



VIGAS "H" ALAS ANCHAS (WF)

Descripción:

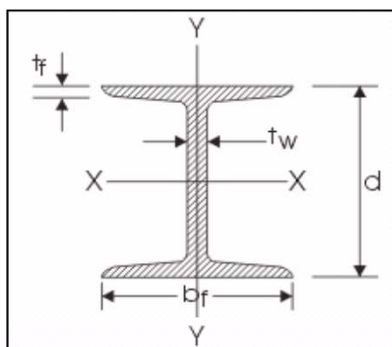
Producto de sección transversal en forma de H, que se obtiene por Laminación de Tochos precalentados hasta una temperatura de 1250°C.

Usos:

Estructuras metálicas, puentes, edificios, grúas.

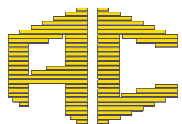
PROPIEDADES MECANICAS

NORMA TECNICA	F	R	A	NORMA EQUIVALENTE
	Kg/mm ²	Kg/mm ²	%	
ASTM A-36	25.3 min	41 min	20 min	DIN 17100 St 37-2 / St 44-2
ASTM A-572 GR 50	35.2 min	46 min	16 min	DIN 17100 St 52.3



DIMENSIONES Y PESO UNITARIO

DESIGNACION	AREA DE SECCIÓN A	ALTURA d	ALA		ESPELOR ALMA tw	PESO Kg/m
			ANCHO bf	ESPELOR tf		
pulg x lb / pie *	pulg.2	pulg	pulg	pulg	pulg	
4 x 13	3.8	4.16	4.06	0.35	0.28	19.35
6 x 12	3.6	6.03	4.00	0.28	0.23	17.86
6 x 15	4.4	5.990	5.99	0.26	0.23	22.32
6 x 16	4.7	6.28	4.03	0.41	0.26	23.81
6 x 20	5.9	6.20	6.02	0.37	0.26	29.76
6 x 25	7.3	6.38	6.08	0.46	0.32	37.20



DIMENSIONES Y PESO UNITARIO

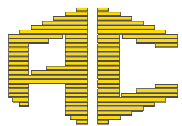
DESIGNACION	AREA DE SECCIÓN A	ALTURA d	ALA		ESPELOR ALMA tw	PESO Kg/m
			ANCHO bf	ESPELOR tf		
pulg x lb / pie *	pulg.2	pulg	pulg	pulg	pulg	
8 x 10	3.0	7.89	3.94	0.21	0.17	14.88
8 x 15	4.5	8.11	4.02	0.32	0.25	22.32
8 x 18	5.3	8.14	5.25	0.33	0.23	26.79
8 x 21	6.2	8.28	5.27	0.40	0.25	31.25
8 x 24	7.1	7.93	6.50	0.40	0.25	35.72
8 x 28	8.3	8.06	6.54	0.47	0.29	41.67
8 x 31	9.1	8.00	8.00	0.44	0.29	46.13
8 x 35	10.3	8.12	8.02	0.50	0.31	52.09
8 x 48	14.1	8.500	8.11	0.69	0.40	71.43
10 x 17	5.0	10.11	4.01	0.33	0.24	25.30
10 x 22	6.5	10.17	5.75	0.36	0.24	32.74
10 x 26	7.6	10.33	5.77	0.44	0.26	38.69
10 x 30	8.8	10.47	5.81	0.51	0.30	44.64
10 x 33	9.7	9.73	7.96	0.44	0.29	49.11
10 x 49	14.4	9.98	10.00	0.56	0.34	72.92
10 x 60	17.6	10.22	10.08	0.68	0.42	89.29
12 x 19	5.6	12.16	4.00	0.35	0.24	28.28
12 x 26	7.7	12.22	6.49	0.68	0.23	38.69
12 x 35	10.3	12.50	6.56	0.52	0.30	52.09
12 x 40	11.8	11.94	8.01	0.52	0.30	59.53
12 x 53	15.6	12.06	10.00	0.58	0.35	78.87
12 x 65	19.1	12.12	12.00	0.61	0.39	96.73
12 x 79	23.2	12.38	12.08	0.74	0.47	117.60
14 x 22	6.5	13.74	5.00	0.34	0.23	32.74
14 x 30	8.9	13.84	6.73	0.39	0.27	44.64
14 x 34	10.0	13.98	6.75	0.46	0.29	50.60

DIMENSIONES Y PESO UNITARIO

DESIGNACION	AREA DE SECCIÓN A	ALTURA d	ALA		ESPELOR ALMA tw	PESO Kg/m
			ANCHO bf	ESPELOR tf		
pulg x lb / pie *	pulg.2	pulg	pulg	pulg	pulg	
14 x 38	11.2	14.10	6.77	0.52	0.31	56.55
14 x 43	12.6	13.66	8.00	0.53	0.31	63.99
14 x 53	15.6	13.92	8.06	0.66	0.37	78.87
14 x 61	17.9	13.89	10.00	0.65	0.38	90.78
14 x 90	26.5	14.02	14.52	0.71	0.44	133.90
16 x 26	7.7	15.69	5.50	0.35	0.25	38.69
16 x 36	10.6	15.86	6.99	0.43	0.30	53.57
16 x 40	11.8	16.01	7.00	0.51	0.31	59.53

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Sucursal Variante : (054) 449273, Moviles : Mov. 95-8524367, RPM: #800290
 Sucursal Huanuco : (054) 453787, Moviles : Mov. 95-9929400, RPM: #935829
 Sucursal Mariscal Castilla : (054) 451567, Moviles : Mov. 95-9515839, RPM: #624717
 Sucursal Dolores : (054) 431054, Moviles : Mov. 95-9875000, RPM: #235041
 Sucursal Socabaya : (054) 959929406, Moviles : Mov. 95-9929406, RPM: #935833



16 x 45	13.3	16.130	7.04	0.57	0.35	66.97
16 x 57	16.8	16.43	7.12	0.72	0.43	84.83
18 x 35	10.3	17.70	6.00	0.43	0.30	52.09
18 x 40	11.8	17.90	6.02	0.53	0.32	59.33
18 x 55	16.2	18.11	7.53	0.63	0.39	81.85
18 x 76	22.3	18.21	11.04	0.68	0.43	113.10
21 x 62	18.3	20.99	8.24	0.62	0.40	92.27
21 x 68	20.0	21.13	8.27	0.69	0.43	101.20
21 x 73	21.5	21.24	8.30	0.74	0.46	108.60
24 x 55	16.2	23.57	7.01	0.51	0.40	81.85
24 x 68	20.1	23.73	8.97	0.59	0.42	101.20
24 x 76	22.4	23.92	8.99	0.68	0.44	113.10
24 x 84	24.7	24.10	9.02	0.77	0.47	125.00
24 x 94	27.7	24.31	9.07	0.88	0.52	139.90
24 x 104	30.6	24.06	12.75	0.75	0.50	154.80
24 x 117	34.4	24.26	12.80	0.85	0.55	174.10
27 x 84	24.8	26.71	9.96	0.64	0.46	125.00

* Longitud Standard: 20' y 30'

DIMENSIONES Y PESO UNITARIO (Norma Europea y JIS)

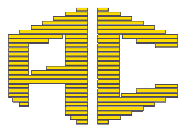
DESIGNACION	AREA DE SECCIÓN A	ALTURA d	ALA		ESPELOR ALMA tw	PESO Kg/m
			ANCHO bf	ESPELOR tf		
pulg x lb / pie *	pulg.2	pulg	pulg	pulg	pulg	
HE 100 A (16.7)	21.24	96.0	100.0	8.0	5.00	11.22
HE 100 B (20.4)	26.04	100.0	100.0	10.0	6.00	13.71
HE 140 B (33.7)	42.96	140.0	140.0	12.0	7.00	22.65
125 (23.8)	30.31	125.0	125.0	9.0	6.5	15.95
200 (21.3)	27.16	200.0	100.0	8.0	5.5	14.27

CARACTERISTICAS DE LA SECCION PARA EL DISEÑO

DESIGNACION	AREA	EJE X - X			EJE Y - Y		
		I	S	r	I'	S'	r'
pulg x lb / pie *	pulg.2	pulg4	pulg3	pulg	pulg4	pulg3	pulg
4 x 13	3.83	11.3	5.5	1.7	3.86	1.9	1.00
6 x 12	3.55	22.1	7.3	2.5	2.99	1.5	0.92
6 x 15	4.43	29.1	9.7	2.6	9.32	3.11	1.46
6 x 16	4.74	32.1	10.2	2.6	4.43	2.2	0.97
6 x 20	5.87	41.4	13.4	2.7	13.3	4.41	1.50
6 x 25	7.34	53.4	16.7	2.7	17.1	5.61	1.52
8 x 10	2.96	30.8	7.8	3.2	2.09	1	0.84
8 x 15	4.45	48.0	11.8	3.3	3.41	1.7	0.88
8 x 18	5.26	61.9	15.2	3.4	7.97	3.04	1.23
8 x 21	6.16	75.3	18.2	3.5	9.77	3.71	1.26

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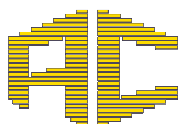
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 Sucursal Dolores : (054) 431054, Moviles : Mov. 95-9875000, RPM: #235041
 Sucursal Socabaya : (054) 959929406, Moviles : Mov. 95-9929406, RPM: #935833



8 x 24	7.08	82.8	20.9	3.4	18.3	5.63	1.61
8 x 28	8.25	98.0	24.3	3.5	21.7	6.63	1.62
8 x 31	9.13	110.0	27.5	3.5	37.1	9.27	2.02
8 x 35	10.30	127.0	31.2	3.5	42.6	10.6	2.03
8 x 48	14.10	184.0	43.3	3.6	60.9	15	2.08
10 x 17	4.99	81.9	16.2	4.1	3.56	1.78	0.85
10 x 22	6.49	118.0	23.2	4.3	11.4	3.97	1.33
10 x 26	7.61	144.0	27.9	4.3	14.1	4.89	1.36
10 x 30	8.84	170.0	32.4	4.4	16.7	5.75	1.37

CARACTERISTICAS DE LA SECCION PARA EL DISEÑO

DESIGNACION	AREA	EJE X - X			EJE Y - Y		
		I	S	r	I'	S'	r'
pulg x lb / pie *	pulg.2	pulg4	pulg3	pulg	pulg4	pulg3	pulg
10 x 33	9.71	170.0	35.0	4.2	36.6	9.2	1.94
10 x 45	13.30	248.0	49.1	4.3	53.4	13.3	2.01
10 x 49	14.40	272.0	54.6	4.4	93.4	18.7	2.54
10 x 60	17.60	341.0	66.7	4.4	116	23	2.57
12 x 19	5.57	130.0	21.3	4.8	3.8	1.88	0.82
12 x 26	7.65	204.0	33.4	5.2	17.3	5.34	1.51
12 x 30	8.79	238.0	38.6	5.2	20.3	6.24	1.52
12 x 35	10.30	285.0	45.6	5.3	24.5	7.47	1.54
12 x 40	11.80	310.0	51.9	5.1	44.1	11	1.93
12 x 53	15.60	425.0	70.6	5.2	95.8	19.2	2.48
12 x 65	19.10	533.0	87.9	5.3	174	29.1	3.02
12 x 79	23.20	662.0	107.0	5.3	216	35.8	3.05
14 x 22	6.49	199.0	29.0	5.5	7.00	2.8	1.04
14 x 30	8.85	291.0	42.0	5.7	19.6	5.82	1.49
14 x 34	10.00	340.0	48.6	5.8	23.3	6.91	1.53
14 x 38	11.20	385.0	54.6	5.9	26.7	7.88	1.55
14 x 43	12.60	428.0	62.7	5.8	45.2	11.3	1.89
14 x 53	15.60	541.0	77.8	5.9	57.7	14.3	1.92
14 x 61	17.90	640.0	92.2	6.0	107	21.5	2.45
14 x 90	26.50	999.0	143.0	6.1	362	49.9	3.70
16 x 26	7.68	301.0	38.4	6.3	9.59	3.49	1.12
16 x 36	10.60	448.0	56.5	6.5	24.5	7	1.52
16 x 40	11.80	518.0	64.7	6.6	28.9	8.25	1.57
16 x 45	13.30	586.0	72.7	6.7	32.8	9.34	1.57
16 x 57	16.80	758.0	92.2	6.7	43.1	12.1	1.60
18 x 35	10.30	510.0	57.6	7.0	15.3	5.12	1.22
18 x 40	11.80	612.0	68.4	7.2	19.1	6.35	1.27
18 x 55	16.20	890.0	98.3	7.4	44.9	11.9	1.67
18 x 76	22.30	1330	146.0	7.7	152	27.6	2.61



CARACTERISTICAS DE LA SECCION PARA EL DISEÑO

DESIGNACION	AREA	EJE X - X			EJE Y - Y		
		I	S	r	I'	S'	r'
pulg x lb / pie *	pulg.2	pulg4	pulg3	pulg	pulg4	pulg3	pulg
18 x 86	25.30	1530	166.0	7.8	175	31.6	2.63
21 x 62	18.30	1330	127.0	8.5	57.5	13.9	1.77
21 x 68	20.00	1480	140.0	8.6	64.7	15.7	1.80
21 x 73	21.50	1600	151.0	8.6	70.6	17	1.81
24 x 55	16.20	1350	114.0	9.1	29.1	8.3	1.34
24 x 68	20.10	1830	154.0	9.6	70.4	15.7	1.87
24 x 76	22.40	2100	176.0	9.7	82.5	18.4	1.92
24 x 84	24.70	2370	196.0	9.8	94.4	20.9	1.95
24 x 94	27.70	2700	222.0	9.9	109	24	1.98
24 x 104	30.60	2100	258.0	10.1	259	40.7	2.91
24 x 117	34.40	3540	291.0	10.1	297	46.5	2.94
27 x 84	24.80	2850	213.0	10.7	106	21.2	2.07

I = Momento de inercia

S = Módulo de sección alrededor del eje

r = Radio de rotación alrededor del eje

CARACTERISTICAS DE LA SECCION PARA EL DISEÑO (Norma EUROPEA)

DESIGNACION	AREA	EJE X - X			EJE Y - Y		
		I	S	r	I'	S'	r'
cm x kg / m	cm2	cm4	cm3	cm	cm4	cm3	cm
HE 100 A (16.7)	21.24	349	72.8	4.06	134	26.76	2.51
HE 100 B (20.4)	26.04	450	89.9	4.16	167.3	33.45	2.53
HE 140 B (33.7)	42.96	1509	215.6	5.93	549.7	78.52	3.58
125 (23,8)	30.31	847	136.0	5.29	293.0	47	3.11
200 (27,3)	27.16	1840	184.0	8.24	134.0	26.8	2.22