

INTERACTIVE ANALYSIS OF
LARGE DATA SETS

eMMA INSPECTOR

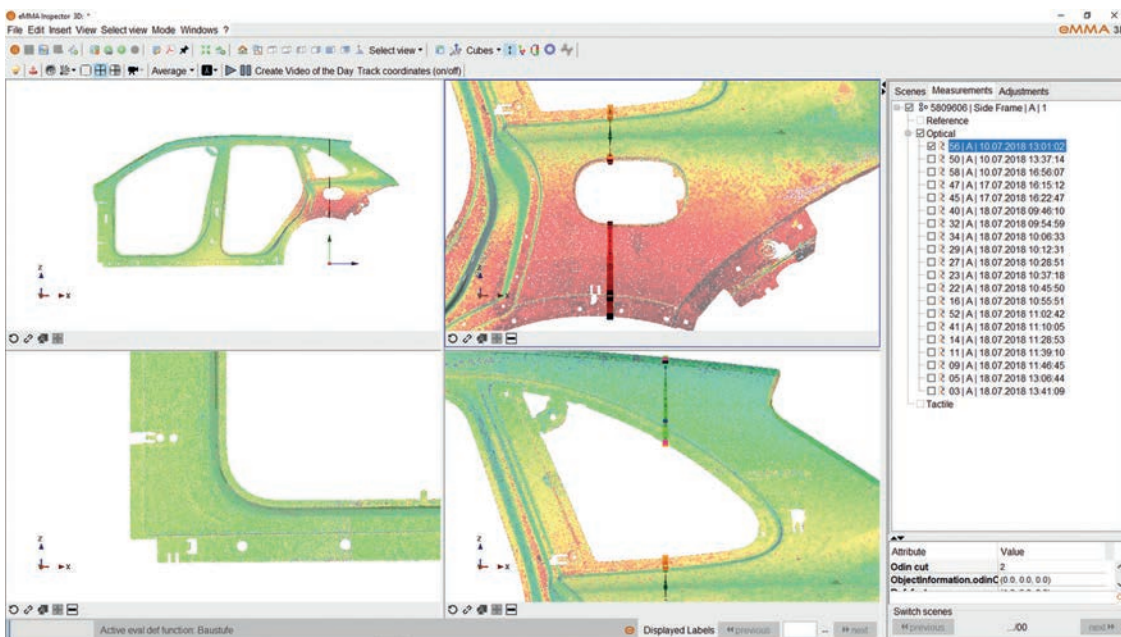
The rapid evolution in manufacturing processes is making more specialised and centralised quality assurance strategies a top priority for OEMs and their suppliers. Of particular interest to manufacturers is real-time production quality data, which is growing in importance as manufacturing becomes more dynamic and dependent on precision and productivity.

Optical measurement systems such as 3D laser scanners, white light scanner systems and laser tracker systems are able to quickly and precisely capture production quality data. But they also generate large volumes of data that can be difficult to handle and analyse efficiently. eMMA Inspector offers a wide variety of functionalities to cope with both the handling and analysis of this data.

3D INTERACTIVE ANALYSIS

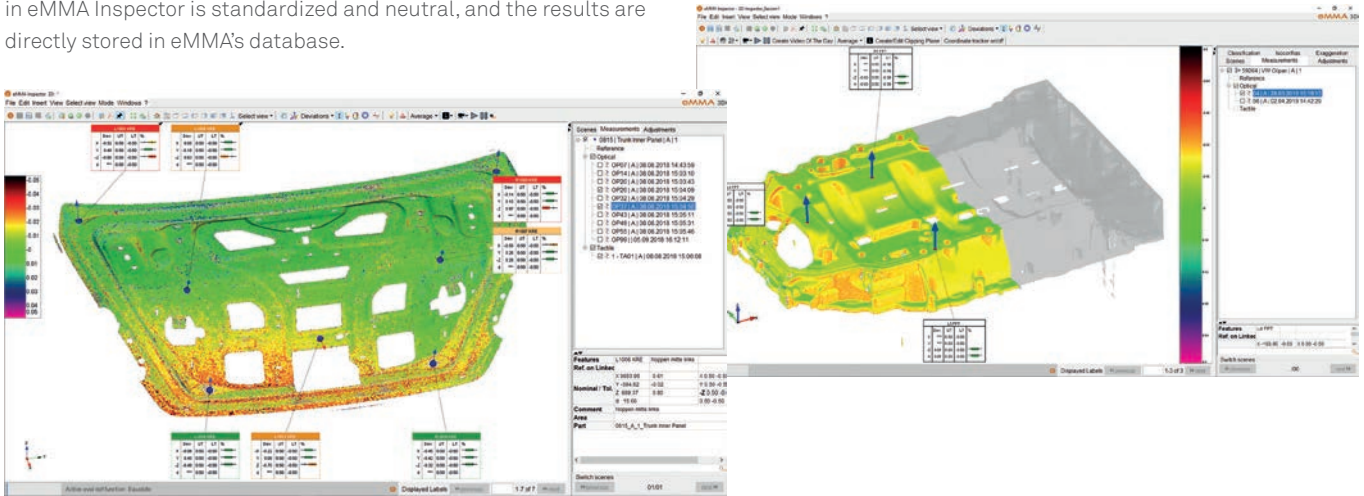
In addition to providing common data analysis functionalities such as color-mapping, basic statistical analysis and direct comparison between measurement results, eMMA Inspector offers cutting planes, which can be customized and configured to focus on a specific profile of the measured part. This allows engineers to do a close-up analysis of an area and place it within the context of the full set of results for the part or parts.

eMMA Inspector's graphical interface meanwhile facilitates an intuitive, multi-perspective analysis of the measured parts with a "split" view option letting users view the same part from multiple different perspectives on a single sub-divided screen. These views can be easily synchronised or controlled independently of each other.



EFFICIENT MANAGEMENT OF LARGE DATA SETS

Considering the growing volume of data generated by countless metrology systems, the ability to manage and storage results efficiently is crucial for a fast and accurate analysis. eMMA Inspector uses lossless compression to reduce binary STL meshes to 5% of their original file size, making it possible for manufacturers to upload multiple sets of results into eMMA's 3D interactive analysis environment either in real-time or post-processing. The deviation calculation technique used in eMMA Inspector is standardized and neutral, and the results are directly stored in eMMA's database.

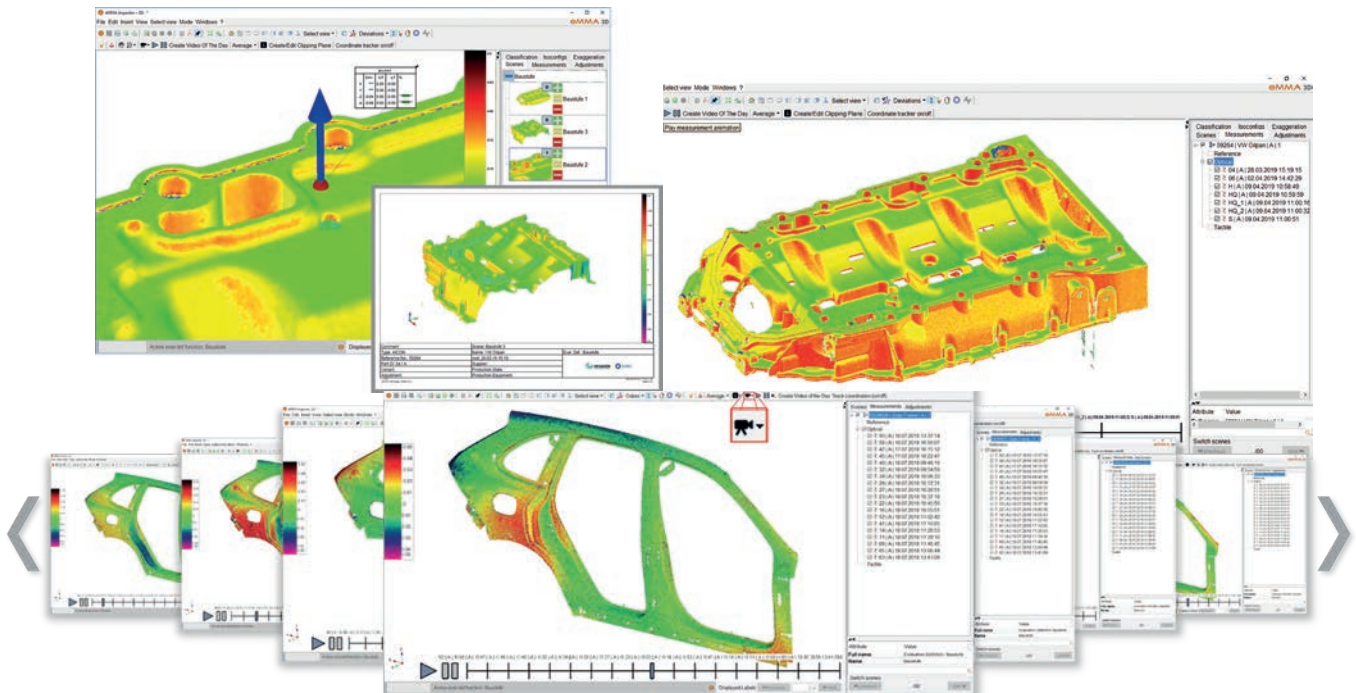


METROLOGY SYSTEM INDEPENDENT

eMMA Inspector supports data exchange through all stages of product development, prototyping and production, independently of the measurement system being used. It also handles optical measurements in multiple formats and provides an integrated 3D environment for the joint analysis of both optical and feature-based tactile measurements.

INNOVATIVE DOCUMENTATION AND REPORTING

Once a rich analysis has been obtained it's imperative to be able to document the results and share them with stakeholders. eMMA Inspector's "video of the day" feature facilitates reporting by summarising the measurement results in chronological order in the form of an easy-to-understand animation, which can be saved as a video file and easily shared.





Hexagon Manufacturing Intelligence helps industrial manufacturers develop the disruptive technologies of today and the life-changing products of tomorrow. As a leading metrology and manufacturing solution specialist, our expertise in sensing, thinking and acting – the collection, analysis and active use of measurement data – gives our customers the confidence to increase production speed and accelerate productivity while enhancing product quality.

Through a network of local service centres, production facilities and commercial operations across five continents, we are shaping smart change in manufacturing to build a world where quality drives productivity. For more information, visit HexagonMI.com.

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-  SENSORS
-  PORTABLE MEASURING ARMS
-  SERVICES
-  LASER TRACKERS & STATIONS
-  MULTISENSOR & OPTICAL SYSTEMS
-  WHITE LIGHT SCANNERS
-  METROLOGY SOFTWARE SOLUTIONS
-  CAD / CAM
-  STATISTICAL PROCESS CONTROL
-  AUTOMATED APPLICATIONS
-  MICROMETERS, CALIPERS AND GAUGES
-  DESIGN AND COSTING SOFTWARE



Q-DAS software sets standards for quality assurance in industrial production. 150 000 users all over the world trust in Q-DAS and successfully apply its software as well as associated training and consulting services to raise product and process quality.

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