

5.4 Roughness measurement of surface

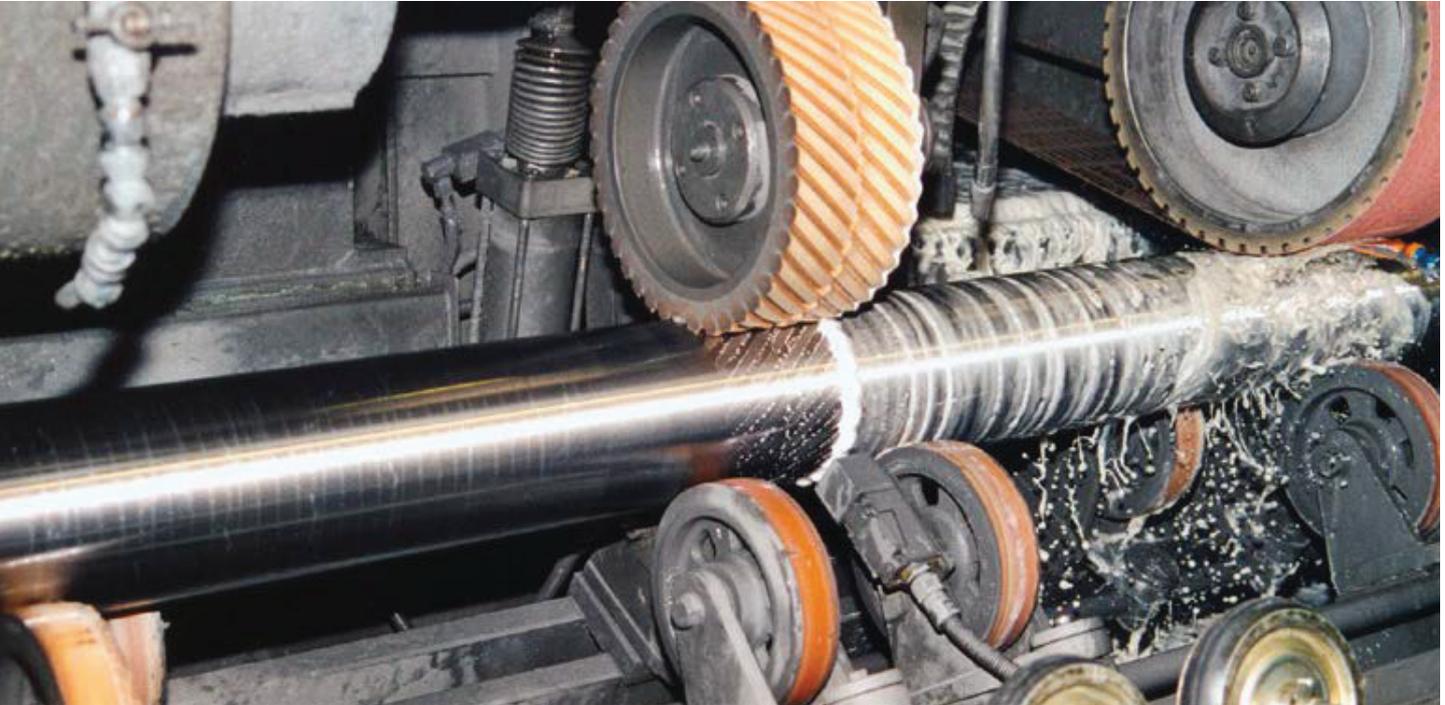
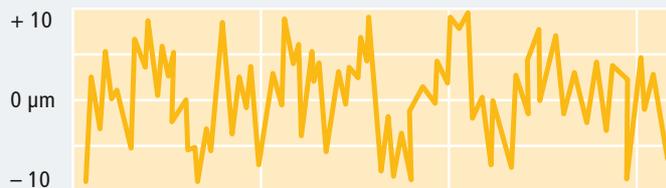


Fig. 5.4_1: Radial grinding of outside surface

Comparison of roughness measurement acc. to DIN EN ISO 4288



Hot rolled parent metal
(condition 1D acc. DIN EN 10088-2)

$R_a = 3.79 \mu\text{m}$

$R_z = 21.16 \mu\text{m}$

$R_{\text{max}} = 24.88 \mu\text{m}$

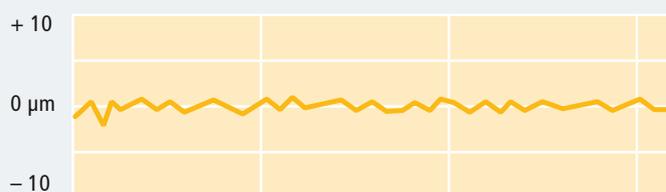


Cold rolled parent metal
(condition 2B acc. DIN EN 10088-2)

$R_a = 0.58 \mu\text{m}$

$R_z = 4.48 \mu\text{m}$

$R_{\text{max}} = 5.20 \mu\text{m}$



Electropolished pipe
(made from cold rolled raw materials)

$R_a = 0.26 \mu\text{m}$

$R_z = 1.71 \mu\text{m}$

$R_{\text{max}} = 2.40 \mu\text{m}$