

## Basic principles of roughness measurement

Stylus instrument	← Stylus has an ideal geometrical form and nominal dimensions and exerts a nominal tracing force
Traced profile	← Is the locus of the centre of the stylus as it traverses the surface within the intersection plane
Reference profile	← Is the trace on which the probe is moved along the datum
Total profile	← Is the digital form of the traced profile relative to the reference profile
Primary profile	← Is the total profile after application of the short wavelength Filter $\lambda_s$
Waviness profile	← Is derived by subsequent filtering of the primary profile by the profile filter $\lambda_f$ and profile filter $\lambda_c$
Roughness profile	← Is the difference between the primary profile and the waviness profile