

Material properties

Material	1.7711 (European Union / EN)
Group	Structural and constructional steels
Subgroup	EN 10269 Steels and nickel alloys for fasteners with specified elevated and/or low temperature properties
Comment	
Application	-

Yield Stress[MPa]			
Dimension	Min	Max	Approx
Fasteners; Quenched and tempered (QT); <= 100 mm	700	-	-
Fasteners; Quenched and tempered (QT); > 100 <= 160 mm	640	-	-

Tensile Stress[MPa]			
Dimension	Min	Max	Approx
Fasteners; Quenched and tempered (QT); <= 100 mm	850	1000	-
Fasteners; Quenched and tempered (QT); > 100 <= 160 mm	850	1000	-

Elongation A5 [%]			
Dimension	Min	Max	Approx
Fasteners; Quenched and tempered (QT); <= 100 mm	14.0	-	-
Fasteners; Quenched and tempered (QT); > 100 <= 160 mm	14.0	-	-

Impact [J]			
Dimension	Min	Max	Approx
Fasteners; Quenched and tempered (QT); <= 100 mm Impact Test: Charpy V Notch	30	-	-
Fasteners; Quenched and tempered (QT); > 100 <= 160 mm Impact Test: Charpy V Notch	25	-	-

Hardness**Dimension****Hardness**

Fasteners; Soft annealed (A)

<= 241 HB

Chemical Composition [%]**Criterion****Min****Max****Approx**

C	0.3600	0.4400	-
Si	-	0.4000	-
Mn	0.4500	0.8500	-
P	-	0.0300	-
S	-	0.0300	-
Cr	0.9000	1.2000	-
Mo	0.5000	0.6500	-
V	0.2500	0.3500	-
Al	-	0.0150	-