

# TECHNICAL GUIDE

## 230M07Pb / ENIA Leaded Freecutting

### Steel Description




230M07 PB / ENIA LEADED FREECUTTING is a very popular free machining low carbon steel that is supplied in the Bright Drawn condition. It is highly machineable and with the addition of lead in consistent properties up to 0.35%, results in very easy chipping, good tool life and improved surface finish. 230M07 PB / ENIA LEADED FREECUTTING is used for the manufacture of repetition turned parts where the best possible machining speeds are required and is used amongst many others, for the production of hydraulic fittings, nuts & bolts, studs, control linkages and especially for intricate drilling and machining operations. A non-leaded version of 230M07 / ENIA FREECUTTING can also be supplied for an extended range of sizes and sections and in a Precision Ground round bar condition, on which we also have Technical Guides.

BS970: 1955	BS970: 1991	COLOUR CODE	DESCRIPTION
ENIA Leaded Freecutting	230M07Pb		Bright drawn leaded 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	0.15 / 0.35

INTERNATIONAL SPECIFICATION COMPARISON	
BRITISH BS 970:1991	230M07Pb
BRITISH BS 970:1955	ENIA Leaded
GERMAN DIN	9SMn28Pb
FRENCH AFNOR	S250Pb
SWEDISH SS	1914
AMERICAN SAE	12L14
EUROPEAN STEEL NO.	1.0718
EUROPEAN STEEL NAME	11SMnPb30
EUROPEAN STANDARD	EN 10277-3

QUICK VIEW SYSTEM	
MACHINEABILITY	250
WELDABILITY	Not recommended
HARDENABILITY	Poor
SELECTION GUIDE AND USAGE EXAMPLES	As 230M07/ENIA but where even better machining speeds, tool life and surface finish is required

SIZE RANGE SUMMARY			
	Rounds	IMP	3/16" - 3.1/4" dia
		MM	3mm - 65mm dia
	Hexagons	IMP	.150" - 1.875" a/f hex
		MM	5mm - 70mm a/f hex
	Squares	MM	4.5mm - 15mm squ

SEE STOCK RANGE FOR SPECIFIC SIZES.