



RELIABLE PIPES & TUBES LTD.



ISO 9001:2008

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ISO 14001:2004 CERTIFIED
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GOVT. RECOGNIZED EXPORT HOUSE

Equivalence Tables Construction Steel

Europe			Germany	France	Italy	Belgium	Sweden	U.K.	Canada	India	Japan		International	USA
EN10025(93)	EN10025(90)	EN10113-2	DIN 17100	NFA 35-501	UNI7070	NBN21-101	MNC810E	BS4360	CSAG40-21	IS	JIS3101	JIS 3106	ISO 630	ASTM
S185	Fe 310-D		St 33	A 33	Fe 320	A 320	SS13,00,00				SS 330		FE 310	A283 A,B,C,D
S235JR(G2)	Fe E360B(FN)		RSt 37-2	E24-2	Fe 360 B	AE235B	SS 13.11.00	40(A)B	230 G	IS226	SS400	SM 400A	Fe 360 B	A284 gr, C, D
S235 JO	Fe E 360 C		St37-3U	E 24-3	Fe 360 C	AE235 C	SS 13,12,00	40C		Fe 410-S		SM400B	Fe 360C	
S235J2G3	Fe E 360 D1		St 37-3 N	E24-4	Fe 360 D	AE 235 D		40D				SM400C	Fe 360 D	
S235J2G4	FeE360 D2							40 EE						A 36
						AE 255 A,B,C,D								
S275 JR	Fe430 B		ST 44-2	E 28-2	Fe430B	AE295 B	SS14,12,00	43(A)B	260W,WT	IS2062			Fe 430B	A529
S 275 JO	Fe 430 C		St44-3U	E 28-3	Fe 430 C	AE 295C		43 C		Fe410 WA			Fe 430C	GR 42,50
S275 J2G3	Fe430 D1	S 275N	St 44-3N	E 28-4	Fe 430D	AE 295 D	SS14,14,00	43 D		Fe 410 WB			Fe 430D	A572
S275 J2G4	Fe430 D2	S 275NL				AE 295 DD	SS14,14,01	43EE		Fe 410 WC				gr,42,50
							SS26,32,00		300W,WT					
							SS26,34,11							A
							SS21,72,00							573 gr,58,65, 70
							SS21,74,01							
S 355 JR	Fe510 B			E 36-2	Fe 510 B	AE 355 B	SS21,32,01	50 B	350 W, WT	IS 961	SS490	SM 490A	FE 510 B	A633 gr
S 355 JO	Fe 510 C		St 52-3 U	E 36-3	Fe 510C	AE 335 C	SS21,34,01	50 C		Fe 570 HT		SS490B	Fe 510 C	A,C,D
S 355 J2G3	Fe 510 D1	S 355 N	St 52-3 N		Fe 510D	AE 355 D	SS 21,35,01	50 D		Fe 540 WHT		SS 490 C	Fe 510D	
S 335J2G4	Fe 510 D1	S 355 NL					SS 26,42,00					SS 490 YA	A 656	A656 gr, 50
S 335K2G3				E 36 -4	Fe 510 DD	AE355DD	SS26,44,11	50 DD				SS490 YB		
S 335K2G4	Fe 510 D D2							50 EE				SM 520 B		
												SM 520 C		A
														709 gr,36,50, 50 W
														A 808

High Yield Steel

Europe	Germany	France			Sweden	U.K.	Canada	Japan	USA
EN 10028-3	DIN 17102	NFA 36201	NFA 35207		MNC 810E	BS 4360	CSA G40-21	JIS 3101	ASTM
	STE 380	E 375R			SS21,42,01		400 W, WT	SS 540	A 572
	WSt E 380	E 375 FP			SS 21,44,01				gr. 60,65
	T St E 380				SS 21,45,01				
	E St E 380								A 633
									grade E
			A 550 AP, FP	AE 410 DD					
	St E 420	E 420 R			SS 26,52,00				
	W St E 420	E 420 FP			SS 26,54,11				
	T St E 420								
	E St E 420								
			A 590 AP, FP					(3116)SPV 450	A 656
P 460 N	St E 460	E 460 R				55 C, EE		(3106) SM 570	gr 60,70,80
P 460 NH	W St E 460	E 460 FP							
P 460 NL1	T St E 460								
P 460 NL 2	E St E 460								

Steel for Welded Tubes

Germany	U.S.A
DIN 17,172	API 4L, 5L
St E 210.7	A
St E 240.7	B
St E 290, 7 (TM)	X 42
St E 320, 7 (TM)	X 48
St E 360, 7 (TM)	X 52
St E 385, 7 (TM)	X 56
St E 415, 7 (TM)	X 60
St E 445, 7 (TM)	X 65
St E 480, 7 (TM)	X 70

Steel Resistant to Atmospherical Corrosion

Europe		Germany	France	U.K.	Canada	U.S.A	International
EN 10155	EU 155	WBL 087	NFA 35502	BS 4360	CSA G 4021	ASTM	ISO 4952
		WSt 37.2	E 24W 2				Fe 235W
S 235 JOW	Fe 360 CK1		E 24 W 3				
S 236 J2W	Fe 360 DK1	W St 37.3	E 24 W 4				
S 355 JOW	Fe 510 C2K1		E 36 WB 3	WR 50 B	gr 350 -A AT	A242	Fe 355 W
S 355 J2G 1W	Fe 510 D2K1	W St 62.3	E 36 WB 4	WR 50 C	gr 400-A AT	A 600 A,B,C	
S 355 J2G2W							
S 355 K2G1W							
S 366K2G2W							

Steel with Cr., Mo.,Cr-Mo.

Europe	Germany	France	Italy	Sweden	Japan	U.K.	U.S.A
EN 10028-2	DIN 17155	AFNOR 36206	UNI 5869	MNC830E	JIS 3103	BS 1501 part 2	ASTM
16 Mo 3	16 Mo 3	15 D 3	16 Mo 3				A202 gr. A,B
		18 MD 4.05	16 Mo 6	22.16.04	450M	271	
		15 MDV 4.05		22.18.04	490 M		A 204 gr.A,B,C
		15 CD 2.05					
14 Cr Mo 45	13 Cr Mo 44	15 CD 4.05	14 Cr Mo 46			620	A 302 gr.A,B
						gr.27,31	
						621 gr. A,B	A 387 gr.2,11,12
						622 gr.31	

General Construction Steel

Europe		Belgium	Germany	France	Sweden	Internationa l	Italy
EN 10025(93)	EN 10025 (90)	NBNA21201	DIN 17100	NFA35501	MNC 850 E	ISO 1052	UNI 7070
		A 330-1,2					
		A-360 1,2,3					
		A-410 1,2,3					
E 295	Fe 490-2	A 490-1,2	St 50-2	A 60-2	SIS 15,50,00	Fe E 490	Fe 490
					SIS 15,50,01		
E 335	Fe 590-2	A 690-1,2	St 60-2	A 60-2	SIS 16,50,00	Fe E 690	Fe 590
					SIS 16,50,01		
E 360	Fe 690-2	A 690-1,2	St 70-2	A 70-2	SIS 16,55,00	Fe E 690	Fe 690
					SIS 16,65,01		

Steel For Ship Building

Lloyds	Norske Veritas	Germanisch er Lloyds	Bureau Veritas	American Bureau of Shipping	USSR Register	Nippon Kaigi Kyoka
A	A	A	A	A	A	A
B	B	B	B	B	B	B
D	D	D	D	SS	D	D
E	E	E	E	E	E	E
				CD/DS		
	NV A 27 S					
	NV D 27 S					
	NV D 27 S					
AH 32	NV A 32	A 32	AH32	AH 32	A32	
DH 32	NV 32	D 32	DH 32	DH 32	D 32	
EH 32	NV E 32	E 32	EH 32	EH 32	E 32	
AH 34 S						
DH 34 S						
EH 34 S						
AH 35	NV A 36	A 36	AH 36	AH 36	A 36	
DH 36	NV D 36	D 36	DH 36	DH 36	D 36	
EH 36	NV E 36	E 36	EH 36	EH 36	E 36	
	NVA 40					
	NVD 40					
	NVE 40					
	NVA 420					
	NVD 420					
	NVE 420					

Steel for Boilers and Pressure Vessels

Europe			Belgium		Germany			France			Italy	Sweden	India	Japan		U.K	USA
EN 10028-2	EN 10028-3	EU 113	NBN629	NBN630	DIN 17135	DIN17165	DIN17102	NFA36201	NFA36205	NFA36207	UNI5859	MNC830E	IS 2002	JIS G 3115	JIS G 3103	BS 1501	ASTM
P235 GH		Fe E255	D 37 1,2	E37 1,2	A St 35	HI	St E 255		A 37 CP, AP,FP		Fe 360 1 KW	SS 13,30,01	Grade 1	SPV 235	SB 410	151	A 285
		KG KW,KT					W St E 255				Fe 360 2 KW	SS 13,31,01				gr.360,400,430	gr.A,B,C
							T St E 255				Fe 360 1 KG						A299
							E St E 255				Fe 360 2 KG		grade 2A			161	A441
P 295 GH	P 275 N	Fe E285	D 42-1,2	E 42-1,2	A St 41	HI1	St E 285		A 42 CP,AP,FP		Fe 410-1-KW	SS 14,30,01				gr.360,400,430	A442
	P 275 NH	KG,KW,KT					W St E 285				Fe 410-2-KW	SS 14,31,01	grade 2B				gr.55,60
	P 275 NL 1						T St E 285				Fe 410-1-KG	SS 14,32,01				154	A455
	P 275 NL 2						E St E 285				Fe 410-2-KG					gr.360A,400A,430A	
P296 GH		Fe E315	D 47-1,2	E47-1,2	A St 45	17 Mn 4	St E 315		A 48 CP,AP,FP		Fe 460-1-KW	SS 21.01.01		SPV 315	SB450	164	A515
		KG,KW,KT					W St E 315				Fe 460-2-KW	SS 21,02,01				gr.360,400	gr.55,60,65,70
							T St E 315				Fe 460-1-KG	SS 21,03,01				223	A 516
							E St E 315				Fe 460-2-KG	SS 29,12,01				gr.460,490	gr.55,60,65,70
P 355 GH	P 355 N	Fe E 355	D52-1,2	E52-1,2	A St 52	19 Mn 8	St E 355	E 355 R	A 52 CP,AP,FP	A 510 AP,FP	Fe 510-1-KW	SS 21,06,01		SPV 355	SB 480	224	A 537
	P 355 NH	KG,KW,KT					W St E 355	E 355 FP			Fe 510-2-KW	SS 21,07,01				gr.400,430,460,490	class 1
	P 355 NL1						T St E 355				Fe 510-1-KG					225	A 612
	P 355 NL2						E St E 355				Fe 510-2-KG					grade 490	A 622
										A 530 AP,FP		SS 21,16,01					gr.A,B,C
												SS 21,17,01					A737
																	gr.B,C7