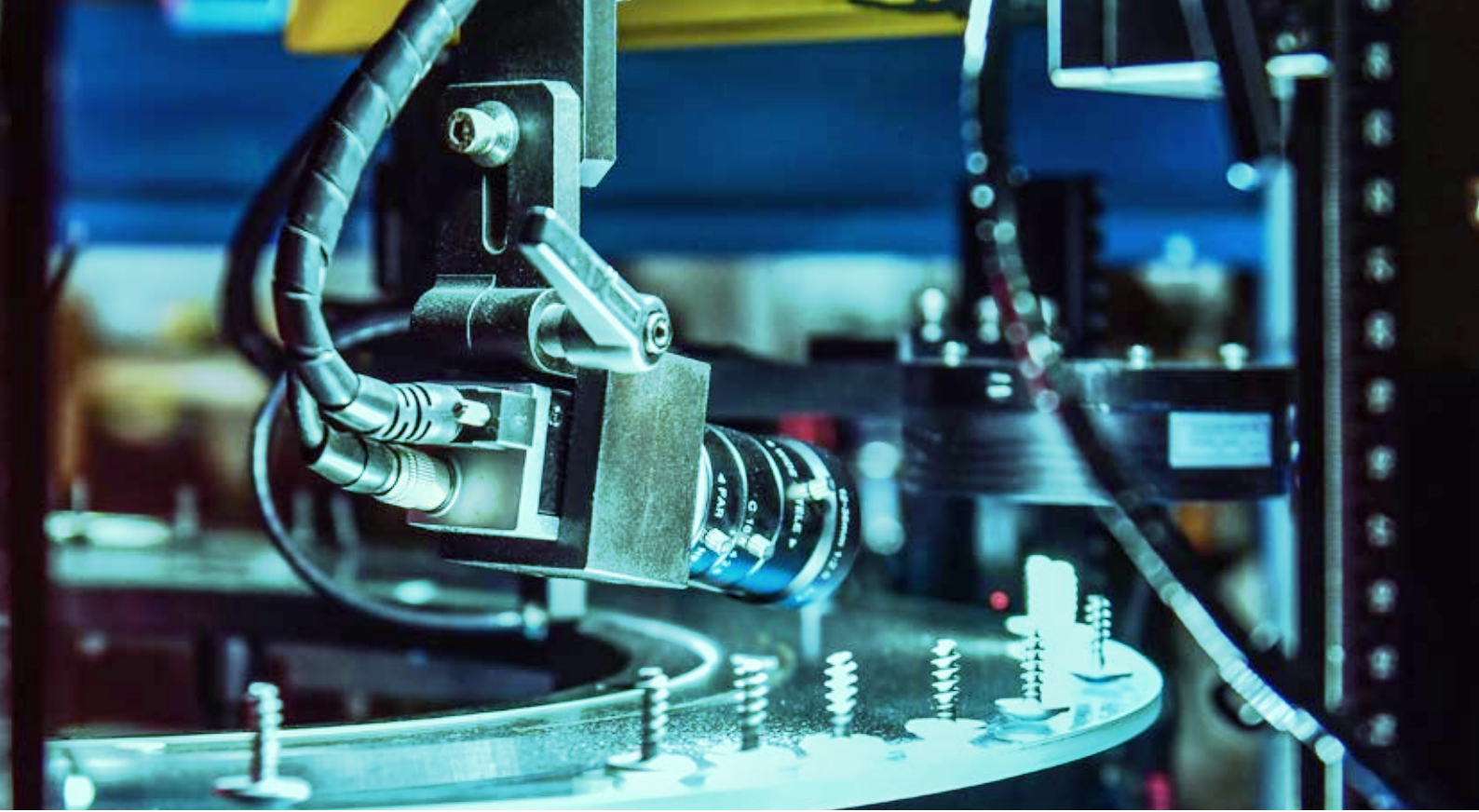
excellence in safety

tec.cvs

**Video analysis systems
to increase efficiency**



tec.nicum
Schmersal Group



tec.cvs Computer Vision Solutions

A modular ecosystem of computer vision and video analytics solutions designed to unify diverse industrial challenges within a single, integrated environment.

This flexible and scalable system enables organizations to collect, analyze, and interpret data from multiple sources – streamlining operations and driving overall efficiency. It allows precise measurement of visual data, performance indicators, availability, quality, and, above all, the safety of people and equipment. Key metrics are continuously monitored and updated in real time to support proactive decision-making.

Implementation is based on an IP camera image capture system, supporting a wide range of industrial applications. Existing infrastructure can be leveraged, as the platform is compatible with previously installed devices – reducing setup time and overall costs. Data processing and decision-making can occur either on site, close to operations, or in the cloud, ensuring maximum adaptability to different industrial contexts.

Results and insights are delivered through a customized dashboard, tailored to the specific needs of each organization. The platform provides intuitive visualizations, trend analyses, and intelligent alerts, empowering teams to respond quickly and make data-driven decisions with confidence.

If you can see, we can measure.





Our products

Video analytics solutions through A.I. Powered by Stepps

Design, statistics, engineering and artificial intelligence

Schmersal has entered into a strategic partnership with Stepps to integrate computer vision technologies into industrial safety systems. The collaboration aims to develop intelligent solutions that prevent accidents through automatic risk detection on production lines. Founded in Porto Digital, in Recife (Brasil), Stepps stands out for applying artificial intelligence and engineering in customized solutions for industry and agribusiness. The partnership drives the advancement of safety 4.0, combining automation, real-time data and AI to modernize and make industrial operations safer.



StepSafe

Risk Isolation

Developed to support industries in their pursuit of ZERO accidents.



StepScan

Precision in Quality

An advanced system capable of recognizing various quality patterns.



StepMotion

Elevating Human Performance

Turns human motion into actionable data for process improvement.

Our Stepps products combine design, statistics, engineering, and artificial intelligence (computer vision) to deliver a modular ecosystem of customizable video analytics solutions for industry.

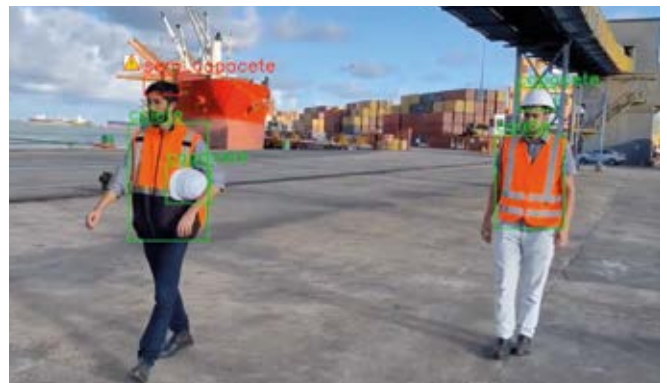


StepSafe

Artificial intelligence to reduce accidents

The video analysis system Step**Safe** – Artificial Intelligence to reduce accidents – is an AI-based visual safety monitoring system.

It can identify accident risks in real time by observing the interaction between people, objects and the working environment. For example, the video analysis system can detect whether an employee enters a danger zone and, if necessary, trigger an alarm signal.



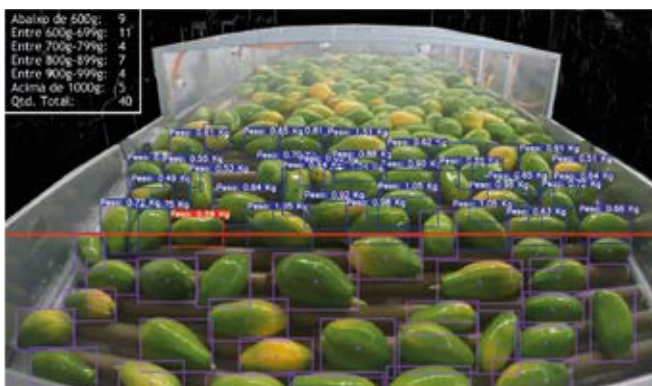
- Forklift proximity monitoring detects risks between vehicles, people, and equipment
- PPE recognition verifies proper use during task execution
- Access control monitors entry to restricted areas
- Accident detection identifies incidents and triggers instant alerts.
- Hazard proximity analysis monitors unsafe distances to machines or moving objects
- Automation and visual alerts activate lights or signals for proactive safety actions





StepScan

Classification of characteristics



StepScan is a system that is able to recognise and classify the features of objects, for example by comparing them with predefined quality standards.

The system can visually identify errors, perform compliance analyses, and show the cause and effect of problems to enable quick resolutions.



- Measures shape and dimensions
- Counts items and detects losses
- Recognizes visual defects
- Verifies conformity by checking if all required holes, edges, and surface features are present
- Identifies causes of defects for quick correction
- Analyzes trends for continuous improvement





StepMotion Behaviour analysis system

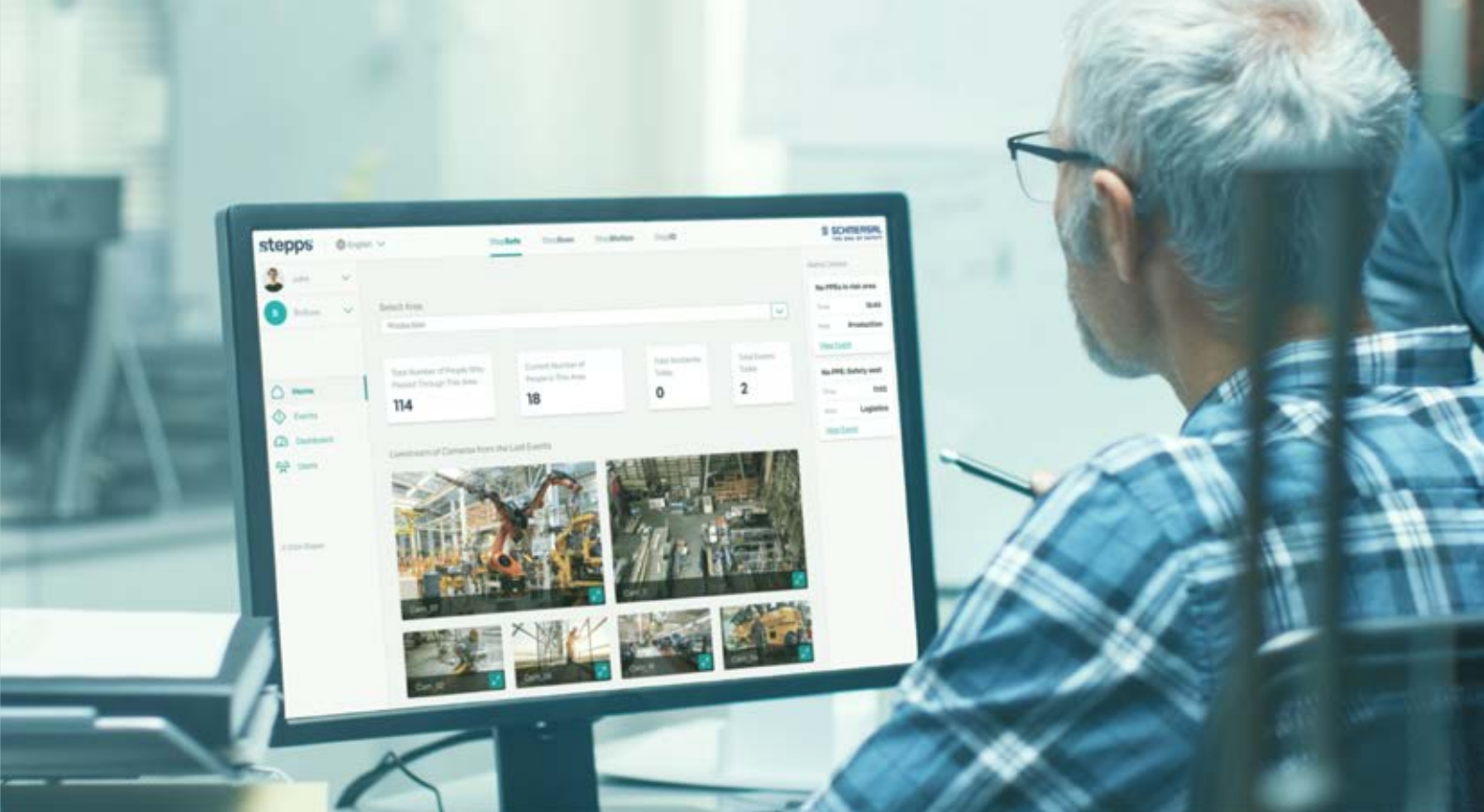


The video analysis system **StepMotion** for detecting human actions in production areas and workshops is able to perform real-time chronoanalyses.

It also assesses adherence to routines, checklists and standards, identifies usage patterns and equipment deficiencies, and performs an analysis of performance in the execution of actions.

- Recognition of all human actions in the analysis area
- Segmented analysis by workstation. Evaluations of compliance with routines, checklists and standards
- Identification of equipment usage patterns and defects
- Analysis of standardization and performance in action execution
- Real-time continuous time studies





tec.cvs Everything in one place!

Our **tec.cvs** platform combines various video analytics tools focused on increasing the safety and efficiency of industrial processes. The platform easily connects to existing CCTV cameras, creating powerful continuous monitoring networks throughout the factory.

Step by step, users can customize their experience, making quick configurations so that the tools adapt to the reality of each environment.



Ready to go digital with CVS?

Have we sparked your interest? Then get in touch with us and request a demo!



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tec.nicum: global service and engineering hubs

tec.nicum – Solutions & Services GmbH is a subsidiary of Schmersal Group. It offers a wide range of services relating to machine and occupational safety.

tec.nicum comprises a global consultancy network of TÜV Rheinland-certified Functional Safety Engineers and Machinery CE Experts. Services can be called upon around the world.

The range of services at tec.nicum is based on six modules: academy in the training and workshop section, consultancy services in the consulting section, engineering in the designing of safety solutions section, integration section in the field of practical implementation, the development of software solutions and new digital technologies in the digitalisation section and the provision of complete solutions in the outsourcing section.



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