

TABLE D-4

INTERNATIONAL MATERIAL SPECIFICATIONS

This table serves as a cross-reference of materials produced to common international material specifications. Material groupings are presented based on similarity of material chemistry and alloying elements. Information presented in this table shall not be considered as permissible allowable substitutions between materials listed. This table serves as a guideline only in locating similar materials for more detailed consideration. Responsibility in selection of material suitable for service lies with the Purchaser.

Some reference numbers in this table are obsolete but are included for reference.

Nominal Composition EN / DIN Numerical Designator	USA ASME	UNS Number	U.K. BS	GERMANY DIN	JAPAN JIS	CHINA GB	EUROPE EN	FRANCE AFNOR	ITALY UNI
C Stl Plate EN/DIN 1.0425	SA-285-C	K02801	BS 1501 151-400 154-400 161-400 164-360 164-400	DIN 17155 H II	JIS G3103 SB42 JIS G 3115 SPV32; SPV 36 SPV235	GB 6654 20R	EN 10028 P235GH P265 GH	NFA36205 A42 CP, FP, FP	UNI 5869 Fe410-1 KW, KG UNI 7660 Fe410 KW, KG
C-Stl Plate EN/DIN 1.8907/1.8917/1.8937	SA-515-60	K02401	BS1501 151-360 161-400	DIN 17102 St E 500 DIN 17155 H11	JIS G3103 SB42	GB 6654 20R 16MnR		NFA35501 E24-2 NFA36204 E500 T	
C-Stl Plate EN/DIN 1.0435	SA-515-65	K02800	BS1501 151-430 154-430 161-430 223-460 223-490 225-460	DIN17155 H III 17Mn4	JIS G 3103 SB46; SB410 SB450 JIS G 3115 SPV235; SPV315 JIS G 3116 SG33; SG325	GB 6654 20R 16MnR		NFA36205 37 AP, CP 42 CP	UNI 5869 Fe360-1 KW, KG Fe360-2 KW, 2KG
C Stl Plate EN/DIN 1.0445/1.0481/1.0482	SA-515-70	K03101	BS1501 223-490B 224-460 224-490 224-490B 225-490	DIN 17155 17 Mn 4 19 Mn 5	JIS G-3103 SB49 SB480 JIS G 3115 SPV 315 JIS G 3116 SG 37 SG 365	GB 6654 16MnR	EN 10028 P295 GH P355NL1	NFA 36205 A48 AP, CP, FB NFA 36201 A48CP	UNI 5869 FE460-1 KG, KW FE510-1 KG, KW FE510-2 KG, KW UNI 7660 FE460-1 KG, KT, KW FE460-2 KG, KT, KW FE510-1 KG, KT, KW FE510-2 KG, KT, KW

INTERNATIONAL MATERIAL SPECIFICATIONS

Nominal Composition EN / DIN Numerical Designator	USA ASME	UNS Number	U.K. BS	GERMANY DIN	JAPAN JIS	CHINA GB	EUROPE EN	FRANCE AFNOR	ITALY UNI
C Stl Plate EN/DIN 1.0426/1.0437/1.0486 1.0487/1.0488	SA-516-60	K02100	BS1501 224-400 A/B 224-430 A/B	DIN 17102 T St E 285 W St E 285 T St E 315 SEW 089 Wst E26 Wst E29	JIS G3115 SPV24 JIS G 3126 SLA 24 SLA-235B SLA-325A	GB 6654 16MnR 16MnDR	EN 10028/3 P275N P275NH P275NL	NFA 36205 A37 FP A42-FP	
C Stl Plate EN/DIN 1.0436 1.0505/1.0506/1.0508	SA-516-65	K02403	BS1501 161-360 161-400 164-360 224-460 A/B	DIN 17102 T St E 355 St E 315 W St E 315 T St E 315 SEW 089 Wst E32	JIS G3118 SPV 46 SGV 450 JIS G3126 SLA 33	GB 6654 16MnR 16MnDR		NFA 36205 A37 CP AP A48 FP	UNI 5869 FE360-1 KG, KW FE360-2 KG, KW
C Stl Plate EN/DIN 1.0562/1.0565/1.0566 1.0473/1.0482/1.0485	SA-516-70	K02700	BS1501 224-460 224-490 A/B	DIN 17155 17 Mn 4 19 Mn 5 19 Mn 6 SEW 089 Wst E32	JIS G 3115 SPV 32 JIS G 3118 SGV42; SGV46 SGV49; SGV410 SGV450; SGV480	GB 6654 16MnR	EN 10028/2 P295GH P355 GH	NFA 36205 A48 CP, AP A52 CP, AP, FP NFA 36207 A50Pb A510 AP, FP A530 AP, FP	UNI 5869 FE460-1 KG, KW FE460-2 KG, KW FE510-1 KG, KW FE510-2 KG, KW
C Stl Plate EN/DIN 1.0583/1.0584/1.0589 1.0473/1.0482/1.0485 1.8902/1.8912/1.8932	SA-537	K12437	BS1501 224-460 224-490 A/B	DIN 17155 19 Mn 6 DIN17102 T St E 380 DIN 17103 P420NH	JIS G 3115 SPV 32 SPV 46 SPV 235 SPV 315 SPV 355	GB 6654 16MnR	EN 10028/2 P295GH P335GH EN 10028/6 P355Q, QH QL	NFA 36205 A52 CP, CPR A52 AP, APR	UNI 5869 FE510-1 KG, KW FE510-2 KG, KW

TABLE D-4 (continued)

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INTERNATIONAL MATERIAL SPECIFICATIONS

Nominal Composition	USA ASME	UNS Number	U.K. BS	GERMANY DIN	JAPAN JIS	CHINA GB	EUROPE EN	FRANCE AFNOR	ITALY UNI
EN / DIN Numerical Designator									
C Stl Forging EN/DIN 1.0432	SA-105	K03504	BS 1503 221-410 221-460 221-490	DIN 17243 17 Mn 4 DIN 2528 C21 St52.3	JIS G 3201 SF45; SF50 JIS G 3202 SFVC 2 A JIS G 40511 S 25 C; S 30 C		EN 10222 P280GH P355N,QH S235 EN 10250 S355J2G3	NFE 29-204 BF48N NFA 36-612 F42	UNI 7746 FE 490
C-Stl Forging	SA-266-2	K03506		DIN 2528 C21 DIN 17100 USt 37-3; USt 42-3	JIS G 3106 SM 41 B JIS G 3202 SFVC 2 A	JB 755 20 16Mn		NFA 36-612 F42	UNI 7746 FE 410 B,C,D
C-Stl Forging	SA-266-4	K03017	BS 1503 221-530	DIN 2528 C21	JIS G 3202 SFVC 2 B JIS G 3205 SFL 1,2	JB 755 20 16Mn	EN 10222 P305GH	NFA 36-612 F48	UNI 7746 FE 410 B,C,D
C-Stl Forging	SA-350-LF2	K03011	BS 1503 223-410 223-490 224-410, 430	TTS41	JIS G 3203 SFVA F1 JIS G 3205 SFL 1,2	JB 755 16Mn 16MnD	EN 10222 P280GH P355N,QH	NFA 36-612 F42 F48	UNI 7746 FE 360 B,C,D
C-Stl Forging	SA-765-2	K03047	BS 1503 221-410; 221-430 221-460; 221-530 221-550 224-460		JIS G 3204 SFVQ 1,2			NFA 36-601 A48 CP,AP,FP NFA 36-602 15 D 3	
C Stl Pipe EN/DIN 1.0405/1.0418	SA-106-B	K03006	BS 2602 27 BS 3602 HFS 27; HFS 430	DIN 17175 St 45.8 I, III DIN 1629 T.1 St 45.4	JIS G 3455 STS 42; STS 410 JIS G3456 STPT 410	20		NFA 49-211 TU E250 NFA49-213 TU42C	

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Nominal Composition EN / DIN Numerical Designator	USA ASME	UNS Number	U.K. BS	GERMANY DIN	JAPAN JIS	CHINA GB	EUROPE EN	FRANCE AFNOR	ITALY UNI
C Stl Pipe EN/DIN 1.0481	SA-106-C	K03501	BS 3602 HFS 35	DIN 1629 St 52.4 DIN 17175 17 Mn 4 SEW 610 17Mn4; 19Mn5	JIS G 3455 STS 49 JIS G 3456 STPT 49-S				
C Stl Pipe EN/DIN 1.0405/1.0418	SA-333-6	K03006	BS3603 HFS 430 LT	SEW 680 TTS 35N	JIS G 3460 SPLT 39-2,-E STPL 380	16 Mn		NFA 49-230 TU 42 BT	
C-Stl Wld Tube EN/DIN 1.0405/1.0418	SA-334-6	K03006	BS 3603 CFS 430 LT	DIN 17173 TT St 35 N DIN 17175 St 45.8	JIS G 3464 STBL 39-S STBL 380 C	16 Mn 09MnD		NFA 49-215 TU 42 BT	UNI 5462 C 18 UNI 5949 C 20
C-Stl Wld Tube	SA-214	K01807	BS 3606 ERW 320	DIN 17177 St 37.8 DIN 2392 St34.2 GBK	JIS G 3461 STB 33 EC STB340 ERW	10 20		NFA 49-142 TS E185A	
C Stl Smls Tube EN/DIN 1.0305	SA-179	K01200	BS 3059 320 BS 3606 CFS 320	DIN 17175 St 35.8 DIN 2391 St 35 GBK	JIS G 3451 STB 33-SC JIS G 3461 STB 340 SML	GB 8163 10 20		NFA 49-215 TU 37-C	UNI 5462 C 14
C Stl Smls Tube EN/DIN 1.0305	SA-192	K01201	BS 3059 360 BS 3602 CEW430 BS 3606 245	DIN 1628 St35.4 DIN 1629 St85 DIN 17175 St 35.6; St 35.8	JIS G 3461 STB 33 SH STB 35 SC,SH STB 340 SML STB 410	GB 5310 20G		NFA 49-215 TU 37-C TU42C	UNI 5462 C 14

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Nominal Composition EN / DIN Numerical Designator	USA ASME	UNS Number	U.K. BS	GERMANY DIN	JAPAN JIS	CHINA GB	EUROPE EN	FRANCE AFNOR	ITALY UNI
1 1/4 Cr-1/2 Mo-Si Plate EN/DIN 1.7335	SA-387 11	K11789	BS 1501 620 Gr.27, Gr.31 621	DIN 17155 13 CrMo 44	JIS 4109 SCMV 2,3	15CrMoR	EN 10028/2 1.7335 13 CrMo 4 5	NFA 36-205 13 CrMo 4 5 NFA 36-206 15 CD 3.05 15 CD 4.05	UNI 5869 14 CrMo 4 5
1 1/4 Cr-1/2 Mo-Si Forging EN/DIN 1.7335	SA-182 F11 SA-336-F11	K11572	BS 1503 620-440, 540 621-460	SEW 810 12 CrMo 44 13 CrMo 44	JIS G 3213 SFHV 23B JIS G 3203 SFVA F11	JB 755 15CrMoR	EN 10222 14 CrMo 4-5	NFA 36-602 15 CD 4.05	14 CrMo 4 5
1 1/4 Cr-1/2 Mo-Si Smls Pipe EN/DIN 1.7335	SA-335 P11	K11597	BS 3604 620, 621 620-440	DIN 17175 13 CrMo 44	JIS G 3458 STPA 23	15CrMoR		NFA 49-213 TU 10 CD 5.05	
1 1/4 Cr-1/2 Mo-Si Smls Tube EN/DIN 1.7335	SA-213-T11 (SA-199-T11)	K11597	BS 3606 CFS 621	DIN 17175 13 CrMo 44	JIS G 3462 STBA 23 SC,SH	15CrMoR		NFA 49-213 TU 10 CD 5.05	
2 1/4 Cr-1 Mo Plate EN/DIN 1.7380	SA-387 22	K21590	BS 1501 622 Gr.31, Gr.45 622-515	DIN 17155 10 CrMo 9 10	JIS G 4109 SCMV 4	12Cr2Mo1R	EN 10028/2 1.7380, 1.7383 10 CrMo 9-10 11 CrMo 9-10	NFA 36-205 10 CrMo 9-10 NFA 36-206 10 CD 9.10 10 CD 12.10 NFA 36-210 12 CD 9.10	UNI 5869 12 CrMo 9 10 UNI 7660 12 CrMo 9-10 KG,KW
2 1/4 Cr-1 Mo Forging EN/DIN 1.7380	SA-182 F22 SA-336-F22	K21590	BS 1503 622-490, 560, 650	DIN 17243 10 CrMo 9 10 SEW 810 10 CrMo 9 10	JIS G 3203 SFVA F22 JIS G 3206 SFVCM F22V JIS G 3213 SFHV 24B	JB 755 12Cr2Mo1R	EN 10222 11 CrMo 9-10 12 CrMo 9-10	NFA 36-602 10 CD 9.10 10 CD 12.10	

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2 1/4 Cr-1 Mo SmIs Pipe EN/DIN 1.7380	SA-335 P22	K21590	BS 3604 622	DIN 17175 10 CrMo 9 10	JIS G 3458 STPA 24	12Cr2Mo1R		NFA 49-213 TU 10 CD 9.10	
2 1/4 Cr-1 Mo SmIs Tube EN/DIN 1.7380	SA-213-T22 (SA-199-T22)	K21590	BS 3059 622-490 BS 3606 622	DIN 17175 10 CrMo 9 10	G3462 STBA 24 SC,SH	12 Cr2Mo 12Cr2Mo1R		NFA 49-213 TU 10 CD 9.10	
5 Cr-1/2 Mo Plate EN/DIN 1.7362	SA-387 5	K41545		DIN 17155 12 CrMo 19 5	JIS G 4109 SCMV 6		EN 10028 1.7362	NFA 36-206 Z 10 CD 5.05	UNI 7660 16 CrMo 20 5 KG,KW
5 Cr-1/2 Mo Forging EN/DIN 1.7362	SA-336-F5 (SA-182 F5)	K41545	BS 1503 625-590, 520	DIN 17243 12 CrMo 19 5	JIS G 3203 SFVA F5	1 Cr5Mo	EN 10222 X16CrMo5-1	NFA 36-602 Z 10 CD 5.05	
5 Cr-1/2 Mo SmIs Pipe EN/DIN 1.7362	SA-335 P5	K41545	BS 3604 625	DIN 17175 12 CrMo 19 5	JIS G 3458 STPA 25	1 Cr5Mo		NFA 49-213 TUZ 12 CD 5.05	
5 Cr-1/2 Mo SmIs Tube EN/DIN 1.7362	SA-213-T5 (SA-199-T5)	K41545	BS 3606 CFS 625	DIN 17176 12 CrMo 19 5 Wnr 1.7362	G3462 STBA 25			NFA 49-213 TUZ 12 CD 5.05	
304 S.S. Plate (18 Cr-8 Ni) EN/DIN 1.4301	SA-240-304	S30400	BS 1501 304 S 15 304 S 31 304 S 50	DIN 17440 5 CrNi 18 9 SEW 680 5 CrNi 18 10	JIS G 4304 SUS 304	0Cr18Ni9	EN 10028 5 CrNi 18-10 6 CrNi 18-10	NFA 36-209 6 CN 18.09 5 CN 18.09	UNI 7500 X 5 CrNi 18 10 UNI 7660 X 5 CrNi 18 10
304 S.S. Forging (18 Cr-8 Ni) EN/DIN 1.4301	SA-182 F304 SA-336-F304	S30400	BS 970 304 S 31 BS 1503 304 S 31 304 S 40	DIN 17440 2 CrMo 18 12 5 CrNi 18 9 SEW 880 5 CrMo 18 10	JIS G3214 SUS F 304 SUS F 804	0Cr18Ni9	EN 10222 5 CrNi 18 10 EN 10250 5 CrNi 18-10	NFA 36-607 6 CN 18.09	

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INTERNATIONAL MATERIAL SPECIFICATIONS

Nominal Composition EN / DIN Numerical Designator	USA ASME	UNS Number	U.K. BS	GERMANY DIN	JAPAN JIS	CHINA GB	EUROPE EN	FRANCE AFNOR	ITALY UNI
304 S.S. SmIs or Wld Pipe (18 Cr-8 Ni) EN/DIN 1.4301	SA-312 TP304	S30403	BS 3605 (CFS - SmIs) (LWHT - Wld) Grade 801 304 S 18 304 S 25 304 S 31 EN58E	DIN 2462 5 CrNi 18 9 DIN 17458/57 (58=SmIs/57=Wld) 5 CrNi 18 10 SEW 680 5 CrNi 18 10	JIS G 3459 SUS 304TP	0Cr18Ni9			
304 S.S. SmIs Tube (18 Cr-8 Ni) EN/DIN 1.4301	SA-213 TP304	S30400	BS 3059 304S51 BS 3606 (CFS) 304 S 31	DIN 2464 5CrNi189 DIN 17458 5 CrNi 18 10 SEW 680 5CrNi1810	JIS G 3463 SUS 304TB-SC	GB 5310 0Cr18Ni9 1Cr18Ni9		NFA 49-217 TU6CN18-09	UNI 6904 X 5 CrNi 18 10
304 S.S. Wld Tube (18 Cr-8 Ni) EN/DIN 1.4301	SA-249 TP304	S30400	BS 3605 (LWHT) 304 S 31 BS 3606 (LWHT) 304 S 25 304 S 31	DIN 2465 5 CrNi 18 9 DIN 17457 5 CrNi 18 10 SEW 680 5 CrNi 18 10	JIS G 3463 SUS 304 TB-AC	0Cr18Ni9			
304L S.S. Plate (18 Cr-8 Ni) EN/DIN 1.4306	SA-240-304L	S30403	BS 1501 304 S 11 304 S 12 304 S 14	DIN 17440 2 CrNi 18 9 S CrNi 19 11	JIS G 4304 SUS 304L	0Cr19Ni10	EN 10028 2 CrNi 18-9 2 CrNi 19-11	NFA 36-209 2 CN 18.10	UNI 7500 X 2 CrNi 18 11 UNI 7660 X 2 CrNi 18 11

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Nominal Composition EN / DIN Numerical Designator	USA ASME	UNS Number	U.K. BS	GERMANY DIN	JAPAN JIS	CHINA GB	EUROPE EN	FRANCE AFNOR	ITALY UNI
304L S.S. Forging (18 Cr-8 Ni) EN/DIN 1.4306	SA-182 F304L SA-336-F304L	S30403	BS 970 304 S 11 BS 1503 304 S 11 304 S 30	DIN 17440 2 CrNi 18 9 2 CrNi 19 11	JIS G3214 SUS F 304L		EN 10222 2 CrNi 18 9 EN 10250 2 CrNi 18-9 2 CrNi 19-11	NFA 36-607 2 CN 18.10	
304L S.S. Smcls or Wld Pipe (18 Cr-8 Ni) EN/DIN 1.4306	SA-312 TP304L	S30403	BS 3605 (CFS - Smcls) (LWHT - Wld) Grade 801L 304 S 11 304 S 14 304 S 22	DIN 2463 2 CrNi 18 9 DIN 17458/57 (58=Smcls/57=Wld) 2 CrNi 19 11	JIS G 3459 SUS 304LTP	0Cr19Ni10			
304L S.S. Smcls Tube (18 Cr-8 Ni) EN/DIN 1.4306	SA-213 TP304L	S30403	BS 3606 (CFS) 304 S 11	DIN 2464 2 CrNi 18 9 DIN 17458 2 CrNi 19 11	JIS G 3463 SUS 304LTB-SC	0Cr19Ni10		NFA 49-217 TUZ 2 CN18-10	UNI 6904 X 2 CrNi 18 11
304L S.S. Wld Tube (18 Cr-8 Ni) EN/DIN 1.4306	SA-249 TP304L	S30403	BS 3605 (LWHT) 304 S 11 BS 3606 (LWHT) 304 S 11; 304 S 22	DIN 17457 2 CrNi 19 11	JIS G 3463 SUS 304LTB-AC	0Cr19Ni10			
316 S.S. Plate (16 Cr-12 Ni-2 Mo) EN/DIN 1.4401/1.4436	SA-240-316	S31600	BS 1501 316 S 16 316 S 31 EN58J	DIN 17440 5 CrNiMo 18 10 5 CrNiMo 18 12 5 CrNiMo 17 13 3	JIS G 4304 SUS 316 SCS 14	0Cr17Ni12Mo2	EN 10028 5 CrNiMo 17-12-2 5 CrNiMo 17-13-3 3 CrNiMo 17-13-3	NFA 36-209 6 CND 17.11 6 CND 17.12 7 CND 17.11	UNI 7500 X 5 CrNiMo 17 12 X 5 CrNiMo 17 13 UNI 7660 X 5 CrNiMo 17 12
316 S.S. Forging (16 Cr-12 Ni-2 Mo) EN/DIN 1.4401/1.4436	SA-182 F316 SA-336-F316	S31600	BS 970 316 S 31 BS 1503 316 S 31; 316 S 33 316 S 40; 316 S 41	DIN 17440 5 CrNiMo 17 12 2	JIS G3214 SUS F 316L	0Cr17Ni12 Mo2		NFA 36-607 6 CND 17.11	

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INTERNATIONAL MATERIAL SPECIFICATIONS

Nominal Composition EN / DIN Numerical Designator	USA ASME	UNS Number	U.K. BS	GERMANY DIN	JAPAN JIS	CHINA GB	EUROPE EN	FRANCE AFNOR	ITALY UNI
316 S.S. SmIs or Wld Pipe (16 Cr-12 Ni-2 Mo) EN/DIN 1.4401/1.4436	SA-312 TP316	S31600	BS 3605 (CFS - SmIs) (LWHT - Wld) Grade 845 316 S 18; 316 S 26 316 S 31 EN58J	DIN 2462 5 CrNiMo 18 10 5 CrNiMo 18 12 DIN 17458/57 (58=SmIs/57=Wld) 5 CrNiMo 17 12 2	JIS G 3459 SUS 316TP	0Cr17Ni12 Mo2			
316 S.S. SmIs Tube (16 Cr-12 Ni-2 Mo) EN/DIN 1.4401/1.4436	SA-213 TP316	S31600	BS 3606 (CFS) 316 S 31	DIN 2464 5 CrNiMo18 10 5 CrNiMo18 12 DIN 17458 5 CrNiMo 17 12 2	JIS G 3463 SUS 316TB-SC	0Cr17Ni12 Mo2		NFA 49-214 Z 6CND17-12B NFA 49-217 TUZ 6CND17-11	UNI 6904 X 5 CrNiMo 17 12 X 5 CrNiMo 17 13
316 S.S. Wld Tube (16 Cr-12 Ni-2 Mo) EN/DIN 1.4401/1.4436	SA-249 TP316	S31600	BS 3605 (LWHT) 316 S 31 BS 3606 (LWHT) 316 S 25 316 S 30; 316 S 31	DIN 2465 5 CrNiMo 18 10 5 CrNiMo 18 12 DIN 17457 5 CrNiMo 17 12 2	JIS G 3463 SUS 316TB-AC	0Cr17Ni12 Mo2			
316L S.S. Plate (16 Cr-12 Ni-2 Mo) EN/DIN 1.4404/1.4435	SA-240-316L	S31603	BS 1501 316 S 11 316 S 24 316 S 37	DIN 17440 7 CrNiMo 18 10 7 CrNiMo 18 12 2 CrNiMo 17 13 2	JIS G 4304 SUS 316L SCS 16	0Cr17Ni14Mo2	EN 10028 2 CrNiMo 17-12-2 2 CrNiMo 17-13-2 2 CrNiMo 18-14-3	NFA 36-209 2 CND 17.12 2 CND 17.13 2 CND 18.13 3 CND 17.11	UNI 7500 X 2 CrNiMo 17 12 X 2 CrNiMo 17 13 UNI 7660 X 2 CrNiMo 17 13
316L S.S. Forging (16 Cr-12 Ni-2 Mo) EN/DIN 1.4404/1.4435	SA-182 F316L SA-336-F316L	S31603	BS 970 316 S 11 BS 1503 316 S 11 316 S 13 316 S 30	2 CrNiMo 17 13 2 2 CrNiMo 18 14 3 DIN 17440 2 CrNiMo 18 10 2 CrNiMo 17 13 2 2 CrNiMo 18 12	JIS G3214 SUS F 316L	0Cr17Ni14 Mo2		NFA 36-607 2 CND 17.12 2 CND 18.13	

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316L S.S. SmIs or Wld Pipe (16 Cr-12 Ni-2 Mo) EN/DIN 1.4404/1.4435	SA-312 TP316L	S31603	BS 3605 (CFS - SmIs) (LWHT - Wld) Grade 845L 316 S 11 316 S 14 316 S 22	DIN 2462 2 CrNiMo 18 10 2 CrNiMo 18 12 DIN 17458/57 (58=SmIs/57=Wld) 2 CrNiMo 17 13 2	JIS G 3459 SUS 316LTP	0Cr17Ni14 Mo2			
316L S.S. SmIs Tube (16 Cr-12 Ni-2 Mo) EN/DIN 1.4404/1.4435	SA-213 TP316L	S31603	BS 3606 (CFS) 316 S 11	DIN 2464 2 CrNiMo 18 10 2 CrNiMo 18 12 DIN 17458 2 CrNiMo 17 13 2	JIS G 3463 SUS 316LTB-SC	0Cr17Ni14 Mo2		NFA 49-217 TUZ 2CND17-12	UNI 6904 X 2 CrNiMo 17 12 X 2 CrNiMo 17 13
316L S.S. Wld Tube (16 Cr-12 Ni-2 Mo) EN/DIN 1.4404/1.4435	SA-249 TP316L	S31603	BS 3605 (LWHT) 316 S 11 BS 3606 (LWHT) 316 S 11 316 S 24; 316 S 29	DIN 2465 2 CrNiMo 18 10 2 CrNiMo 18 12 DIN 17457 2 CrNiMo 17 13 2	JIS G 3463 SUS 316LTB-AC	0Cr17Ni14 Mo2			
321 S.S. Plate (18 Cr-10 Ni-Ti) EN/DIN 1.4541	SA-240-321	S32100	BS 1501 321 S 12 321 S 31 321 S 49 321 S 87 EN58B	DIN 17440 10 CrNiTi 18 10 6 CrNiTi 18 10 12 CrNiTi 18 12 SEW 880 10 CrNiTi 18 10	JIS G 4304 SUS 321	0Cr18Ni10Ti	EN 10028 6 CrNiTi 18-10	NFA 36-209 6 CNT 18.10	UNI 7500 X 6 CrNiTi 18 11 UNI 7660 X 6 CrNiTi 18 11
321 S.S. Forging (18 Cr-10 Ni-Ti) EN/DIN 1.4541	SA-182 F321 SA-336-F321	S32100	BS 1503 321 S 31 321 S 50 321 S 51-490 321 S 51-510	DIN 17440 12 CrNiTi 18 9 10 CrNiMo 18 10 6 CrNiTi 18 10 SEW 680 10 CrNiMo 18 10	JIS G3214 SUS F 321	0Cr18Ni10Ti		NFA 36-607 6 CNT 18.10	

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Nominal Composition EN / DIN Numerical Designator	USA ASME	UNS Number	U.K. BS	GERMANY DIN	JAPAN JIS	CHINA GB	EUROPE EN	FRANCE AFNOR	ITALY UNI
321 S.S. SmIs or Wld Pipe (18 Cr-10 Ni-Ti) EN/DIN 1.4541	SA-312 TP321	S32100	BS 3605 (CFS - SmIs) (LWHT - Wld) Grade 822 Ti 321 S 18 321 S 22 321 S 31 321 S 59 EN58B	DIN 2462 10 CrNiTi 18 9 DIN 17458/57 (58=SmIs/57=Wld) 6 CrNiTi 18 10 SEW 680 10 CrNiTi 18 10	JIS G 3459 SUS 321TP	0Cr18Ni10Ti			
321 S.S. SmIs Tube (18 Cr-10 Ni-Ti) EN/DIN 1.4541	SA-213 TP321	S32100	BS 3606 (CFS) 321 S 31	DIN 2464 10 CrNiTi 18 9 DIN 17458 6 CrNiTi 18 10 SEW 680 10 CrNiTi 18 10	JIS G 3463 SUS 321TB-SC	0Cr18Ni10Ti		NFA 49-214 Z 6 CNT18-2B NFA 49-217 TUZ 6 CNT18-10	UNI 6904 X 6 CrNiTi 18 11
321 S.S. Wld Tube (18 Cr-10 Ni-Ti) EN/DIN 1.4541	SA-249 TP321	S32100	BS 3605 (LWHT) 321 S 31 BS 3606 (LWHT) 321 S 22 322 S 31	DIN 2465 10 CrNiMo 18 9 DIN 17457 6 CrNiTi 18 10 SEW 650 10 CrNiMo 18 10	JIS G 3463 SUS 321TB-AC	0Cr18Ni10Ti			
347 S.S. Plate (18 Cr-10 Ni-Cb) EN/DIN 1.4550	SA-240-347	S34700	BS 1501 347 S 17 347 S 31 347 S 49	DIN 17440 5 CrNiNb 19 9 6 CrNiNb 18 10 10 CrNiTi 18 9	JIS G 4304 SUS 347 SCS 21		EN 10028 6 CrNiNb 18-10	NFA 36-209 6 CNNb 18.10	UNI 7500 X 6 CrNiNb 18 11 X 8 CrNiNb 18 11 UNI 7660 X 6 CrNiNb 18 11

INTERNATIONAL MATERIAL SPECIFICATIONS

Nominal Composition EN / DIN Numerical Designator	USA ASME	UNS Number	U.K. BS	GERMANY DIN	JAPAN JIS	CHINA GB	EUROPE EN	FRANCE AFNOR	ITALY UNI
347 S.S. Forging (18 Cr-10 Ni-Cb) EN/DIN 1.4550	SA-182 F347 SA-336-F347	S34700	BS 1503 347 S 31 347 S 40 347 S 50 347 S 51	6 CrNiNb 18 10 DIN 17440 10 CrNiMo18 9 6 CrNiNb 18 10 SEW 680 10 CrNiMo18 10	JIS G3214 SUS F 347			NFA 36-607 6 CNNb 18.10	
347 S.S. Smls or Wld Pipe (18 Cr-10 Ni-Cb) EN/DIN 1.4550	SA-312 TP347	S34700	BS 3605 (CFS - Smls) (LWHT - Wld) Grade 822 Nb 347 S 18 347 S 31 347 S 59 EN58G	DIN 2462 10 CrNiNb 18 10 DIN 17458/57 (58=Smls/57=Wld) 6 CrNiNb 18 10 SEW 680 10 CrNiNb 18 9	JIS G 3459 SUS 347TP	0Cr18Ni11Nb			
347 S.S. Smls Tube (18 Cr-10 Ni-Cb) EN/DIN 1.4550	SA-213 TP347	S34700	BS 3059 347S51 BS 3606 (CFS) 347 S 31	DIN 2464 10 CrNiMo 18 9 DIN 17458 6 CrNiNb 18 10 SEW 680 10 CrNiMo 18 10	JIS G 3463 SUS 347TB-SC	0Cr18Ni11Nb GB 5310 1Cr19Ni11Nb		NFA 49-214 Z 6 CNNb18-12B	UNI 6904 X 6 CrNiNb 18 11 X 8 CrNiNb 18 11
347 S.Stl. Wld Tube (18 Cr-10 Ni-Cb) EN/DIN 1.4550	SA-249 TP347	S34700	BS 3505 (LWHT) 347 S 31 BS 3606 (LWHT) 347 S 31	DIN 17457 6 CrNiNb 18 10	JIS G 3463 SUS 347TB-AC	0Cr18Ni11Nb			

TABLE D-4 (continued)

TABLE D-4 (continued)

Nominal Composition EN / DIN Numerical Designator	USA ASME	UNS Number	U.K. BS	GERMANY DIN	JAPAN JIS	CHINA GB	EUROPE EN	FRANCE AFNOR	ITALY UNI
410 S.Stl. (Ferritic) Plate 13 Cr EN/DIN 1.4006	SA-240-410	S41000	410 S 21 410 C 21 420 S 29 EN56B	DIN 17440 10 Cr 13 15 Cr 13	JIS G 4304 SUS 410 SCS 1		12 Cr 13	Z 12 C 13 Z 10 C 13	UNI 7660 X 12 Cr 13 KG,KW X 10 Cr 13
410S S.Stl. (Ferritic) Plate 13 Cr EN/DIN 1.4000/1.4001	SA-240-410S	S41008	BS 1501 403 S 17	DIN 17440 6 Cr 13 7 Cr 14	JIS G 4304 SUS 403 SUS 410 S	0Cr13		Z 6 C 13 Z 3 C 14	X 6 Cr 13
410 S.Stl. (Ferritic) SmIs or Wld Tube 13 Cr EN/DIN 1.4006	SA-268 TP410	S41000		DIN 2462 10 Cr 13	JIS G 3463 SUS 410TB		12 Cr 13	Z 12 C 13	UNI 6904 12 Cr 13
Copper Tube	SB-111	C12200	BS 2871 CN106	DIN 17671 SF-Cu	JIS H3300 C 1220		EN 12451/52 CW024A	NFA 51-124 Cu-DHP	
N. R. Brass Plate EN/DIN 2.0530	SB-171	C46400 C46500	BS 2870 CZ112 BS 2875 CZ112	DIN 17670 CuZn38 Sn1 DIN 17675 CuZn39 Sn	JIS H3100 C 4640 P		EN 1653 CW717R	NFA 51-115 CuZn38 Sn1	
Admiralty Brass SmIs Tube EN/DIN 2.0470	SB-111	C44300 C44400 C44500	BS 2871 CZ111	DIN 17671 CuZn28 Sn1	JIS H3300 C 4430 T		EN 12451/52 CW706R		
70-30 CuNi Plate EN/DIN 2.0820	SB-171	C71500	BS 2870 CN107 BS 2875 CN107	DIN 17670 CuNi30Mn1Fe DIN 17675 CuNi30Fe	JIS H3100 C 7150 P		EN 1653 CW354H	NFA 51-115 CuNi30FeMn	
70-30 SmIs Tube EN/DIN 2.0820	SB-111	C71500	BS 2871 CN107	DIN 1785 CuNi30Mn1Fe CuNi30Fe	JIS H3300 C 7150		EN 12451/52 CW354H	NFA 51-102 CuNi30Mn1Fe	

INTERNATIONAL MATERIAL SPECIFICATIONS

Nominal Composition EN / DIN Numerical Designator	USA ASME	UNS Number	U.K. BS	GERMANY DIN	JAPAN JIS	CHINA GB	EUROPE EN	FRANCE AFNOR	ITALY UNI
90-10 Plate EN/DIN 2.0872/2.0877	SB-171	C70600	BS 2870 CN102 BS 2875 CN102	DIN 17670 CuNi10Fe1Mn DIN 17675 CuNi10Fe	JIS H3100 C 7060 P		EN 1653 CW352H	NFA 51-115 CuNi10Fe1Mn	
90-10 SmIs Tube EN/DIN 2.0872/2.0877	SB-111	C70600	BS 2871 CN102	DIN 1785 CuNi10Fe1Mn	JIS H3300 C 7060 T		EN 12451/52 CW352H	NFA 51-102 CuNi10Fe1Mn	
Monel 400 Plate EN/DIN 2.4360	SB-127	N04400	BS 3072 NA13 BS 3073 NA13	DIN 17750 NiCu30Fe	JIS H4551 NCuP NW4400				
Monel 400 SmIs Tube EN/DIN 2.4360	SB-163	N04400	BS 3074 NA13	DIN 17751 NiCu30Fe DIN 17743 NiCu30Fe	JIS H4552 NCuT NW4400			NU 30	
Inconel 600 Plate EN/DIN 2.4640	SB-168	N06600	BS 3072 NA14 BS 3073 NA14	DIN 17750 NiCr15Fe	JIS G4902 NCF600				
Inconel 600 SmIs Tube EN/DIN 2.4640	SB-163	N06600	BS 3074 NA14	DIN 17751 NiCr15Fe DIN 17742 NiCr15Fe	JIS G4904 NCF600 TB			NC 15 Fe	

TABLE D-4 (continued)

TABLE D-4 (continued)

INTERNATIONAL MATERIAL SPECIFICATIONS

Nominal Composition EN / DIN Numerical Designator	USA ASME	UNS Number	U.K. BS	GERMANY DIN	JAPAN JIS	CHINA GB	EUROPE EN	FRANCE AFNOR	ITALY UNI
Inconel 625 Plate EN/DIN 2.4856	SB-443	N06625	BS 3072 NA21 BS 3073 NA21	DIN 17750 NiCr22Mo 9Nb	JIS G4902 NCF625				
Inconel 625 Smls Tube EN/DIN 2.4856	SB-444	N06625	BS 3074 NA21	DIN 17751 NiCr22Mo 9Nb	JIS G4904 NCF625 TB				