

TECHNICAL GUIDE

722M24T / EN40BT

Steel Description

722M24T / EN40BT is a 3% Chromium Molybdenum Nitriding Steel which is usually supplied in the hardened and Tempered T condition as bright peeled or hot rolled. 722M24T / EN40BT offers high wear resistance together with good toughness and ductility and, the nitriding process produces a scale free surface with minimal distortion, suitable for the manufacture of bolts, drills, gears, guides, shafts & spindles.

BS970: 1955	BS970: 1991	COLOUR CODE	DESCRIPTION
EN40BT	722M24T		Black 3% chromium molybdenum nitriding steel

CHEMICAL ANALYSIS	
Car	0.20 / 0.28
Sil	0.10 / 0.40
Mang	0.45 / 0.70
Phos	0.035 max
Sul	0.040 max
Chr	3.00 / 3.50
Moly	0.46 / 0.65

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	722M24T
BRITISH BS 970:1955	EN40BT
GERMAN DIN	
FRENCH AFNOR	
SWEDISH SS	
AMERICAN SAE	
EUROPEAN STEEL NO.	
EUROPEAN STEEL NAME	
EUROPEAN STANDARD	

SIZE RANGE SUMMARY			
	Rounds	MM	25mm - 200mm dia

SEE STOCK RANGE FOR SPECIFIC SIZES.

QUICK VIEW SYSTEM	
MACHINEABILITY	35
WELDABILITY	Not recommended
HARDENABILITY	Medium strength nitriding
SELECTION GUIDE AND USAGE EXAMPLES	After hardening produces very hard resistant case & core strength 55/65 t/sq". Shackle pins & ball joints