

## 不鏽鋼管 TABLE OF THE CHEMICAL COMPOSITION OF STAINLESS STEEL PIPES AND TUBES

規格 Specification		化學成份Chemical Composition(%)							
		C	Si	Mn	P	S	Ni	Cr	Mo
JIS	SUS 304	≦0.08	≦1.00	≦2.00	≦0.04	≦0.03	8.00~11.00	18.00~20.00	
	SUS 304L	≦0.03	≦1.00	≦2.00	≦0.04	≦0.03	9.00~13.00	18.00~20.00	
	SUS 316	≦0.08	≦1.00	≦2.00	≦0.04	≦0.03	10.00~14.00	16.00~18.00	2.00~3.00
	SUS 316L	≦0.03	≦1.00	≦2.00	≦0.04	≦0.03	12.00~16.00	16.00~18.00	2.00~3.00
ASTM	TP304	≦0.08	≦0.75	≦2.00	≦0.04	≦0.03	8.00~11.00	18.00~20.00	
	TP 304L	≦0.035	≦0.75	≦2.00	≦0.04	≦0.03	8.00~13.00	18.00~20.00	
	TP 316	≦0.08	≦0.75	≦2.00	≦0.04	≦0.03	11.00~14.00	16.00~18.00	2.00~3.00
	TP 316L	≦0.035	≦0.75	≦2.00	≦0.04	≦0.03	10.00~15.00	16.00~18.00	2.00~3.00

## 不鏽鋼的機械性質 STAINLESS MECHANICAL PROPERTIES

規格 Specification		機械性質Mechanical Properties				特性 Characteristics
		抗強拉度 Tenside Strength	伸長率 Elongation	降伏強度 Yield Strength	硬度 Hardness	
		kgf/mm <sup>2</sup> [N/mm <sup>2</sup> ]	%	kgf/mm <sup>2</sup> [N/mm <sup>2</sup> ]	HRB	
JIS ASTM	SUS 340 TP 340	≧53 [520]	≧35	≧21 [205]	≧90	304 抗一般熱及耐熱 Resistant to highly oxidizing acids such as nitric acid, geeral corrosion-resistant and heat resistant
	SUS 340L TP 340L	≧49 [480]	≧35	≧18 [175]	≧90	304L 耐腐蝕性強及耐高溫 Resistant to various organic acids such as diluted sulfuric acid, sulfurous acid and acetic acid, anit-pitting corrosion.
	SUS 316 TP 316	≧53 [520]	≧35	≧21 [205]	≧90	316 304+耐晶界腐蝕性 304+inter-granular corrosion resistance.
	SUS 316L TP 316L	≧49 [480]	≧35	≧18 [175]	≧90	316L 316+耐晶界腐蝕性耐高溫至650℃ 306+inter-granular corrosion resistance, heat resistance up to 650℃.

## 不鏽鋼管固溶化熱處理 STAINLESS STEEL SOLUTION ANNEALING CONDITION

JIS規範		ASTM規範		CNS規範	
鋼種 Type	固溶化處理(℃) Annealing Process	鋼種 Type	固溶化處理(℃) Annealing Process	鋼種 Type	固溶化處理(℃) Annealing Process
SUS 304	1010℃以上水急冷 WATER QUENCHING	TP 304	1040℃以上水急冷 WATER QUENCHING	TP 304	1010℃以上水急冷 WATER QUENCHING
SUS 304L		TP 304L		TP 304L	
SUS 316		TP 316		TP 316	
SUS 316L		TP 316L		TP 316L	