

Materials comparison DIN / EN / ASTM

Pipes / Tubes				Flanges			Buttwelding Fittings		
Material number	EN	ASTM	Material number	EN	ASTM	Material number	EN	ASTM	
Non-alloy			Non-alloy			Non-alloy			
1.0254 St 37.0	P235TR1	A 53 Grade A	1.0038 RSt 37-2	S235JR	-	1.0254 St 37.0	S235	-	
1.0570 St 52-3	S355J2H (1.0576)	-	1.0570 St 52-3	S355J2 (1.0577)	-	-	-	-	
1.0305 St 35.8/I	P235GH TC1 (1.0345)	A 106 Grade A	1.0460 C 22.8	P250GH	-	1.0305 St 35.8/I	P235GH (1.0345)	A 234 Grade WPA	
1.0305 St 35.8/III	P235GH TC2 (1.0345)	-	1.0432 C 21	-	A 105	1.0305 St 35.8/III	P235GH (1.0345)	-	
1.0405 St 45.8/I	P265GH TC1 (1.0425)	A 106 Grade B	1.0352 -	P245GH	-	1.0405 St 45.8/I	P265GH (1.0425)	A 234 Grade WPB	
1.0405 St 45.8/III	P265GH TC2 (1.0425)	-	-	-	-	1.0405 St 45.8/III	P265GH (1.0425)	-	
Alloyed heat-resistant			Alloyed heat-resistant			Alloyed heat-resistant			
1.5415 15 Mo 3	16Mo3	A 335 Grade P1	1.5415 15 Mo 3	16Mo3	A 182 Grade F1	1.5415 15 Mo 3	16Mo3	A 234 Grade WP1	
1.7335 13 CrMo 4 4	13CrMo4-5	A 335 Grade P12	1.7335 13 CrMo 4 4	13CrMo4-5	A 182 Grade F12	1.7335 13 CrMo 4 4	13CrMo4-5	A 234 Grade WP12	
-	-	A 335 Grade P11	-	-	A 182 Grade F11	-	-	A 234 Grade WP11	
1.7380 10 CrMo 9 10	10CrMo9-10	A 335 Grade P22	1.7380 10 CrMo 9 10	11CrMo9-10 (1.7383)	A 182 Grade F22	1.7380 10 CrMo 9 10	10CrMo9-10	A 234 Grade WP22	
1.7362 12 CrMo 19 5	X11CrMo5	A 335 Grade P5	1.7362 12 CrMo 19 5	-	A 182 Grade F5	1.7362 12 CrMo 19 5	X11CrMo5	A 234 Grade WP5	
-	-	A 335 Grade P9	-	-	A 182 Grade F9	-	-	A 234 Grade WP9	
1.4903 -	X10CrMoVNb9-1	A 335 Grade P91	1.4903 -	X10CrMoVNb9-1	A 182 Grade F91	1.4903 -	X10CrMoVNb9-1	A 234 Grade WP91	
Low temperature			Low temperature			Low temperature			
1.5637 10 Ni 14	X12Ni14	A 333 Grade 3	1.5637 10 Ni 14	12Ni14	A 350 Grade LF3	1.5637 10 Ni 14	12Ni14	A 420 Grade WPL3	
1.0356 TTSt 35 N	P215NL (1.0451)	A 333 Grade 1	1.0566 TTSt 355	P355QH1 (1.0571)	A 350 Grade LF2	1.0356 TTSt 35 N	P215NL (1.0451)	-	
1.0356 TTSt 35 V	P255QL (1.0452)	-	-	-	-	1.0356 TTSt 35 V	-	-	
-	P265NL (1.0453)	A 333 Grade 6	-	-	-	-	P265NL (1.0453)	A 420 Grade WPL6	
Fine-grain steels			Fine-grain steels			Fine-grain steels			
1.0486 StE 285	-	API 5L Grade X42	1.0486 StE 285	-	A 694 Grade F42	1.0486 StE 285	-	A 860 Grade WPHY42	
1.0562 StE 355	P355N	API 5L Grade X52	1.0562 StE 355	P355N	A 694 Grade F52	1.0562 StE 355	P355N	A 860 Grade WPHY52	
1.8902 StE 420	P420N	API 5L Grade X60	1.8902 StE 420	P420N	A 694 Grade F60	1.8902 StE 420	-	A 860 Grade WPHY60	
1.8905 StE 460	P460N	API 5L Grade X70	1.8905 StE 460	P460N	A 694 Grade F70	1.8905 StE 460	-	A 860 Grade WPHY70	
High yield steels			High yield steels			High yield steels			
1.0457 StE 240.7	L245NB / L245NE	API 5L Grade B	-	-	-	1.0457 StE 240.7	-	-	
1.0484 StE 290.7	L290NB / L290NE	API 5L Grade X42	-	-	-	1.0484 StE 290.7	L290NB / L290NE	A 860 Grade WPHY42	
1.0582 StE 360.7	L360NB / L360NE	API 5L Grade X52	-	-	-	1.0582 StE 360.7	L360NB / L360NE	A 860 Grade WPHY52	
1.8972 StE 415.7	L415NB / L415NE	API 5L Grade X60	-	-	-	1.8972 StE 415.7	L415NB / L415NE	A 860 Grade WPHY60	
Stainless steel			Stainless steel			Stainless steel			
1.4307 -	X2CrNi18-9	A 312 Grade TP304L	1.4307 -	X2CrNi18-9	A 182 Grade F304L	1.4307 -	X2CrNi18-9	A 403 Grade WP304L	
1.4306 X 2 CrNi 19 11	X2CrNi19-11	A 312 Grade TP304L	1.4306 X 2 CrNi 19 11	-	A 182 Grade F304L	1.4306 X 2 CrNi 19 11	X2CrNi19-11	A 403 Grade WP304L	
1.4301 X 5 CrNi 18 10	X5CrNi18-10	A 312 Grade TP304	1.4301 X 5 CrNi 18 10	X5CrNi18-10	A 182 Grade F304	1.4301 X 5 CrNi 18 10	X5CrNi18-10	A 403 Grade WP304	
1.4541 X 6 CrNiTi 18 10	X6CrNiTi18-10	A 312 Grade TP321	1.4541 X 6 CrNiTi 18 10	X6CrNiTi18-10	A 182 Grade F321	1.4541 X 6 CrNiTi 18 10	X6CrNiTi18-10	A 403 Grade WP321	
1.4550 X 6 CrNiNb 18 10	X6CrNiNb18-10	A 312 Grade TP347	1.4550 X 6 CrNiNb 18 10	X6CrNiNb18-10	A 182 Grade F347	1.4550 X 6 CrNiNb 18 10	X6CrNiNb18-10	A 403 Grade WP347	
1.4404 X 2 CrNiMo 17 13 2	X2CrNiMo17-12-2	A 312 Grade TP316L	1.4404 X 2 CrNiMo 17 13 2	X2CrNiMo17-12-2	A 182 Grade F316L	1.4404 X 2 CrNiMo 17 13 2	X2CrNiMo17-12-2	A 403 Grade WP316L	
1.4401 X 5 CrNiMo 17 12 2	X5CrNiMo17-12-2	A 312 Grade TP316	1.4401 X 5 CrNiMo 17 12 2	X5CrNiMo17-12-2	A 182 Grade F316	1.4401 X 5 CrNiMo 17 12 2	X5CrNiMo17-12-2	A 403 Grade WP316	
1.4571 X 6 CrNiMoTi 17 12 2	X6CrNiMoTi17-12-2	A 312 Grade S 31635	1.4571 X 6 CrNiMoTi 17 12 2	X6CrNiMoTi17-12-2	A 182 Grade F316Ti	1.4571 X 6 CrNiMoTi 17 12 2	X6CrNiTi18-10	-	
1.4429 X 2 CrNiMoN 17 13 3	X2CrNiMoN17-13-3	A 312 Grade TP316LN	1.4429 X 2 CrNiMoN 17 13 3	X2CrNiMoN17-13-3	A 182 Grade F316LN	1.4429 X 2 CrNiMoN 17 13 3	X2CrNiMoN17-13-3	A 403 Grade WP316LN	
1.4436 X 5 CrNiMo 17 13 3	X3CrNiMo17-13-3	A 312 Grade TP316	1.4436 X 5 CrNiMo 17 13 3	X3CrNiMo17-13-3	A 182 Grade F316	1.4436 X 5 CrNiMo 17 13 3	X3CrNiMo17-13-3	A 403 Grade WP316	
1.4435 X 2 CrNiMo 18 14 3	X2CrNiMo18-14-3	A 312 Grade TP316L	1.4435 X 2 CrNiMo 18 14 3	X2CrNiMo18-14-3	A 182 Grade F316L	1.4435 X 2 CrNiMo 18 14 3	X2CrNiMo18-14-3	A 403 Grade WP316LN	
1.4439 X 2 CrNiMoN 17 13 5	X2CrNiMoN17-13-5	UNS S 31726	1.4439 X 2 CrNiMoN 17 13 5	X2CrNiMoN17-13-5	A 182 Grade F48	1.4439 X 2 CrNiMoN 17 13 5	X2CrNiMoN17-13-5	UNS S 31726	
1.4539 X 1 NiCrMoCuN 25 20 5	X1NiCrMoCu25-20-5	UNS N 08904 (904L)	1.4539 X 1 NiCrMoCuN 25 20 5	X1NiCrMoCu25-20-5	A 182 Grade F904L	1.4539 X 1 NiCrMoCuN 25 20 5	X1NiCrMoCu25-20-5	UNS N 08904 (904L)	
1.4547 -	X1CrNiMoCuN20-18-7	UNS S 31254	1.4547 -	X1CrNiMoCuN20-18-7	UNS S 31254	1.4547 -	X1CrNiMoCuN20-18-7	UNS S 31254	
1.4529 X 1 NiCrMoCuN 25 20 6	X1NiCrMoCuN25-20-7	UNS N 08926	1.4529 X 1 NiCrMoCuN 25 20 6	X1NiCrMoCuN25-20-7	UNS N 08926	1.4529 X 1 NiCrMoCuN 25 20 6	X1NiCrMoCuN25-20-7	UNS N 08926	
1.4462 X 2 CrNiMoN 22 5 3	X2CrNiMoN22-5-3	UNS S 31803 (Duplex)	1.4462 X 2 CrNiMoN 22 5 3	X2CrNiMoN22-5-3	A 182 Grade F51 (Duplex)	1.4462 X 2 CrNiMoN 22 5 3	X2CrNiMoN22-5-3	UNS S 31803 (Duplex)	
1.4410 -	X2CrNiMoN25-7-4	UNS S 32750 (Superduplex)	1.4410 -	X2CrNiMoN25-7-4	A 182 Grade F53 (Superduplex)	1.4410 -	X2CrNiMoN25-7-4	UNS S 32750 (Superduplex)	