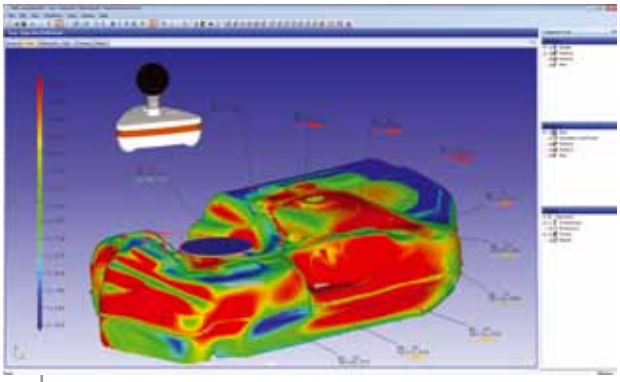
New Focus software release increases the accessibility and performance of laser scanning

Nikon Metrology introduces Focus Scan 5.5 and Focus Inspection 9.3. The software suite for point cloud data acquisition and inspection supports Windows 7, and successfully handles a nearly infinite number of measuring points on a Windows 64-bit operating system. It is able to exchange information with the latest versions of leading CAD software packages, and interacts with more CMM/scanner combinations then ever before.

Focus Inspection 9.3 introduces tighter feature detection integration and easier GD&T tolerances assignments. Regarding gap and step measurements, Focus improved the robustness of caliper positioning. The semi-automatic scan definition in Focus Scan 5.5 now includes improved closest qualification and lasso selection. Quite important is that during on-line scanning the reflection angle is also taken into account.

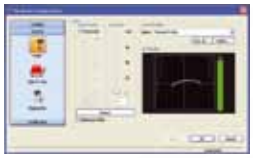
Focus' subtract mesh functionality is extended to retain certain parts of the mesh that surround solids under a specific distance and inclination range. For point cloud comparison tasks, the choice is now offered to specify a maximum search distance option. Related to reporting improvements, Focus Inspection fully supports Excel 2010 and allows reporting settings to be specified during automation playback.



Graphic part-to-CAD analysis from every possible perspective allows Focus users gain critical insights on the spot.

Focus Handheld Scanning API

To provide flexible and reliable access to premium handheld Nikon Metrology laser scanners, Focus offers 3rd party software vendors an application programming interface (API). With the new API, it becomes very straightforward for them to integrate Nikon Metrology 3D laser scanners. The API manages point cloud acquisition by controlling all interaction between the laser scanner and the handheld localizer of choice. By handling all interfacing with the scanner, such as scanner parameter modifications or running a qualification routine, the Focus handheld Scanning API ensures highest accuracy and reliability of the acquired data. The resulting point cloud data is fed directly into the point cloud processing application in real time, ready for further processing.



The plug-in offers design and manufacturing engineers fast-lane access to their favorite handheld Nikon Metrology laser scanners, while enjoying the convenience of the point cloud software environment they know inside out. Users of PolyWorks, Geomagic, Rapidform, Verisurf, Spatial Analyzer, PowerINSPECT* and Metrolog* software can take advantage from the Focus Handheld Scanning API.

*(under development)