

TECHNICAL GUIDE

230M07 / ENIA Freecutting

Steel Description





230M07 / ENIA FREECUTTING is a very popular free machining low carbon steel that is supplied in either the Bright Drawn or Turned Bar condition. It is a highly machineable sulphurised material with consistent chemical properties, resulting in easy chipping, good tool life and improved surface finish. 230M07 / ENIA FREECUTTING is used for the manufacture of repetition turned parts where excellent machinability is required, including the production of hydraulic fittings, nuts & bolts, studs, control linkages and especially for intricate drilling and machining operations. 230M07 / ENIA FREECUTTING can also be supplied in a Precision Ground bar condition and in a Leaded / Pb version, where even higher machining speeds are required, on which we also have Technical Guides.

BS970: 1955	BS970: 1991	COLOUR CODE	DESCRIPTION
ENIA Freecutting	230M07		Bright drawn / turned / Freecutting steel

CHEMICAL ANALYSIS	
Car	0.15 max
Sil	0.05 max
Mang	0.90 / 1.30
Phos	0.09 max
Sul	0.25 / 0.35
Chr	-
Moly	-
Nick	-
Lead	-

INTERNATIONAL SPECIFICATION COMPARISON	
BRITISH BS 970:1991	230M07
BRITISH BS 970:1955	ENIA
GERMAN DIN	9SMn28
FRENCH AFNOR	S250
SWEDISH SS	1912
AMERICAN SAE	1214
EUROPEAN STEEL NO.	1.0715
EUROPEAN STEEL NAME	11SMn30
EUROPEAN STANDARD	EN 10277-3

QUICK VIEW SYSTEM	
MACHINEABILITY	200
WELDABILITY	Not recommended
HARDENABILITY	Poor
SELECTION GUIDE AND USAGE EXAMPLES	Highly machineable with consistent properties giving good tool life and surface finish

SIZE RANGE SUMMARY			
	Rounds	IMP	1/8" - 9" dia
		MM	3mm - 150mm dia
	Hexagons	IMP	.500" - 2.760" a/f hex
	Flats	IMP	3/4" x 1/2" - 6.1/2 x 2.1/4"
		MM	90mm x 10mm - 165mm x 55mm
	Squares	IMP	3/16" - 6" squ
		MM	6mm - 90mm squ

SEE STOCK RANGE FOR SPECIFIC SIZES.