

ALLOY STEELS -EN30B

EN30B-BS 970 GRADE 835M30-BAR

A 4-1/4% NICKEL-CHROMIUM-MOLYBDENUM ALLOY STEEL

TYPICAL ANALYSIS

C.	Mn.	P.	S.	Si.	Cr.	Ni.	Mo.
.28/.33	.40/.60	0.025	0.015	.10/.35	1.10/1.24	4/4.30	.20/.40

TYPICAL APPLICATIONS

THIS STEEL MAY BE USED WHERE TOUGHNESS AND HIGH TENSILE STRENGTH ARE REQUIRED. ONE OF THE MAIN USES IS FOR PLASTIC MOULDS, BUT HAS MANY OTHER APPLICATIONS FOR EXAMPLE: DOWN HOLE TOOLS, ROCK DRILLING BIT BODIES, HEAVY DUTY CONSTRUCTION TOOLS, HEAVY DUTY SHAFTS AND ROLLS, HIGHLY STRESSED GEARS AND TRANSMISSION COMPONENTS.

MECHANICAL PROPERTIES

NORMALIZED, TEMPERED & STRESS RELEIVED-TYPICAL

UP TO AND INCLUDING 6"

TENSILE STRENGTH, PSI.	160,000	PSI MIN
YIELD STRENGTH, PSI.	130,000	PSI MIN
ELONGATION, % IN 2"	13.0	
REDUCTION IN AREA, %	50.0	
BRINELL HARDNESS	320-365	

CHARPY V-NOTCH MIN. @ -50° F.	15 FT.-LBS.
CHARPY V-NOTCH MIN. @ ROOM TEMPERATURE	45 FT.-LBS.
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