

**COMPARISON TABLE FOR BOILER TUBES, LINE PIPES AND FITTINGS**

Product Type	DIN Standard	EN Standard	ASTM/ASME Standard	API Standard	DIN short name	EN short name	EN material	ASTM/ASME Material	API Material
Seamless carbon steel boiler tubes			A/SA 53					Grade B	
			A/SA 53 T&C					Grade B,galvanized	
	17175	10216-2			St 35.8/I	P235GH TC 1	1.0345		
	17175	10216-2			St 35.8/III	P235GH TC 2	1.0345		
	17175	10216-2	A/SA 106	Spec.5 L	St 45.8/I	P265GH TC 1	1.0425	Grade B	Grade B
				Spec.5 L					Grade X 52
Seamless pipes for low temperature services	17173	10216-4	A/SA 106		TT ST 35 N	P215NL TC 1	1.0451	Grade C	
	17173	10216-4	A/SA 333		TT ST 35 V	P255QL TC 1	1.0452	Grade 6	
Seamless alloy steel boiler tubes	17175	10216-2	A/SA 335,A/SA 209		15 Mo 3	16 Mo 3	1.5415	Grade P 1/T 1	
			A/SA 335,A/SA 213					Grade P 11/T 11	
	17175	10216-2	A/SA 335,A/SA 213		13 CrMo 4 4	13 CrMo 4-5	1.7335	Grade P 12/T 12	
	17175	10216-2	A/SA 335,A/SA 213		10 CrMo 9 10	10 CrMo 9-10	1.7380	Grade P 22/T 22	
			A/SA 335,A/SA 213					Grade P 5/T 5	
	17175/Vd-TüV	10216-2			15 NiCuMoNb 5 (WB 36)	15 NiCuMoNb 5-6-4	1.6368		
			A/SA 335,A/SA 213					Grade P 9/T 9	
	17175/Vd-TüV	10216-2	A/SA 335,A/SA 213		X10 CrMoVNb 9 1	X10 CrMoVNb 9-1	1.4903	Grade P 91/T 91	
	17175	10216-2			X20 CrMoV 12 1	X20 CrMoV 11-1	1.4922		
	17175/Vd-TüV	10216-2	A/SA 335,A/SA 213		15 CrMoV 510				
17175/Vd-TüV	10216-2	A/SA 335,A/SA 213			X10 CrMoVNb 9-2	1.4901	P 92/T 92		
Elbows,tees,reducers,caps	2605/2615/2616/2617	10253-2			St 35.8/I	P235GH TC 1	1.0345		
	2605/2615/2616/2617	10253-2			St 35.8/III	P235GH TC 2	1.0345		
	2605	10253-2			St 42.8/I				
				ANSI B 16.9/ANSI B 16.28				A/SA 234 WPB	
				ANSI B16.9				A/SA 234 WPC	
	2605/2615/2616/2617	10253-2			TT St 35 N	P215NL TC 1	1.0451		
	2605/2615/2616/2617	10253-2	ANSI B 16.9/ANSI B 16.28		TT St 35 V	P255QL TC 1	1.0452	A/SA 420 WPL 6	
	2605/2615/2616/2617	10253-2			15 Mo 3	16 Mo 3	1.5415		
				ANSI B16.9				A/SA 234 WP 11	
	2605/2615/2616/2617	10253-2			13 CrMo 4 4	13 CrMo 4-5	1.7335		
	2605/2615/2616/2617	10253-2	ANSI B16.9		10 CrMo 9 10	10 CrMo 9-10	1.7380	A/SA 234 WP 22	
				ANSI B16.9				A/SA 234 WP 5	
	2605/2615/2616/2617	10253-2	ANSI B16.9		X10 CrMoVNb 9 1	X10 CrMoVNb 9-1	1.4903	A/SA 234 WP 91	
Welding neck flanges, blind flanges, slip-on flanges, lap-joint flanges, plain flanges	2642/2576/2527/2632-2638/2628-2629	EN 1092-1	ANSI B 16.5/150 IBS-2500 IBS		C 22.8	P250GH	1.0460	A/SA 105	
			ANSI B 16.5/150 IBS-2500 IBS					A/SA 350 LF 2	
	2527/2632-2638/2628-2629	EN 1092-1			15 Mo 3	16 Mo 3	1.5415		
				ANSI B 16.5/150 IBS-2500 IBS				A/SA 182 F 11	
	2527/2632-2638/2628-2629	EN 1092-1			13 CrMo 4 4	13 CrMo 4-5	1.7335		
	2527/2632-2638/2628-2629	EN 1092-1	ANSI B 16.5/150 IBS-2500 IBS		10 CrMo 9 10	10 CrMo 9-10	1.7380	A/SA 182 F 22	
			ANSI B 16.5/150 IBS-2500 IBS				A/SA 182 F 5		
2527/2632-2638/2628-2629	EN 1092-1	ANSI B 16.5/150 IBS-2500 IBS		X10 CrMoVNb 9 1	X10 CrMoVNb 9-1	1.4903	A/SA 182 F 91		

Inspection certificates 3.1 / 3.2 In accordance with DIN EN 10201 and 3.1 B / 3.1 A / 3.1 C in accordance with DIN 50049  
 Classification authorities: TÜV / GL / LR / DNV / ABS etc.