

compar 

excellence in machine vision & robotics

SWISS  MADE

since 1986



system certification ISO 9001:2015



membership

COMPANY PROFILE

Aspiring to be your competent system provider for machine vision and robotics, we offer solutions that include smart cameras, computer-based vision systems, accurate robots, and even integrated test installations that allow for highly flexible handling.

It is our interdisciplinary and interconnected engineering knowledge about automation, image processing and robotics which enables us to create efficient systems that convince and delight our clients. Our goal is to always support your progress with foresight and sustainability.



your requirement | our contribution | one result
excellence in machine vision & robotics

CORE COMPETENCIES

The industrial use of machine vision and robotics are our core competencies. We analyse your requirements, select suitable hardware and software components, generate complete solutions and integrate them into your plants and machinery or form an autonomous inspection system ourselves.

MACHINE VISION



ROBOTICS



AUTOMATION



follow zero-error strategies
optimize processes & resource efficiency
increase productivity

OUR INDUSTRIES

Solutions by Compar, which are suitable for the medical, automotive and watch making industries, are also successfully employed in other segments; particularly where comprehensive quality control is required, zero defaults policies are pursued, and where resource efficiency and a high level of productivity are important.



MEDTECH / PHARMA

The medical and pharmaceutical industry manufacture high-tech products that are subject to high quality requirements. 100% quality control is a permanent feature during the manufacture of such components.

Examples are:

- » Universal palletising system
- » Comprehensive quality inspection of contact lenses
- » Cosmetic and dimensional inspection of implants



AUTOMOTIVE / TRANSPORTATION

Zero defects policies form the basis of the production and manufacture of components in the automotive industry. In many cases, industrial image processing systems are used for the purpose of a quality inspection.

Examples are:

- » Flexible handling ensures a flawless assembly
- » Console print inspection in perfection
- » Securing impeccable airbag operation



PACKAGING / FOOD / LOGISTIC

The need to manufacture products reliably and flawlessly is more important than ever in the food, beverage and packaging industry. And this includes optical quality control.

Examples are:

- » Fast code reading of packaging
- » Contour testing of various types of packaging
- » Track & Trace solutions



SEMICONDUCTOR / ELECTRONIC

Production speed and quality are of decisive importance in the manufacture of electronic components or in the inspection of printed circuit boards. Here we offer robust solutions.

Examples are:

- » Complex assembly controls
- » Layer thickness measurement
- » Deep learning system for solder inspection

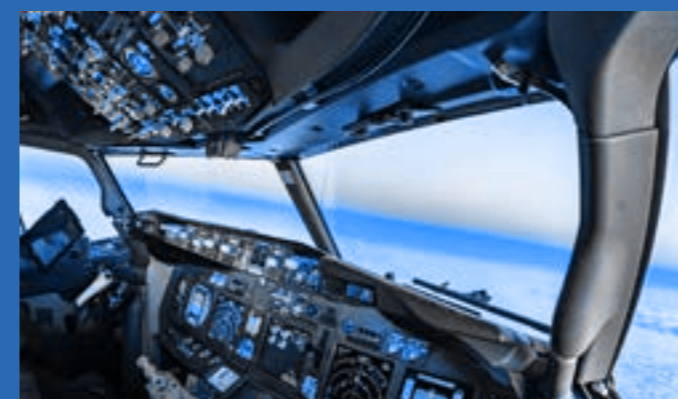


WATCHMAKING

Precision in perfection is not just a saying, but a fact as far as the manufacture of watch movements is concerned.

Examples are:

- » Assembly of high quality bearings
- » Print inspection for date rings
- » Universal parts handling



AEROSPACE / DEFENSE

Solutions by Compar, which are suitable for the medical, automotive and watch making industries, are also successfully employed in other segments for a wide range of inspection tasks, especially aerospace and defense industries.

Examples are:

- » Complex quality checks concerning water-tight seal
- » Code reading on metallic or glass-like surfaces
- » Robot vision handling for textile industry

with long-term vision and sustainability
it is our goal to bring you one step further

MAIN PRODUCTS

Compar's products can be found where robust quality inspections are required, absolute zero-defect policies are pursued, resource efficiency is a major concern and high productivity is demanded.



MACHINE VISION SOLUTION *VISIONexpert*[®]

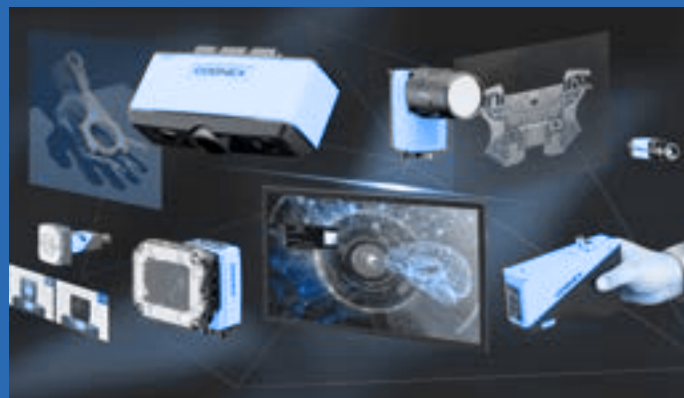
A key component is the innovative machine vision software platform *VISIONexpert*[®], allowing many degrees of freedom and offering various features for almost any requirement in the creation/configuration of robust test routines. It is a flexible PC-based solution, developed by Compar, for more than 30 years and is constantly being improved.

VISIONexpert[®]



AUTONOMOUS INSPECTION SYSTEMS

Compar offers autonomous test cells. Our customers rely on universal parts handling, flexible palletising systems and sophisticated inspection cells, consisting of the three key components of supply unit, robot and image processing unit.



INTELLIGENT CAMERAS

As a Preferred System Integrator of Cognex (PSI), Compar has the world's leading machine vision products at its disposal and uses these smart components to tackle industry-specific image processing tasks.

COGNEX



SYSTEMS FOR MACHINE BUILDERS

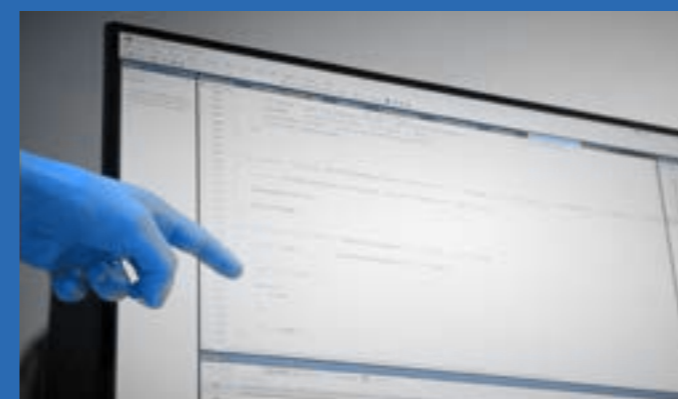
Whether ready-to-use working modules or simply the universal machine vision software. The bundled system consisting of machine vision hard-/software, feeding unit and/or robot is just as flexible as complete solutions but acting as a single component - ideal for simple machine integration.



INDUSTRIAL ROBOTS

The Epson robots portfolio ranges from numerous SCARA variants to 6-axis robots. As a part of Compar's solutions, these robust industrial robots ensure smooth processes and guarantee lasting precision. Also, Epson is the world leader for SCARA robots, and Compar is the official distributor for Switzerland and the Principality of Liechtenstein.

EPSON
EXCEED YOUR VISION



STUDIES / ANALYSES

Compar carries out feasibility studies and develops master plans. Furthermore, Compar develops measurement, identification and test procedures based on the most powerful image processing algorithms and tools.

follow zero-error strategies
optimize processes and resource efficiency
increase productivity

OUR EXPERTISE

With the aim of being a competent system integrator for industrial image processing and robotics, we offer solutions with intelligent cameras, PC-based vision systems, precise robots, as well as holistic test systems with highly flexible handling.



MEASUREMENT

Intuitive and flexible measurement tools for

- » dimensions
- » areas
- » volumes
- » diameters
- » distances
- » etc.



SOLDER INSPECTION

Solder inspection tools

- » measure presence and amount of solder
- » check for undesired dents or bridges
- » etc.



3D INSPECTION

Based on 3D data acquired through

- » laser triangulation
- » stereo vision
- » interferometry
- » structured-light technology
- » confocal sensors
- » time of flight technology
- » etc.



SURFACE / COSMETIC INSPECTION

Detection tools for

- » scratches
- » dents
- » impacts
- » color defects
- » black / white spots
- » etc.



PRINT INSPECTION

Precise print inspection with easy teach-in procedure based on

- » single part drawing
- » learned part geometry
- » CAD template as predefined template



LENS INSPECTION

Optical inspection of artificial lenses from ocular/intra-ocular lenses to industrial micro-lenses.

- » dimension
- » cosmetic defects
- » function
- » refractive power

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it is our goal to bring you one step further

OUR EXPERTISE

Thanks to our interdisciplinary and networked engineering knowledge in automation, image processing and robotics, powerful systems are created that inspire and convince our customers. With long-term vision and sustainability, our goal is to keep you up to date.



ASSEMBLY INSPECTION

Tools for detection of

- » presence
- » position
- » rotation
- » conformity
- » etc.



DEEP LEARNING

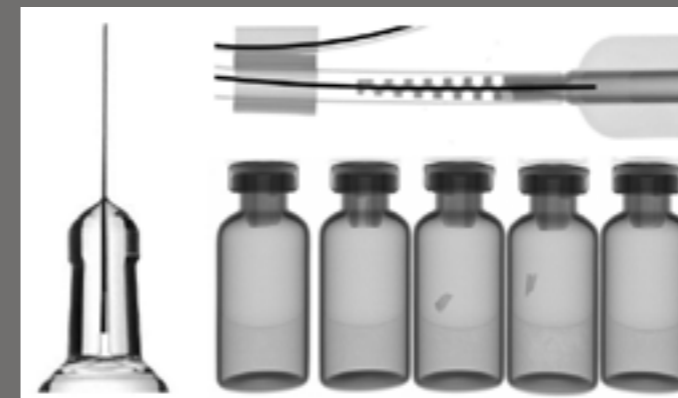
Deep learning based image analysis to solve complex applications.

- » presence
- » detection of anomalies
- » pattern matching
- » counting
- » classification



CODE READING / SECURE TRACK & TRACE

Fast code reading, 1D, higher-density 2D matrix codes, or direct part mark (DPM) codes. Comprehensive library for text recognition and character verification. Secure Track & Trace turn-key solutions for Level 1 and 2 with interfaces to Level 3 and 4.



X-RAY

X-Ray technology allows us to inspect features which are typically hidden from view. Furthermore Compar is certified to built complete X-ray machines.

For example

- » sealing integrity and completeness inspection
- » end of line packaging inspection
- » tomography

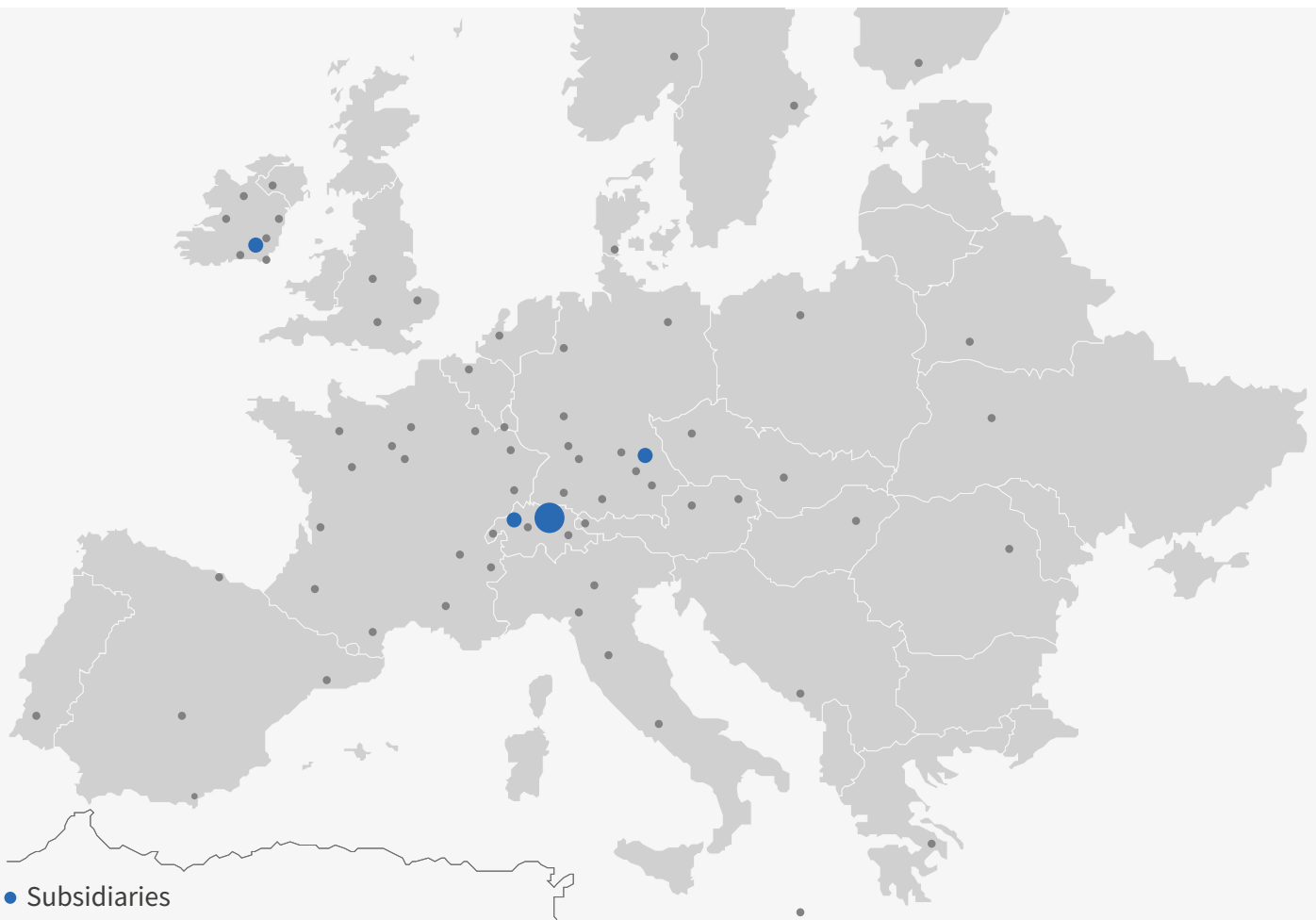


ROBOT GUIDANCE / BIN PICKING

Conveyor tracking, support of feeding systems, variety of interfaces.
Smart robot concept, suitable 3D camera technology, high-performance libraries.



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- Subsidiaries
- Main customers



HEADQUARTERS

Compar AG
Schwerzistrasse 6
CH-8807 Freienbach
+41 55 416 10 60
info@compar.ch
www.compar.ch



SALES OFFICE GERMANY

Compar AG
c/o Richard Fuchs
Oedstrasse 11
D-84056 Rottenburg
+49 173 35 20 781
rfuchs@compar.de
www.compar.de



SUBSIDIARY IRELAND

Compar IRL Ltd.
Cleaboy Business Park
Old Kilmeaden Road
X91 KW98 Waterford
+353 51 349 810
info@compar.ie
www.compar.ie