



TUBERÍA DE ACERO ESTRUCTURAL REDONDA

REFERENCIA		Dimensiones Nominales		t _{efectivo}	D/t	Área de diseño de la sección	EJE DE SIMETRÍA				Saint Venant	Área superficial I	Peso Nominal
Diámetro Nominal (pulg)	Diámetro externo (pulg)	Diámetro Exterior	Espesor				I _x	S _x	r _x	Z _x			
											D [mm]	t [mm]	[mm ⁴]
1-1/2"	1.89"	48,0	1,5	1,40	34,41	204	55.504	2.313	16,48	3.031	111.007	0,151	1,78
		48,0	2,0	1,86	25,81	270	71.864	2.994	16,33	3.962	143.728	0,151	2,35
		48,0	2,5	2,33	20,65	334	87.225	3.634	16,17	4.855	174.451	0,151	2,92
		48,0	3,0	2,79	17,20	396	101.629	4.235	16,01	5.710	203.258	0,151	3,45
2"	2.36"	60,0	2,0	1,86	32,26	340	143.695	4.790	20,57	6.289	287.390	0,188	2,94
		60,0	2,5	2,33	25,81	421	175.449	5.848	20,41	7.738	350.898	0,188	3,64
		60,0	3,0	2,79	21,51	501	205.642	6.855	20,25	9.139	411.284	0,188	4,33
		60,0	4,0	3,72	16,13	658	261.552	8.718	19,94	11.800	523.104	0,188	5,67
2-1/2"	2.87"	73,0	2,0	1,86	39,25	416	263.155	7.210	25,16	9.415	526.309	0,229	3,58
		73,0	2,5	2,33	31,40	516	322.664	8.840	25,00	11.617	645.327	0,229	4,44
		73,0	3,0	2,79	26,16	615	379.792	10.405	24,84	13.760	759.585	0,229	5,30
		73,0	4,0	3,72	19,62	810	487.166	13.347	24,53	17.872	974.332	0,229	6,97
3"	3-1/2"	89,0	2,0	1,86	47,85	509	483.530	10.866	30,82	14.176	967.060	0,280	4,37
		89,0	2,5	2,33	38,28	633	594.945	13.370	30,66	17.471	1.189.890	0,280	5,43
		89,0	3,0	2,79	31,90	756	702.735	15.792	30,50	20.743	1.405.470	0,280	6,48
		89,0	4,0	3,72	23,92	997	907.758	20.399	30,18	27.072	1.815.516	0,280	8,54
4"	4-1/2"	114,3	2,5	2,33	49,16	818	1.282.429	22.440	39,60	29.156	2.564.858	0,359	6,99
		114,3	3,0	2,79	40,97	977	1.520.118	26.599	39,44	34.699	3.040.236	0,359	8,35
		114,3	4,0	3,72	30,73	1.292	1.977.533	34.603	39,12	45.505	3.955.067	0,359	11,04
		114,3	6,0	5,58	20,48	1.906	2.823.351	49.402	38,49	66.014	5.646.703	0,359	16,26
6"	6"	152,4	4,0	3,72	40,97	1.738	4.804.324	63.049	52,58	82.251	9.608.648	0,479	14,92
		152,4	6,0	5,58	27,31	2.574	6.945.070	91.143	51,95	120.341	13.890.139	0,479	22,09
		152,4	8,0	7,44	20,48	3.388	8.923.185	117.102	51,32	156.477	17.846.369	0,479	29,05
6"	6-1/4"	159	4,0	3,72	42,74	1.815	5.472.661	68.839	54,92	89.713	10.945.323	0,500	15,66
		159	6,0	5,58	28,49	2.689	7.923.447	99.666	54,28	131.398	15.846.893	0,500	22,60
8"	8-5/8"	219,1	5,0	4,65	47,11	3.132	18.011.226	164.430	75,83	213.832	36.022.453	0,688	26,75
		219,1	8,0	7,44	29,45	4.947	27.728.840	253.145	74,87	333.370	55.457.679	0,688	42,21
		219,1	10,0	9,30	23,56	6.129	33.779.776	308.385	74,24	409.520	67.559.552	0,688	52,77
8"	8-7/8"	225,0	5,0	4,65	48,39	3.219	19.545.436	173.737	77,92	225.810	39.090.872	0,707	27,79
		225,0	7,0	6,51	34,56	4.469	26.688.302	237.229	77,28	310.866	53.376.605	0,707	37,71
10"	10-3/4"	273,1	7,0	6,51	41,94	5.451	48.438.094	354.793	94,26	462.586	96.876.189	0,858	46,43
		273,1	9,0	8,37	32,62	6.960	61.007.441	446.859	93,63	586.560	122.014.882	0,858	59,25
12"	12-3/4"	323,9	8,0	7,44	43,53	7.396	92.602.663	571.886	111,90	744.995	185.205.327	1,017	62,89
		323,9	10,0	9,30	34,82	9.190	113.760.470	702.550	111,26	920.426	227.520.939	1,017	78,12
		323,9	12,0	11,16	29,02	10.963	134.158.721	828.524	110,62	1.091.633	268.317.442	1,017	93,15
16"	16"	406,4	12,7	11,81	34,41	14.641	285.213.718	1.403.611	139,57	1.839.528	570.427.435	1,277	123,31
20"	20"	508,0	12,7	11,81	43,01	18.411	566.935.895	2.232.031	175,48	2.908.459	1.133.871.790	1,596	155,13
24"	24"	609,6	12,7	11,81	51,61	22.181	991.196.628	3.251.957	211,39	4.221.230	1.982.393.256	1,915	186,95