

- **APLICACIÓN :**

Tubo se utiliza para la extracción de petróleo y gas natural extracto de un pozo.

ITEM		TOLERANCE
DIAMETRO EXTERIOR	Cuerpo del Tubo	$D \leq 101.60\text{mm} \pm 0.79\text{mm}$
		$D \leq 114.30\text{mm} + 1.0 \% D - .5\% D$
	Acoplamiento	$\pm 1\% D$
GROSOR DE LA PARED		$0, -12.5 \% t$
WEIGHT	Largos Individuales	0.03
	Lotes Carretadas	$0, - 1.75 \%$

- **DATOS TÉCNICOS**



- PROPIEDADES

GRADO	LÍMITE DE ELÁSTICO				RESISTENCIA A LA TRACCIÓN		DUREZA		VARIACION DE DUREZA ADMISIBLE
	min		max		min		max		
	Psi	Mpa	Psi	Mpa	Psi	Mpa	HRC	BHN	HRC
J55	55,000	379	80,000	552	75,000	517	-	-	-
K55	55,000	379	80,000	552	95,000	655	-	-	-
N80-1	80,000	552	80,000	758	100,000	689	-	-	-
N80Q	80,000	552	80,000	758	100,000	689	-	-	-
M65	65,000	448	85,000	586	85,000	586	22	235	-
L80-1	80,000	552	95,000	655	95,000	655	23	241	-
C90-1	90,000	621	105,000	724	100,000	689	25.4	255	3.0
C90-2	90,000	621	105,000	724	100,000	689	25.4	255	3.0
C95	95,000	655	110,000	758	105,000	724	-	-	-
T95-1	95,000	655	110,000	758	105,000	724	25.4	255	3.0
T95-2	95,000	655	110,000	758	105,000	724	25.4	255	3.0
P110	110,000	758	140,000	965	125,000	862	-	-	-

COMPOSICIÓN QUÍMICA (%)

GRADO	COMPOSICIÓN QUÍMICA												
	C		Mn		Mo		Cr		NI	Cu	P	S	SI
	min	max	min	max	min	max	min	max	max	max	max	max	Max
J55	-	-	-	-	-	-	-	-	-	-	0.030	0.030	-
K55	-	-	-	-	-	-	-	-	-	-	0.030	0.030	-
N80-1	-	-	-	-	-	-	-	-	-	-	0.030	0.030	-
N80Q	-	-	-	-	-	-	-	-	-	-	0.030	0.030	-
M65	-	0.43	-	1.90	-	-	-	-	0.25	0.35	0.030	0.030	0.45
L80-1	-	0.35	-	1.00	0.25	0.75	-	1.2	0.99	-	0.020	0.010	-
C90-1	-	0.50	-	1.90	-	NL	-	NL	0.99	-	0.030	0.010	-
C90-2	-	0.45	-	1.90	-	-	-	-	-	-	0.030	0.030	0.45
C95	-	0.35	-	1.20	0.25	0.85	0.40	1.50	0.99	-	0.020	0.010	-
T95-1	-	0.50	-	1.90	-	-	-	-	0.99	-	0.030	0.010	-
T95-2	-	-	-	-	-	-	-	-	-	-	-	0.030	0.45
P110	-	-	-	-	-	-	-	-	-	-	-	0.030	0.45

LONGITUD

	(Range 1)	(Pange 2)	(Pange 3)
TUBERIA	6.10-7.32m	8.53-9.75m	11.58-12.80m
CAJA	4.88-7.62m	7.62-10.36m	10.36-14.63m
BAR CONJUNTA	0.5m-6.0m (2FEET-20FEET)		

• PARA TUBO

TAMAÑO DE DESIGNACIÓN	DIAMETRO EXTERIOR		GROSOR DE PARED		TIPO ACABADO FINAL					
					GRADO					
	In	mm	In	mm	J55	L80-1	N80	C90	T95	P110
1.900"	1.900	48.26	0.125	3.18	PI	-	-	-	-	-
	1.900	48.26	0.145	3.68	PNUI	PNUI	PNUI	PNUI	PNUI	-
	1.900	48.26	0.2	5.08	PU	PU	PU	PU	PU	PU
2 3/8"	2.375	60.32	0.167	4.24	PN	PN	PN	PN	PN	-
	2.375	60.32	0.19	4.83	PNU	PNU	PNU	PNU	PNU	PNU
	2.375	60.32	0.254	6.45	-	PNU	PNU	PNU	PNU	PNU
	2.375	60.32	0.259	7.49	-	P	-	P	P	-
	2.375	60.32	0.336	8.53	-	PU	-	PU	PU	-
2 7/8"	2.875	73.02	0.217	5.51	PNU	PNU	PNU	PNU	PNU	PNU
	2.875	73.02	0.276	7.01	-	PNU	PNU	PNU	PNU	PNU
	2.875	73.02	0.308	7.82	-	PNU	PNU	PNU	PNU	PNU
	2.875	73.02	0.34	8.64	-	PU	-	PU	PU	-
	2.875	73.02	0.392	9.96	-	P	-	P	P	-
	2.875	73.02	0.44	11.18	-	P	-	P	P	-
3 1/2"	3.5	73.02	0.216	5.49	PN	PN	PN	PN	PN	-
	3.5	88.9	0.254	6.45	PNU	PNU	PNU	PNU	PNU	PNU
	3.5	88.9	0.289	7.34	PN	PN	PN	PN	PN	-
	3.5	88.9	0.375	9.52	-	PNU	PNU	PNU	PNU	PNU
	3.5	88.9	0.43	10.92	-	P	-	P	P	-
	3.5	88.9	0.476	12	-	P	-	P	P	-
	3.5	88.9	0.53	13.46	-	P	-	P	P	-
4"	4	101.6	0.226	5.74	PN	PN	PN	PN	PN	-
	4	101.6	0.262	6.65	PU	PU	PU	PU	PU	-
4 1/2"	4.5	114.3	0.271	6.88	PNU	PNU	PNU	PNU	PNU	-
	4.5	114.3	0.337	8.56	-	P	-	P	P	-
	4.5	114.3	0.38	9.65	-	P	-	P	P	-
	4.5	114.3	0.43	10.92	-	P	-	P	P	-
	4.5	114.3	0.5	12.7	-	P	-	P	P	-
	4.5	114.3	0.56	14.22	-	P	-	P	P	-
	4.5	114.3	0.63	16	-	P	-	P	P	-

TAMAÑO	PESO	EXTERIOR		PARED		TIPO ACABADO FINAL							
DESIGNACIÓN	DESIGNACIÓN	DIAMETRO		ESPESOR		GRADO							
		In	Mm	In	mm	J55/K55	L80-1	N80	C90	C95	T95	P110	M65
7 5/8"	26.4	7.625	193.68	0.328	8.33	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	29.7	7.625	193.68	0.375	9.52	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	33.7	7.625	193.68	0.43	10.92	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	39	7.625	193.68	0.5	12.7	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	42.8	7.625	193.68	0.562	14.27	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	45.3	7.625	193.68	0.595	15.11	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	47.1	7.625	193.68	0.625	15.68	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
8 5/8"	24	8.625	219.08	0.264	6.71	PS	-	-	-	-	-	-	-
	28	8.625	219.08	0.304	7.72	-	-	-	-	-	-	-	-
	32	8.625	219.08	0.352	8.94	PSLB	-	-	-	-	-	-	-
	36	8.625	219.08	0.4	10.16	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	40	8.625	219.08	0.45	11.43	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	44	8.625	219.08	0.5	12.7	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	49	8.625	219.08	0.557	14.15	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
9 5/8"	32.3	9.625	244.48	0.312	7.92	-	-	-	-	-	-	-	-
	36	9.625	244.48	0.352	8.94	PSLB	-	-	-	-	-	-	PSLB
	40	9.625	244.48	0.395	10.03	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PSLB
	43.5	9.625	244.48	0.435	11.05	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	47	9.625	244.48	0.472	11.99	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	53.5	9.625	244.48	0.545	13.84	-	PLB	PLB	PLB	PLB	PLB	PLB	-
	58.4	9.625	244.48	0.595	15.11	-	PLB	PLB	PLB	PLB	PLB	PLB	-
	59.4	9.625	244.48	0.609	15.47	-	-	-	P	-	P	-	-
	64.9	9.625	244.48	0.672	17.07	-	-	-	P	-	P	-	-
	70.3	9.625	244.48	0.734	18.64	-	-	-	P	-	P	-	-
10 3/4"	32.75	10.75	273.05	0.279	7.09	-	-	-	-	-	-	-	-
	40.5	10.75	273.05	0.35	8.89	PSB	-	-	-	-	-	-	PSB
	45.5	10.75	273.05	0.4	10.16	PSB	-	-	-	-	-	-	PSB
	51	10.75	273.05	0.45	11.43	PSB	PSB	PSB	PSB	PSB	PSB	PSB	PSB
	55.5	10.75	273.05	0.495	12.57	-	PSB	PSB	PSB	PSB	PSB	PSB	PSB
	60.7	10.75	273.05	0.545	13.84	-	-	-	PSB	-	PSB	PSB	-
	65.7	10.75	273.05	0.959	15.11	-	-	-	PSB	-	PSB	PSB	-
	73.2	10.75	273.05	0.672	17.07	-	-	-	P	-	P	-	-
	79.2	10.75	273.05	0.734	18.64	-	-	-	P	-	P	-	-
	85.3	10.75	273.05	0.797	20.24	-	-	-	P	-	P	-	-

TAMAÑO	PESO	EXTERIOR		PARED		TIPO ACABADO FINAL							
DESIGNACIÓN	DESIGNACIÓN	DIAMETRO		ESPESOR		GRADO							
		In	Mm	In	mm	J55/K55	L80-1	N80	C90	C95	T95	P110	M65
11 3/4"	42	11.75	298.45	0.333	8.46	-	-	-	-	-	-	-	-
	47	11.75	298.45	0.375	9.53	PSB	-	-	-	-	-	-	PSB
	54	11.75	298.45	0.435	11.05	PSB	-	-	-	-	-	-	PSB
	60	11.75	298.45	0.489	12.42	PSB	PSB	PSB	PSB	PSB	PSB	PSB	PSB
	65	11.75	298.45	0.534	13.56	-	P	P	P	P	P	P	-
	71	11.75	298.45	0.582	14.78	-	P	P	P	P	P	P	-
13 3/8"	48	13.375	339.72	0.33	8.38	-	-	-	-	-	-	-	-
	54.5	13.375	339.72	0.38	9.65	PSB	-	-	-	-	-	-	PSB
	61	13.375	339.72	0.43	10.92	PSB	-	-	-	-	-	-	PSB
	68	13.375	339.72	0.48	12.19	PSB	PSB	PSB	PSB	PSB	PSB	PSB	PSB
	72	13.375	339.72	0.541	13.06	-	PSB	PSB	PSB	PSB	PSB	PSB	-
16"	65	16	406.4	0.375	9.53	-	-	-	-	-	-	-	-
	75	16	407.4	0.438	11.13	PSB	-	-	-	-	-	-	PSB
	84	16	408.4	0.495	12.57	PSB	-	-	-	-	-	-	Possible
	109	16	409.4	0.66	16.66	PSB	P	P	-	-	-	P	-