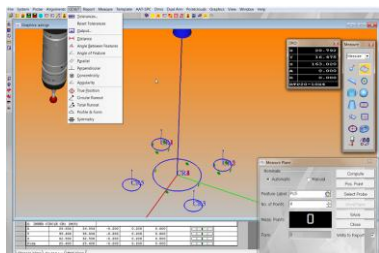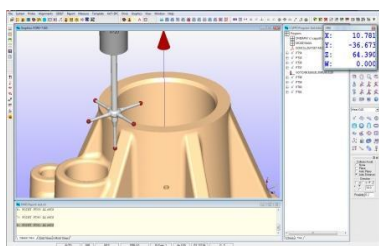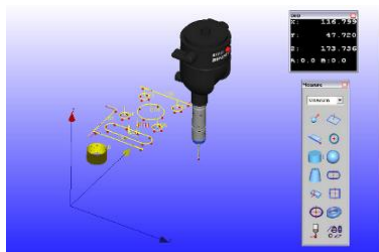# THOME PRÄZISION

## Powerful inspection Software CAPPS

CAPPS was developed to be upwardly mobile metrology software with a strong graphics engine, complete CAD capability, a powerful programming language with DMIS and tree view structure as well as a flexible reporting environment. With over 20 years of evolution, CAPPS has been one of the leader in CAD based measurement software. CAPPS offers several software levels serving specific needs of customers.
CAPPS is available in 3 separate versions. Each designed to meet the particular needs of its users.



### CAPPS PS: Powerfully Simple

Capps PS is the most affordable measurement software with complete geometrical measuring capabilities. It has a simple intuitive user interface to measure any part within a 3D graphics user interface.
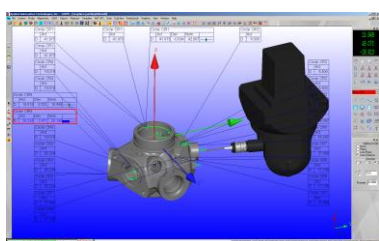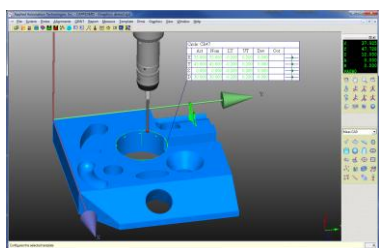


- Complete measurement of all geometric elements
- All GD&T can be calculated
- Complete construction Methods like Best Fit, intersection, middle element etc. are available
- Easy alignment routines like Best Fit, geometric, 3-2-1 alignment
- Fast probe calibration
- Easy to learn 3D graphics menus and toolbars
- All Measurements are displayed in 3D
- Easy CAD functionality like 3D graphics with user interaction
- Flexible reporting options with spread sheet like editing
- Scalable digital readout
- DMIS input/output options
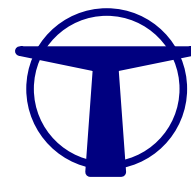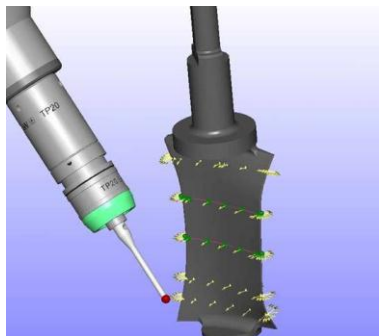- Easy upgrade to Basic Plus or Advanced levels



### CAPPS-BASIC+

Capps Basic Plus is a complete measurement software with CAD capability for geometrical features. Parts can be measured with or without CAD models automatically creating DMIS programs. Basic plus is a great middle ground inspection software that has nearly all of the advanced-type functionality without all of the extra CAD functionality.



- All functions from CAPPS PS are available
- Macros for fast measuring of all geometric elements with various number of points and different measuring methods
- Native DMIS programming
- Automatic Probe Calibrations
- MGP CAD alignment macros
- Import and display CAD models & Interact with wireframe elements
- Import of CAD models as Iges- and Step-Files
- Extraction of nominals from wireframe or create from blue prints
- Adaptive curve scanning
- Reverse engineering to CAD
- Easy upgrade to CAPPS-DMIS Advanced

**THOME Präzision GmbH**
Zeilharder Str. 31, D-64409 Messel / Germany

Tel.: +49-(0)6159-7093-0
Fax: +49-(0)6159-7093-10

info@thome-praezision.de
www.thome-precision.com
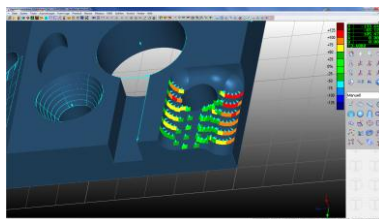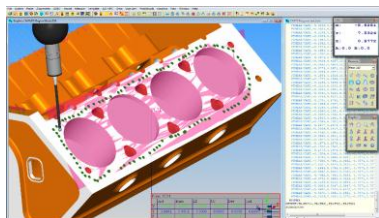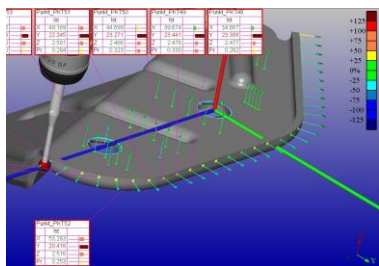
1/4

# THOME PRÄZISION

## CAPPS-ADVANCED

CappsDMIS Advanced is a CAD based metrology software with an easy to navigate interface.

This level of CappsDMIS allows complete control over mathematical model, easy and precise alignment methods, automatic feature measurements and geometry recognition. Parts can be measured with or without CAD models automatically creating DMIS programs. Our Advanced software is capable of being upgraded to function with Laser Scanners, Analog Scanning probes, outputting SPC data, and much more. Features of our Advanced level software include:
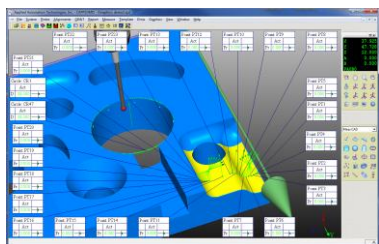
- All functions from CAPPS PS and BASIC+ are available
- CAD-compare for free form surface measurements
- Import of CAD models like Iges- and Step-Files
- CAD master model at the CMM
- Automatic collision avoidance
- Auto Probe Calibration
- Graphical analysis of form deviations
- Advanced CAD operations for surface and curve manipulation and interaction
- Automatic probe path generation routines for all geometric and sheet-metal features
- Automatic feature extraction from a CAD model
- Advanced Fixtureless alignment methods with CAD
- Programmable graphical reporting for template boxes, graphical deviations, and confetti reports
- Relative measurement methods for sheet-metal, die and molds
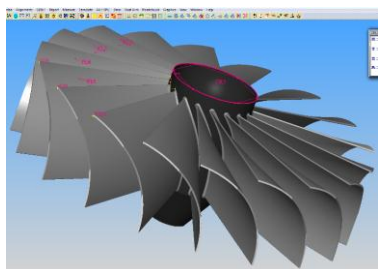
## CAPPS-Scanning

The module SCAN allows scanning of the elements line, plane, circle, cylinder, cone, sphere and curve with scanning probe systems. Scanning is carried out on known or unknown scan paths. The following scanning probes from Renishaw are supported: SP25, SP600, SP80 and REVO.

## CAPPS Offline

CAPPS Offline is the product for pure offline programming. It is also possible to connect to a measuring machine if the customer buys also the online module. The offline module has the same functions as in the online version.

## CAD interface modules

CAD interfaces are the basis for efficient measurements. CAPPS allows importing CAD models in different formats. Iges and Step-Formats can be imported without a specific module.
In addition you can get the following CAD-interfaces as option:
Catia4, Catia5, Pro-E, Unigraphics, Solid Works, VDA-FS

**THOME Präzision GmbH**
Zeilharder Str. 31, D-64409 Messel / Germany

Tel.: +49-(0)6159-7093-0
Fax: +49-(0)6159-7093-10

info@thome-praezision.de
www.thome-precision.com

2/4

# THOME PRÄZISION

## Device modules – for optional machine components

Device modules expand CAPPS products for certain measuring machine components and their application.

### Indexing Probe Head

The Indexing Probe Head module supports the calibration and operation of the following probe heads from Renishaw: **PH10M, PH10MQ, PH10T, MH8, MIH, MH20i**.
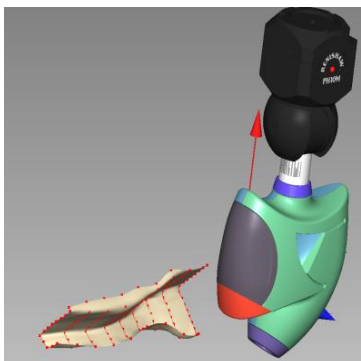
### 5 Axis Probe Head

The module 5 Axis Probe Head allows calibrating and operating a 5 axis continuously variable probe head that can be positioned in any direction. Once calibrated, all angle positions are automatically created and can be used for measure. The module supports the **PH20** and **REVO** from Renishaw.
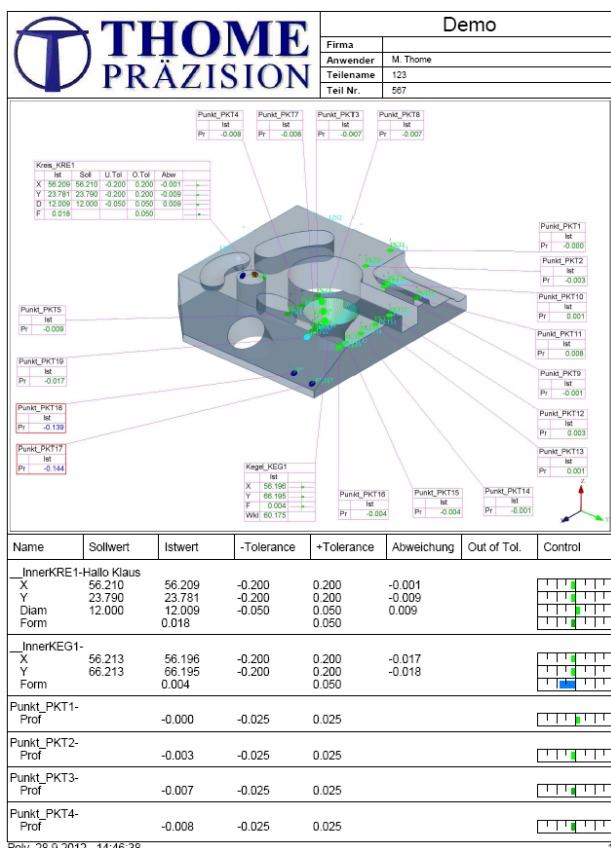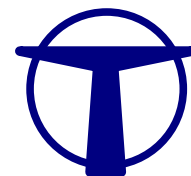
### Probe Changer

The Probe Changer module allows calibration and use of the following stylus changing systems and changing rack ports from Renishaw:
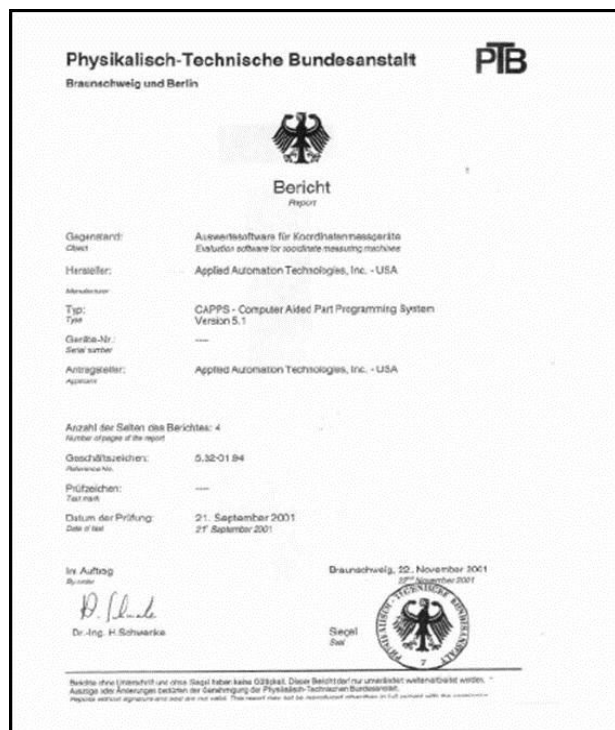**MCR20, SCR200, ACR, FCR25.**

### Laser Probe

Laser interface and Point Cloud measurement functionality integrated into online or offline CappsDMIS software. Generate surfaces from curves & point clouds to create a **reverse engineered CAD.**

**THOME Präzision GmbH**
Zeilharder Str. 31, D-64409 Messel / Germany

Tel.: +49-(0)6159-7093-0
Fax: +49-(0)6159-7093-10

info@thome-praezision.de
www.thome-precision.com

3/4

# THOME PRÄZISION



## Inspection Report

Different report types are available. Each inspection report can be easily adapted according to the needs of our customers.



## Certified by PTB / Germany

The Software is certificated according to the international standard of PTB / Germany. This gives our customers the confidence in the calculation algorithm of our software to get the best possible precision results.