


TECHNICAL GUIDE

605M36T / EN16T

Steel Description

605M36T / EN16T is a low alloy manganese molybdenum steel which is supplied in the bright drawn, turned and hot rolled condition and is hardened and tempered to “T” condition, resulting in good mechanical properties. 605M36T / EN16T is readily machineable, with excellent ductility and shock resistance, suitable for the manufacture of crankshafts, conrods and shafts. See properties below and our hardness comparison table under the Useful Information section on our website. Where higher machining speeds and a better surface finish is required, we can also supply a sulphurised semi freecutting 606M36T / EN16MT on which we also have a technical guide.

BS970: 1955	BS970: 1991	COLOUR CODE	DESCRIPTION
EN16T	605M36T		Bright / black manganese molybdenum steel

CHEMICAL ANALYSIS	
Car	0.32 / 0.40
Sil	0.10 / 0.40
Mang	1.30 / 1.70
Phos	0.035 max
Sul	0.040 max
Moly	0.22 / 0.30

MECHANICAL PROPERTIES	
Tensile Strength N/MM2 Min Rm	850 / 1000
Yield Stress N/MM2 Min Rm	700
Elongation A Min % on 5.65√SO	9
Izod Min	54
Kcv Min	-
Proof Stress 0.2% N/MM2 Min	680
Brinell Hardness	248 / 302

INTERNATIONAL SPECIFICATION COMPARISON	
BRITISH BS 970:1991	605M36T
BRITISH BS 970:1955	EN16T
GERMAN DIN	
FRENCH AFNOR	
SWEDISH SS	
AMERICAN SAE	
EUROPEAN STEEL NO.	
EUROPEAN STEEL NAME	
EUROPEAN STANDARD	

SIZE RANGE SUMMARY			
	Rounds	IMP	1/4" - 3" dia
		MM	10mm - 230mm dia

SEE STOCK RANGE FOR SPECIFIC SIZES.

QUICK VIEW SYSTEM	
MACHINEABILITY	45
WELDABILITY	Pre / post heat precaution required
HARDENABILITY	High strength up to 30mm dia
SELECTION GUIDE AND USAGE EXAMPLES	Good mechanical properties, ductility and shock resistance. crankshafts, conrods and shafts