

METROLOGICAL TESTS

Specifications

Traverse

50mm

Measuring Speed

0.05; 0.1; 0.5; 1 mm/s

Detector Measuring Force

0.75 mN

Stylus Tip Angle

60°

Stylus Tip Radius

2 μ m

Maximum number of channels

1

Range

800; 80; 8 μ m

Positioning

$\pm 1.5^\circ$ (tilting) and 10 mm (up/down)

Profiles

Primary Profile (P), Roughness Profile (R), Waviness (W), MOTIF (R, W)

Standard

EN ISO, VDA, JIS, ANSI and customized settings

Analysis graphs

AC and ADC

Digital filter

Gauss, 2CR75, PC75

No. of sampling length (L)

x 1, x 3, x 5, x L* (* = or any other value)

Cut-off length

λ_c : 0.08 mm; 0.25 mm; 0.8 mm; 2.5 mm; 8 mm

λ_s : 2.5 μ m; 8 μ m; 25 μ m

Surface roughness tester

MITUTOYO SURFTEST
SJ-412

MITUTOYO SURFTEST SJ-412 is a contact-type surface roughness tester that acquires surface morphology of a specimen fixed on a planar surface by a stylus detector that is drag linearly over the specimen itself.

The contact technique is based on the conversion of the vertical movement of the tip sensor into an electrical signal, which will be quantified according to various international standards (EN ISO, VDA, ANSI, JIS) and customized settings.

The skidless detector allows to measure the primary profile (P), roughness profile (R), waviness profile (W) and more.

The software can perform a mathematic compensation of curved, radiused and tilted surfaces. It allows two different evaluation conditions within one adjustable measurement.

Resulting profilometry is suitable for a variety of uses, as: geometric control, roughness and texture measurement, morphology evaluation.

