

ISO 2604/5-78 STEEL PRODUCTS FOR PRESSURE PURPOSES PART5 LONGITUDINALLY WELDED AUSTENITIC STAINLESS STEEL TUBES

1. Chemical Composition

Grade	Mfg. Process	Chemical Composition (%)								
		C	Si	Mn	P	S	Ni	Cr	Mo	Others
TW46	A	0.03Max	1.00Max	2.00Max	0.045Max	0.030Max	9.00~12.00	17.00~19.00	-	-
TW47	A	0.07Max	1.00Max	2.00Max	0.045Max	0.030Max	8.00~11.00	17.00~19.00	-	-
TW50	A	0.08Max	1.00Max	2.00Max	0.045Max	0.030Max	9.00~12.00	17.00~19.00	-	Nb: 10×C~1.00
TW53	A	0.08Max	1.00Max	2.00Max	0.045Max	0.030Max	9.00~12.00	17.00~19.00	-	Ti: 5×C~0.80
TW57	A	0.03Max	1.00Max	2.00Max	0.045Max	0.030Max	11.00~14.00	16.00~18.50	2.00~2.50	-
TW58	A	0.03Max	1.00Max	2.00Max	0.045Max	0.030Max	11.50~14.50	16.00~18.50	2.50~3.00	-
TW60	A	0.07Max	1.00Max	2.00Max	0.045Max	0.030Max	10.50~14.00	16.00~18.50	2.00~2.50	-
TW61	A	0.07Max	1.00Max	2.00Max	0.045Max	0.030Max	11.00~14.50	16.00~18.50	2.50~3.00	-
TW69	A	0.10Max	1.00Max	1.50Max	0.045Max	0.030Max	30.00~35.00	19.00~23.00	-	Ti: 0.15~0.60 Al: 0.15~0.60

2. Mechanical Properties

Grade	Tensile Test MPa or N/mm ²		Remarks (Similar to JIS)
	Min Yield point	Tensile Strength	
TW46	175	490~690	(SUS304LTPY)
TW47	195	490~690	(SUS304TPY)
TW50	205	510~710	(SUS334TPY)
TW53	195	510~710	(SUS347TPY)
TW57	185	490~690	(SUS321TPY)
TW58	185	490~690	(SUS316LTPY)
TW60	205	510~710	(SUS316TPY)
TW61	205	510~710	(SUS316TPY)
TW69	195	480~680	-

[illegible]