


# TECHNICAL GUIDE

## 709M40T/EN19T

BS970: 1955	BS970: 1991	COLOUR CODE	DESCRIPTION
EN19T	709M40T		Bright / black 1% chromium molybdenum steel

CHEMICAL ANALYSIS	
Car	0.36 / 0.44
Sil	0.10 / 0.40
Mang	0.70 / 1.00
Phos	0.035 max
Sul	0.040 max
Chr	0.90 / 1.20
Moly	0.25 / 0.35

MECHANICAL PROPERTIES	
Tensile Strength N/MM2 Min Rm	850 / 1000
Yield Stress N/MM2 Min Rm	700
Elongation A Min % on 5.65v/50	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	709M40T
BRITISH BS 970:1955	EN19T
GERMAN DIN	42CrMo4
FRENCH AFNOR	42CD4
SWEDISH SS	2244
AMERICAN SAE	4140
EUROPEAN STEEL NO.	1.7225
EUROPEAN STEEL NAME	42CrMo4
EUROPEAN STANDARD	EN10277-5

QUICK VIEW SYSTEM	
MACHINEABILITY	40
WELDABILITY	Pre / post heat precaution required
HARDENABILITY	High strength up to 60mm dia
SELECTION GUIDE AND USAGE EXAMPLES	Good tensile, ductility and shock resistance. Can be induction hardened to give resistance to wear

SIZES														
Size (ins. dia)	1/2	5/8	3/4	7/8	1	1.1/8	1.1/4	1.3/8	1.1/2	1.5/8	1.3/4	2	2.1/4	2.1/2
	3													

Size (mm. dia)	10.00	45.00	50.00	60.00										
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