Stainless Steel Seamless & Welded Tubes / Pipes Product Specification & Comparison

GRADE	CHEMICAL ANALYSIS (&)									COMPARISON / EQUIVALENT								
ASTM (USA)	C	Si(Max.)	Mn(Max.)	P(Max.)	S(Max.)	Ni	Cr	Mo	Other	UNS (USA)	B.S (UK)	EN/DIN (Germany)	AFNOR NF (France)	UNI (Italy)	SS (Sweden)	JLS (Japan)	GB/PR (China)	KS (Korea)
304	0.08 max	1.00	2.00	0.045	0.030	8.00~11.00	18.00~20.00	-	-	S30400	304S31 / 304S15	1.4301	Z7 CN 18-09/ Z6 CN 18-09	X5CrNi 18 10	2333	SUS 304	0Cr 18Ni9	STS 304
304L	0.035 max	1.00	2.00	0.045	0.030	8.00~13.00	18.00~20.00	-	-	S30403	304S11	1.4307	Z2 CN 18-10 Z3 CN 18-10	X2CrNi 18 11	2352	SUS 304L	00Cr 19Ni10	STS 304L
304N	0.08 max	1.00	2.00	0.045	0.030	8.00~11.00	18.00~20.00	-	N:0.10-0.16	S30451	304S71	1.6907	-		-	-	-	-
304LN	0.035 max	1.00	2.00	0.045	0.030	8.00~12.00	18.00~20.00	-	N:0.10-0.16	S30453	304S61	1.4311	Z3 CN 18-10 Az		2371	SUS 304LN	00Cr 18Ni1 ON	STS 304LN
304H	0.04-0.10	1.00	2.00	0.045	0.030	8.00~11.00	18.00~20.00	-	-	S30409	304S51	1.4948	Z6 CN 18-09	X8CrNi 18 10	2333	SUS 304	1Cr 18Ni9	STS 304
316	0.08 max	1.00	2.00	0.045	0.030	10.00~14.00	16.00~18.00	2.00~3.00	-	S31600	316S31	1.4401	Z7 CND 17-11-02	X5CrNiMo 17 12	2347	SUS 316	0Cr17 Ni12Mo2	STS 316
											316S33 / 316S31	1.4436	Z7 CND 18-12-03	X5CrNiMo 17 13	2343			
316L	0.035 max	1.00	2.00	0.045	0.030	10.00~14.00	16.00~18.00	2.00~3.00	-	S31603	316S11 / 316S11	1.4404	Z3 CND 17-11-02/ Z3 CND 18-12-02/	X5CrNiMo 17 12	2348	SUS 316L	00Cr Ni12Mo2	STS 316L
											316S13 / 316S11	1.4435	Z3 CND 18-14-03	X2CrNiMo 17 13	2353			
316N	0.08 max	1.00	2.00	0.045	0.030	10.00~14.00	16.00~18.00	2.00~3.00	N:0.10-0.16	S31651	-	-	-	-	-	-	-	-
316LN	0.035 max	1.00	2.00	0.045	0.030	10.00~14.00	16.00~18.00	2.00~3.00	N:0.10-0.16	S31653	316S61	1.4406	Z3 CND 17-11 Az		-	SUS 316LN	00Cr 17N112Mo2N	STS 316LN
316Ti	0.08 max	0.75	2.00	0.045	0.030	10.00~14.00	16.00~18.00	2.00~3.00	Ti:5X(C+N)-0.70 N-0.10 max	S31635	320S31	1.4571	Z6 CNDT 17-12	X6CrNiMoTi 17 13	2350	SUS 316TI	0Cr 18Ni12Mo2TI	STS 316T1
316H	0.04-0.10	1.00	2.00	0.045	0.030	11.00~14.00	16.00~18.00	2.00~3.00	-	S31609	316S52	1.4401 / 1.4919	Z6 CND 17-12B	X8CrNiMo 17 12	-	-	-	-
321	0.08 max	1.00	2.00	0.045	0.030	9.00~12.00	17.00~19.00	-	Ti:5X(C+N) ~0.70	S32100	321S31	1.4541	Z6 CNT 18-10	X6CrNiTI 18 11	2337	SUS 321	0Cr 18Ni9TI	STS 321
321H	0.04-0.10	1.00	2.00	0.045	0.030	9.00~12.00	17.00~19.00	-	Ti:4X(C+N) ~0.70	S32109	321S51	1.4878	Z6 CNT 18-10	X8CrNiTI 18 11	2337	SUS 321		
317	0.08 max	1.00	2.00	0.045	0.030	11.00~15.00	18.00~20.00	3.00~4.00	-	S31700	317S16	1.4449	Z3 CND 19-15-04	X5 CrNiMo 1815	-	SUS 317		
317L	0.035 max	1.00	2.00	0.045	0.030	11.00~15.00	18.00~20.00	3.00~4.00		S31703	317512	1.4438	Z6 CNNb 18-10	X2 CrNiMo 1815	2367	SUS 317L	00Cr 19N113Mo3	STS 317L
347	0.08 max	1.00	2.00	0.045	0.030	9.00~13.00	17.00~19.00	-	Nb+Ta: 10XC%-1.00	S34700	347S31	1.455		X6CrNiNb 18 11	2338	SUS 347	0Cr 18N11Nb	STS 347
347H	0.04-0.10	1.00	2.00	0.045	0.030	9.00~13.00	17.00~19.00	-	Nb+Ta 8XC%-1.0	S34709	316S)a	1.4961	Z8 CN 25-20/	X8CrNiNb 18 11	2347	-	-	-
310S	0.080 max	1.00	2.00	0.045	0.030	19.00~22.00	24.00~26.00	0.75	-	S31008	310S16 / 310S24	1.4845	Z12 CN 25-20	X6CrNi 25 20	2361	SUS 310S	1Cr 25Ni20	STS 310S
904L	0.020 max	1.00	2.00	0.045	0.030	23.00~28.00	19.00~23.00	4.0~5.0	N –>0.10 Cu–>1.00-2.00	N08904	904513	1.4539	Z2 NCDU 25-20 11	X1 NiCr MoCu 25-20-5	2562	-	-	STS 317 J5L
310H	0.04-0.10	1.00	2.00	0.045	0.030	19.00~22.00	24.00~26.00	-	-	S31009	-	-		-	-	-	-	-
Duplex 31803	0.03 max	1.00	2.00	0.03	0.020	4.50-6.50	21.00~23.00	2.50~3.50	N--> 0.08 - 0.20	S31803	-	1.4462	Z2 CND 22-05 Az		2377	-	00Cr 22Ni5Mo3N	-
Duplex 2205	0.03 max	1.00	2.00	0.03	0.020	4.50~6.50	22.00~23.00	3.00~3.50	N--> 0.14 - 0.20	S32205	318513	1.4462	Z3 CND 23-05 AZ		2377	SUS 329J3L	00Cr 22Ni5Mo3N	STS 329J3L
Super Duplex 2507	0.03 max	0.80	1.20	0.035	0.020	6.00~8.00	24.00~26.00	3.00~5.00	N--> 0.24-0.32 Cu--> 0.90	S32750		1.441			2328		00Cr 25Ni7Mo4N	
405	0.08 max	1.00	1.00	0.040	0.030	0.50	11.50~14.50	-	Al:0.10-0.30	S40500	405S17	1.4002	Z6 C A113		-	SUS 405		
410	0.15 max	0.75	1.00	0.04	0.030	-	11.50~13.50	-	-	S41000	410S21	1.4006	Z12C13	X12Cr13	2302	SUS 410	1Cr12	STS 410
430	0.12 max	0.75	1.00	0.04	0.030	-	16.00~18.00	-	-	S43000	430S17	1.4016	Z8 C17	X8Cr17	2320	SUS 430	1Cr17	STS 430

Above data are only for reference and HMT don't take any liability for the same.