

ROUGHNESS HEIGHT RATING												
ROUGHNESS GRADE ¹	N12	N11	N10	N9	N8	N7	N6	N5	N4	N3	N2	N1
ROUGHNESS VALUES [$\mu\text{m } R_a$]	50	25	12.5	6.3	3.2	1.6	0.80	0.40	0.20	0.10	0.05	0.25
PROCESS ²												
Flame cutting												
Snagging												
Sawing												
Planing, shaping												
Drilling												
Chemical milling												
Elect. discharge mach.												
Milling												
Broaching												
Reaming												
Electron beam												
Laser												
Electro-chemical												
Boring, turning												
Barrel finishing												
Electrolytic grinding												
Roller burnishing												
Grinding												
Honing												
Electro-polish												
Polishing												
Lapping												
Super finishing												
Sand casting												
Hot rolling												
Forging												
Perm. mould casting												
Investment casting												
Extruding												
Cold rolling, drawing												
Die casting												
The ranges shown above are typical of the processes listed.							Less frequent application					
Higher or lower values may be obtained under special conditions							Average application					

1 SABS 0111 Part I-1990, Table 7

2 Avalone, E.A. and Baumeister, Machinery's Handbook, 24th Ed, Industrial Press, 1987