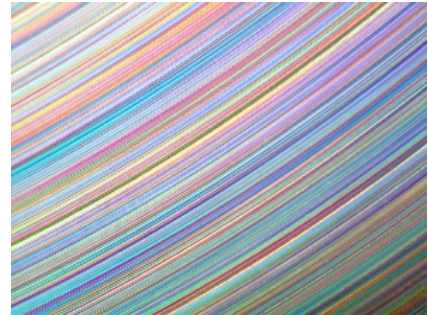


Data sheet N5 superfine Rpk calibration standard specimen

Calibration standard for very small parameters of the Abbott curve

The surface of this multifunctional standard specimen consists of turned grooves. This surface structure is manufactured by a precision turning tool. The surface is a hardened nickel coating (> 700HV1).



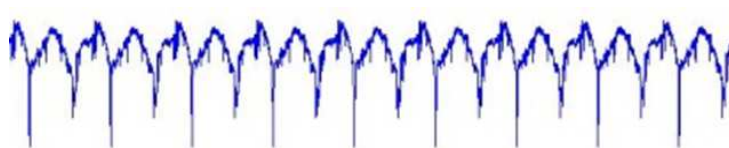
This surface structure emulates a very smooth real object surface and matches the surface structure of a very fine ground camshaft bearing. In contrast to ordinary standards this one features well defined and regular profiles. This standard piece is not only delivered stating the calibrated parameters but also an ASCII data set of the surface profile is optionally available. The user can compare this with his own measurements.

By default the calibration certificate lists the following parameters: Rk, Rvk, Rpk, Rz (ISO). Optionally more parameters can be calibrated.

The following features are available:

Zone 1: Surface roughness profile having the following parameters

Rk = $0.117 \pm 0.005 \mu\text{m}$; Rpk = $0.052 \pm 0.005 \mu\text{m}$; Rvk = $0.314 \pm 0.014 \mu\text{m}$

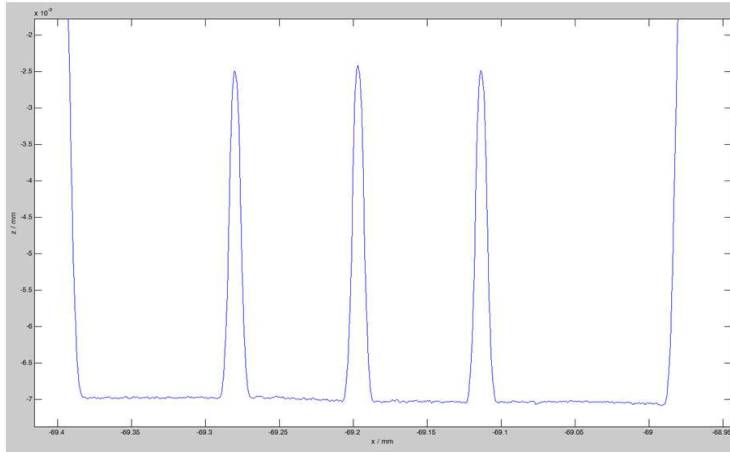


Zone 2: Calibration grooves (as an option)

Two grooves having depths of 0.5 and 1 μm and a groove width of 50 μm .

Zone 3: Knife edges (Option)

3 knife edges, approx. 8 μm high and with 90° tip angle serve to control the tip radius of the roughness tester. The knife edge tip radius is a few nm.



Evaluation software (Option)

This serves to compare the surface profiles as measured by the user with the calibration profiles.

The standard piece is mounted in a holder and supplied in a wooden box + calibration certificate + ASCII surface profile + optionally an app to assess the measured profiles.

