

REFERENCE SPECIMENS

Roughness, profilometry and roundness

ROUGHNESS SPECIMENS





For the calibration and functional check of the instruments, reference samples made specifically for this purpose are available. We have any type of specimensavailable, from roughness ones for the calibration of roughness gauges to roundness ones for the calibration of roundness gauges. The profilometry samples, as well as for the control of the profilometers, can possibly also be used for the control of the optical machines.

IMAGE	CODE	DESCRIPTION	PROFILE
	6.100	Ra = 0,10 µm RSm = 10 µm Pt = 0,3 µm	Sinusoidal 
	6.110	Ra = 0,30 µm RSm = 100 µm Pt = 1,0 µm	Sinusoidal 
	6.101	Ra = 0,50 µm RSm = 50 µm Pt = 1,5 µm	Sinusoidal 
	6.102	Ra = 1,00 µm RSm = 100 µm Pt = 3,0 µm	Sinusoidal 
	6.102	Ra = 1,6 µm Rz = 4,5 µm	Square wave 
	6.103	Ra = 2,97 µm RSm = 100 µm Pt = 12 µm	Triangular 
	6.104	Ra = 6,00 µm RSm = 135 µm Pt = 19 µm	Sinusoidal 
	6.105	Area 1 — Ra = 2,97 µm Area 2 — Ra = 0,48 µm Area 3 — Stylus check	Ra 2,97µm - Triangular (C3) Ra 0,48µm - Random (D) Stylus check - Triangular (B2)
	6.107	Ra = 2,97 µm RSm = 100 µm Pt = 12 µm	Triangular 
	6.108	1 µm groove	Single step 
	6.112	For visual comparison, 30 zones divided into lapping, grinding, turning and milling. Composite values from Ra = 0.05 µm up to Ra = 12.50 µm	Turning, vertical milling, horizontal milling, grinding and lapping

PROFILE SPECIMENS

IMAGE	CODE	DESCRIPTION	NOTE
	6.300	Profile specimen <ul style="list-style-type: none">1x height 45mm1x length 45mm1x convex radius 3mm	For profilometers PGS100 e PGS200
	6.301	Profile specimen <ul style="list-style-type: none">1x height 20mm1x length 20mm1x convex radius 3mm	For retrofit on generic profilometer
	6.302	Profile specimen <ul style="list-style-type: none">1x height 2.5mm1x length 2.5mm1x 1mm convex radius	For rugo-profilometers WARPsurf and RT120
	6.303	Profile specimen CN303 <ul style="list-style-type: none">1x 90° convex angle1x R 2,5mm convex radius4x steps of 1 mm	For generic profilometer
	6.308	Profile specimen CN181 <ul style="list-style-type: none">2x 90° convex angles1x 90° concave angles2x convex rays2x concave spokesvarious steps in X (up to 170mm)various heights in Z (up to 6mm)	For generic profilometer
	6.307	Profile specimen for the measurement of the helix angle <ul style="list-style-type: none">5x concave angles at varying degrees of inclination	Specific for PGS200 profilometer with software package for measuring helical profiles

ROUNDNESS SPECIMENS

IMAGE	CODE	DESCRIPTION
	6.200	Spherical specimenmade of ceramic. It allows to quantify and verify the rotation oscillations of the roundness tester table. Typical error <0.05 µm
	6.201	Flick specimen for checking and calibrating the sensitivity of the probe. Nominal step about 17µm
	6.203	Cylinder specimen for checking and aligning the Z axis, diameter 80mm, height 300mm. Typical deviation 2µm
	6.204	Multi-harmonic specimen for the verification of the calculation of the FFT analysis and the roundness tester filters. Harmonics: 1:5 - 1:15 - 1:50 - 1:150 - 1:300