

WHAT'S NEW IN CMM-Manager - 3.7

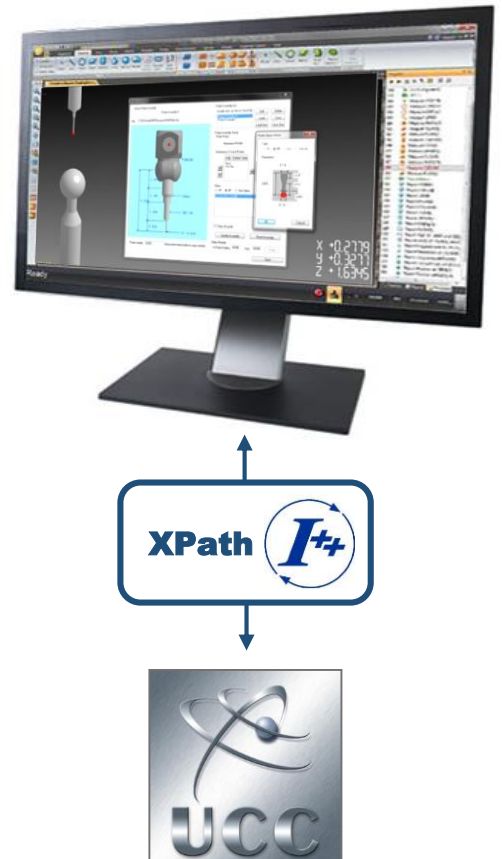


October 20, 2017

Nikon Metrology, Inc.

Nikon Metrology is pleased to announce the release of CMM-Manager version 3.7. This release adds the following enhancements:

- XPath support for Renishaw UCC I++ Driver
- Driver Updates
 - Mitutoyo UC 200 SP25 Support
 - Support UCC Server / Suite Versions 5+
- Gear Module Enhancements
- Improved Graphics Display
 - Smoother and Resizable Text
 - OpenGL Line Smoothing
 - Rotation Center Automatically set to current feature
- Reporting
 - Improved DDE
 - Multi-Operation Report Tolerance Update
 - True Position Tilted Cylinder
 - Graphical Report Disc vs. Spike
- Vision (iNexiv)
 - Pattern Recognition Score – VB
 - Load Video Operation
 - Improved Unknown Edge Profiling
 - Added Feature Filtering for Vision Measurements
- Improved Focus Ref Frame & Feature Export
- Added JT, SolidEdge, and DWG CAD import



XPath support for Renishaw UCC I++ Driver

- Automatically Sync Calibration Data (Probe Tips), Calibration Sphere, Machine Volume, Axis Orientation, Table Height, and Probe Head type
- New Tools & Probe Tips in UCC Server automatically appear in CMM-Manager
- Get Probe Assembly by Name vs. Numerical Index

Driver Updates

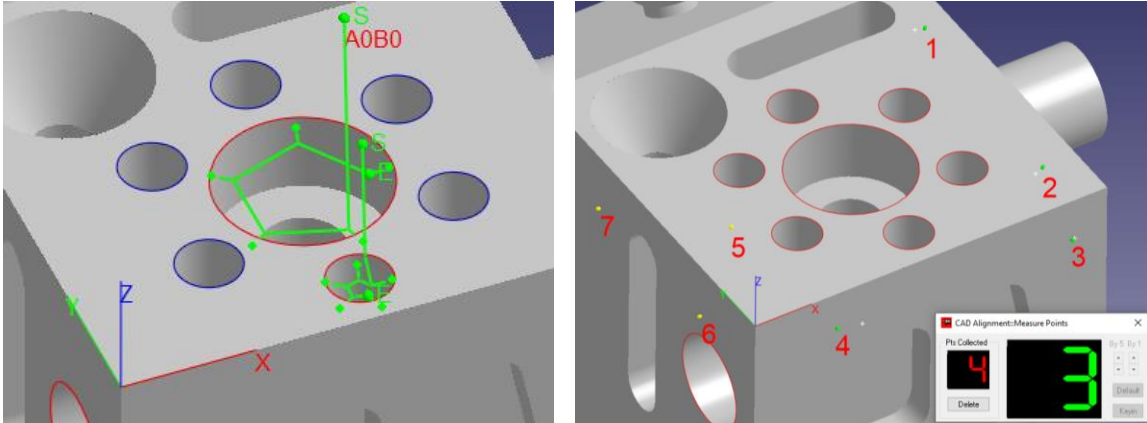
- Added Renishaw SP25 support for Mitutoyo UC 200 Controller
- Support for UCC Server 5.0.3 (PH20) and 5.1.0 (all other Probes)

Gear Module Enhancements

- Export Measured Gear Data to Involute Pro Format

Improved Graphics Display

- Larger & Clearer Fonts in Main Graphic Window, Reports, and Graphic Reports
- Open GL Smoothing in Main Graphic Window and Graphical Reports
- Graphic Manipulation - 3D Rotation Automatically Centered on Current Feature

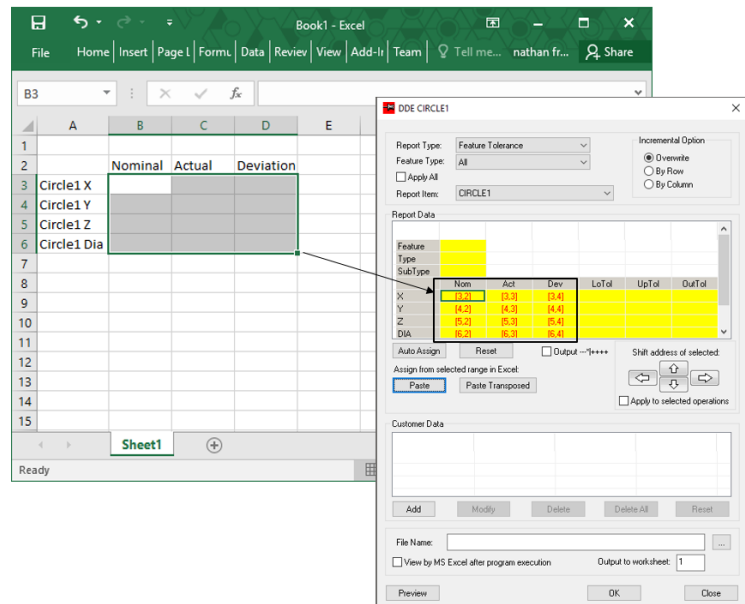


Reporting – Improved DDE

- Paste Button Automatically Populates DDE Cell Address(s) from Active Excel Document
- Added Shift Cell Address Button allows updating multiple DDE Operations
- Create Custom Excel Report 2x Faster

Reporting – Multi-Report Tolerance Update

- Apply Tolerance to Multiple Report Operations
- Save Time Compared to Editing Each Report Individually

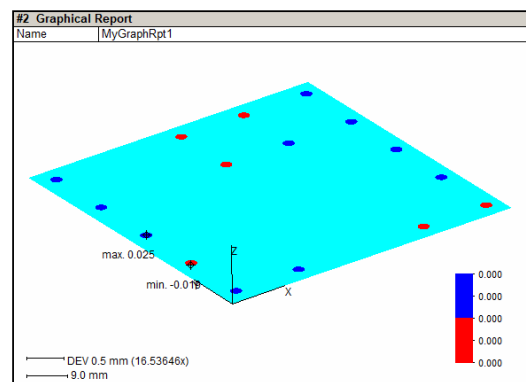
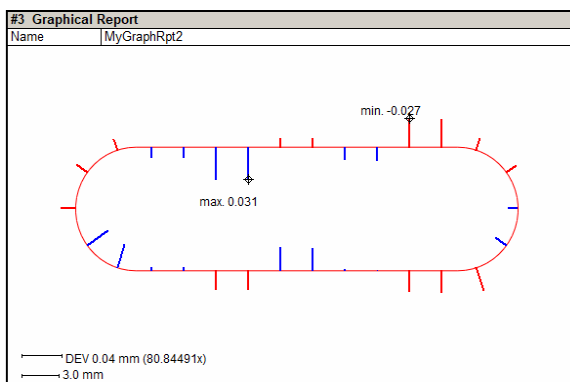


Reporting – True Position Tilted Cylinder

- Report True Position of Cylinder Includes I,J,K Vector or Angle X,Y,Z
- Eliminate extra Alignment Operations when Reporting Tilted Cylinder(s) True Position

Reporting – Graphic Report Form Deviation

- Automatically Set Spike or Disc Display for 2D and 3D Feature Form Graphical Reports



Vision – Pattern Recognition Score - VB

- Numeric Pattern Recognition Score can be retrieved as VB Variable (Integer 1-1000)
- Allows for more robust Pattern Recognition and Program Flow Control based on Pattern Recognition Results

Vision – Load Live Video Operation

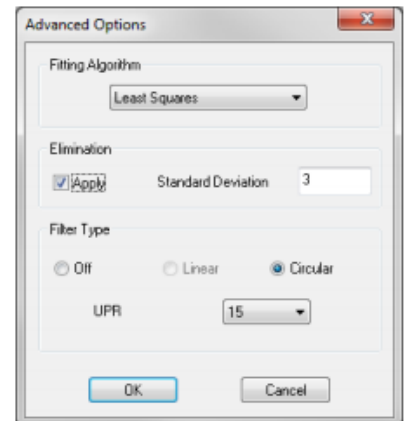
- Switch from Imported Image to Live Video During Program Execution
- Allows use of External Digital Camera or Static Image Source as well as Built-in iNexiv Camera

Vision – Improved Unknown Edge Profiling

- Improved Simple Tool Alignment During Unknown Vision Edge Profile
- Improve Edge Detection on Edge(s) with Noise or Lighting Variation

Vision – Added Feature Filtering for Vision Measurements

- UPR Filter for Circular Features
- Linear Filter for Lines / Planes
- Standard Deviation Elimination Filter



Improved Focus Ref Frame & Feature Export

- Programmable Operation to Export Features and Ref Frame for use in Focus Software

Language Support:

- English, Chinese, French, German, Japanese, Polish, Spanish, Czech and Italian

Bug Fixes:

- Prevent unexpected repositioning of Vision Arc Tool Position During Resize
- Allow multi-layer CAD Import for .STP / .STEP Format
- Increased Polar Coordinate decimal precision for Reporting
- Fixed SP25 from losing surface contact during Slot Measurement
- Fixed Missing Probe Path for CAD Teach Pilot Hole
- Fixed Vision Tool Orientation for Complex CAD Taught Features
- Fixed Incorrect Lighting for First Program Step
- Fixed Laser AF Scan Range Unit Conversion
- Replaced Absolute Deviation with +/- Deviation for Best-Fit Alignment Reports
- Fixed Measure Cross Section for PH20 Probe Path
- Fixed Inconsistent Datum Alignment Report Output

PC Requirements:

- CPU ----- Intel i7 / AMD FX 3.0 GHz or above
- OS ----- 32 / 64 bit - Windows 7, 8, 10
- Disc / Ram ----- 500 GB / 8 GB or more recommended
- Graphics Card ----- 1920 x 1080 (v3.0+ includes dual monitor support)
- PCI Slot ----- Mini tower to accommodate full height PCI card if needed