

ACERO SAE 1018 – FICHA TECNICA

ACEROS AL CARBON / MAQUINARIA

COLOR DE IDENTIFICACION

Nacional:

Importación:



Descripción

- Acero para construcción de maquinaria.
- Acero de bajo carbono, fácil de ser soldado y mecanizado; tiene alta tenacidad y baja resistencia mecánica siendo adecuado para componentes de maquinaria.

Composición química

Carbono "C"	Silicio "Si"	Manganeso "Mn"
0.18	0.25	0.4

Perfil	Acabado	Medidas		
	Estirado en frío	3/16"	A	4"
	Pelado	4 1/4"	A	6"
	Laminado en caliente	1 1/2"	A	16"
	Estirado en frío	1/8"	A	4"
	Estirado en frío	1/4"	A	4"
	Estirado en frío	1/8" x 1/4"	A	3" X 12"

Tratamientos térmicos

Templado y Cianurado		Revenido	Dureza	
° C	Medio	° C	Brinell	Rockwell C
770 - 800	AGUA	150 - 200	150	-

Usos y aplicaciones

Bujes, Ejes, Piñones, Cadenas, Elementos de sujeción, Rodillos, Coples, Flechas, Tensores, Cuñas, Pernos, Tornillería.



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PESOS DEL ACERO EN BARRA (KILOS POR METRO LINEAL)



Medida			Redondo	Hexagonal	Cuadrado
mm.	Pulgadas		kgs.	kgs.	kgs.
	Decim.	Frac.			
1.588	0.0625	1/16	0.0155	0.0171	0.0196
3.175	0.125	1/8	0.0621	0.0685	0.079
4.763	0.1875	3/16	0.1396	0.154	0.1778
6.35	0.25	1/4	0.2484	0.2738	0.316
7.938	0.3125	5/16	0.3881	0.4279	0.4961
9.525	0.375	3/8	0.559	0.6163	0.7117
11.113	0.4375	7/16	0.7607	0.8388	0.9636
12.7	0.5	1/2	0.9936	1.096	1.265
14.288	0.5625	9/16	1.257	1.387	1.601
15.875	0.625	5/8	1.552	1.712	1.976
17.463	0.6875	1 1/16	1.878	2.072	2.363
19.05	0.75	3/4	2.235	2.465	2.847
20.638	0.8125	1 3/16	2.624	2.893	3.341
22.225	0.875	7/8	3.042	3.355	3.874
23.813	0.9375	1 3/16	3.494	3.852	4.449
25.4	1	1	3.974	4.383	5.06
26.988	1.0625	1 1/16	4.486	4.947	5.712
28.575	1.125	1 1/8	5.029	5.547	6.404
30.163	1.187	1 3/16	5.646	6.179	7.136
31.75	1.25	1 1/4	6.211	6.848	7.906
33.338	1.3125	1 5/16	6.846	7.549	8.717
34.925	1.375	1 3/8	7.47	8.285	9.567
36.513	1.4375	1 7/16	8.212	9.056	10.46
38.1	1.5	1 1/2	8.942	9.86	11.39
39.688	1.5625	1 9/16	9.704	10.7	12.35
41.275	1.625	1 5/8	10.494	11.57	13.31
42.863	1.6875	1 11/16	11.32	12.48	14.41
44.45	1.75	1 3/4	12.17	13.42	15.608
46.038	1.8125	1 13/16	13.06	14.4	16.62
47.625	1.875	1 7/8	13.97	15.4	17.79
49.213	1.9375	1 15/16	14.91	16.45	18.99
50.8	2	2	15.9	17.53	20.24
53.975	2.125	2 1/8	17.95	19.79	22.85
55.563	2.1875	2 3/16	19.02	20.97	24.21
57.15	2.25	2 1/4	20.12	22.19	25.802
58.738	2.312	2 5/16	21.25	23.44	27.07
60.325	2.375	2 3/8	22.43	24.72	28.55
61.913	2.4375	2 7/16	23.6	26.03	30.06

Medida			Redondo	Hexagonal	Cuadrado
mm.	Pulgadas		kgs.	kgs.	kgs.
	Decim.	Frac.			
63.5	2.5	2 1/2	24.999	27.38	31.854
65.088	2.5625	2 9/16	26.265	28.77	33.23
66.675	2.625	2 5/8	27.562	30.2	34.87
69.85	2.75	2 3/4	31.249	33.14	37.21
73.025	2.875	2 7/8	32.85	36.23	41.82
74.613	2.9375	2 15/16	34.29	37.82	43.63
76.2	3	3	35.999	39.44	45.54
79.375	3.125	3 1/8	38.81	42.79	49.41
82.55	3.25	3 1/4	41.97	46.29	53.8
88.9	3.5	3 1/2	48.999	53.68	62.4
95.25	3.75	3 3/4	55.9	61.63	71.7
101.6	4	4	63.6	70.11	81.5
107.95	4.25	4 1/4	71.8	79.12	92
114.3	4.5	4 1/2	80.999	88.75	103.2
120.65	4.75	4 3/4	89.67	98.88	114.9
127	5	5	99.36	109.55	127.4
133.35	5.25	5 1/4	109.54	120.79	140.4
139.7	5.5	5 1/2	120.21	132.56	154.2
146.05	5.75	5 3/4	131.4	144.89	168.4
152.4	6	6	143.1	157.8	183.5
165.1	6.5	6 1/2	167.9	185.1	215.3
177.8	7	7	194.8	214.8	249.7
190.5	7.5	7 1/2	225	246.77	286.69
203.2	8	8	254.5	280.4	326.2
215.9	8.5	8 1/2	289	316.97	368.24
228.6	9	9	321.9	355	412.8
241.3	9.5	9 1/2	361	395.93	459.98
254	10	10	397.4	438.2	509.6
266.7	10.5	10 1/2	441	483.68	561.92
279.4	11	11	480.9	530.3	616.7
292.1	11.5	11 1/2	529	580.19	674.05
304.8	12	12	575.99	631	733.9
317.5	12.5	12 1/2	625	685.48	796.37
330.2	13	13	676	741.42	861.35
342.9	13.5	13 1/2	729	799.55	928.89
355.6	14	14	784	859.87	998.97
368.3	14.5	14 1/2	840.77	922.39	1071.59
381	15	15	900	987.09	1146.77

PESOS DEL ACERO EN SOLERA



		ANCHO																		
MM	PULG	12.7	15.87	19.05	25.4	31.75	38.1	44.45	50.8	57.15	63.5	76.2	88.9	101.6	114.3	127	152.4	203.2	254	304.8
		1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	1 3/4"	2"	2 1/4"	2 1/2"	3"	3 1/2"	4"	4 1/2"	5"	6"	8"	10"	12"
3.17	1/8"	0.315	0.39	0.475	0.635	0.8	0.95	1.09	1.27	1.400*	1.58	1.905	2.210*	2.540*	2.800*	3.180*	3.600*	5.080*	6.250*	7.500*
4.76	3/16"	0.475	0.59	0.711	0.95	1.19	1.425	1.650*	1.9	2.150*	2.38	2.85	3.320*	3.8	4.280*	4.750*	5.700*	7.600*	9.500*	11.400*
6.35	1/4"	0.632	0.782	0.947	1.265	1.582	1.906	2.23	2.63	2.87	3.155	3.796	4.44	5.06	5.700*	6.33	7.6	10.120*	12.650*	15.180*
7.93	5/16"	0.781*	0.976	1.172	1.562	1.95	2.343	2.767	3.125	3.570*	3.9	4.666	5.468	6.25	7.03	7.81	9.375*	12.680*	15.850*	19.020*
9.52	3/8"	0.949	1.185	1.425	1.906	2.371	2.858	3.34	3.796	4.29	4.749	5.701	6.639	7.581	8.545	9.497	11.43	15.18	18.99	22.76
12.7	1/2"		1.563	1.898	2.531	3.156	3.796	4.46	5.061	5.74	6.327	7.592	8.857	10.122	11.395	12.653	15.183	20.24	25.306	30.36
15.87	5/8"			2.373	3.156	3.945	4.749	5.59	6.327	7.180*	7.904	9.497	11.075	12.653	14.242	15.823	18.979	25.306	31.56	37.87
19.05	3/4"				3.796	4.748	5.701	6.715	7.592	8.630*	9.497	11.388	13.293	15.183	17.089	18.979	22.775	30.363	37.94	45.53
25.4	1"					6.327	7.592	8.93	10.122	11.48	12.653	15.183	17.714	20.24	22.775	25.35	30.36	40.46	50.575	60.69
31.75	1 1/4"						9.570*	11.100*	12.65	14.370*	15.95	18.98	22.330*	25.305	28.710*	31.9	37.957	50.585	63.230*	75.878
38.1	1 1/2"							13.300*	15.183	17.220*	19.115	22.775	26.760*	30.366	34.400*	38.23	45.549	60.732	75.915	91.098
44.45	1 3/4"								17.860*	20.110*	22.320*	26.790*	31.250*	35.720*	40.180*	44.650*	53.58	71.430*	89.29	107.120*
50.8	2"									22.960*	25.48	30.58	35.680*	40.77	45.870*	50.97	61.16	81.55	101.94	122.28
63.5	2 1/2"											38.230*	44.600*	50.970*	57.340*	63.710*	76.450*	101.940*	127.420*	152.850*
76.2	3"											53.520*	61.160*	68.810*	76.450*	91.740*	122.320*	152.900*	183.420*	

*Medidas especiales sobre pedido