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## **New, MCOSMOS<sup>®</sup> 3.0 CMM software imports native CAD files utilizing an easy-to-use, icon-based interface**

(Aurora, IL) Mitutoyo America Corporation announces availability of MCOSMOS<sup>®</sup> Version 3.0 Coordinate Measuring Machine (CMM) software. By combining highly-intuitive, icon-based programming with the ability to import native CAD models, MCOSMOS 3.0 enables even novice users to easily import part and fixture models and 'virtually' place them in a CMM.

Mitutoyo MCOSMOS 3.0 graphically defines the CMM, racks, probes and even styli. Selected graphically, all measurement points are clearly displayed on a 3D graphic view which can be rotated, zoomed or panned to any convenient viewpoint. Animation enables offline running of part programs before ever placing an actual part in the CMM, providing machine volume verification and collision avoidance.

Online and offline geometric programming eliminates manual data inputting – data is automatically extracted from the 3D CAD models with just a few icon-clicks to generate CMM part programs, even before the part is manufactured.

(more)

MCOSMOS 3.0 will accept CAD files through CATIA v 4 V 4.1.9 to V 4.2.4; CATIA v 5 R2 to R15; IGES Up to V 5.3; Parasolid V 10.0 to V 17.0; Pro/E up to 16 Wildfire2; ACIS Sat V 14.0; Solidworks V 98 to V 2005; STEP AP 203 and 214 Geometry; Unigraphics V 11 to V 18, NX1, NX2; VDA-FS V 1.0 and V 2.0

MCOSMOS 3.0 links all statistics, data, image and sound files associated with a part program for simple, easy and effective record management for each workpiece – all data is selectable via icon-clicks. MCOSMOS 3.0 is web enabled and supports networking and real-time collection, analysis and sharing of SPC data.

Mitutoyo MCOSMOS 3.0 also supports Electro Discharge Machining (EDM) with dedicated functions that enable calculation of corrections (offsets) that have to be made to tool positioning during EDMing.

Mitutoyo MCOSMOS 3.0 software's open architecture seamlessly supports third party applications. MCOSMOS 3.0 also integrates with MeasurLink<sup>®</sup>, the open architecture, scalable, metrology data communications and management system solution from Mitutoyo designed for enterprise-wide metrology management.

Mitutoyo America Corporation's nationwide network of Metrology Centers and support operations provide application, calibration, service, repair and educational programs for industry. This ensures that our 6,000+ metrology products will deliver measurement solutions for our customers throughout their lifetime. Contact Mitutoyo America Corporation, 958 Corporate Boulevard, Aurora, IL 60502. Phone: (630) 820-9666 Fax: (630) 978-5394

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# # #

# Integrate and simplify CMM programming for maximum productivity

**MCOSMOS®**  
Version 3.0

## Overview

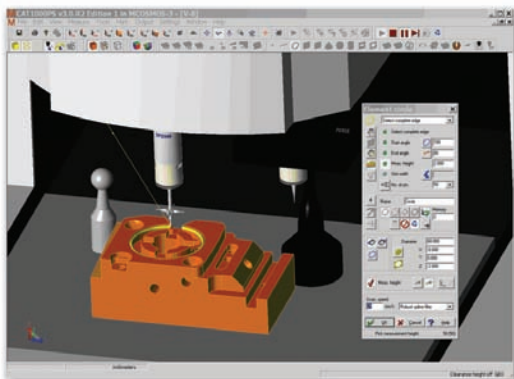
Version 3.0 of Mitutoyo MCOSMOS® Coordinate Measuring Machine (CMM) software combines highly-intuitive, icon-based programming with the ability to import native CAD models to enable even novice users to easily import part and fixture models and place them, on- or off-line.

MCOSMOS 3.0 graphically defines the CMM, racks, probes and styli. Selected graphically, all measurement points are clearly displayed on a 3D graphic view which can be rotated, zoomed or panned to any convenient viewpoint. Animation enables off-line running of part programs before placing an actual part in the CMM, providing machine access verification and collision avoidance.

On-line and off-line geometric programming eliminates manual data inputting – data is automatically extracted from CAD models, wireframe or surfaces with just a few icon-clicks to generate CMM part programs, even before the part is manufactured.

MCOSMOS 3.0 links all statistics, data, image and sound files associated with a part program for simple, easy and effective record management for each workpiece. All data is selectable via icon-clicks.

MCOSMOS 3.0 supports networking and real-time collection, analysis and sharing of SPC data. Open architecture can support third party applications. MCOSMOS 3.0 also seamlessly integrates with Mitutoyo MeasurLink®, the open architecture, scalable, metrology data communications and management system solution from Mitutoyo designed for enterprise-wide metrology management.



IMPORT YOUR CAD PART AND FIXTURE MODELS AS DIFFERENT ENTITIES AND 'VIRTUALLY' PLACE THEM ON YOUR CMM.

## Quality-tested, around the world

MCOSMOS 3.0 has been extensively tested since 3rd Q, 2005, and in 10 countries, to assure its installability, stability, proof against memory leaks and disaster soft landing, to confirm high levels of compatibility with Microsoft operating systems and to assure it is robust and behaves as designed in customer environments.

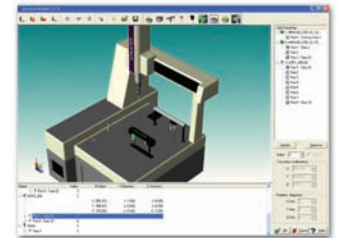
## CAD translators

MCOSMOS 3.0 will accept IGES, VDA-FS, and STEP CAD formats; also Spatial's ACIS and UGS's Parasolid. Native CAD models from CATIA v4 and v5, UGS Unigraphics and NX, and PTC Pro/E and Wildfire can be directly read into MCOSMOS 3.0

## High-level features

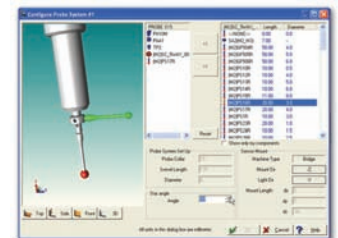
### MACHINE BUILDER

- Complete graphical model of CMM
  - Probes, racks, masterballs
- Program on- and off-line
- Full collision detection
- Enables part-to-volume checking



### PROBE BUILDER

- Automatic probe calibration and change
- Uses current Renishaw numbering system
- Supports new probes
  - Mitutoyo MTP2000
  - Mitutoyo MPP10
  - Mitutoyo MPP300Q
  - Renishaw MH20i
  - Renishaw PH6A
  - Renishaw PH6M
  - Renishaw PHS1



**MiCAT**  
Mitutoyo Intelligent Computer Aided Technology  
the standard in world  
metrology software

*Advance Your Process*

## Additional advanced features

- Nominal scanning enhancement:  
Discards run-in and run-out sections
- Improved scanning compensation:  
Clean contour display
- Fly-mode scanning (UC200/300/500 controllers only):  
Smoother/faster touch trigger scans
- Variable tolerance bands:  
Two independent bands, mirrored bands, band and constant
- Enhanced temperature compensation:  
Easier programming

## Available at 3 option levels

### MCOSMOS 1

Includes GEOPAK<sup>1</sup>

Available options: CAT1000S<sup>2</sup>, SCANPAK<sup>4</sup>

### MCOSMOS 2

Includes GEOPAK<sup>1</sup>, CAT1000P<sup>3</sup>

Available options: CAT1000S<sup>2</sup>, SCANPAK<sup>4</sup>

### MCOSMOS 3

Includes GEOPAK<sup>1</sup>, CAT1000S<sup>2</sup>/P<sup>3</sup>, SCANPAK<sup>4</sup>

## <sup>1</sup> GEOPAK Module

- Icon & pull-down menus with interactive dialogs
- Easy menu-driven guidance with graphics
- Off-line programming
- Interactive editor for convenient program edits
- Macros for automatic measurement of all elements
- Integrated text, images and sound
- Customer-specific output formats
- PTB-certified geometric element computation
- Certified QS-Stat interface
- Best fit of measured values to CAD model

## <sup>2</sup> CAT1000S Module (Surface)

- Fast comparison of actual values to nominal CAD data
- Deviations represented with color shading
- Selectable display of results with labeling

## <sup>3</sup> CAT1000P Module (Prismatic)

- Full off-line programming
- Full CAD model manipulation via mouse
- Clickable measuring commands
- Simple program datum setting from CAD data
- Clear display of probe path and measurement points
- Automatic collision avoidance programming

## <sup>4</sup> SCANPAK Module

- Graphic display of Actual/Nominal comparison
- Best fit capability
- Extensive contour manipulation toolkit
- Over 70 output formats in Transpak
- Flexible output using "Protocol designer"

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