Automatic measurement program generation software

MiCAT Planner

One-click programming that changes the relationship between people and precision measurement
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FEATURES

1. Identifies tolerance information included in 3D models with Product and Manufacturing Information (PMI), defines measurement locations and creates a measurement program fully automatically.

2. Through its optimization function, the software estimates the shortest route for measurement with the minimum of probe repositioning and tool changing, and creates a program that enables measurement in the minimum possible time.

3. Utilizing the rule editor function to set the measurement rules prevents variation in measurement quality between program writers.
Screen setups and features

MiCAT Planner screen setups offer simple interfaces such as 3D view and plain view, thereby enabling intuitive operation. The placement and window sizes of the interfaces can be freely customized.

**3D view**
- Full-color graphics show:
  - Measuring machine details
  - CAD model with tolerances
  - Measurement points and measurement paths
  - Measurement animations

**Plan view**
- Shows lists such as measurement parameters and tolerances.
- Lets you flag measurements and assessments using check boxes.
- The parameters are set in the order of the measurements.
- You can easily change the order of measurements by dragging and dropping parameters using a mouse.

**Properties view**
You can change the names of parameters, tolerance items and measurement points, and edit measurement points for individual parameters.

**Program view**
- Shows measurement details and measurement estimation times.
- Enables animation of measurement programs in 3D.

**Case study**
Compare the measurement part-programming time for a test piece.

1: Programming in 2D drawing: **45-60 minutes**
2: Programming using 2D drawing + 3D CAD: **15-20 minutes**
3: Create with MiCAT Planner (using 3D CAD model + PMI): approx. **3 minutes!**

Note: The measurement rules are defined in advance.

Part-programming time
Reduced by up to **95%!!**
Guarantee a **dramatically reduced development phase** and at the same time improve product quality.

**Supported CAD formats**

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<tr>
<th>CAD format</th>
<th>Extension</th>
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<td>ACIS</td>
<td>.sat</td>
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<td>.prt</td>
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<td>.prt/.prt.*</td>
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<tr>
<td>CATIA v5 *1</td>
<td>.CATPART</td>
<td>R8 – R24 (V5 – 6R2014)</td>
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*1 Option (either one is included as standard)
Note: The model requires that you have the solid model. Assembly data is not supported.

**Tolerance information add function**
Lets you add tolerances in the software even for 3D CAD models containing no tolerance information. Automatically create optimal measuring programs based on the added tolerance specifications.

**Supports MCOSMOS**
MCOSMOS v4.0R4 or higher
* To use a measuring program created by the MiCAT Planner you will need a special “right to execute”. A “right to execute” for one 3D measuring machine is included in the MiCAT Planner.

**Supported languages**
Available in 8 languages (Japanese, English (US, UK), German, French, Spanish, Portuguese, Italian and Chinese (simplified))
Whatever your challenges are, Mitutoyo supports you from start to finish.

Mitutoyo is not only a manufacturer of top quality measuring products but one that also offers qualified support for the lifetime of the equipment, backed up by comprehensive services that ensure your staff can make the very best use of the investment.

Apart from the basics of calibration and repair, Mitutoyo offers product and metrology training, as well as IT support for the sophisticated software used in modern measuring technology. We can also design, build, test and deliver bespoke measuring solutions and even, if deemed cost-effective, take your critical measurement challenges in-house on a sub-contract basis.

Note: Product illustrations are without obligation. Product descriptions, in particular any and all technical specifications, are only binding when explicitly agreed upon.

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Mitutoyo Corporation
20-1, Sakado 1-Chome,
Takatsu-ku, Kawasaki-shi,
Kanagawa 213-8533, Japan
T +81 (0) 44 813-8230
F +81 (0) 44 813-8231
http://www.mitutoyo.co.jp

Find additional product literature and our product catalogue
http://www.mitutoyo.co.jp/global.html