

REFERENCES WE CAN OFFER

DIN LINES

- Seamless and welded steel pipes for lines, devices and containers.
- Standard: UNE-EN 10255.
Grade: S 195T.

UNE-EN BOILERS

- Seamless heat-resistant steel pipes.
- Standard: UNE-EN 10216-2.
Grades: P 235 GH and P 265 GH.

CALIBRATED

- Electrically welded and seamless steel precision pipes, cold drawn.
- Standards: UNE-EN 10305-1 and UNE-EN 10305-2.

BLACK GALVANIZED

- Resistance welded pipes for water and steam lines. In black and galvanized.
- Standards: ISO 65L-II and UNE-EN 10255.
Grade: S195T.

ASTM LINES

- Steel pipes for general lines.
- Standard: ASTM A-53.

HIGH TEMPERATURES AND FURNACES

- Pipes for high temperature lines and furnaces.
- Standard: ASTM A-106.
Grades: A, B and C.

HEAT EXCHANGERS

- Pipes for heat exchangers.
- Standard: ASTM A-178.
Grades: A, C and D.
- Standard: ASTM A-179.
- Standard: ASTM A-209.
Grades: T1, T1a and T1b.
- Standard: ASTM A-213.
Grades: T2, T5, T5b, T5c, T9, T11, T12, T17, T21, T22, T91 and T92.
- Standard: ASTM A-214.

ELECTRICAL CONDUITS

- Rigid conduits for electrical uses.
- Standard: ANSI C.80.

STRUCTURAL PIPES

- Square/rectangular profile.
- Standard: UNE-EN 10219-1.
Grades: S275 JOH and S335J2H.

ALLOYS

- High temperature pipes.
- Standard: ASTM A-335.
Grades: P1, P2, P5b, P5c, P9, P11, P12, P15, P21, P22 and P91.

LOW TEMPERATURES

- Low temperature pipes.
- Standard: ASTM A-333 and ASTM A-334.
Grades: 1, 3, 4, 6, 7, 8, 9, 10 and 11.

LINE PIPES

- Seamless and welded steel pipes.
- Standard: API 5-L.
Grades: A, B, X42, X46, X52, X56, X60, X65, X70 and X80.

DRILLING

- Drilling, casing and tubing pipes.
- Standard: API-5CT.

HIGH RELIABILITY

- Electric fusion welded steel pipes for applications requiring high reliability in diameters from 16".
- Standards: ASTM A-671, ASTM A-672 and ASTM A-691.

MECHANICAL USE

- Pipes for mechanical use.
- Standard: UNE-EN 10297-1.
Grade: E-355.

ASTM BOILERS

- Pipes for boilers and other uses at high pressure and/or temperature.
- Standard: ASTM A-192.
- Standard: ASTM A-210.
Grades: A1 and C.
- Standard: ASTM A-213.
Grades: T5, T9, T11, T21, T22 and T91.

STANDARDS AND QUALITIES

SOME STANDARDS AND QUALITIES BY TYPE OF MATERIAL *

ITEM	SEAMLESS PIPES	TUBING
DIMENSIONAL STANDARD	ASME B 36.10	Included in the ASTM
CARBON STEEL	ASTM A 53/A 106 Gr B/API 5L Gr B ASTM A 106 Gr C	ASTM A 513-W (A 178-W) ASTM A 512-S (A 179-S)
CARBON STEEL FOR LOW TEMPERATURES	ASTM A 333 Gr 3 ASTM A 333 Gr 6	ASTM A 334 Gr 3 ASTM A 334 Gr 6
CARBON STEEL HIGH YIELD	API 5L X42 (L290) API 5L X46 (L320) API 5L X52 (L360) API 5L X56 (L390) API 5L X60 (L415) API 5L X65 (L450) API 5L X70 (L485)	
ALLOY STEEL	ASTM A 335 P1 ASTM A 335 P5 (5Cr) ASTM A 335 P9 (9Cr) ASTM A 335 P11 (11/4 Cr-1/2Mo) ASTM A 335 P12 (1Cr-1/2Mo) ASTM A 335 P22 (21/4Cr-1Mo) ASTM A 335 P91	ASTM A 213 T2 ASTM A 213 T5 ASTM A 213 T9 ASTM A 213 T11 ASTM A 213 T12 ASTM A 213 T91

*For other qualities, please ask.

EQUIVALENCE BETWEEN DIN AND EN STANDARDS

		STANDARD	QUALITY	STANDARD	QUALITY	WERKSTOFF NO.
CARBON STEEL	SEAMLESS PIPES	DIN 2440	-	EN 10255	S195T	-
		DIN 2448	37.0	EN 10216-1	P235 TR1 (CE) or TR2(CE)	1.0254 / 1.0255
			44	EN 10025-2	P275JR	1.0044
			52	EN 10025-2	S355J2H	1.0577
			35.8	EN 10216-1 EN 10216-2	P235 TR2 P235 GH	1.0255 1.0345
		DIN 1626/2458	37.0	EN 10216-2	195 TR1 / TR2	1.0107 / 1.0108
			42.0		235 TR1 / TR2	1.0254 / 1.0255
		ASTM A 106	Gr.B	EN 10216-2	P235GH	1.0425
		API 5L	Gr.B	EN 10216-2	P235GH	1.0425
		API 5L (HIGH YIELD CARBON STEEL)	X42	EN 10216-3	P275N	1.0488 / 1.1104
			X46-X52	EN 10216-3	P355N	1.0562 / 1.0565 / 1.0566 / 1.1106
			X56-X70	EN 10216-3	P460N	1.8905 / 1.8935 / 1.8915 / 1.8918
			X80-X90	EN 10208-2	P620N	1.8876 / 1.8877 / 1.8890
		API 5L (FUEL LINE)	Gr.B	EN 10208-2	L245NB	1.0457
			X42	EN 10208-2	L290NB	1.0484
			X46	EN 10208-2	-	-
			X52	EN 10208-2	L360NB/QB	1.0582 / 1.8948
			X56	EN 10208-2	-	-
			X60	EN 10208-2	L415NB/QB	1.8972 / 1.8947
			X70	EN 10208-2	L485QB	1.8955
X80	EN 10208-2		L555QB	1.8957		



		STANDARD	QUALITY	STANDARD	QUALITY	WERKSTOFF NO.
CARBON STEEL	WELDED PIPES	DIN 2440	-	EN 10255	S195T	-
		DIN 2458	-	EN 10217-1	195 TR1 / TR2	1.0107 / 1.0108
			235 TR1 / TR2		1.0254 / 1.0255	
			265 TR1 / TR2		1.0258 / 1.0259	
		ASTM A672	Gr 65	EN 10217-5	P235GH/P265GH	1.0345 / 1.0425
			Gr 70	EN 10217-5	P265GH/16Mo3	1.0425 / 1.5415
		ERW API5L/ASTM A 53	Gr. B	EN 10217-2	P235GH	1.0425
			X42	EN 10217-3	P275N	1.0488 / 1.1104
			X46-X52	EN 10217-3	P355N	1.0562 / 1.0565 / 1.0566 / 1.1106
			X56-X70	EN 10217-3	P460N	1.8905 / 1.8935 / 1.8915 / 1.8918
			X80-X90	EN 10217-3	P620N	1.8876 / 1.8877 / 1.8890
			API5L (FUEL LINE)	Gr.B	EN 10208-2	L245MB
		X42		EN 10208-2	L290MB	1.0429
		X52		EN 10208-2	L360MB	1.0578
		X60		EN 10208-2	L415MB	1.8973
	X65	EN 10208-2		L450MB	1.8975	
	X70	EN 10208-2		L485MB	1.8977	
	STRUCTURAL PIPE	ASTM A500 (C)	Gr.B	EN 10219	S355JOH / S355J2H	1.0547 / 1.0576
				EN 10297	E315 / E355	1.0236 / 1.0580 (1.0920 with charpy)
	LOW TEMPERATURE CARBON STEEL	PIPES	ASTM A333	Gr.3	EN 10216-4	12Ni14
Gr.6				EN 10216-4	P265NL	1.0453
ASTM A671			Gr.60	EN 10217-6	P215NL	1.0451
			Gr.70	EN 10217-6	P265NL	1.0453
ALLOY STEEL	SEAMLESS PIPES	ASTM A-335	P1	EN 10216-2	16Mo3	1.5415
				EN 10216-2	8MoB5-4	1.5450
			P2	EN 10216-2	14MoV6-3	1.7715
			P5	EN 10216-2	X11CrMo5	1.7362
			P9	EN 10216-2	X11CrMo9-1	1.7386
			P11	EN 10216-2	10CrMo5-5	1.7338
			P12	EN 10216-2	13CrMo4-5	1.7335
			P22	EN 10216-2	10CrMo9-10	1.7380
			P91	EN 10216-2	X10CrMoVNb9-1	1.4903