

				UNI	ASTM	
(p)	49-112:87			663:68 (p) 7088:72 Unalloyed steel	A 53	A 106 Carbon Steel
al quality ressure	Ambient Temperat.			General Purposes	Black Hot-dip zinc-coat.	High Temperat.
					A + Carbon equival	A + Carbon equival
				TUE 220 A	Fe 35-1 Fe 35-2 Fe 35-1	B + Carbon equival B + Carbon equival
				TUE 235 A	Fe 45-1 Fe 45-2 Fe 45-1	
						C + Carbon equival
				Fe 52-1 Fe 52-2		
				UNI	ASTM	
49-211:89	49-213:90	49-215:81 (p)	49-219:90	5462:64	A 106	A 179
Alloy	Unalloy Alloy (Mo & Cr-Mo)	Unalloy Alloy (Ferritic)	Unalloy Alloy (Mo & Cr-Mo)		Carbon Steel	Low-Carbon Steel
Elevated Temperat.	Elevated Temperat.	Heat-Exchanger	Elevated Temperat. Furnaces	High-pressure Elevated Temperat.	High Temperat.	Cold-Drawn Heat-Exchanger
					A + High temp serv	Low C
TU E 220	TU 37 C - TU 42 C - TU 42 CR	TU 37 C - TU 42 c		C 14		
TU 42 F				C 18	B + High temp serv	
TU E 250						
TU E 275	TU 48 C - TU 48 CR	TU 48 c				
					C + High temp serv	
				16 Mo 5		
				TU 15 D 3	TU 15 D 3	TU 15 D 3
				TU 15 CD 2-05		
				TU 10 CD 5-05	TU 10 CD 5-05	TU 10 CD 5-05
				TU 13 CD 4-04	TU 13 CD 4-04	
				14 Cr Mo 3		
				12 Cr Mo 910		
				TU 10 CD 9-10	TU 10 CD 9-10	TU 10 CD 9-10
				TU Z 12 CD 05-05 a	TU Z 12 CD 05-05 a	
				TU Z 12 CD 05-05 b	TU Z 12 CD 05-05 b	
				TU Z 10 CD 5-05		
				TU Z 10 CD 09 a	TU Z 10 CD 9	TU Z 10 CD 09 a
				TU Z 10 CD 09 b	TU Z 10 CD 09 b	
				TU Z 10 CDVnb 09-01	TU Z 10 CDVnb 09-01	
				TU Z 10 CDnbV 09-02		

					VALUES REQUESTED BY ENs		
					FOR COMPLIANCE WITH PED		ELONGATION A% Min
					KV Trasvers		
					AVERAGE J Min	TEMPERATURE ° C	
al					27	0	14
al **							
al							

					VALUES REQUESTED BY ENs		
A 192 Carbon Steel	A 209 C-Mo	A 210 Medium-carbon	A 213 Alloy (Ferr.& Aust.)	A 335 Alloy (Ferr.)	FOR COMPLIANCE WITH PED		ELONGATION A% Min
					KV Trasvers		
Boiler High-pressure	Superheater	Boiler Superheater	Heat-Exchanger Boiler Superheater	High Temperat.	AVERAGE J Min	TEMPERATURE ° C	
Low C					27	0	14
		A1					
		C					
	T1 T1a T1b			P1			
			T2	P2			
			T17				
			T11	P11			
			T12	P12			
				P15			
			T21	P21			
			T22	P22			
			T23				
			T5	P5			
			T9	P9			
			T91	P91			
			T23	P23			
			T 24				
			T 911	P911			
			T92	P92			
			T122	P122			
			18Cr-2Mo				
						20	

TUBES FOR PRESSURE PURPOSES - STANDARD CORRELATION

EN	BS	DIN	NF
EN 10216 Part 3 Unalloy Alloy Fine Grain	3603:91 (p)	17179:86 Fine Grain	
Pressure purposes		Special requirements	
		St E 255	
		WSt E 255	
		TSt E 255	
	430 LT	E St E 255	
		St E 285	
P275NL1		WSt E 285	
P275NL2		T St E 285	
P355N		E St E 285	
P355NH		St E 355	
P355NL1		W St E 355	
P355NL2		T St E 355	
		E St E 355	
		St E 420	
		WSt E 420	
		TSt E 420	
P460N		ESt E 420	
P460NH		St E 460	
P460 NL1		W St E 460	
P460NL2		T St E 460	
P620Q		E St E 460	
P620QH			
P620QL			
P690Q			
P690QH			
P690QL1			
P690QL2			
EN	BS	DIN	NF
EN 10216 Part 4 Unalloy Alloy Low Temperature	3603: 91 (p) Carbon Alloy Low Temperature	3600 series (p) 17173: 85 Low temperature	49-215:81 (p) Unalloy Alloy (Ferritic) Heat-Exchanger Low Temperature
Pressure purposes	Pressure purposes		Pressure Vessels
P215NL		TT St35 N	
P255QL		TT St 35 V	
P265NL	430 LT		TU 42 BT TU 42 BT
26CrMo4-2		26CrMo4	
11MnNi5-3		11MnNi53	
13MnNi6-3		13MnNi63	
			TU 17 N 2 TU 17 N 2
12Ni14	503 LT	10Ni14	TU 10 N 9 TU 10 N 9
12Ni14+QT	503 LT	10Ni14	TU 10 N 14 TU 10 N 14
X12Ni5		12Ni19	TU 10 N 14 TU 10 N 14
X12Ni5+QT		12Ni19	
X10Ni9	509 LT	X8Ni9	
X10Ni9+QT	509 LT	X8Ni9	TU Z 6 N 9 TU Z 6 N 9
			TU Z 6 N 9 TU Z 6 N 9

ASTM				VALUES REQUESTED BY ENs		
				FOR COMPLIANCE WITH PED		ELONGATION A% Min
				KV Trasvers		
				AVERAGE J Min	TEMPERATURE ° C	
				According to Table 7 of EN 10216-3 Requested values are depending from steel grades and wall thickness		14

UNI	UNI	ASTM	ASTM	VALUES REQUESTED BY ENs		
5949:67 Unalloy Special Alloy Low Temperature	5949:67 Unalloy Special Alloy Low Temperature	A 333 Low Temperature	A 334 Carbon Steel Alloy Low Temperature	FOR COMPLIANCE WITH PED		ELONGATION A% Min
				KV Trasvers		
				AVERAGE J Min	TEMPERATURE ° C	
C 15		gr1	gr1	According to Table 5 of EN 10216-4 Requested values are depending from steel grades and wall thickness		14
C 20		gr6	gr6			
18 Ni 9						
18 Ni 14		gr3	gr3			
18 Ni 14		gr3	gr3			
X 12 Ni 09		gr8	gr8			
X 12 Ni 09		gr8	gr8			
		Gr 4	Gr 4			
		Gr 7	Gr 7			
		Gr 9	Gr 9			
		Gr 10				
		Gr 11				



Tubes for pressure purposes
Standard correlation