

耐大气腐蚀钢板

Steel Plates With Atmospheric Corrosion Resistance (单位: mm)

JIS G3114: 1998 焊接结构用热轧耐大气腐蚀钢

Hot-rolled atmospheric corrosion resisting steels for welded structure (对钢板 For plate)

牌号 Symbol of grade	钢板 成品厚度 Plate Thickness mm	热处理 Heat treatment	化学成分% (熔炼分析) Chemical Composition % (Heat analysis)								拉伸试验 Tensile Test (JIS试样 Test piece NO.1A: L ₀ =200mm b=40mm、NO.5: L ₀ =50mm b=25mm、NO.4: L ₀ =50mm d=14mm)										V型冲击试验 Impact Test 纵向 Longitudinal				
			C	Si	Mn	P	S	Cu	Cr	Ni	屈服强度 Yield Strength N/mm ² , ≥					抗拉强度 Tensile Strength N/mm ²	断后伸长率 Elongation %, ≥			试验温度 Test temperature ℃	平均冲击功 Average Impact Energy J, ≥ (试样尺寸 the size of test piece 10×10mm)				
			≤		≤	≤	≤				厚度 Thickness, mm						厚度a Thickness, mm (JIS试样 Test piece)								
											≤16	>16 ~40	>40 ~75	>75 ~100	>100 ~160	>160 ~200	≤16 (NO.1A或NO.5)	>16 (NO.1A或NO.5)	>40 (NO.4)						
SMA400AW	≤200													205	195				—	—					
SMA400BW	≤200		0.18	0.15 ~0.65	1.25	0.035	0.035	0.30 ~0.50	0.45 ~0.75	0.05 ~0.30								0	27						
SMA400CW	≤100										245							0	47						
SMA400AP	≤200															400~540	17 (NO.1A)	21 (NO.1A)	23	—	—				
SMA400BP	≤200	如: 正火N、淬火+ 回火Q+T、	0.18	≤0.55	1.25	0.035	0.035	0.20 ~0.35	0.30 ~0.55	—					205	195				0	27				
SMA400CP	≤100	热工艺控制Thermal processing control、 其他合适的热处理 some other heat treatments.													—	—				0	47				
SMA490AW	≤200														305	295				—	—				
SMA490BW	≤200	其他合适的热处理 some other heat treatments.	0.18	0.15 ~0.65	1.40	0.035	0.035	0.30 ~0.50	0.45 ~0.75	0.05 ~0.30								0	27						
SMA490CW	≤100										365							0	47						
SMA490AP	≤200	买方同意 Agreed by purchaser: TMCP	0.18	≤0.55	1.40	0.035	0.035	0.20 ~0.35	0.30 ~0.55	—					305	295				—	—				
SMA490BP	≤200																	0	27						
SMA490CP	≤100														—	—				0	47				
SMA570W	≤100		0.18	0.15 ~0.65	1.40	0.035	0.035	0.30 ~0.50	0.45 ~0.75	0.05 ~0.30	460							0	27						
SMA570P	≤100		0.18	≤0.55	1.40	0.035	0.035	0.20 ~0.35	0.30 ~0.55	—					450	430	420	—	—	570~720	19 (NO.5)	26 (NO.5)	20	-5	47

注Remarks:
 1, 对于如何钢级的钢板, 可加入耐大气腐蚀的有效元素如Mo Nb Ti V和Zr 但这些元素的总量不得超过0.15%。
 The elements effective for the atmospheric corrosion resistance, such as Mo, Nb, Ti, V and Zr may be added to any grade of plates, the total content of these elements shall not be over 0.15%.
 2, 碳当量和焊接裂纹敏感系数Carbon equivalent (CE) or chemical composition susceptible to weld crack(Pcm)

牌号 Symbol of grade	热处理 Heat treatment	碳当量 %, CE=C+Mn/6+Si/24+Ni/40+Cr/5+Mo/4+V/14 ≤			买方同意 Agreed by purchaser: 替代CE 焊接裂纹敏感系数%, Pcm = C+Si/30+Mn/20+Cu/20+Ni/60+Cr/20+Mo/15+V/10+5B ≤		
		厚度 Thickness, mm			厚度 Thickness, mm		
		≤50	>50~100	>100	≤50	>50~100	>100
SMA490AW, SMA490BW, SMA490CW	Thermal processing control	0.41	0.43	协议Agreement	0.24	0.26	协议Agreement
SMA490AP, SMA490BP, SMA490CP		0.40	0.42	协议Agreement	0.24	0.26	协议Agreement