ABOUT AUTIS

AUTIS' industry-leading product portfolio includes**:**

SVS
SURFACE VERIFICATION SYSTEM

DEFECT DETECTION AND CLASSIFICATION

rSVS
SURFACE VERIFICATION SYSTEM
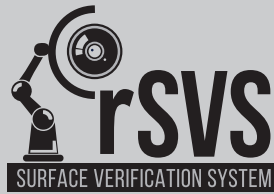
ROBOTIC DEFECT DETECTION AND CLASSIFICATION

SRS
SURFACE REPAIR SYSTEM

AUTOMATIC REPAIR

QMS
QUALITY MEASUREMENT SYSTEM
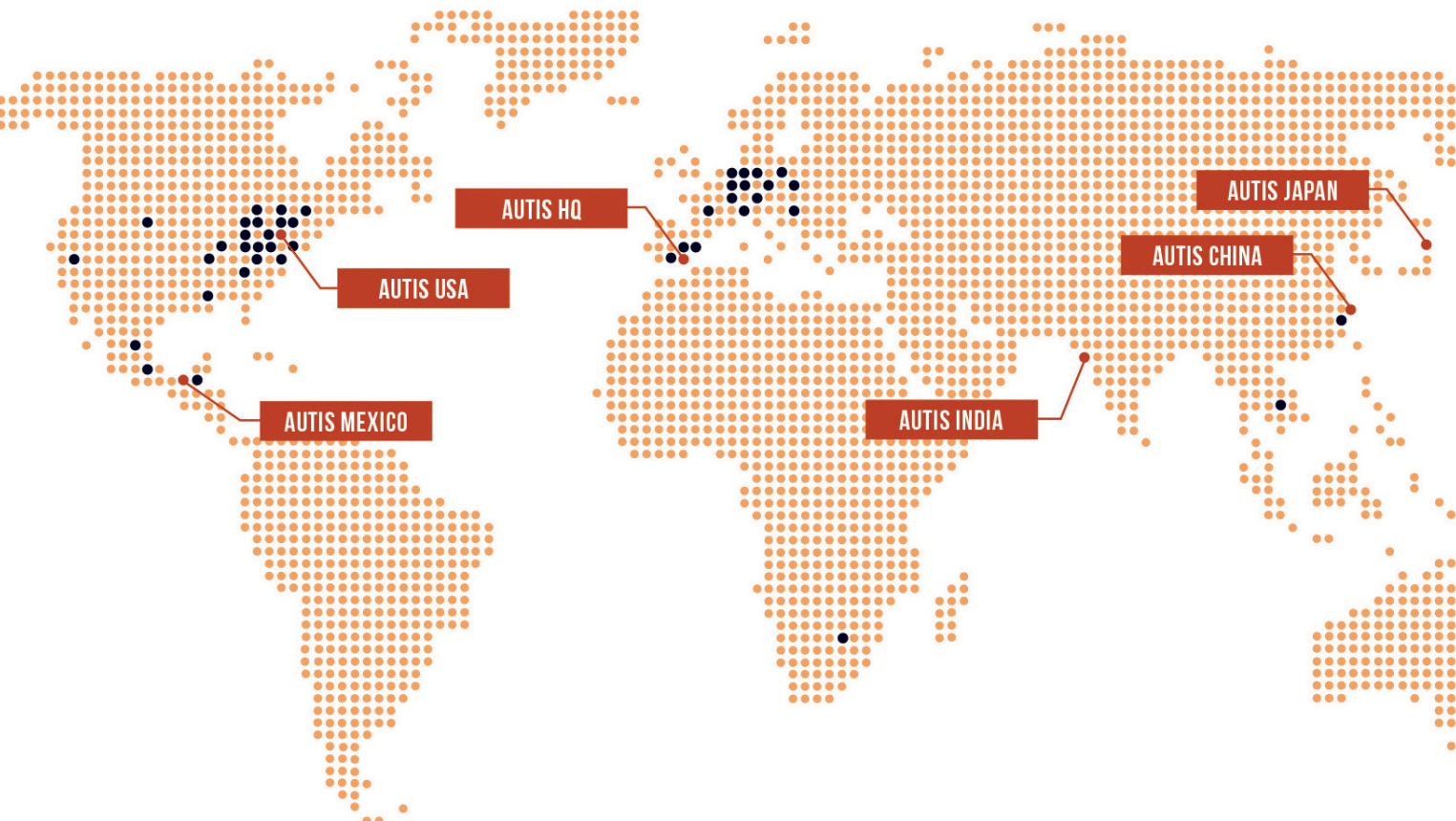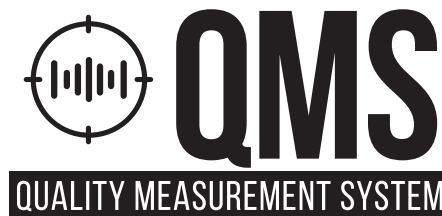
COLOR, APPEARANCE & THICKNESS MEASUREMENT

AUTIS AUTOMATED SYSTEMS FOR INSPECTION OF PAINTED SURFACES WORLDWIDE

AUTIS HQ

AUTIS USA

AUTIS MEXICO

AUTIS JAPAN

AUTIS CHINA

AUTIS INDIA

autis@autis.com | www.autis.com

QMS
QUALITY MEASUREMENT SYSTEM

QUALITY MEASUREMENT SYSTEM
FOR ASSESSMENT OF PAINT QUALITY ATTRIBUTES INCLUDING COLOR, APPEARANCE & THICKNESS

AUTIS

THE ROBOTIC SOLUTION FOR PAINT QUALITY MEASUREMENT

The Quality Measurement System is an automated robotic cell that enhances the repeatability, productivity, and dependability of the quality control process when compared with the use of handheld devices for similar measurement of paint quality attributes. Compared against operator-led assessment, the objectivity of sensor driven measurement along with the system's ability to control the operating conditions leave little room for data misinterpretation.

QMS benefits from AUTIS' extensive expertise in robotics, signal processing, design of quality assurance systems for painted surfaces, and software development. While QMS has a standardized product at its core, the structure is nimble resulting in a solution which is **highly adaptable to meet individual customer requirements.**

QMS cells consist of one or more robots mounted on lineal tracks, each equipped with a **BYK-Mac I Robotic Sensor** to measure color and effect, a **BYK wave-scan sensor** to measure appearance and orange peel, and a **PELT sensor** to measure dry coat multi-layered thickness. Other sensor types and technologies are 100% compatible with **QMS** and can be integrated as per customer specification.

QMS BENEFITS

TRACEABILITY
Car body data and associated paint quality data managed electronically.

EARLY DETECTION
Remedial countermeasures are more effective the sooner they are implemented.

ANNUAL SAVINGS
Sound business case for reduced manpower, lower rework or scrap costs, and fewer warranty claims.

IMPROVED EFFICIENCY
Personnel can be deployed to handle less repetitive tasks.

DATA EXPLOITATION
Can be analyzed alongside process data to identify trends / patterns.

QMS FEATURES

01 **Accurate and repeatable robot positioning and sensor movement** towards the bodywork surface to guarantee optimal conditions for sensor operation.

02 **Optimized trajectory and expert robot programming** to achieve short cycle times resulting in a threefold increase (x3) in the number of cars sampled offline, e.g., a measurement sequence with 20 color points, 30 appearance points, and 50 thickness points takes around 18 minutes with QMS as opposed to 60 minutes if carried out manually.

03 **Sophisticated cell design offering safe operation**, built-in redundancy, ample connectivity to enable remote maintenance and communication with plant quality management systems, intuitive HMI and in-house developed software to allow maximum data exploitation and customized data handling.

04 **QMS facilitates optimal integration** of any commercially available sensor to accommodate specific customer requests.

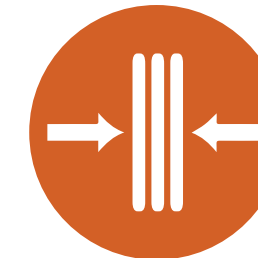**05** **QMS** versions available **for sheet metal and plastic surfaces.**

QMS TECHNOLOGY

- Color Measurement
- Appearance Measurement
- Multi-Layer Thickness Measurement
- Versatile On-board Instrument Setup
- Industry Standard Communication and Control Protocols
- High Precision Positioning Systems
- Integrated Data Exploitation and Handling
- Reliable and Accurate Measurements

24/7 ONLINE SUPPORT AND MAINTENANCE SERVICE BY AUTIS SPECIALIST ENGINEERS

INTEGRATION IN PLANT QUALITY AND CONTROL SYSTEMS TO ALLOW CUSTOMERS TO VERIFY THE STATUS OF THE QMS SYSTEM