

NF A49-214-78 STEEL TUBES SEAMLESS AUSTENITIC STEEL TUBES FOR USE AT HIGH TEMPERATURES

Grade	Mfg. Process	Chemical Composition (%)								
		C	Si	Mn	P	S	Ni	Cr	Mo	Others
Z6CN19-10	S	0.04~0.08	1.0Max	2.0Max	0.035Max	0.030Max	8~11	18~20	-	B0.0010~0.0030
Z3CND17-12B	S	0.04~0.08	1.0Max	2.0Max	0.035Max	0.030Max	11~14	16~18	2.0~3.0	B0.0010~0.0030
Z6CNT18-12B	S	0.04~0.08	1.0Max	2.0Max	0.035Max	0.030Max	10~13	17~19	-	B0.0010~0.0030 Ti 4CMin 0.60Max
Z6CNNb18-12B	S	0.04~0.08	1.0Max	2.0Max	0.035Max	0.030Max	10~13	17~19	-	B0.0010~0.0030 (Nb+Ti) 8CMin 0.75Max
Z8CNDT17-13B	S	0.05~0.10	1.0Max	2.0Max	0.035Max	0.030Max	12~15	16~18	2.0~3.0	B0.0010~0.0030 Ti 4CMin 0.75Max
Z10CNWT17-13B	S	0.07~0.13	1.0Max	1.0Max	0.035Max	0.030Max	12~14	16~18	-	B0.0010~0.0030 W 2.5Min 4Max Ti 5CMin 0.8Max

Grade	Tensile Test MPa or N/mm ²	
	Min Yield point	Tensile Strength
Z6CN19-10	190	490~740
Z3CND17-12B	190	490~690
Z6CNT18-12B	190	490~690
Z6CNNb18-12B	190	490~690
Z8CNDT17-13B	190	540~740
Z10CNWT17-13B	190	540~740

Material Comparison Tables (ASTM, KS, JIS, DIN, BS, NBN, NF, UNI)

[illegible]

Stainless Steel Pipe																	
TP 304	S30400	STS 304TP / SUS 304 TP	D3576 / G3459	(16)	X5CrNi 18 9	17440	1.4301	(3b)	3605	304S18		TU Z6 CN19-10	A 49-230		X5 CrNi 18 10	6904	(3b)
TP 304H	S30409	STS 304HTP / SUS 304HTP	D3576 / G3459	(16)				(3)	3605	304S59		TU Z6 CN19-10	A 49-214		X8 CrNi 19 10	6904	(3b)
TP 304L	S30403	STS 304LTP/SU	D3576 / G3459	(16)	X2 CrNi 19 9	17440	1.4306	(3b)	3605	304S14		TU Z2 CN19-11	A 49-230		X2 CrNi 18 11	6904	(3b)
TP 310	S31000	304LTP	D3576 / G3459	(16)				(3)							X22 Cr Ni 25 20	6904	(3b)(11)
TP 316	S31600	STS 310STP/SU	D3576 / G3459	(16)	X5 CrNiMo 18 10	17440	1.4401	(3b)	3605	316S18		Z 6 CND 17.11	A 35-573	(3b)	X5 CrNiMo 17 12	6904	(3b)
TP 316H	S34609	310STP	D3576 / G3459	(16)				(3)	3605	316S59		TUZ6CND17-12	A 49-230		X8 CrNiNb 17 12	6904	(3b)
TP 316L	S31603	STS 316TP / SUS 316TP	D3576 / G3459	(16)	X2 CrNiMo 18 10	17440	1.4404	(3b)	3605	316S14		TUNZ2CND17-12	A 49-230		X2 CrNiMo 17 12	6904	Dalmine 941(3b)
TP 321	S32100	STS 316HTP /SU	D3576 / G3459	(16)	X10 CrNiTi 18 9	17440	1.4541	(3b)	3605	321S18		Z6 CNT 18.11	A 49-230		X6 CrNiTi 18 11	6904	(3b)
TP 347	S34700	316HTP	D3576 / G3459	(16)	X5 CrNiNb 18 9		1.4543	(3b)	3605	347S18		Z6 CNNb 18.11	A 35-573	(3b)	X6 CrNiNb 18 11	6904	(3b)
TP 347H	S34709	STS 316LTP /SU	D3576 / G3459	(16)				(3)							X6 CrNiNb 18 11	6904	(3b)