

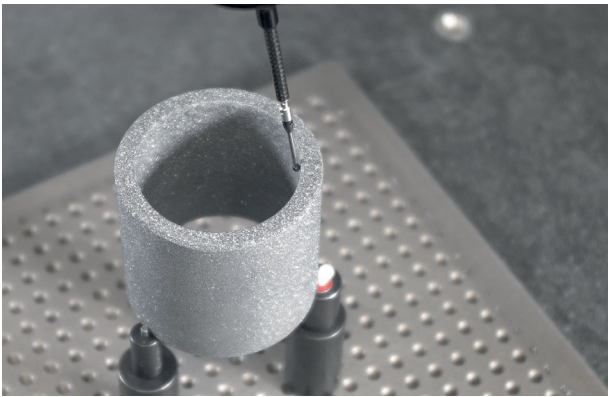
ULTRA SCANNING

Wear comparison testing between UltraScanning diamond styli versus standard ruby equivalent

- The **UltraScanning** range has been specifically developed for use within metrology applications that require a hardwearing stylus and for extreme measurement applications.

- The principal advantage of the diamond-coated spheres is that they will maintain their roundness and will not suffer material „pick up“ or premature wear when scanning abrasive materials or soft surfaces.

The test set-up.



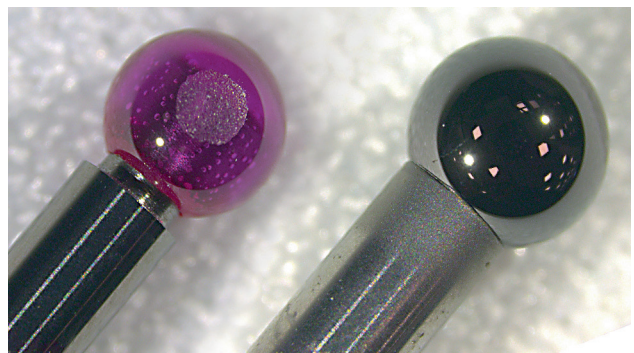
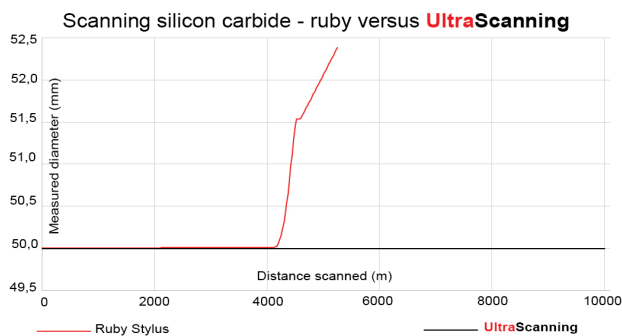
- The test was conducted to prove the wear resistance.
- **UltraScanning** was compared to the industry standard ruby material stylus.
- For comparison a material was chosen with very similar properties and one of the hardest, strongest ceramic materials available: silicon carbide.
- Also a testpiece with extremely rough surfaces finish of 16 Ra (comparable to abrasive paper 80 grade) was chosen.
- The test was executed with highly recognized scanning systems in metrology.

The test method.

- 1) Each stylus was calibrated and
- 2) then put through a series of 25 metre scans at a speed of 25 mm/sec followed by
- 3) 2 calibration checks to measure for potential wear.

The result.

The standard ruby material stylus first started to exhibit wear at approximately 3.500 metres. The **UltraScanning** stylus was tested through approximately 10.000 metres with no deterioration in calibration performance and no visible marking or wear.



Optical comparison of the tested styli (left ruby, right **UltraScanning**)
Clearly visible: The **UltraScanning** ball has absolutely no wear.