
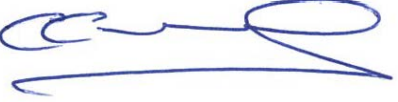


Renishaw CMM Products Division PRODUCT BULLETIN – PBC1624

Product: UCC Software	Status: Open
Title: Launch of UCCsuite 4.5	Date: 24 th October 2012

Originator: John Rosser		Distribution:	
Reviewer: Andy Holding		Internal	✓
		Subsidiaries	✓
		OEMs	✓
		Distributors	✓
		Retrofitters	✓

Summary:

Renishaw is pleased to announce the release of UCCsuite 4.5. The software is available for download from the following location:

<http://www.renishaw.com/cmmsupport/en/ucc-suite-released-software--10698>

We strongly advise reading the release notes which are available within the “installation Manager” software or through “start”, “All programs”, “UCCsuite...”

PH20 metrology improvements

Significant improvements to the PH20 calibration have been made in version 4.5. Previous versions exhibited problems with the matching of tip size, depending on whether taking Head touches or CMM touches and could be susceptible to false triggers. Version 4.5 now has the following improvements:

- A pre-travel variation (PTV) map is added for CMM touches, thereby improving the form performance for CMM touches at different angles of touch. V4.4.9 only had a PTV map for Head touches.
- Tip size derivation is improved to give a better single tip size which is valid for both touch methods (Head touch and CMM touch).
- Establishment of the 0 degrees (straight down) position of the A-axis (A-axis Offset) is improved giving better size measurements for Head touches below the critical angle, i.e. when measuring vertical bores. Tip correction will still be required to correct the A-axis offset that may result from the mechanical repeatability seen after

a module change (either in a rack or manually), but is no longer required immediately after calibration; it would have minimal effect.

- Installation parameter finding is improved to give better geometry. This will not have much effect in typical cases, but will improve measurements for longer and stiffer styli and module combinations.

The above changes will have no effect on REVO systems.

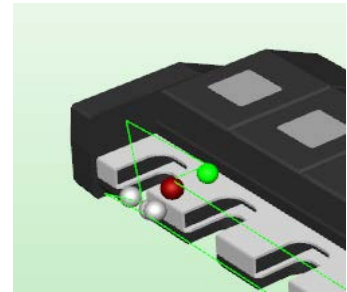
UCC security

Two levels of security have been added into UCCsuite 4.5. The application software can now be secured to a single UCC controller and the service/commissioning can be restricted with a hardware key instead of a password.

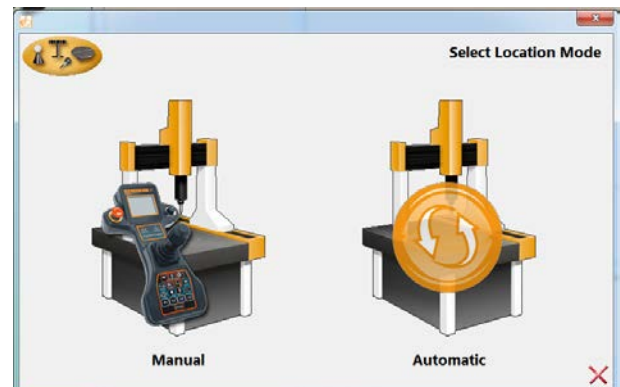
An overview of the new security options are provided in the release notes. Full details will be provided in a subsequent document.

Rack alignment improvements

- UCCsuite 4.5 includes an overhaul of its rack alignment routines/GUI. Initial joystick alignment is guided by a bouncing ball graphic. The red ball is the next point; the green ball represents taken points.



- After joystick alignment, the user is presented with a choice of old "Manual" method for each port or CNC "Automatic" for all ports.



- Please refer to the release notes regarding UCCsuite upgrade; in some cases it may be necessary to re-align racks.

Pre-requisites / actions / warnings after upgrade

- **Installation: Service pack 3** must be installed for Windows XP systems.
- **PH20 Metrology:** for all tools please **Clear Calibration and Recalibrate all tools** in UCCserver when upgrading from a previous release.
- **Setting PH20 PtMeas.HeadAccel to maximum value.** In some cases, depending on how the PH20 tool has been created, the value of the PtMeasPar.HeadAccel can be set to 100 mm/s². This can mean that for the higher head speeds the acceleration is not enough for the touch to be taken at the required speed. Typically a value of 2000 mm/s² should be used. This value can be changed in UCCserver advanced tree.
- **MODUS users should ensure MODUS 1.5 build 312 or later** is installed. When large environments are being used in conjunction with MODUS a timeout error

("UCCserver has not responded") may be seen. In this case ensure that MODUS 1.5 build 312 or later is installed.

- **PH10 rack port offsets:** An upgrade of a PH10 system may require a modification of the Rack Port Offsets. See table in the Rack Overhaul section in the release notes.
- **Surface Finish Probe rack insert graphic removed:** users must edit the rack to replace the original SFP insert with an RCP insert. These inserts are identical so the SFP insert has been removed to avoid duplication. Note that Surface Finish Probes should now be stored in thermally controlled ports (RCP TC) which do not require inserts.
- **Upgrading SPA2 to SPA3 on a PH20 installation:** there is a known problem regarding this. Please refer to the section on UCCassist MkII in the release notes for further explanation.

Appendix

Listed below are issues that have arisen since the release of UCCsuite 4.5 together with a its associated solution:

- Use of ML10 can fail: resolve by registering the Dx10Server.exe (full solution will be provided in a service pack).
- Launching UCCassist MkII from the command line is failing: (await service pack)
- UCCassist MkII visit reports: generation of visit reports is failing due to Microsoft Report Viewer not being present. As a short term solution, download and install Microsoft Report Viewer 2012 (full solution will be provided in a service pack).
- PH20 probe calibration: Crank Stylus pointing in -ve Y direction hits the sphere during Max Acceleration finding section (await service pack).
- PH20 Probe Calibration: Occasional failure during Optimal speed finding section. Appears to be due to timing issues in the system (await service pack).
- MCG tests in UCCassist MkII: Occasionally shows the error "Concurrent use of the controller connection was detected" (this can be cleared and the test will continue).

A service pack (UCCsuite 4.5.1) is being prepared and is expected to be released during the week ending 2nd November 2012.

If you have any questions regarding this bulletin please contact your local Renishaw office.