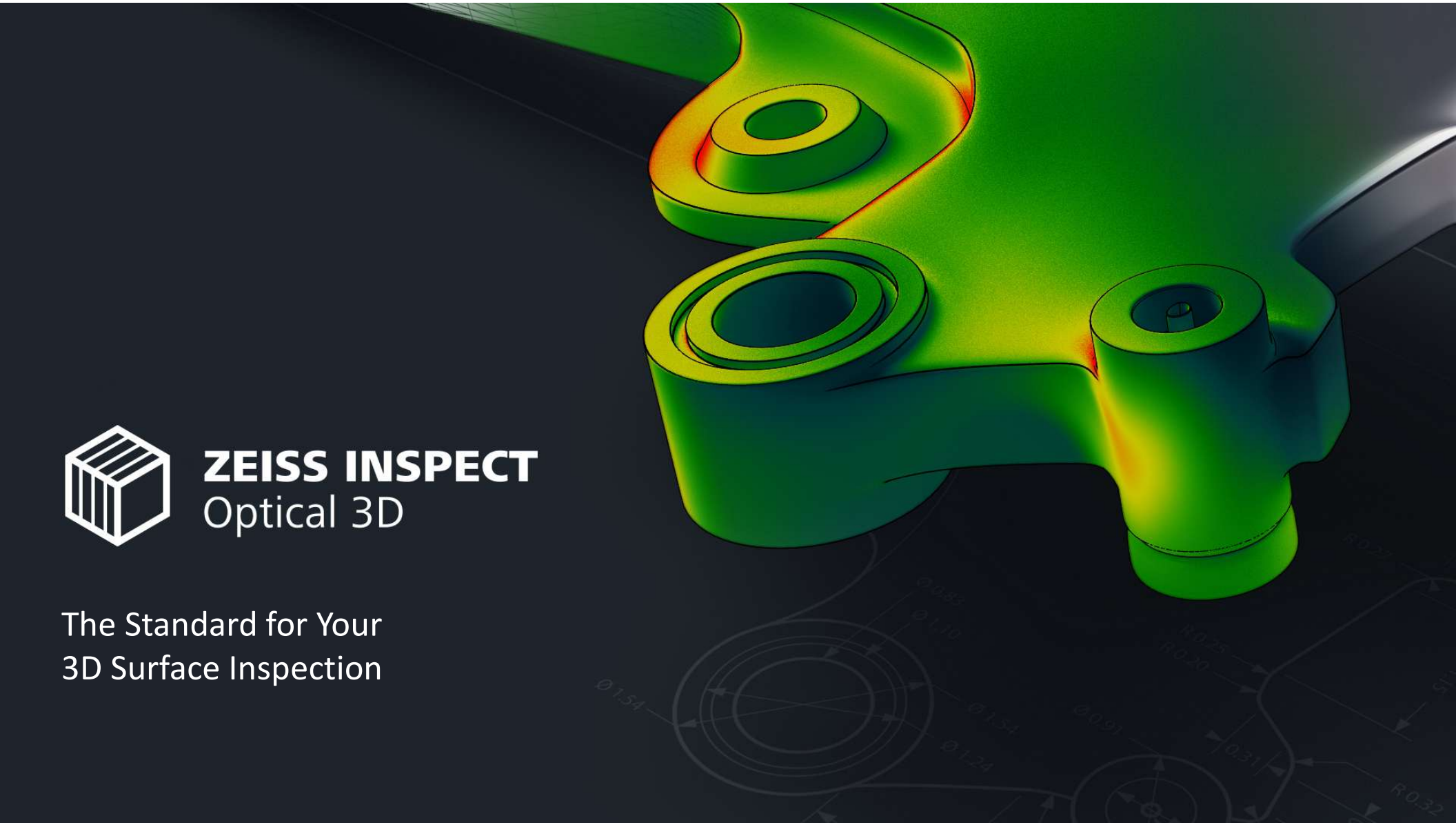
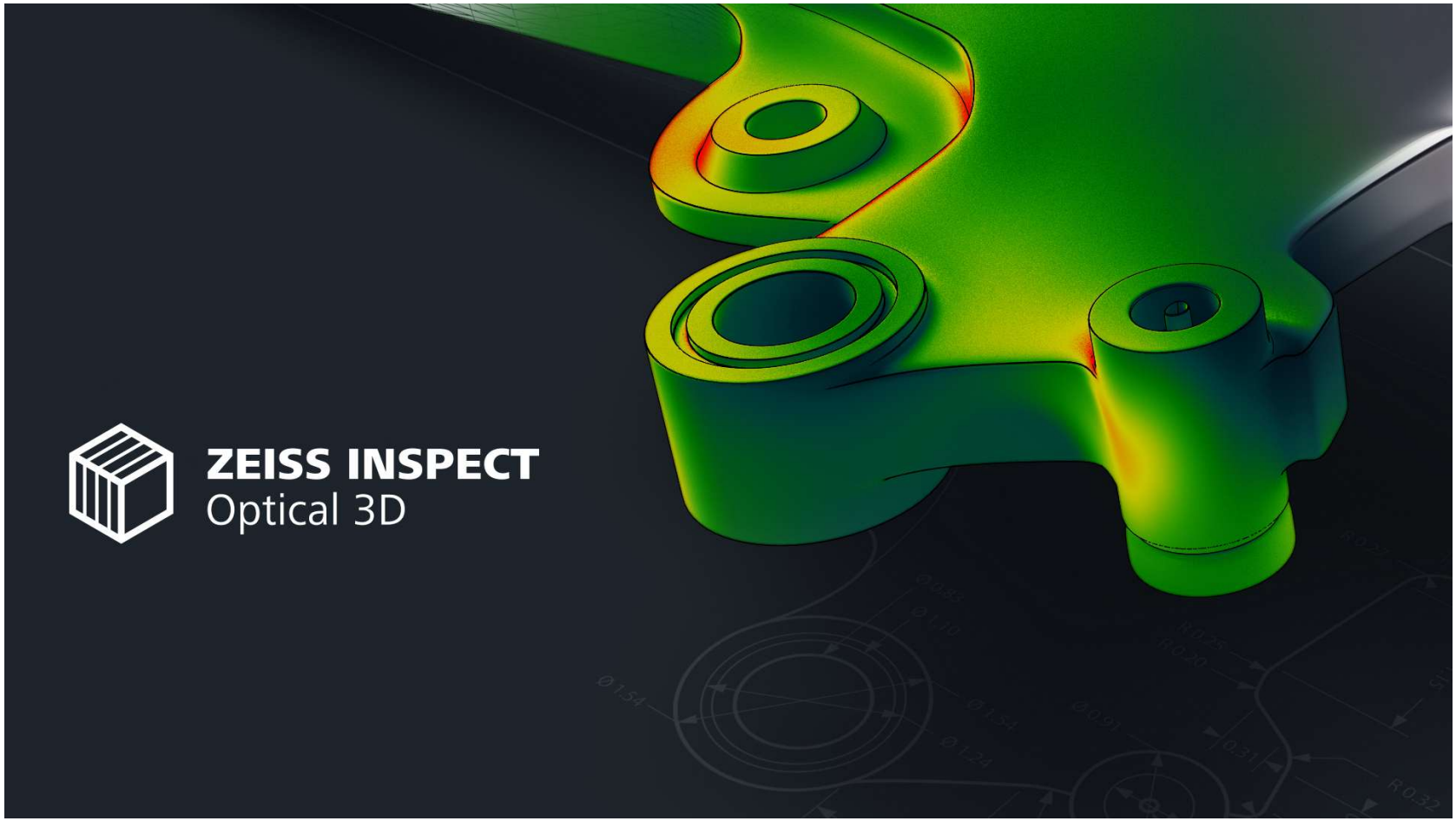

ZEISS INSPECT
Optical 3D
The Standard for Your
3D Surface Inspection

ZEISS INSPECT Optical 3D
The standard for your 3D surface inspection



ZEISS INSPECT Optical 3D at a Glance
Inspection and evaluation of optically measured 3D surface data

Intuitive data acquisition

Digitize your part with ZEISS INSPECT Optical 3D. It is the standard software for all:

- ZEISS ScanBox measuring machines, ZEISS ScanCobot systems
- 3D scanners: ATOS, GOM Scan 1, ZEISS T-SCAN hawk 2

Powerful inspection software

No matter which optical measuring system you use to measure your data – a ZEISS system or a third-party product –, ZEISS INSPECT Optical 3D solves your inspection tasks.

Generate or import your measuring data and CAD data to gain precise information on the quality of your measuring objects.

Large scope of functionality

Identify deviations – color-scaled nominal-actual comparison, extensive options for GD&T analysis as well as curve inspection features are fully integrated. Conduct trend analyzes and digitally assemble your part.

Bundle your results in easy-to-understand reports – even with a video – and share them with others.

Flexible Data Sources
Processing your surface data from any optical 3D measuring system

Data acquisition and inspection

Manual or robot-guided 3D scanning

3D scanners ATOS, GOM Scan 1, ZEISS T-SCAN hawk 2

Automated 3D scanning machines used in series production

ZEISS ScanBox systems, ZEISS ScanCobot

Only inspection

Third-party systems

Users of third-party scanners measure their measuring data in the usual way and switch to ZEISS INSPECT Optical 3D for data analysis.

The software supports the import of all conventional formats, e.g., ASCII, STL, PSL, PLY, G3D.

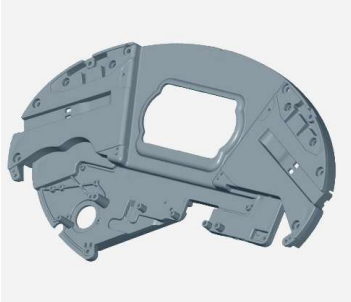
All-in-One Software
Improving workflow and data consistency

ZEISS INSPECT Optical 3D is an all-in-one software. It accompanies the customer **throughout the entire workflow**:
When using an optical 3D measurement system from ZEISS, there is no need to switch from one software to another.

Benefits

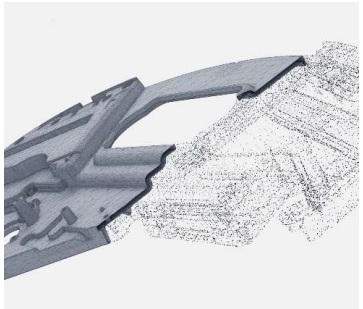
- Continuous workflow in one software guarantees a streamlined workflow and consistent UI experience
- No need to learn and be trained on two different software products

ZEISS systems only

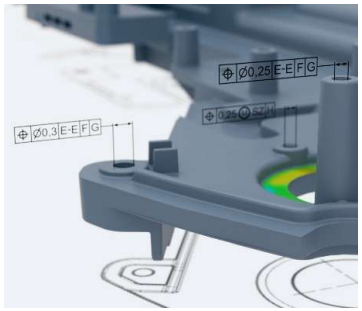


Full-field data acquisition

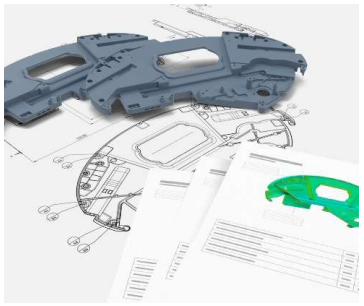
Any optical 3D measurement system on the market



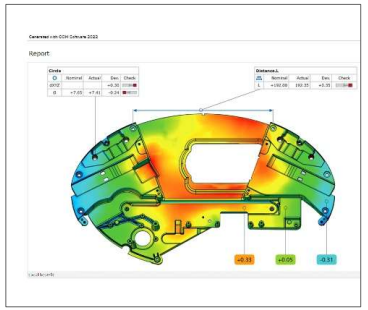
Mesh processing



Dimensional inspection



Reporting
(direct interface to ZEISS PiWeb)



Sharing results

Benefits of the Software Being Part of the ZEISS Ecosystem

Centralized experience

- Everything from a single source: **Comprehensive product portfolio** from hardware and software to service, support and trainings
- **All-in-one software:**
  - Streamlined workflow for ZEISS systems
  - Consistent UI experience
  - Convenient and easy to learn
  - Minimal training effort
- ZEISS Quality Suite as **central metrology software platform**

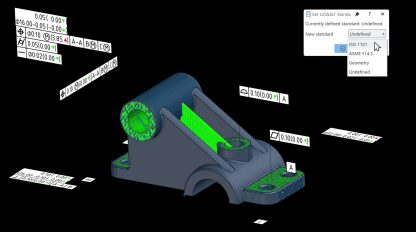
Intuitive usability

- Extensive helpful functionality and features assure that the **software can be learned very fast:**
  - Integrated **workflow assistant**
  - **Project Guide** and tooltips
  - Interactive online **Tech Guide**
  - **Guidelines, documentation and training** material provided in the ZEISS Quality Suite
- Contemporary, **user-friendly interface**
- Intuitive visualization of deviations with **an intuitive color scale**

Flexible customization

- Customizable via templates and **Python interface (API)**
- Customize with **apps**:
  - Over 100 ready-to-use apps, most of them free
  - New Apps are constantly developed
  - Easily get apps in the software store
  - Develop your own apps, using the App Editor, documentation on ZEISS GitHub, APIs and test functions
- **Flexible buying options** from licenses to monthly or yearly subscriptions
- **Powerful free version**

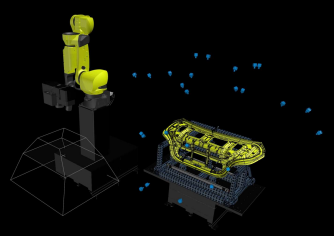
What Makes ZEISS INSPECT Optical 3D Unique?
Four strengths of the software



GD&T and PMI

Identify deviations quickly and easily

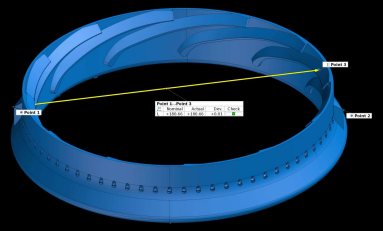
- Automate the creation of GD&T measurement plans by using PMI data directly taken from the CAD model
- Incorporates the latest international standards



VMR

Leverage productivity with automated measuring cells

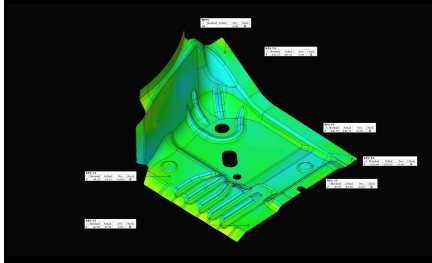
- Vast feature scope to automate both object digitization and inspection tasks
- Makes automated programming and inspection easy
- Saves time and reduces user interaction



Parametric

Measure, analyze, repeat – no problem

- Saves each inspection step, making measurement plans traceable, repeatable, and editable
- With the cluster & pattern function, multiple elements can be easily adapted

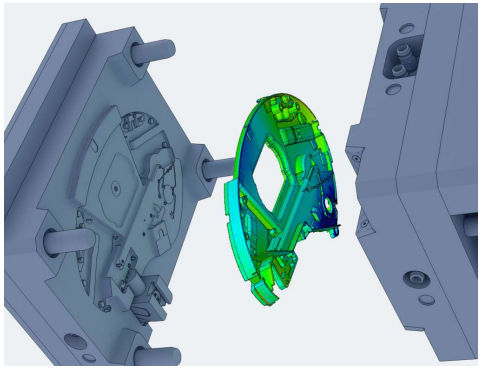


Virtual Processes

Easily create digital twins and simulate clamped states

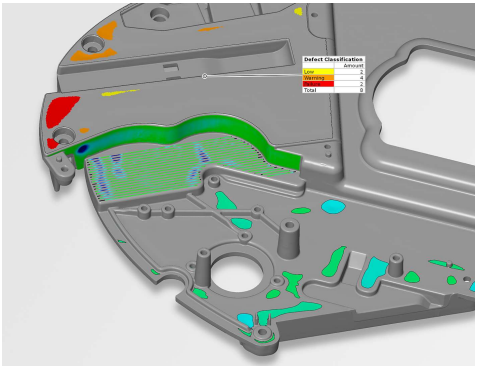
- Use digital twins for fast measurement and evaluation of the complete part
- Including surface analysis, form tolerance and digital assembly
- Measure clamping conditions virtually without fixtures

Powerful Features Throughout the Entire Workflow



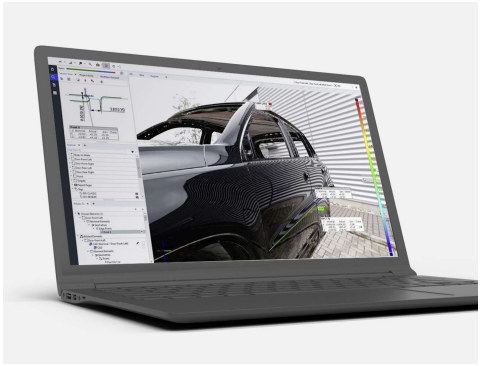
Digital assembly

Assemble your parts digitally – no matter where they were manufactured.
Save valuable time in quality assurance and efficiently reduce the amounts of waste materials.



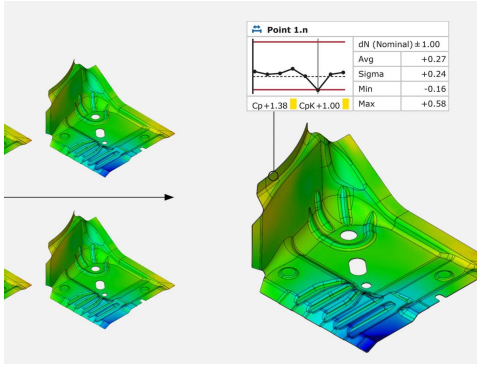
Surface defect inspection

With assisted defect inspection tools, ZEISS INSPECT detects quality issues automatically and categorizes them, revealing even smallest defects quickly and efficiently.



Photorealistic rendering

Use ZEISS INSPECT to virtually assemble your parts and evaluate them in a realistic environment. Correct shadowing helps to detect inaccuracies.

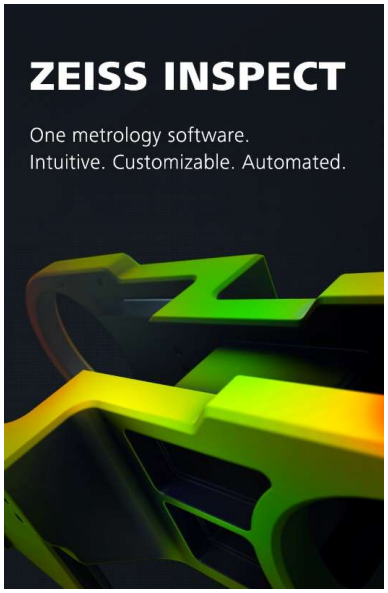


Trend analysis

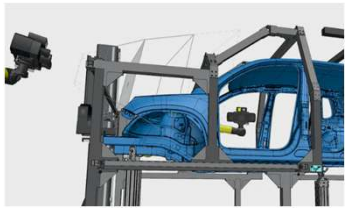
Get meaningful results with just a few clicks. Compare several parts within one project and easily evaluate them with statistical color plots for range and sigma.

More Power for Your Software – Extend it with Apps
Selected Apps for ZEISS INSPECT Optical 3D

More than 100 apps available in ZEISS Quality Software Store

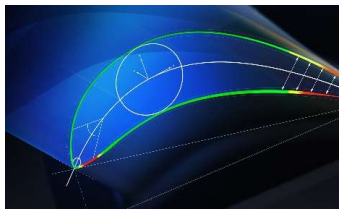


Charged apps

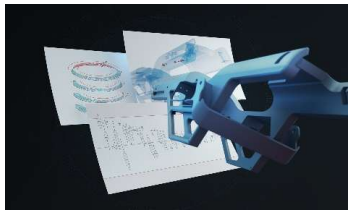


Virtual Measuring Room
For automation
Represents a real environment in a virtual simulation.

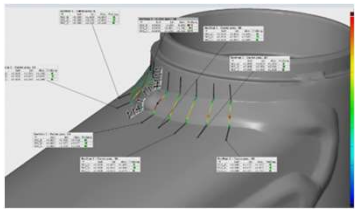
Virtual Clamping
For simplification of measurement
Uses the simulated clamping of components for highly accurate test results.



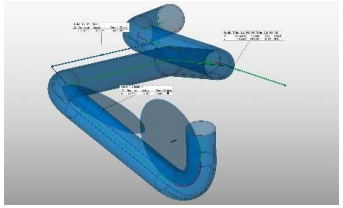
Airfoil Inspection
Analyze blades and airfoils
Ensures that everything runs smoothly in terms of blade geometry.



ZEISS PiWeb Reporting Plus
For reporting and statistics
Creates meaningful visualizations of measuring results.



Weld Check
For surface inspections and norm-based evaluation
Enables easy and digital visual inspection of welds.



Tube Check
Determination of bending correction parameters
Determines the correction values of a complete tube fully automatically.

Example for a free app
(great variety of free apps available)

De-Warp
For element transformations
Virtually compensates warpage for plastic parts.

Optimal customization of the software to your needs

- 100+ free apps
- Powerful subscription apps
- Available in the ZEISS Quality Software Store
- New Apps are constantly developed
- Develop your own Apps

Seeing beyond