

A213 T5	SA199 T5	STBA 25	3606 625		2604 II S37					Sec 4-E-TS430
	SA213 T5									
A213 T9	SA199 T9	STBA 26	3059-P2 622-490		2604 II S38					Sec 4-E-TS500
	SA213 T9									
A209 T1b	SA209 T1b		3059-P2 243	17175 17Mn4	2604 II S39	ABS M		Sec 6 2-1/2Cr 1Mo-490		Sec 4-E-TS450-1
			3059-P2 620-460			(=A209- T1b)				
A250 T1b	SA250 T1b		3059-P2 629-470	17175 14MoV63	2604 II S40					Sec 4-E-TS460-2
A250 T11	SA250 T11		3059-P2 629-590	17175 X20CrMoV12 1						Sec 4-E-TS590
A250 T22	SA250 T22		3059-P2 762							Sec 4-E-TS610
A213 T5b	SA213 T5b		3059-P2 304S51							Sec 4-E-TS690
A213 T5c	SA213 T5c		3059-P2 306S51							
A213 T17	SA213 T17		3059-P2 316S52							
A213 T21	SA213 T21		3059-P2 316S51							
A213 T23	SA213 T23		3059-P2 321S51							
A213 T91	SA213 T91		3059-P2 347S51							
A213 T92	SA213 T92		3059-P2 215S15							

Steel Heat Exchanger Tubes for Low Temperature Service

ASTM	ASME	JIS G 3464	BS	DIN	ISO	ABS	NK	LRS	DNV
A334 1	SA334 1	STBL 380	3603 430LT	17173 TTst35N/V					
				17174 TTst35N/V					
A334 3	SA334 3	STBL 450	3603 503LT	17173 10Ni14	2604 II TS43				
A334 8	SA334 8	STBL 690	3603 509LT	17173 X8Ni9	2604 II TS45				
A334 6	SA334 6			17173 26CrMo4					
A334 7	SA334 7			17173 11MnNi53					
				17174 11MnNi53					
A334 9	SA334 9			17173 13MnNi63					
				17174 13MnNi63					
A334 11	SA334 11			17173 12Ni19					
				17174 12Ni19					
A423 1	SA423 1			(17174 10Ni14)					
A423 2	SA423 2			(17174 X8Ni9)					

Steel Tubes for Fired Heater

ASTM	ASME	JIS G 3467	ABS	NK	LRS	DNV
A210 A1	SA210 A1	STFA 10				
A209 T1	SA209 T1	STFA 12				
A213 T12	SA213 T12	STFA 22				

A213 T11	SA213 T11	STFA 23				
A213 T22	SA213 T22	STFA 24				
A213 T5	SA213 T5	STFA 25				
A213 T9	SA213 T9	STFA 26				

Alloy Steel Tubes for Generator Boiler

ASTM	ASME	KA	ABS	NK	LRS	DNV
		KA-STBA 21				
A213 T23	SA213 T23	KA-STBA 24J1				
A213 T91	SA213 T91	KA-STBA 28				

Carbon Steel Pipes for Pressure Service

ASTM	ASME	JIS G 3454	BS	DIN	ISO	ABS	NK	LRS	DNV
A53 A	SA53 A	STPG 370	3601 320	1626 ust37.0	2604 II TW4	ABS 2	KSTPG 38	Sec 2 320	Sec 4-B-TS360
					2604 III TS4			Sec 2 360	
A135 A	SA135 A		3601 360	1626 st37.0	2604 II TS5	ABS 8		Sec 3 320	Sec 4-B-TW360
					2604 III TW5			Sec 3 360	
				1629 st37.0	2604 II TS6				
					2604 III TW6				
A53 B	SA53 B	STPG 410	3601 430	1626 st44.0	2604 II TS9	ABS 3	KSTPG 42	Sec 2 410	Sec 4-B-TS410
					2604 III TW9				Sec 4-B-TW410
A135 B	SA135 B			1629 st44.0	2604 II TS10	ABS 9		Sec 3 410	Sec 4-B-TS430
					2604 III TW10				Sec 4-B-TW430
				1626 st52.0	2604 II TS13			Sec 2 460	Sec 4-B-TS500
					2604 III TW13				Sec 4-B-TW500
				1629 st52.0	2604 II TS14			Sec 2 490	
					2604 III TW14			Sec 3 460	

Carbon Steel Pipes for High Pressure Service

ASTM	ASME	JIS G 3455	BS	DIN	ISO	ABS	NK	LRS	DNV
		STS 370		1630 st37.4			KSTS 38		
		STS 410		1630 st44.4	2604 II TS15		KSTS 42		
		STS 480		1630 st52.4	2604 II TS18		KSTS 49		

Carbon Steel Pipes for High Temperature Service

ASTM	ASME	JIS G 3456	BS	DIN	ISO	ABS	NK	LRS	DNV
A106 A	SA106 A	STPT 370	3602 P1 360	17175 st35.8		ABS 4	KSTPT 38		
				17177 st37.8					
A106 B	SA106 B	STPT 410	3602 P1 430	17175 st45.8		ABS 5	KSTPT 42		

				17177 st42.8					
A106 C	SA106 C	STPT 480	3602 P1 500Nb	17175 17Mn4			KSTPT 49		
				17175 19Mn5					

Alloy Steel Pipes for High Pressure Service

GB 5310, CNB-9

12Cr1MoV

Alloy Steel Pipes for High Temperature Service

ASTM	ASME	JIS G 3458	BS	DIN	ISO	ABS	NK	LRS
A335 P1	SA335 P1	STPA 12		17175 15Mo3	2604 II TS26	ABS 6	KSTPA 12	
				17177 15Mo3	2604 III TW26			
A335 P2	SA335 P2	STPA 20	3604 P1 660		2604 II TS32	ABS 7		
					2604 III TW32			
A335 P12	SA335 P12	STPA 22	3604 P1 620-440	17175 13CrMo44		ABS 12	KSTPA 22	Sec 2 1Cr 1/2Mo440
								Sec 3 1Cr 1/2Mo440
A335 P11	SA335 P11	STPA 23	3604 P1 621			ABS 11	KSTPA 23	
A335 P22	SA335 P22	STPA 24	3604 P1 622	17175 10CrMo910	2604 II TS34	ABS 13	KSTPA 24	Sec 2 2-1/4Cr1Mo410
A335 P5	SA335 P5	STPA 25	3604 P1 625		2604 III TS37	ABS 14		
A335 P9	SA335 P9	STPA 26	3604 P1 629-470		2604 II TS38			
A335 P5b/P5c	SA335 P5b/P5c		3604 P1 591	17175 14MoV63	2604 II TS33			Sec 2 2-1/2Cr1Mo490
A335 P15	SA335 P15		3604 P1 629-590	17175 X20CrMoV12 1	2604 II TS39			Sec 2 /2Cr1/2Mo1/4V460
A335 P21	SA335 P21		3604 P1 762		2604 II TS40			
A335 P91	SA335 P91							
A335 P92	SA335 P92							

Steel Pipes for Low Temperature Service

ASTM	ASME	JIS G 3460	BS	DIN	ISO	ABS	NK	LRS	DNV
A333 1	SA333 1	STPL 380	3603 430LT	17173 TTst35N		ABS 1L	KLP A	Sec 4 360	Sec 4-D-TS6
				17173 TTst35V			KLP B		Sec 4-D-TW6
A334 1	SA334 1			17174 TTst35N			KLP C		Sec 4-D-TS10
				17174 TTst35V					Sec 4-D-TW10
A333 3	SA333 3	STPL 450	3603 503LT	17173 10Ni14	2604 TS43	ABS 4L	KLP 3	Sec 4 3.5Ni440	Sec 4-D-TS43
A333 8	SA333 8	STPL 690	3603 509LT	17173 X8Ni9	2604 TS45	ABS 5L	KLP 9	Sec 4 9Ni690	Sec 4-D-TS45
A333 4, A334 3	SA333 4, SA334 3			17173 26CrMo4		ABS 2L	KLP 2	Sec 4 410	Sec 4-D-TS15
									Sec 4-D-TW15
A333 6, A334 6	SA333 6, SA334 6			17173 11MnNi53		ABS 3L		Sec 4 60	Sec 4-D-26CrMo4
				17174 11MnNi53					Sec 4-D-TW43
A333 7, A334 7	SA333 7, SA334 7			17173 13MnNi63		ABS 6L			Sec 4-D-11MnNi53
				17174 13MnNi63					Sec 4-D-TW45
A333 9, A334 8	SA333 9, SA334 8			17173 12Ni19					Sec

										4-D-13MnNi63
					17174 12Ni19					
A333 10, A334 9	SA333 10, SA334 9				17174 10Ni14					Sec 4-D-12Ni19
A333 11, A334 11	SA333 11, SA334 11				17174 X8Ni9					

Alloy Steel Pipes for Generator Piping

ASTM	ASME	KA	BS	DIN	ISO	ABS	NK	LRS	DNV
A335 P23	SA335 P23	KA-STPA 24J1							
A335 P91	SA335 P91	KA-STPA 28							