

Innovative Gauging
Best Practice – Best Value
Robust. 2D/3D. Flexible. Reliable. Exact.

**In-line
Non-laser
Non-contact**

ISRA
VISION
perceptron

3D Quality In-line Gauging

Precise – fast – robust – flexible

Modern production processes of manufacturing automation are very complex. Extremely precise gauging and fit, as well as flexibility are in question – the most diverse product variations must be manufactured in the shortest time on an assembly line. An exact 3D measurement is necessary for the most precise fit, to inspect the dimensional accuracy of individual parts or the assemblies that have already been mounted. Quality control occurs in hard-to-access positions with the widest range of features as well as surfaces with the most diverse reflective characteristics. The items being manufactured are not only in an undefined position, but they are also moving. The measuring data acquired is used directly for quality optimization in production. The Geometry Gauging Sensors (GGS) family is an easy, compact tool that meets these requirements.

A sophisticated sensor family

As quality gauging systems sensors are stationary or mounted on a robot and can be combined into a multisensor system for complex tasks. The measurement principle is based on sophisticated procedures and algorithms which use significant object features or the surface profile as gauging information.

Applications:

- In-line quality gauging
- Integrated quality check
- Gap and flush measurement

Your benefits:

The highest precision

- Multiple-line 3D area matching
- Combination of 2D/3D gauging technology in one sensor
- Gauging precision up to 0.05 mm

Maximum speed

- Direct measurement with a highspeed algorithm
- Shortest cycle times

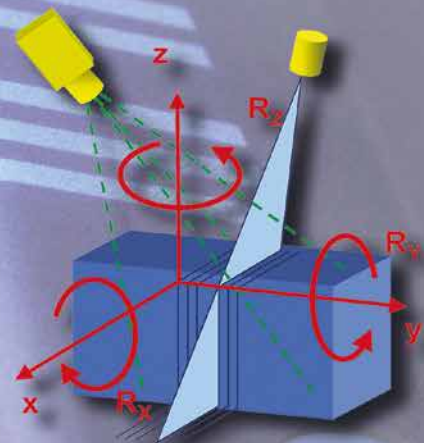
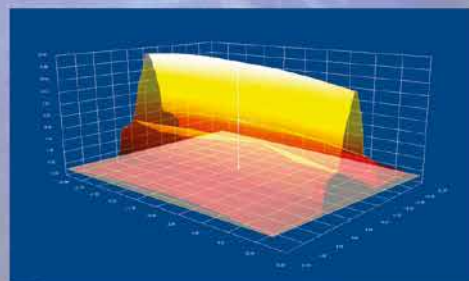
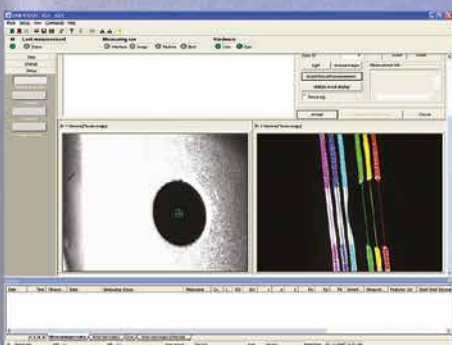
Wide flexibility and availability

- Narrow band LED light with camera filter
- Flexible sensor arrangement
- Independent of component part colors
- Multiple gauging features: Edges, holes, surfaces, radii, angles, etc.
- Variable application possibilities: Stationary or mobile e.g. on robot arm

Easy to use

- Simple user interface
- Automatic stripe recognition
- Automatic calibration

Geometry Gauging Sensor Family



Measure – Visualize – Analyze – Optimize

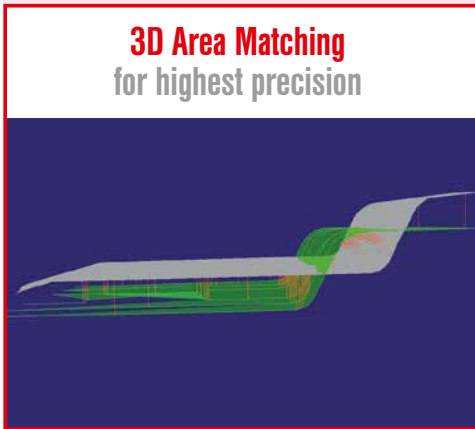
In-line. Online. Global.

The right mix for the best quality

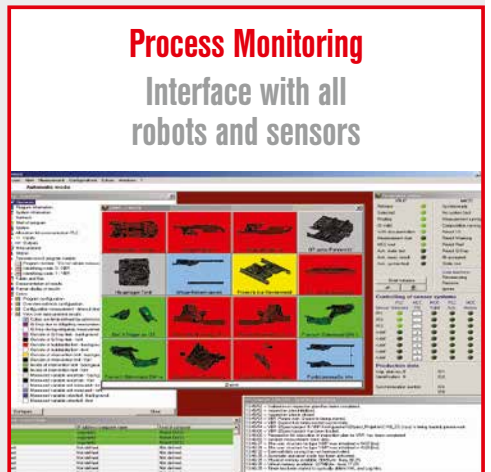
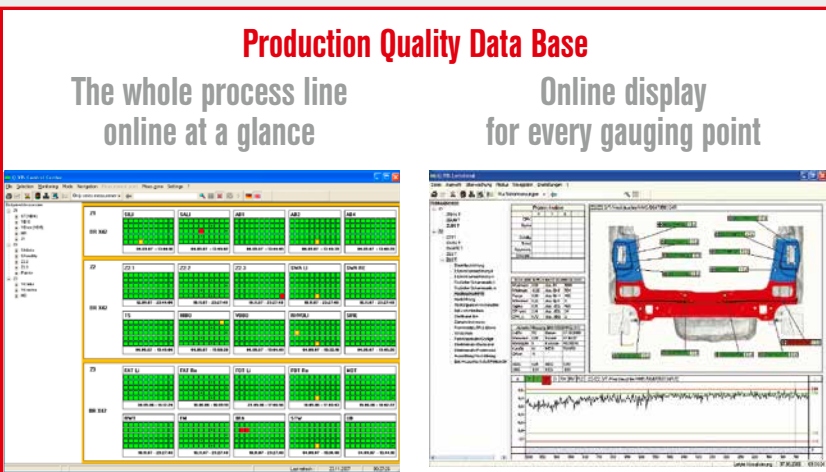
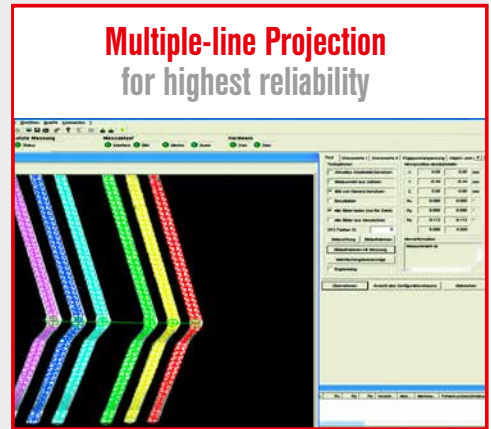
Best quality, widest flexibility and low costs have long been the request of automotive manufacturers. Interlocking new and complex process chains with each other is valuable for producing top-class vehicles. As a supplier to the automotive industry, ISRA VISION focuses on highly efficient systems that provide the manufacturer with a long-term com-

petitive advantage. An intelligent tool box made of in-line measurement technology and in-process analysis software is available for measurement tasks on the body in white. It enables a complete quality inspection and evaluation locally, per measurement cell as well as for the whole car body – detailed, exact and accessible everywhere.

Quality auto body manufacturing at a glance!



Quality
Measure ...
Visualize ...
Analyze ...
Optimize ...



Sensor – Robot – Software

A team for the highest precision

Everything in one package

We deliver a compact and flexible system that offers complete quality management for all process levels.

A quick and targeted reaction

Measurement deviations are recognized quickly and reliably by the measurement data presented in real time.

The optimum combination

Our gauging equipment components are optimally tuned to each other to meet the highest demands:

- The measurement data is comparative and collected in a precise, objective and reproducible way.
- The measurement data has a uniform presentation so the results can be interpreted in a comprehensive way.

Flexibly expandable

The in-line gauging package offers a highly precise, local acquisition and saving of individual measurement data as well as its visualization and a first analysis.

This package makes up the basis for establishing a gauging cell network with connection to a central data server. It may be expanded for the purpose of process optimization to the in-process analysis software IQ-VIS at any time.

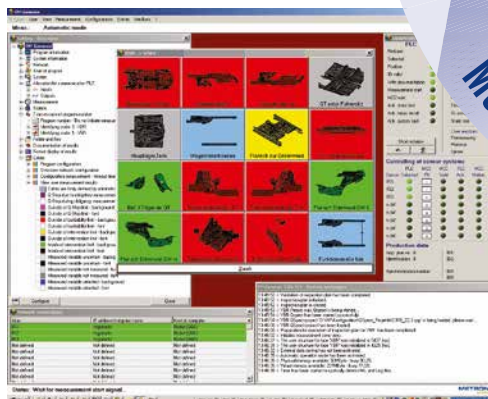
With IQ-VIS, you will be capable of analyzing and comparing all gauging cells at the plant, cross-company wide, regional-ly or worldwide.

Integrated sensor calibration, robotic temperature compensation,

Environmental influences and deterioration change the measurement characteristics of sensors. Careful calibration protects from measurement mistakes and the same holds for robots. They warm up while operating, which has an influence on the measurement results. Our solution creates an integrated robotic temperature compensation that can be implemented directly in the production line in only a few minutes and guarantees the utmost accuracy.

Compact and economical

The combination of calibrated robots and sensors guarantees the highest precision and exactness as required by your needs. Our system is distinguished by its availability as well as by its minimized maintenance and downtime.



Gauging Cell Details at a Glance

All-in-One process monitoring



Intelligent integration of in-line gauging technology

One software for production

100% stable, secure and researched

Easy to use

Clear and structured user interface

Immediate visualization of the quality conditions

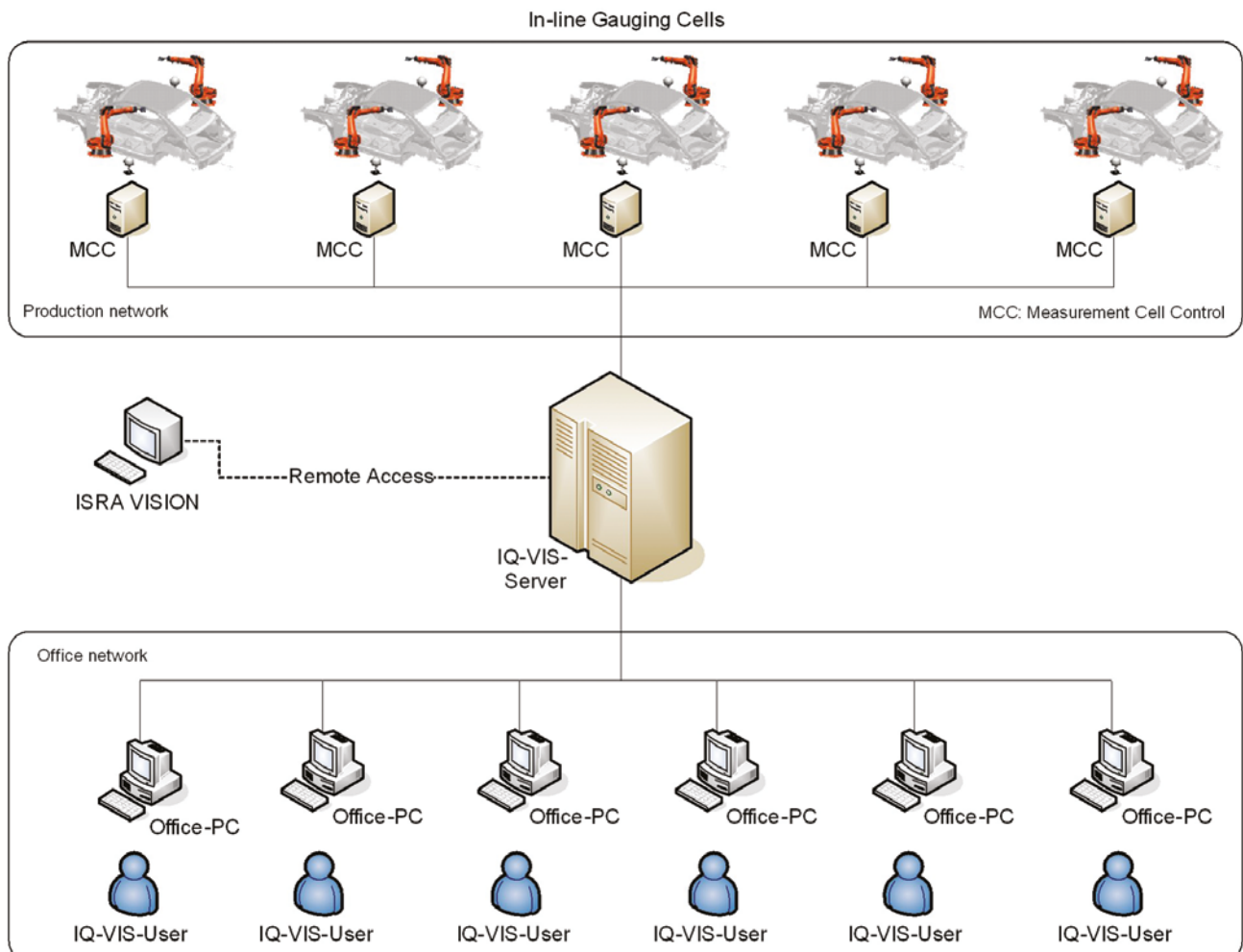
Easily understood graphics

Quick causal analysis

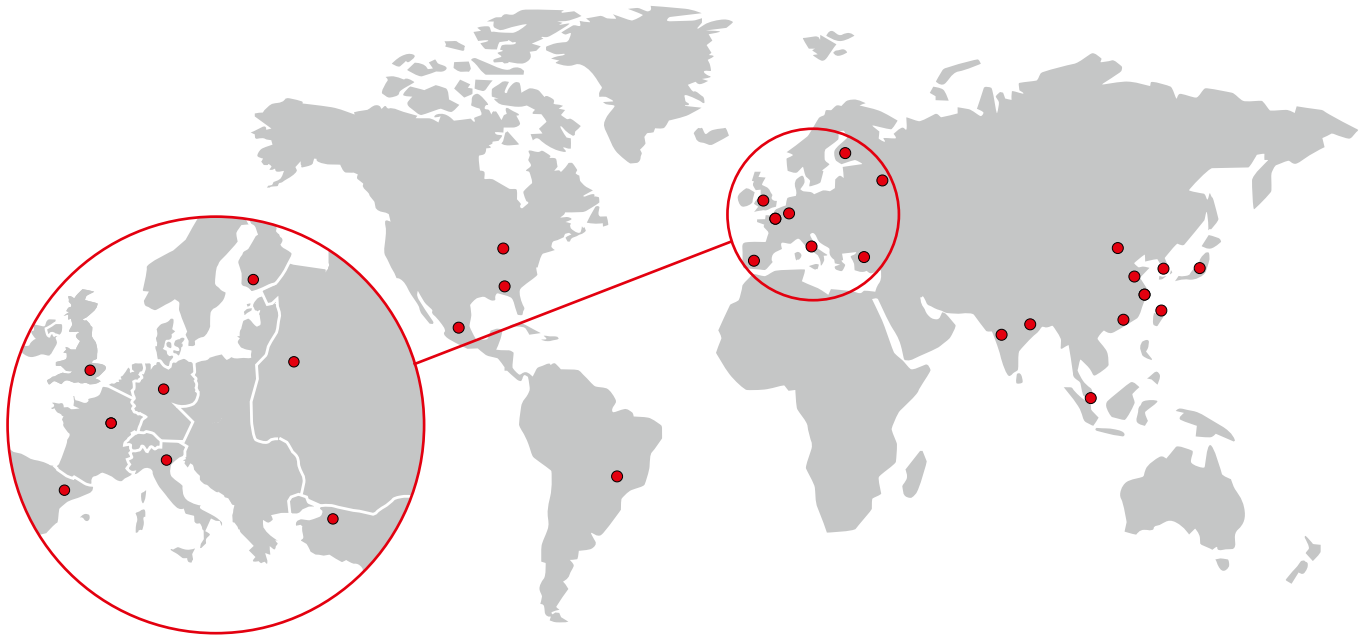
Just three clicks to the problem

Versatile data interfaces for transfer of results

Quick start up with off-line configuration



Innovation for Robot Automation



Automation at its best

ISRA VISION has been a leading supplier of high-performance quality inspection, robot guidance and production logistics systems for more than 30 years.

Our systems are used around the world in many different industries and applications. Our mission is to offer a comprehensive portfolio of standard solutions, covering all requirements along the process chain.

ISRA's experience and technological competence in the field of industrial image processing has been proven by thousands of successfully installed systems worldwide.

Benefits at a glance

Customers opt for ISRA's solutions for the following reasons:

- Our development activities are consistently aligned with our customers' requirements.
- We are continuously expanding our knowledge and expertise in all core areas of industrial image processing.
- Our customer relationships do not end with the delivery of new products. The Customer Support and Service Center provides comprehensive support for the use of your systems and helps you to increase your productivity – be it via our telephone hotline, remote service, on-site service, or our maintenance services.
- More than 900 employees at our sites in Europe, North and South America, and Asia are committed to your success.

ISRA VISION

Germany
Tel.: +49 (6151) 948 0

Belgium
Tel.: +49 (2366) 930 00

Spain
Tel.: +34 (93) 839 70 32

France
Tel.: +33 (0) 1 39 09 32 00

Italy
Tel.: +39 (02) 61 79 91

UK
Tel.: +44 (1442) 261 202

USA
Tel.: +1 (800) 753 4413

Brazil
Tel.: +55 (11) 347 611 32

Turkey
Tel.: +90 (212) 285 97 45

Russia
Tel.: +7 (921) 055 63 30

P.R. China
Tel.: +86 (21) 685 002 88

Japan
Tel.: +81 (45) 534 99 11

Korea
Tel.: +82 (31) 806 973 00

Taiwan (R.O.C.)
Tel.: +886 (3) 250 01 48

India
Tel.: +91 98 23 16 24 55

Optimize your ROI with the technology leader **ISRA**
info@isravision.com www.isravision.com