

## Material properties

<b>Material</b>	<b>1.7225 (European Union / EN)</b>
<b>Group</b>	Structural and constructional steels
<b>Subgroup</b>	EN 10250-3 Open die steel forgings for general engineering purposes
<b>Comment</b>	Alloy special steels

**Application** -

Yield Stress[MPa]			
Dimension	Min	Max	Approx
Quenched and tempered; <= 160 mm; (long.)	500	-	-
Quenched and tempered; <= 160 mm; (trans.)	500	-	-
Quenched and tempered; > 160 <= 330 mm; (long.)	460	-	-
Quenched and tempered; > 160 <= 330 mm; (trans.)	460	-	-
Quenched and tempered; > 330 <= 500 mm; (long.)	390	-	-
Quenched and tempered; > 330 <= 500 mm; (trans.)	390	-	-

Tensile Stress[MPa]			
Dimension	Min	Max	Approx
Quenched and tempered; <= 160 mm; (long.)	750	-	-
Quenched and tempered; <= 160 mm; (trans.)	750	-	-
Quenched and tempered; > 160 <= 330 mm; (long.)	700	-	-
Quenched and tempered; > 160 <= 330 mm; (trans.)	700	-	-
Quenched and tempered; > 330 <= 500 mm; (long.)	600	-	-
Quenched and tempered; > 330 <= 500 mm; (trans.)	600	-	-

Elongation A5 [%]			
Dimension	Min	Max	Approx
Quenched and tempered; <= 160 mm; (long.)	14.0	-	-
Quenched and tempered; <= 160 mm; (trans.)	10.0	-	-
Quenched and tempered; > 160 <= 330 mm; (long.)	15.0	-	-
Quenched and tempered; > 160 <= 330 mm; (trans.)	11.0	-	-
Quenched and tempered; > 330 <= 500 mm; (long.)	16.0	-	-
Quenched and tempered; > 330 <= 500 mm; (trans.)	12.0	-	-

Impact [J]			
Dimension	Min	Max	Approx
Quenched and tempered; <= 160 mm; (long.) <b>Impact Test:</b> Charpy V Notch	30	-	-
Quenched and tempered; <= 160 mm; (trans.) <b>Impact Test:</b> Charpy V Notch	16	-	-
Quenched and tempered; > 160 <= 330 mm; (long.) <b>Impact Test:</b> Charpy V Notch	27	-	-
Quenched and tempered; > 160 <= 330 mm; (trans.) <b>Impact Test:</b> Charpy V Notch	14	-	-
Quenched and tempered; > 330 <= 500 mm; (long.) <b>Impact Test:</b> Charpy V Notch	22	-	-
Quenched and tempered; > 330 <= 500 mm; (trans.) <b>Impact Test:</b> Charpy V Notch	12	-	-

Chemical Composition [%]			
Criterion	Min	Max	Approx
C	0.3800	0.4500	-
Si	-	0.4000	-
Mn	0.6000	0.9000	-
P	-	0.0350	-
S	-	0.0350	-
Cr	0.9000	1.2000	-
Mo	0.1500	0.3000	-