

TECHNICAL ENCLOSURE

MATERIALS FOR STUDBOLTS - BOLTS - SPECIALS



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MATERIALS SPECIFICATIONS				CHARACTERISTICS			
NAME	NR	GRADE	SERVICE	SIZE STANDARD LIMITS	HB (INDICATIVE)	REMARKS	
ASTM	A 182	F51	S	ALL	≥ 180		
		F44	S	ALL	≥ 200		
		F53	S	ALL	≥ 240		
ASTM	A 193	B5	H	≤ 4"	-		
		B6	H	≤ 4"	-		
		B7	H	≤ 7"	≤ 321		
		B7M	S	≤ 7"	≤ 235	SOUR SERVICE	
		B76	H	≤ 8"	≤ 321		
		B8 CL 1	H	ALL	≤ 223		
		B8 CL 2	H	≤ 1.1/2"	≤ 321	STRAIN HARDENED	
		B8M CL 1	H	ALL	≤ 223		
		B8M CL 2	H	≤ 1.1/2"	≤ 321	STRAIN HARDENED	
		B8T CL 1	H	ALL	≤ 223		
		B8C CL 1	H	ALL	≤ 223		
ASTM	A 320	L7	L	≤ 2.1/2"	-		
		L7M	S	≤ 2.1/2"	≤ 235	SOUR SERVICE	
		L43	L	≤ 4"	-		
		B8 CL 1	L	ALL	≤ 223		
		B8 CL 2	L	≤ 1.1/2"	≤ 321	STRAIN HARDENED	
		B8M CL 1	L	ALL	≤ 223		
		B8M CL 2	L	≤ 1.1/2"	≤ 321	STRAIN HARDENED	
		B8T CL 1	L	ALL	≤ 223		
		B8C CL 1	L	ALL	≤ 223		
		A 453	651 A	S	ALL	217/277	
			651 B	S	ALL	212/269	
		660 A	S	ALL	248/341		
		660 B	S	ALL	248/341		
	A 540	B23	S	≤ 6"	248/429	ALL CLASSES	
		B24	S	≤ 6"	248/415	ALL CLASSES	
	A 564	630	S	≤ 8"	≥ 302	SOLUTION THREATENED 1100°F	
DIN	17240	C35	H	≤ 100 mm	≥ 150		
		CK35	H	≤ 100 mm	≥ 150		
		24CrMo5	H	≤ 100 mm	≥ 180		
		21CrMoV5 7	H	≤ 250 mm	≥ 210		
		40CrMoV4 7	H	≤ 100 mm	≥ 270		
		X22CrMoV12 1	H - S	≤ 250 mm	≥ 240		
		X19CrMoVNbN11 7	H - S	≤ 250 mm	≥ 270		
		X8CrNiMoBNb16 16	H - S	≤ 100 mm	≥ 200		
		NiCr20TiAl	H - S	≤ 160 mm	≥ 300		
DIN	17440	X5CrNi18 10	S	≤ 160 mm	≥ 150		
REGISTERED TRADE MARKS	-	MONEL	S	ALL	-	ALL IDENTIFICATION NUMBERS	
	-	INCONEL	S	ALL	-		
	-	HASTELLOY	S	ALL	-		
	-	NIMONIC	S	ALL	-		

H = High temperature service

L = Low temperature service

S = Special service

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Figures shown above are to be used as a guide only.