Deuxième édition

2023

MANUEL DES PROPRIÉTÉS GÉOMÉTRIQUES DE SECTIONS EXTRUDÉES EN ALUMINIUM

aluQuébec
Grappe de l'aluminium

CeiAl
Centre d'expertise et d'innovation sur l'aluminium

NOTE | RESPONSABILITÉ

L'information, les données et les renseignements contenus dans les pages de ce document (appelé par la suite l'«Information»), étaient considérés comme fiables au moment de leur publication, mais rien ne garantit qu'ils sont exacts et complets. L'Information est présentée uniquement à titre de renseignement et ne doit d'aucune manière être interprétée comme un conseil de nature technique ou autre. Sans limiter la portée générale de ce qui précède, l'Information peut contenir des inexactitudes techniques ou des erreurs typographiques et AluQuébec, la Grappe industrielle de l'aluminium, ses administrateurs, ses dirigeants, ses représentants, ses employés et ses mandataires ne peuvent être tenus responsables d'aucune manière des dommages pouvant en découler.

Dégagement de responsabilité

AluQuébec met à votre disposition l'Information sans aucune garantie, implicite ou explicite, et se dégage de toute responsabilité quant à son exactitude, sa fiabilité, sa pertinence ou son exhaustivité.

Droits d'auteur et propriété intellectuelle

Les droits d'auteur de tous les éléments contenus sur ce document, incluant textes, images et graphiques, appartiennent et restent la propriété d'AluQuébec et aucun de ces éléments ne peut être copié, reproduit, publié, modifié, affiché, transmis, ou distribué en totalité ou en partie, sous quelque forme que ce soit sans l'autorisation préalable écrite d'AluQuébec. Un tel acte pourrait être une infraction à la législation applicable en matière de propriété intellectuelle et entraîner des réclamations.

ALUQUÉBEC

AluQuébec réunit les producteurs d'aluminium, les transformateurs, les équipementiers, les fournisseurs spécialisés, les centres de R-D ainsi que les institutions d'enseignement liés à l'industrie.

Comme instance fédératrice de l'ensemble de cet écosystème, AluQuébec stimule le développement et le rayonnement de la chaine de valeur de l'industrie québécoise de l'aluminium autour de solutions concrètes afin de développer le plein potentiel de l'industrie et accroitre l'utilisation du matériau.

Le rôle d'AluQuébec est d'agir comme levier pour l'industrie de l'aluminium d'ici en assurant la cohérence et la convergence entre les parties prenantes pour faciliter et favoriser la prise d'actions globales et porteuses qui répondent aux besoins de l'industrie et dont les répercussions seront bénéfiques pour l'ensemble du Québec tout en assurant un rayonnement à l'international.

Concrètement, AluQuébec collabore avec l'industrie à l'intérieur de groupes de travail – appelés chantiers – à la mise en place des projets arrimés aux besoins des entreprises qui composent la filière aluminium. De plus, AluQuébec fait la promotion de l'utilisation et de l'intégration de l'aluminium dans des secteurs d'activité porteurs tels que le bâtiment, la construction durable, les infrastructures, les ponts et les passerelles ainsi que le transport, notamment en offrant un appui technique complet et de la formation pour soutenir l'innovation et la R-D en entreprise via le Centre d'expertise et d'innovation sur l'aluminium d'AluQuébec (CeiAl).

L'équipe du CeiAl accompagne les entreprises, les professionnels et la relève afin de faciliter une plus grande utilisation de l'aluminium. Le CeiAl se veut une référence au Québec en termes d'information, de formations sur les normes, les alliages, les contraintes, etc. Le CeiAl est aussi un partenaire dans le développement de concepts qui permettront de mener à bien des projets novateurs avec l'aluminium.

TABLE DES MATIÈRES

TABLE DES MATIÈRES

Définition des symboles:

I_x : moment d'inertie par rapport à l'axe X-X
I_y : moment d'inertie par rapport à l'axe Y-Y
S_x : module de section élastique par rapport à l'axe X-X
S_y : module de section élastique par rapport à l'axe Y-Y
Z_x : module de section plastique par rapport à l'axe X-X
Z_y : module de section plastique par rapport à l'axe Y-Y
r_x : rayon de giration autour de l'axe fort
r_y : rayon de giration autour de l'axe faible
x_0 , y_0 : coordonnées du centre de cisaillement de la section par rapport aux axes principaux
x_s , y_s : coordonnées du centre de cisaillement de la section par rapport aux axes géométriques
J : constante de torsion de St Venant
C_w : constante de gauchissement
r_o : rayon polaire de gyration autour du centre de cisaillement
Ω : propriété de section utilisée pour le calcul de la résistance au flambement par flexion-torsion d'une section à simple symétrie
α : angle entre les axes principaux et géométriques d'une section
θ : angle de pente des profilés structuraux en C
β_w : Propriété de section pour des profilés en L à jambe inégale, positive pour les jambes courtes en compression et négative pour les jambes longues en compression. Si la jambe longue est en compression à n'importe quel endroit le long de la portée non contreventée de la pièce, la valeur négative de β_w doit être utilisée.

Formules de calcul :

$$r_0^2 = x_0^2 + y_0^2 + r_x^2 + r_y^2$$

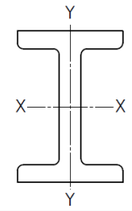
$$\Omega = \frac{r_x^2 + r_y^2}{r_0^2}$$

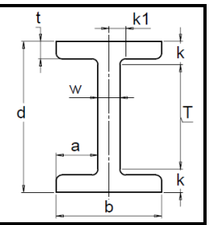
$$\beta_w = \frac{1}{I_w}\int_A z\left(w^2 + z^2\right)dA - 2z_0$$

Calcul de la charge morte en kN/m : $\frac{masse * 9.81}{1000}$

Remarques :
- Les profilés présentés dans les tableaux ci-après sont classés par ordre décroissant relativement à l'extrudeur.
- Les profilés en aluminium ne sont pas standardisés. Ainsi un profilé standard peut avoir certaines différences selon l'extrudeur qui le produit.
- Par soucis de classification, les différences propres à chaque extrudeur sont parfois omises pour pouvoir recenser chaque type de profilé dans un même tableau.
- Les propriétés ont été déterminées en considérant le matériel comme étant l'aluminium 6061 T6.

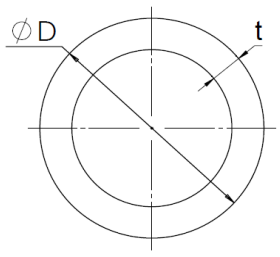
PROFILÉS EN I





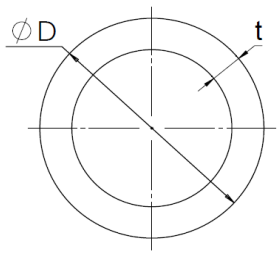
Identification de la section	Charge Morte	Aire	Axe X-X				Axe Y-Y				Constante de torsion	Constante de gauchissement	Masse théorique	Profondeur	Aile		Épaisseur de l'âme	Distances					Aire par mètres de longueur		Extrudeur	Emplacement	Identification de la section du fabricant
W d x ω			I_x	S_x	r_x	Z_x	I_y	S_y	r_y	Z_y	J	C_W	ω	d	Largeur (b)	Épaisseur Moyenne (t)	w	a	T	k	k_1	d-2t	Total	Sans la surface de l'aile supérieure			
mm x (kg/m)	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴	10^9 mm⁶	kg/m	mm	mm	mm	mm	mm	mm	mm	mm	mm	m²	m²			
W 203																											
x20	0.191	7168	53.6	528	86.5	593	17.8	175	49.8	269	446	157	19.51	203	203	12.7	9.53	96.8	140	31.8	23.8	178	1.17	0.964	Extrudex	Toronto	S-20745
x16	0.157	5884	45.6	449	88.1	497	15.4	151	51.1	230	230	141	16	203	203	11.0	7.32	97.9	161	21.2	13.8	181	1.19	0.984	Extrudex	Toronto	S-17391
x13	0.128	4807	34.3	338	84.5	385	4.35	68.6	30.1	106	256	38.4	13	203	127	12.7	7.90	59.6	149	27.0	18.2	178	0.874	0.747	Extrudex	Toronto	S-27029
x10	0.103	3853	28.2	278	85.6	312	3.56	56.1	30.4	86.1	122	32.8	10	203	127	10.4	6.35	60.3	167	18.0	10.8	182	0.889	0.762	Extrudex	Ohio	S-21927
x8,8	0.086	3239	23.6	232	85.4	260	3.10	46.4	30.9	71.4	64.5	29.2	8.8	203	133	7.82	5.84	63.8	171	16.0	11.0	188	0.914	0.781	Extrudex	Ohio	S-26325
W 178																											
x8.7	0.0849	3182	17.9	201	74.9	226	2.41	42.1	27.5	64.6	87.9	16.8	8.7	178	114	9.65	5.84	54.2	143	17.3	10.5	158	0.788	0.674	Extrudex	Toronto	S-24405
W 152																											
x14	0.138	5159	20.9	274	63.6	314	7.51	98.5	38.1	151	276	35.9	14	152	152	12.7	9.53	71.4	108	22.2	14.3	127	0.879	0.727	Extrudex	Toronto	S-24769
x11	0.111	4177	17.3	227	64.3	256	5.64	74.0	36.7	114	160	27.7	11	152	152	9.53	7.92	72.2	102	25.4	19.8	133	0.871	0.719	Extrudex	Toronto	S-5411
x11	0.109	4018	16.6	218	64.4	246	5.63	73.8	37.4	113	125	28.3	11	152	152	9.53	7.94	72.2	117	17.5	11.9	133	0.885	0.732	Hydro	Montreal	AS-45766
x8.1	0.0799	2994	11.7	154	62.6	177	1.67	32.9	23.6	51.5	96.3	8.27	8.1	152	102	9.53	7.14	47.2	111	20.6	14.7	133	0.678	0.576	Extrudex	Toronto	S-20791
x8.1	0.0791	2963	12.6	165	65.1	183	4.03	52.9	36.9	80.8	47.8	21.2	8.1	152	152	6.83	6.10	73.2	126	13.2	9.40	139	0.891	0.739	Extrudex	Ohio	S-58
x7.2	0.0706	2647	10.4	136	62.5	156	1.12	25.2	20.6	39.6	81.8	5.54	7.2	152	88.9	9.53	6.35	41.3	111	20.7	14.3	133	0.629	0.540	Hydro	Montreal	AS-8126
x7.2	0.0706	2647	10.4	136	62.5	156	1.12	25.2	20.6	39.6	81.8	5.54	7.2	152	88.9	9.53	6.35	41.3	111	20.7	14.3	133	0.629	0.540	Extrudex	Toronto	S-3859
x6.2	0.0609	2282	9.1	119	63.0	135	1.24	24.4	23.3	37.9	37.9	6.46	6.2	152	102	7.09	5.84	47.9	126	13.4	9.27	138	0.689	0.587	Extrudex	Ohio	S-57
x6.1	0.0600	2222	9.2	120	64.2	135	1.29	25.4	24.1	39.1	38.3	6.69	6.1	152	102	7.37	4.90	48.3	122	15.0	10.1	138	0.688	0.587	Hydro	Montreal	MS-17279
x5.8	0.0572	2153	8.0	105	61.0	122	0.59	15.5	16.6	24.8	48.6	2.97	5.8	152	76.2	7.92	6.35	34.9	118	17.4	12.7	137	0.581	0.504	Hydro	Montreal	AS-7696
W 140																											
x10	0.100	3759	13.9	199	60.8	220	8.25	89.6	46.9	136	81.3	35.5	10	140	184	7.92	6.35	88.9	108	15.8	11.1	124	0.990	0.806	Extrudex	Toronto	S-4851
W 127																											
x9.3	0.0921	3451	9.7	152	52.9	174	3.27	51.4	30.8	79.8	130	10.8	9.4	127	127	9.53	7.92	59.5	79.4	23.8	18.2	108	0.722	0.595	Extrudex	Toronto, Ohio	S-4403
x9.3	0.0916	3451	9.7	152	52.9	174	3.27	51.4	30.8	79.8	130	10.8	9.3	127	127	9.53	7.92	59.5	79.3	23.8	18.3	108	0.722	0.595	Hydro	Montreal	AS-8304
x8.2	0.0802	3009	8.4	132	52.8	150	2.72	42.9	30.1	66.6	81.6	9.33	8.2	127	127	7.95	7.95	59.5	88.8	19.1	15.1	111	0.727	0.600	Extrudex	Toronto, Ohio	S-20801
x5.1	0.0502	2236	6.1	95.8	52.1	111	0.75	19.8	18.4	30.8	72.7	2.48	5.1	127	76.2	10.2	5.72	35.2	87.6	19.7	12.4	107	0.531	0.455	Hydro	Montreal	AS-8127
x4.6	0.0450	1686	4.3	67.2	50.3	78.5	0.41	10.9	15.7	17.8	29.3	1.45	4.6	127	76.2	5.54	6.35	34.9	93.7	16.6	14.3	116	0.527	0.451	Extrudex	Toronto	S-2296
x4.5	0.0446	1686	4.3	67.2	50.3	78.5	0.41	10.9	15.7	17.8	29.3	1.45	4.5	127	76.2	11.1	6.35	34.9	93.7	16.6	14.6	105	0.527	0.451	Extrudex	Québec	S-15419
W 111																											
x3.6	0.0348	1305	2.4	42.4	42.5	50.8	0.14	5.58	10.4	9.35	21.2	0.370	3.6	111	50.8	6.35	6.35	22.2	85.7	12.7	9.53	98.4	0.402	0.351	Extrudex	Toronto	S-20807
W 102																											
x6.2	0.0603	2261	4.0	79.7	42.3	91.4	1.39	27.4	24.8	42.4	56.8	2.92	6.2	102	102	7.92	6.35	47.6	63.6	19.0	14.3	85.8	0.578	0.476	Extrudex	Toronto, Ohio	S-5258
x6.1	0.0601	2261	4.0	79.7	42.3	91.4	1.39	27.4	24.8	42.4	56.8	2.92	6.1	102	102	7.92	6.35	47.6	63.6	19.0	14.3	85.8	0.578	0.476	Hydro	Montreal	AS-8060
x5.7	0.0561	2243	3.7	72.4	40.5	84.7	1.12	22.1	22.4	35.6	61.1	2.38	5.7	102	102	6.35	9.53	46.0	66.7	17.4	15.9	88.9	0.571	0.470	Extrudex	Ohio	S-26738
x4.6	0.0449	1468	2.6	51.5	42.2	58.8	0.47	12.4	17.9	19.3	23.3	1.03	4.6	102	76.2	7.92	4.75	35.7	69.9	15.9	11.9	85.8	0.482	0.406	Hydro	Montreal	AS-7652
x4.0	0.0393	1486	2.5	48.2	40.6	56.3	0.36	10.4	15.6	16.5	24.0	0.795	4.0	102	69.9	6.35	6.35	31.8	76.2	12.7	9.53	88.9	0.458	0.388	Extrudex	Toronto	S-12408
x4.0	0.0392	1471	2.6	51.5	42.2	58.8	0.47	12.4	17.9	19.3	23.4	1.03	4.0	102	76.2	6.35	4.78	35.7	69.9	15.9	11.9	88.9	0.482	0.406	Extrudex	Toronto	S-27040
x4.0	0.0390	1471	2.6	51.5	42.2	58.8	0.47	12.4	17.9	19.3	23.4	1.03	4.0	102	76.2	6.35	4.78	35.7	69.9	15.9	11.9	88.9	0.482	0.406	Hydro	Montreal	AS-7626
x3.5	0.0338	1268	2.3	46.1	43.0	51.8	0.43	11.3	18.5	17.4	14.2	0.971	3.4	102	76.2	5.84	3.81	36.2	77.2	12.2	8.26	89.9	0.489	0.413	Extrudex	Toronto	S-23023
x2.6	0.0251	941	1.7	32.9	42.1	37.3	0.17	5.96	13.4	9.20	7.81	0.390	2.6	102	57.2	5.46	3.43	26.9	85.3	8.13	4.38	90.7	0.420	0.363	Extrudex	Ohio	S-26468
W 95																											
x0.97	0.00949	322	0.3	8.1	31.1	9.30	0.01	0.965	6.7	1.50	0.826	0.0192	1.0	95.3	30.1	3.18	1.83	14.2	66.5	4.83	2.57	88.9	0.267	0.236	Hydro	Montreal	MS-18608
W 89																											
x6.0	0.0588	2591	3.7	82.3	37.6	94.1	2.72	42.8	32.4	65.5	65.2	4.30	6.0	88.9	127	7.95	6.35	60.3	50.7	19.1	14.3	73.0	0.654	0.527	Metra	Laval	28007.00
W 76																											
x3.3	0.0322	1186	1.2	30.4	31.2	35.3	0.27	8.61	15.2	13.5	20.1	0.312	3.3	76.2	63.5	6.35	4.75	29.4	44.5	15.9	11.9	63.5	0.381	0.317	Hydro	Montreal	MS-55927
x3.2	0.0317	1186	1.2	30.4	31.2	35.3	0.27	8.61	15.2	13.5	20.1	0.312	3.2	76.2	63.5	6.35	4.75	29.4	44.5	15.9	11.9	63.5	0.381	0.317	Extrudex	Toronto	S-23017
x3.2	0.0315	1186	1.2	30.4	31.2	35.3	0.27	8.61	15.2	13.5	20.1	0.312	3.2	76.2	63.5	6.35	4.75	29.4	44.5	15.9	11.9	63.5	0.381	0.317	Hydro	Montreal	AS-7625
x2.8	0.0274	1027	1.0	25.2	30.6	29.7	0.14	5.56	30.6	8.91	17.9	0.159	2.8	76.2	50.8	6.35	4.78	23.0	44.5	15.9	11.9	63.5	0.330	0.279	Extrudex	Toronto	S-6872
x1.9	0.0187	714	0.7	19.6	32.3	21.8	0.23	6.15	18.1	9.41	2.72	0.309	1.9	76.2	76.2	3.18	3.18	36.5	63.5	6.35	4.78	69.9	0.445	0.369	Extrudex	Québec	S-20044

TUBES RONDS



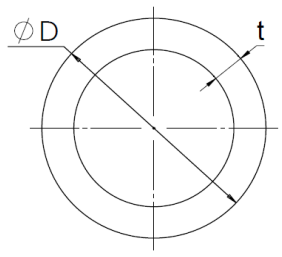
Identification de la section HSS D x t	Dimension extérieure (D)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 305														
x19	305	19.1	46.3	4.54E-01	17083	1.75E+02	1148	101	1555	349910	0.958	Nanshan	Lafayette	1594
x13	305	12.7	31.6	3.10E-01	11642	1.24E+02	816	103	1083	248530	0.958	Taber	Russelville	TM-07648
x9.5	305	9.53	23.9	2.34E-01	8826	9.62E+01	631	104	829	192370	0.958	Tri City Extrusion	Bristol	HD12-375
x7.9	305	7.92	20	1.96E-01	7383	8.13E+01	534	105	698	162610	0.958	Tri City Extrusion	Bristol	HD12-312
x6.4	305	6.35	16.1	1.58E-01	5948	6.62E+01	434	105	565	132340	0.958	Nanshan Tri City Extrusion	Lafayette Bristol	1257 HD12-250
HSS 273														
x9.5	273	9.53	21.4	2.10E-01	7877	6.84E+01	501	93.2	661	136790	0.858	Taber	Russelville	TM-13267
x5.1	273	5.08	11.6	1.14E-01	4272	3.83E+01	281	94.7	364	76629	0.858	Extrudex	Toronto	H-20787
HSS 267														
x19	267	19.1	40.2	3.94E-01	14806	1.14E+02	856	87.8	1169	228110	0.838	Taber	Russelville	TM-13264
x16	267	15.9	33.9	3.32E-01	12496	9.86E+01	739	88.8	999	197120	0.838	Taber	Russelville	TM-13252
x13	267	12.7	27.5	2.70E-01	10123	8.18E+01	613	89.9	819	163510	0.838	Taber	Russelville	TM-13253
x11	267	11.1	24.2	2.37E-01	8913	7.28E+01	546	90.4	725	145680	0.838	Taber	Russelville	TM-13263
x9.5	267	9.53	20.8	2.04E-01	7688	6.36E+01	477	90.9	629	127150	0.838	Taber	Russelville	TM-13254
HSS 254														
x13	254	12.7	26.1	2.56E-01	9617	7.01E+01	552	85.4	739	140230	0.798	Taber	Russelville	TM-07761
x9.5	254	9.53	19.8	1.94E-01	7308	5.46E+01	430	86.5	569	109240	0.798	Tri City Extrusion	Bristol	HD10-375
x7.9	254	7.92	16.6	1.63E-01	6120	4.63E+01	365	87.0	479	92638	0.798	Tri City Extrusion	Bristol	HD10-312
x6.4	254	6.35	13.4	1.31E-01	4935	3.78E+01	298	87.5	389	75632	0.798	Tri City Extrusion	Bristol	HD10-250
x5.6	254	5.56	11.8	1.16E-01	4337	3.34E+01	263	87.8	343	66876	0.798	Tri City Extrusion	Bristol	HD10-219
x4.8	254	4.78	10.1	9.90E-02	3735	2.90E+01	228	88.1	296	57948	0.798	Nanshan Tri City Extrusion	Lafayette Bristol	1598 HD10-188
x4.2	254	4.19	8.91	8.74E-02	3286	2.56E+01	202	88.3	261	51212	0.798	Tri City Extrusion	Bristol	HD10-165
x4.0	254	3.96	8.43	8.27E-02	3109	2.43E+01	191	88.4	247	48550	0.798	Tri City Extrusion	Bristol	HD10-156
HSS 229														
x25	229	25.4	43.9	4.31E-01	16198	8.48E+01	742	72.4	1053	169630	0.718	Nanshan	Lafayette	1465
x13	229	12.7	23.3	2.28E-01	8605	5.03E+01	440	76.4	592	100520	0.718	Nanshan	Lafayette	1635
x9.5	229	9.53	17.8	1.75E-01	6549	3.93E+01	344	77.5	457	78637	0.718	Tri City Extrusion	Bristol	HD9-375
x6.4	229	6.35	12	1.18E-01	4429	2.73E+01	239	78.6	313	54676	0.718	Tri City Extrusion	Bristol	HD9-250
x5.6	229	5.56	10.6	1.04E-01	3894	2.42E+01	212	78.8	276	48396	0.718	Tri City Extrusion	Bristol	HD9-219
x4.8	229	4.78	9.1	8.92E-02	3354	2.10E+01	184	79.1	239	41979	0.718	Tri City Extrusion	Bristol	HD9-188
x4.0	229	3.96	7.58	7.43E-02	2793	1.76E+01	154	79.4	200	35209	0.718	Tri City Extrusion	Bristol	HD9-156
HSS 219														
x8.2	219	8.18	14.7	1.44E-01	5570	3.28E+01	291	76.7	385	65584	0.688	Extrudex	Toronto	H-17180
x8.1	219	8.13	14.6	1.43E-01	5384	3.00E+01	274	74.6	362	59991	0.688	Taber	Russelville	TM-12799
x3.8	219	3.76	6.89	6.76E-02	2540	1.47E+01	134	76.1	174	29415	0.688	Tri City Extrusion	Bristol	2242
HSS 216														
x13	216	12.7	22	2.16E-01	8099	4.19E+01	388	71.9	524	83838	0.678	Nanshan	Lafayette	1631
HSS 203														
x19	203	19.1	29.9	2.93E-01	11009	4.71E+01	464	65.4	647	94234	0.638	Nanshan	Lafayette	1360
x13	203	12.7	20.6	2.02E-01	7593	3.46E+01	340	67.5	461	69118	0.638	Service Center Metals	Prince George	HT2020
x12	203	11.5	18.9	1.85E-01	6922	3.19E+01	314	67.9	423	63751	0.638	Extrudex	Toronto	H-16450
x9.5	203	9.53	15.7	1.54E-01	5789	2.72E+01	268	68.5	357	54362	0.638	Tri City Extrusion	Bristol	HD8-375
x7.9	203	7.92	13.2	1.29E-01	4857	2.32E+01	228	69.1	302	46324	0.638	Tri City Extrusion	Bristol	HD8-312
x7.9	203	7.87	13.1	1.28E-01	4827	2.30E+01	227	69.1	300	46062	0.638	Taber	Russelville	TM-11645
x7.1	203	7.14	12	1.18E-01	4392	2.11E+01	208	69.3	274	42214	0.638	Extrudex	Toronto	H-14304
x6.4	203	6.35	10.6	1.04E-01	3923	1.90E+01	187	69.6	246	38000	0.638	Hydro Tri City Extrusion Service Center Metals Extrudex	Montreal Bristol Prince George Toronto	AH-40797 HD8-250 HT1523 H-25529
x5.6	203	5.56	9.36	9.18E-02	3450	1.68E+01	166	69.9	217	33680	0.638	Tri City Extrusion	Bristol	HD8-219
x4.8	203	4.78	8.06	7.90E-02	2974	1.46E+01	144	70.1	188	29252	0.638	Hydro Tri City Extrusion	Montreal Bristol	AH-39439 HD8-188
x4.0	203	3.96	6.72	6.59E-02	2478	1.23E+01	121	70.4	157	24568	0.638	Tri City Extrusion	Bristol	HD8-156
x4.0	203	3.96	6.73	6.60E-02	2478	1.23E+01	121	70.4	157	24568	0.638	Hydro	Montreal	AH-40650
x3.2	203	3.18	5.41	5.31E-02	1993	9.96E+00	98	70.7	127	19916	0.638	Tower Extrusion Nanshan	Olney Lafayette	13566 1365
HSS 191														
x19	191	19.1	27.8	2.73E-01	10250	3.81E+01	400	61.0	561	76175	0.598	Nanshan Service Center Metals	Lafayette Prince George	1295 HT1759
x13	191	13.0	19.7	1.93E-01	7265	2.89E+01	303	63.1	412	57793	0.600	Taber	Russelville	TM-13835
x13	191	12.7	19.2	1.89E-01	7086	2.81E+01	295	63.0	402	56232	0.598	Nanshan	Lafayette	1643
HSS 178														
x25	178	25.4	32.9	3.23E-01	12148	3.62E+01	407	54.6	594	72421	0.559	Nanshan	Lafayette	1746
x19	178	19.1	25.7	2.52E-01	9491	3.03E+01	341	56.5	482	60593	0.559	Taber	Russelville	TM-11723
x13	178	12.7	17.8	1.75E-01	6580	2.25E+01	253	58.5	346	45059	0.559	Nanshan	Lafayette	1630
x6.4	178	6.35	9.27	9.09E-02	3417	1.26E+01	141	60.6	186	25115	0.559	Tri City Extrusion Hydro	Bristol Montreal	HD7-250 AH-60554
x5.6	178	5.56	8.15	7.99E-02	3007	1.12E+01	125	60.9	165	22298	0.559	Tri City Extrusion Hydro	Bristol Montreal	HD7-219 AH-59663
x4.8	178	4.78	7.03	6.89E-02	2593	9.70E+00	109	61.2	143	19399	0.559	Tri City Extrusion Hydro	Bristol Montreal	HD7-188 AH-56370
x4.0	178	3.96	5.86	5.75E-02	2162	8.16E+00	91.82	61.4	120	16321	0.559	Tri City Extrusion Hydro	Bristol Montreal	HD7-156 AH-40433
x3.2	178	3.18	4.72	4.63E-02	1740	6.63E+00	74.57	61.7	96.7	13253	0.559	Tri City Extrusion	Bristol	HD7-125
HSS 169														
x8.2	169	8.20	11.2	1.10E-01	4135	1.34E+01	158	56.8	211	26706	0.530	Nanshan	Lafayette	1207

TUBES RONDS



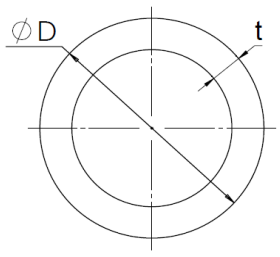
Identification de la section HSS D x t	Dimension extérieure (D)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 168														
x11	168	11.0	14.7	1.44E-01	5417	1.68E+01	200	55.7	272	33636	0.529	Hydro Nanshan Extrudex	Montreal Lafayette Toronto, Ohio	AH-47714 1217 H-21962
x7.1	168	7.11	9.76	9.57E-02	3597	1.17E+01	139	57.0	185	23377	0.529	Hydro Tri City Extrusion Extrudex	Montreal Bristol Toronto, Ohio	AH-41758 2193 H-9036
x6.4	168	6.35	8.75	8.58E-02	3227	1.06E+01	126	57.3	166	21161	0.529	Tri City Extrusion	Bristol	2217
x3.4	168	3.40	4.8	4.71E-02	1761	5.98E+00	71.1	58.3	92.4	11959	0.529	Extrudex	Toronto	H-6399
x2.6	168	2.64	3.74	3.67E-02	1373	4.71E+00	55.9	58.5	72.4	9409	0.529	Extrudex	Ohio	H-5063
HSS 166														
x11	166	11.4	15.1	1.48E-01	5558	1.68E+01	201	54.9	274	33502	0.523	Tri City Extrusion	Bristol	2301
x3.4	166	3.40	4.81	4.72E-02	1734	5.71E+00	68.9	57.4	89.6	11415	0.521	Hydro	Montreal	AH-60053
HSS 165														
x13	165	12.7	16.5	1.62E-01	6074	1.77E+01	215	54.0	295	35476	0.519	Western Extrusions	Dallas	H 19123
HSS 164														
x4.8	164	4.78	6.46	6.34E-02	2384	7.54E+00	92	56.2	121	15072	0.515	Nanshan	Lafayette	1048
HSS 153														
x3.2	153	3.18	4.04	3.96E-02	1491	4.17E+00	54.6	52.9	71.0	8335	0.480	Tri City Extrusion	Bristol	2177
HSS 152														
x25	152	25.4	27.5	2.70E-01	10123	2.12E+01	278	45.8	414	42408	0.479	Service Center Metals Nanshan	Prince George Lafayette	HT1964 1735
x19	152	19.1	21.6	2.12E-01	7972	1.81E+01	237	47.6	341	36126	0.479	Service Center Metals	Prince George	HT1950
x13	152	12.7	15.1	1.48E-01	5568	1.37E+01	180	49.6	248	27362	0.479	Service Center Metals Nanshan	Prince George Lafayette	HT1949 1290
x8.0	152	7.95	9.77	9.58E-02	3604	9.42E+00	124	51.1	166	18837	0.479	Tri City Extrusion	Bristol	2300
x6.4	152	6.35	7.89	7.74E-02	2911	7.77E+00	102	51.7	135	15533	0.479	Hydro Tri City Extrusion Western Extrusions Service Center Metals Extrudex	Montreal Bristol Dallas Prince George Toronto, Ohio	AH-07227 HD6-250 H 19118 HT1948 H-17229
x5.0	152	4.95	6.22	6.10E-02	2292	6.23E+00	81.8	52.1	108	12457	0.479	Tri City Extrusion	Bristol	HD6-195
x4.8	152	4.78	6	5.88E-02	2212	6.03E+00	79.1	52.2	104	12052	0.479	Hydro Tri City Extrusion Extrudex Hydro	Montreal Bristol Toronto, Ohio Montreal	AH-41576 HD6-188 H-23194 MH-17235
x4.7	152	4.75	5.95	5.83E-02	2201	6.00E+00	78.7	52.2	103	11994	0.479	Metra	Laval	96881
x4.0	152	3.96	5.01	4.91E-02	1846	5.08E+00	66.7	52.5	87.2	10163	0.479	Tri City Extrusion Tower Extrusion Hydro	Bristol Olney Montreal	HD6-156 14512 MH-16971
x3.4	152	3.40	4.32	4.24E-02	1592	4.41E+00	57.9	52.7	75.5	8827	0.479	Tri City Extrusion	Bristol	HD6-134
x3.2	152	3.18	4.03	3.95E-02	1487	4.14E+00	54.3	52.7	70.6	8272	0.479	Tri City Extrusion Hydro	Bristol Montreal	HD6-125 MH-41271
x3.0	152	3.05	3.87	3.80E-02	1429	3.98E+00	52.3	52.8	67.9	7961	0.479	Tri City Extrusion	Bristol	HD6-120
x2.4	152	2.36	3.02	2.96E-02	1112	3.13E+00	41	53.0	53.1	6254	0.479	Tri City Extrusion	Bristol	HD6-093
x2.1	152	2.11	2.7	2.65E-02	994	2.81E+00	36.8	53.1	47.5	5609	0.479	Tri City Extrusion	Bristol	HD6-083
x2.0	152	1.98	2.54	2.49E-02	935	2.64E+00	34.7	53.2	44.8	5285	0.479	Tri City Extrusion	Bristol	HD6-078
HSS 141														
x9.5	141	9.53	10.7	1.05E-01	3939	8.59E+00	122	46.7	165	17171	0.444	Metra Extruded Aluminum Corporation Hydro Extrudex	Laval Belding Montreal Toronto, Ohio	96543 19569 AH-49870 H-20331
x6.6	141	6.55	7.49	7.35E-02	2771	6.30E+00	89.2	47.7	119	12595	0.444	Metra Hydro Extrudex	Laval Montreal Toronto, Ohio	96640 AH-45781 H-17417
x4.7	141	4.75	5.52	5.41E-02	2035	4.74E+00	67.2	48.3	88.5	9489	0.444	Tower Extrusion	Olney	9522
x3.4	141	3.40	4	3.92E-02	1473	3.50E+00	49.5	48.7	64.6	6998	0.444	Hydro	Montreal	AH-07185
HSS 140														
x19	140	19.1	19.6	1.92E-01	7213	1.34E+01	192	43.2	279	26875	0.439	Service Center Metals Nanshan	Prince George Lafayette	HT2127 1745
x13	140	12.70	13.7	1.34E-01	5062	1.03E+01	147	45.1	205	20593	0.439	Service Center Metals	Prince George	HT1947
x9.5	140	9.53	10.6	1.04E-01	3891	8.28E+00	119	46.1	161	16555	0.439	Nanshan	Lafayette	1093
x6.4	140	6.35	7.21	7.07E-02	2657	5.91E+00	82.7	47.2	113	11828	0.439	Western Extrusions	Dallas	H 19119
x4.8	140	4.78	5.6	5.49E-02	2022	4.60E+00	65.9	47.7	86.8	9204	0.439	Hydro	Montreal	MH-18292
x2.0	140	1.98	2.32	2.28E-02	856	2.03E+00	29	48.7	37.5	4056	0.439	Tri City Extrusion	Bristol	HD5.5-078
x1.6	140	1.57	1.85	1.81E-02	683	1.63E+00	23.3	48.8	30.0	3252	0.439	Tower Extrusion	Olney	7952

TUBES RONDS



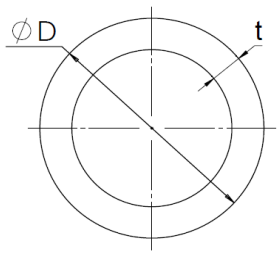
Identification de la section HSS D x t	Dimension extérieure (D)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 127														
x13	127	12.7	12.4	1.22E-01	4556	7.52E+00	118	40.6	166	15047	0.399	Service Center Metals	Prince George	HT1946
x11	127	11.10	11	1.08E-01	4037	6.83E+00	108	41.1	149	13668	0.399	Extrudex	Ohio	H-24621
x8.0	127	7.95	8.04	7.88E-02	2966	5.27E+00	83.1	42.2	113	10547	0.399	Western Extrusions	Dallas	H 19124
x6.4	127	6.35	6.52	6.39E-02	2404	4.38E+00	69	42.7	92.4	8765	0.399	Service Center Metals Tri City Extrusion Hydro	Prince George Bristol Montreal	HT1945 HD5-250 AH-58721
x6.3	127	6.27	6.45	6.33E-02	2377	4.34E+00	68.3	42.7	91.4	8675	0.399	Hydro Hydro	Montreal Montreal	AH-07080 MH-16676
x6.2	127	6.22	6.43	6.31E-02	2359	4.31E+00	67.9	42.7	90.7	8615	0.399	Extrudex	Toronto, Ohio	H-20332
x4.8	127	4.78	4.97	4.87E-02	1832	3.42E+00	53.9	43.2	71.3	6844	0.399	Taber Tower Extrusion Tri City Extrusion Service Center Metals Extrudex	Russelville Wylie-M Bristol Prince George Toronto	OH-05304 275.0 HD5-188 HT2122 H-23250
x4.7	127	4.76	4.96	4.86E-02	1832	3.42E+00	53.9	43.2	71.3	6844	0.399	Hydro Hydro Hydro	Montreal Montreal Montreal	AH-07083 MH-16601 MH-62791
x4.7	127	4.75	4.92	4.82E-02	1822	3.41E+00	53.6	43.2	70.9	6811	0.399	Metra	Laval	96879
x4.2	127	4.22	4.41	4.32E-02	1625	3.06E+00	48.2	43.4	63.5	6124	0.399	Tri City Extrusion	Bristol	HD5-166
x4.0	127	3.96	4.15	4.07E-02	1530	2.90E+00	45.6	43.5	59.9	5790	0.399	Hydro Tri City Extrusion Extrudex Hydro	Montreal Bristol Toronto Montreal	AH-7342 HD5-156 H-23595 MH-16923
x3.2	127	3.18	3.35	3.29E-02	1234	2.36E+00	37.2	43.8	48.6	4727	0.399	Hydro Nanshan Tower Extrusion Tri City Extrusion Hydro Extrudex Hydro Extrudex	Montreal Lafayette Olney Bristol Montreal Toronto Montreal Québec	AH-07082 1047 2010 HD5-125 AH-42248 H-23550 MH-17188 V-17021
x3.0	127	3.05	3.22	3.16E-02	1186	2.28E+00	35.8	43.8	46.8	4552	0.399	Tri City Extrusion	Bristol	HD5-120
x2.1	127	2.11	2.24	2.20E-02	826	1.61E+00	25.4	44.1	32.8	3219	0.399	Tri City Extrusion Extrudex	Bristol Ohio	HD5-083 H-20779
HSS 121														
x13	121	12.7	11.7	1.15E-01	4303	6.35E+00	105	38.4	148	12694	0.379	Service Center Metals Nanshan	Prince George Lafayette	HT1999 1090
x6.4	121	6.35	6.18	6.06E-02	2278	3.73E+00	61.8	40.5	82.9	7455	0.379	Service Center Metals	Prince George	HT1350
HSS 119														
x5.7	119	5.72	5.53	5.42E-02	2039	3.30E+00	55.2	40.2	73.8	6594	0.375	Crown Extrusions	Chaska	1348
HSS 115														
x2.0	115	1.98	1.91	1.87E-02	703	1.12E+00	19.5	39.9	25.3	2241	0.361	Tower Extrusion	Olney	9518
HSS 114														
x13	114	13.5	11.6	1.14E-01	4267	5.51E+00	96.5	35.9	138	11024	0.359	Extrudex	Ohio	H-26757
x13	114	12.70	11	1.08E-01	4049	5.30E+00	92.8	36.2	132	10602	0.359	Nanshan Service Center Metals	Lafayette Prince George	1369 HT2024
x8.6	114	8.56	7.7	7.55E-02	2841	3.99E+00	69.9	37.5	95.8	7984	0.359	International Extrusions Metra Hydro Extrudex	Garden City Laval Montreal Toronto, Ohio	KE10347 96864 AH-07146 H-6282
x6.4	114	6.35	5.83	5.72E-02	2151	3.14E+00	55	38.2	74.0	6282	0.359	Service Center Metals Tri City Extrusion Taber	Prince George Bristol Russelville	HT1395 HD4.5-250 OH-05838
x6.0	114	6.02	5.55	5.44E-02	2046	3.00E+00	52.6	38.3	70.5	6008	0.359	International Extrusions Hydro Hydro Metra Extrudex	Garden City Montreal Montreal Laval Toronto, Ohio	KE10346 AH-07081 MH-14249 96633 H-6281
x5.9	114	5.89	5.44	5.33E-02	2005	2.95E+00	51.6	38.4	69.2	5901	0.359	Bonnell	C	A-1383
x4.8	114	4.78	4.45	4.36E-02	1641	2.46E+00	43.1	38.7	57.2	4926	0.359	Hydro Tri City Extrusion Service Center Metals Taber Hydro	Montreal Bristol Prince George Russelville Montreal	AH-63053 1154 HT1337 OH-05092 MH-18291
x4.0	114	3.96	3.8	3.73E-02	1372	2.09E+00	36.6	39.0	48.2	4177	0.359	Hydro	Montreal	MH-64654
x3.2	114	3.18	3	2.94E-02	1107	1.71E+00	29.9	39.3	39.2	3417	0.359	Taber Hydro	Russelville Montreal	OH-05091 AH-07079
x3.0	114	3.05	2.89	2.83E-02	1064	1.65E+00	28.8	39.3	37.7	3292	0.359	Metra Tri City Extrusion Extrudex Extrudex Extrudex	Laval Bristol Toronto Ohio Québec	97268 1111 H-18705 H-19509 V-15405
x2.3	114	2.29	2.18	2.14E-02	804	1.26E+00	22	39.6	28.6	2519	0.359	Extruded Aluminum Corporation	Belding	20616
x2.2	114	2.16	2.06	2.02E-02	760	1.19E+00	20.9	39.6	27.1	2387	0.359	Tri City Extrusion	Bristol	1174
x2.1	114	2.11	2.01	1.97E-02	742	1.17E+00	20.4	39.7	26.5	2334	0.359	Bonnell Extrudex	M Ohio	AE1750 H-20780
x3.2	114	3.18	3.07	3.01E-02	1107	1.71E+00	29.9	39.3	39.2	3417	0.359	Hydro	Montreal	MH-18570
HSS 108														
x13	108	12.7	10.3	1.01E-01	3796	4.38E+00	81.1	34.0	116	8754	0.339	Service Center Metals	Prince George	HT1944
x6.4	108	6.35	5.49	5.38E-02	2025	2.62E+00	48.6	36.0	65.5	5240	0.339	Service Center Metals Tower Extrusion	Prince George Olney	HT1288 10846
HSS 105														
x23	105	23.2	16.2	1.59E-01	5938	5.31E+00	102	29.9	158	10628	0.329	Extrudex	Ohio	H-23171
x9.5	105	9.53	7.76	7.61E-02	2847	3.26E+00	62.2	33.8	86.6	6516	0.329	Extrudex	Ohio	H-23670

TUBES RONDS



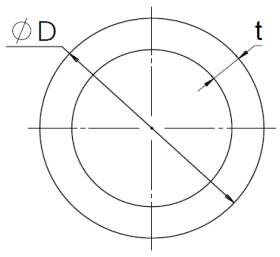
Identification de la section HSS D x t	Dimension extérieure (D)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 102														
x25	102	25.4	16.5	1.62E-01	6074	4.89E+00	96.3	28.4	153	9787	0.319	Service Center Metals	Prince George	HT2016
x19	102	19.1	13.4	1.31E-01	4935	4.42E+00	87.1	29.9	132	8846	0.319	Nanshan Service Center Metals	Lafayette Prince George	1095 HT2343
x13	102	12.7	9.61	9.42E-02	3543	3.57E+00	70.2	31.7	101	7136	0.319	Service Center Metals International Extrusions Extrudex	Prince George Garden City Ohio	HT1943 KE10492 H-21379
x9.7	102	9.65	7.55	7.40E-02	2785	2.97E+00	58.5	32.7	81.8	5945	0.319	Taber	Russelville	OH-08618
x9.5	102	9.53	7.46	7.32E-02	2752	2.94E+00	58	32.7	80.9	5890	0.319	Service Center Metals Nanshan Extrudex	Prince George Lafayette Ohio	HT1389 1744 H-26324
x8.1	102	8.08	6.41	6.29E-02	2371	2.61E+00	51.4	33.2	70.7	5217	0.319	Metra Hydro Extrudex	Laval Montreal Toronto, Ohio	96612 AH-07134 H-11496
x7.9	102	7.92	6.32	6.20E-02	2330	2.57E+00	50.6	33.2	69.6	2142	0.319	Tower Extrusion	Olney	8383
x6.4	102	6.35	5.15	5.05E-02	1898	2.16E+00	42.5	33.7	57.6	4320	0.319	Taber Tri City Extrusion Nanshan Pennex Aluminum Service Center Metals Western Extrusions Metra Hydro	Russelville Bristol Lafayette Leetonia Prince George Dallas Laval Montreal	OH-05837 2149 1288 5342-H HT1454 H 19611 96727 AH-07078
x5.7	102	5.74	4.68	4.59E-02	1727	1.99E+00	39.2	33.9	52.7	3977	0.319	Metra Tri City Extrusion Hydro Extrudex Hydro Extrudex	Laval Bristol Montreal Toronto, Ohio Montreal Québec	96650 1185 AH-07070 H-3274 MH-15300 V-18405
x5.4	102	5.41	4.43	4.34E-02	1633	1.89E+00	37.3	34.0	30.0	3786	0.319	Bonnell	N	A-1382
x4.8	102	4.78	3.94	3.86E-02	1451	1.70E+00	33.5	34.3	44.7	3405	0.319	Taber Pennex Aluminum Tri City Extrusion Service Center Metals Extrudex	Russelville Leetonia Bristol Prince George Toronto, Ohio	OH-05090 5736-H 2134 HT1461 H-23068
x4.7	102	4.75	3.91	3.83E-02	1444	1.70E+00	33.4	34.3	44.5	3390	0.319	Metra Hydro Hydro	Laval Montreal Montreal	96878 AH-07077 MH-16674
x4.0	102	3.96	3.29	3.23E-02	1214	1.45E+00	28.5	34.5	37.7	2895	0.319	Extrudex Tri City Extrusion	Toronto Bristol	H-23715 2133
x3.9	102	3.94	3.36	3.30E-02	1207	1.44E+00	28.3	34.5	37.5	2879	0.319	Hydro Hydro	Montreal Montreal	AH-7347 MH-18311
x3.8	102	3.76	3.12	3.06E-02	1154	1.38E+00	27.2	34.6	35.9	2764	0.319	Extrudex	Québec	V-15464
x3.2	102	3.18	2.66	2.61E-02	981	1.19E+00	23.4	34.8	30.7	2375	0.319	Taber Tri City Extrusion Tower Extrusion Tower Extrusion Tower Extrusion Gateway Extrusions Nanshan Pennex Aluminum Western Extrusions Bonnell Service Center Metals Metra Hydro Extrudex Hydro Extrudex	Russelville Bristol Olney Olney Olney Woodbridge Lafayette Leetonia Dallas CN Prince George Laval Montreal Toronto, Ohio Montreal Québec	OH-03000 1191 5912 290 10507 CES163 1447 5338-H H 19216 A-1493 HT1277 999004 AH-07060 H-3806 MH-12412 SA-05077
x3.0	102	3.05	2.56	2.51E-02	943	1.14E+00	22.5	34.8	29.6	2289	0.319	Tri City Extrusion International Extrusions	Bristol Garden City	1100 KE8806
x2.1	102	2.13	1.81	1.78E-02	666	8.23E-01	16.2	35.2	21.1	1646	0.319	Tri City Extrusion	Bristol	1099
x2.1	102	2.11	1.78	1.75E-02	658	8.14E-01	16	35.2	20.8	1628	0.319	Metra Extrudex Hydro	Laval Ohio Montreal	96622 H-16517 MH-16269
x1.8	102	1.83	1.55	1.52E-02	573	7.12E-01	14	35.3	18.2	1424	0.319	Western Extrusions	Dallas	H 19131
x1.7	102	1.70	1.45	1.42E-02	534	6.65E-01	13.1	35.3	17.0	1330	0.319	Tri City Extrusion	Bristol	1098
x1.7	102	1.65	1.4	1.37E-02	518	6.46E-01	12.7	35.3	16.5	1292	0.319	Extrudex International Extrusions Extruded Aluminum Corporation Extrudex	Toronto, Ohio Garden City Belding Québec	H-16034 KE5732 21117 V-15874
x1.6	102	1.60	1.36	1.33E-02	502	6.27E-01	12.3	35.3	16.0	1254	0.319	Metra	Laval	97337
x1.3	102	1.35	1.15	1.13E-02	424	5.32E-01	10.5	35.4	13.5	1063	0.319	Gateway Extrusions	Woodbridge	CES164
x1.3	102	1.27	1.08	1.06E-02	400	5.03E-01	9.9	35.5	12.8	1005	0.319	Metra	Laval	97099
HSS 99														
x1.5	98.6	1.52	1.26	1.24E-02	464	5.46E-01	11.1	34.3	14.3	1091	0.310	Extruded Aluminum Corporation	Belding	19452
HSS 95														
x19	95.3	19.1	12.4	1.22E-01	4556	3.51E+00	73.7	27.8	112.7	7019	0.299	Service Center Metals	Prince George	HT1167
x13	95.3	12.7	8.92	8.75E-02	3290	2.87E+00	60.2	29.5	87.1	5732	0.299	Service Center Metals Nanshan Extrudex	Prince George Lafayette Ohio	HT1287 1193 H-891
x8.7	95.3	8.74	6.46	6.34E-02	2372	2.24E+00	47	30.7	65.5	4479	0.299	Extrudex	Toronto	H-3135
HSS 94														
x9.3	94.0	9.27	6.68	6.55E-02	2465	2.23E+00	47.6	30.1	66.7	4470	0.295	Tower Extrusion	Olney	8333
HSS 92														
x17	91.9	16.9	10.8	1.06E-01	3979	2.94E+00	64	27.2	96.6	5881	0.289	Extrudex	Ohio	H-23172
HSS 90														
x5.0	90.0	5.00	3.63	3.56E-02	1335	1.21E+00	26.8	30.1	36.1	2416	0.283	Extrudex	Toronto	H-5299

TUBES RONDS



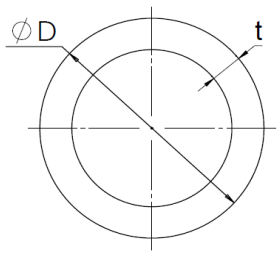
Identification de la section HSS D x t	Dimension extérieure (D)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 89														
x19	88.9	19.1	11.3	1.11E-01	4176	2.73E+00	61.5	25.6	95.1	5467	0.279	Service Center Metals Nanshan Extrudex	Prince George Lafayette Ohio	HT1347 1568 H-21470
x13	88.9	12.7	8.24	8.08E-02	3037	2.26E+00	20.9	27.3	74.3	4526	0.279	Service Center Metals	Prince George	HT2220
x10	88.9	10.2	6.81	6.68E-02	2511	1.98E+00	44.5	28.1	63.2	3952	0.279	Tower Extrusion	Olney	13583
x9.5	88.9	9.53	6.46	6.34E-02	2373	1.89E+00	42.6	28.3	60.2	3787	0.279	Extrudex	Ohio	H-21356
x7.6	88.9	7.62	5.25	5.15E-02	1944	1.62E+00	36.4	28.8	50.4	3235	0.279	Metra Hydro Extrudex Extrudex	Laval Montreal Toronto, Ohio Québec	96524 AH-07010 H-6857 V-14644
x6.4	88.9	6.35	4.56	4.47E-02	1645	1.41E+00	31.7	29.3	43.3	2816	0.279	Hydro	Montreal	AH-59185
x5.6	88.9	5.59	3.96	3.88E-02	1461	1.27E+00	28.6	29.5	38.8	2544	0.279	Crown Extrusions	Chaska	12586
x5.5	88.9	5.49	3.88	3.80E-02	1436	1.25E+00	28.2	29.5	38.2	2506	0.279	Metra Hydro Extrudex Hydro Extrudex	Laval Montreal Toronto, Ohio Montreal Québec	96547 AH-07076 H-2210 MH-14029 V-15307
x4.8	88.9	4.78	3.42	3.35E-02	1261	1.12E+00	25.1	29.8	33.8	2235	0.279	Taber Tri City Extrusion Western Extrusions Metra	Russelville Bristol Dallas Laval	OH-05089 2151 H 19126 999349
x4.7	88.9	4.75	3.67	3.60E-02	1254	1.11E+00	25	29.8	33.6	2225	0.279	Hydro Hydro	Montreal Montreal	AH-07022 MH-17805
x4.0	88.9	3.96	2.86	2.80E-02	1056	9.54E-01	21.5	30.0	28.6	1907	0.279	Western Extrusions Tower Extrusion	Dallas Olney	H 19041 4162
x3.9	88.9	3.91	2.89	2.83E-02	1043	9.43E-01	21.2	30.1	28.2	1886	0.279	Hydro	Montreal	MH-18794
x3.8	88.9	3.76	2.73	2.68E-02	1015	9.20E-01	20.7	30.1	27.5	1839	0.279	Extrudex	Québec	V-01815
x3.2	88.9	3.18	2.32	2.28E-02	854	7.85E-01	17.7	30.3	23.3	1570	0.279	Taber Tri City Extrusion Tower Extrusion Crown Extrusions Pennex Aluminum Bonnell Western Extrusions Metra Hydro Hydro	Russelville Bristol Olney Chaska Leetonia M Dallas Laval Montreal Montreal	OH-02999 1190 6492 13243 5779-H AE0430 H 19127 96836 AH-60676 MH-16675
x3.0	88.9	3.05	2.23	2.19E-02	821	7.57E-01	17	30.4	22.4	1514	0.279	Hydro Tri City Extrusion Tower Extrusion Extrudex Extrudex	Montreal Bristol Olney Toronto, Ohio Québec	AH-07075 1129 18675 H-16298 V-18642
x2.1	88.9	2.13	1.58	1.55E-02	581	5.46E-01	12.3	30.7	16.0	1093	0.279	Tri City Extrusion	Bristol	1130
x2.1	88.9	2.11	1.55	1.52E-02	574	5.40E-01	12.2	30.7	15.9	1081	0.279	Metra Extrudex	Laval Toronto	97047 H-8495
x1.7	88.9	1.70	1.26	1.24E-02	466	4.42E-01	9.95	30.8	12.9	885	0.279	Tri City Extrusion	Bristol	1161
HSS 87														
x3.9	87.2	3.91	2.77	2.72E-02	1022	8.88E-01	20.4	29.5	27.1	1775	0.274	Tri City Extrusion	Bristol	2224
HSS 86														
x2.3	85.7	2.29	1.62	1.59E-02	599	5.21E-01	12.2	29.5	15.9	1042	0.269	International Extrusions	Garden City	KE6942
x2.3	85.6	2.29	1.62	1.59E-02	598	5.18E-01	12.1	29.5	15.8	1037	0.269	International Extrusions	Garden City	KE11150
HSS 83														
x13	82.6	12.7	7.55	7.40E-02	2784	1.75E+00	42.5	25.1	62.5	3504	0.259	Service Center Metals Extrudex	Prince George Ohio	HT1318 H-26338
x11	82.6	10.7	8.5	8.34E-02	2407	1.59E+00	38.5	25.7	55.4	3174	0.259	Hydro	Montreal	AH-07002
x9.5	82.6	9.53	5.95	5.83E-02	2183	1.48E+00	35.8	26.0	51.0	2957	0.259	Extrudex	Ohio	H-26323
x6.4	82.6	6.35	4.12	4.04E-02	1519	1.11E+00	26.9	27.0	36.9	2217	0.259	Taber Nanshan Service Center Metals Extrudex Extrudex	Russelville Lafayette Prince George Toronto, Ohio Québec	OH-05691 1602 HT1386 H-20283 V-20035
x3.2	82.6	3.18	2.14	2.10E-02	791	6.23E-01	15.1	28.1	20.0	1246	0.259	Pennex Aluminum	Leetonia	5719-H
x2.5	82.6	2.54	1.73	1.70E-02	638	5.10E-01	12.4	28.3	16.2	1021	0.259	Bonnell	M	AE0174
x1.8	82.6	1.83	1.26	1.24E-02	463	3.77E-01	9.14	28.5	11.9	754	0.259	International Extrusions	Garden City	KE8372
x1.7	83.0	1.65	1.14	1.12E-02	421	3.48E-01	8.39	28.8	10.9	697	0.261	Extrudex	Québec	V-01132
x1.6	82.6	1.57	1.09	1.07E-02	400	3.28E-01	7.94	28.6	10.3	655	0.259	Extruded Aluminum Corporation	Belding	5872
x1.4	82.8	1.40	0.967	9.48E-03	357	2.95E-01	7.14	28.8	9.2	591	0.260	Metra	Laval	996567
HSS 80														
x4.0	80.0	3.99	2.6	2.55E-02	951	6.88E-01	17.2	26.9	23.0	1377	0.251	Extrudex	Toronto	H-5298
x2.4	80.1	2.41	1.6	1.57E-02	589	4.44E-01	11.1	27.5	14.6	889	0.252	Tower Extrusion	Olney	9841
HSS 79														
x3.9	79.4	3.91	2.51	2.46E-02	926	6.61E-01	16.6	26.7	22.3	1321	0.249	Tri City Extrusion	Bristol	2222
x2.8	79.4	2.77	1.81	1.78E-02	666	4.88E-01	12.3	27.1	16.2	977	0.249	Western Extrusions	Dallas	H 19132
HSS 78														
x7.1	77.8	7.14	4.31	4.23E-02	1582	9.96E-01	25.6	25.1	35.7	1992	0.244	Extrudex	Toronto	H-3136
HSS 77														
x1.6	76.9	1.57	1.01	9.90E-03	372	2.64E-01	6.87	26.6	8.93	528	0.242	Extruded Aluminum Corporation	Belding	18391

TUBES RONDS



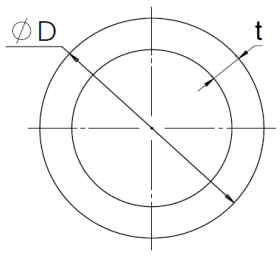
Identification de la section HSS D x t	Dimension extérieure (D)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 76														
x19	76.2	19.1	9.27	9.09E-02	3417	1.55E+00	40.6	21.3	64.4	3097	0.239	Service Center Metals Extrudex	Prince George Ohio	HT2099 H-20159
x13	76.2	13.1	7.07	6.93E-02	2595	1.35E+00	35.3	22.8	52.8	2691	0.239	Extrudex	Ohio	H-20281
x13	76.2	12.7	6.86	6.73E-02	2531	1.33E+00	34.8	22.9	51.8	2651	0.239	Service Center Metals Nanshan Pennex Aluminum Extrudex	Prince George Lafayette Leetonia Ohio	HT1232 1135 50431 H-29334
x9.5	76.2	9.53	5.41	5.31E-02	1993	1.13E+00	29.6	23.8	42.6	2258	0.239	Service Center Metals Tower Extrusion Nanshan	Prince George Wylie-M Lafayette	HT1286 2809 1155
x8.1	76.2	8.10	4.7	4.61E-02	1732	1.02E+00	26.7	24.2	37.7	2034	0.239	Tower Extrusion	Olney	15317
x6.4	76.2	6.35	3.78	3.71E-02	1392	8.55E-01	22.4	24.8	31.0	1710	0.239	Taber Nanshan Crown Extrusions Tower Extrusion Western Extrusions Pennex Aluminum Service Center Metals Hydro Extrudex Hydro Extrudex	Russelville Lafayette Chaska Olney Dallas Leetonia Prince George Montreal Toronto, Ohio Montreal Québec	OH-05690 1462 12585 6713 H 19897 5665-H HT1186 AH-7334 H-19620 MH-58632 V-18669
x4.8	76.2	4.78	2.9	2.84E-02	1070	6.85E-01	18	25.3	24.4	1370	0.239	Hydro Pennex Aluminum Tri City Extrusion Western Extrusions Service Center Metals Extrudex	Montreal Leetonia Bristol Dallas Prince George Québec	MH-54992 5734-H 2185 H 19128 HT1285 V-18334
x4.7	76.2	4.75	2.92	2.86E-02	1065	6.82E-01	17.9	25.3	24.2	1364	0.239	Hydro Extrudex	Montreal Ohio	AH-07003 H-19266
x3.8	76.2	3.76	2.31	2.27E-02	855	5.62E-01	14.7	25.6	19.7	1123	0.239	Metra Hydro Extrudex	Laval Montreal Québec	97095 MH-19141 SA-05066
x3.2	76.2	3.18	1.97	1.93E-02	728	4.85E-01	12.7	25.8	16.9	971	0.239	Taber Bonnell Tower Extrusion Tower Extrusion International Extrusions Pennex Aluminum Tri City Extrusion Western Extrusions Service Center Metals Metra Extrudex Hydro Extrudex	Russelville CN Wylie-M Wylie-M Garden City Leetonia Bristol Dallas Prince George Laval Toronto Montreal Québec	OH-05097 A-1922 291 8492 KE10894 5207-H 1189 H 19544 HT1276 96876 H-3842 MH-16677 V-18406
x3.0	76.2	3.05	1.9	1.86E-02	700	4.68E-01	12.3	25.9	16.3	937	0.239	Hydro	Montreal	AH-07021
x3.0	76.2	3.05	1.9	1.86E-02	700	4.68E-01	12.3	25.9	16.3	937	0.239	Tri City Extrusion	Bristol	1102
x2.8	76.2	2.82	1.76	1.73E-02	649	4.37E-01	11.5	25.9	15.2	874	0.239	Tri City Extrusion	Bristol	2161
x2.4	76.2	2.41	1.52	1.49E-02	559	3.80E-01	9.98	26.1	13.1	761	0.239	Tri City Extrusion Extrudex	Bristol Québec	2147 SA-05064
x2.3	76.2	2.29	1.44	1.41E-02	530	3.62E-01	9.51	26.1	12.5	724	0.239	Extruded Aluminum Corporation	Belding	20659
x2.1	76.2	2.13	1.34	1.31E-02	496	3.40E-01	8.93	26.2	11.7	680	0.239	Tri City Extrusion	Bristol	1101
x1.7	76.2	1.70	1.08	1.06E-02	398	2.76E-01	7.24	26.3	9.43	552	0.239	Tri City Extrusion	Bristol	1096
x1.7	76.2	1.65	1.05	1.03E-02	386	2.68E-01	7.04	26.4	9.16	536	0.239	Extrudex Bonnell Hydro	Toronto M Montreal	H-2577 AE1805 MH-43579
x1.6	76.2	1.57	1	9.81E-03	369	2.57E-01	6.74	26.4	8.76	513	0.239	Bonnell Bonnell	CN CN	A-1267 A-1356
x1.4	76.2	1.40	0.885	8.68E-03	328	2.29E-01	6.02	26.4	7.81	458	0.239	Metra	Laval	997558
x1.3	76.2	1.27	0.808	7.92E-03	299	2.09E-01	5.5	26.5	7.12	419	0.239	Metra Extrudex Hydro	Laval Toronto Montreal	97098 H-5503 MH-10841
HSS 75														
x3.2	74.9	3.18	1.94	1.90E-02	715	4.61E-01	12.3	25.4	16.3	921	0.235	Gateway Extrusions	Woodbridge	CES141
x1.8	74.9	1.83	1.14	1.12E-02	420	2.80E-01	7.48	25.8	9.76	560	0.235	Gateway Extrusions	Woodbridge	CES140
x1.3	74.9	1.27	0.796	7.81E-03	294	1.99E-01	5.31	26.0	6.88	398	0.235	Bonnell Gateway Extrusions	M Woodbridge	AE0852 CES139
HSS 73														
x5.2	73.0	5.16	2.98	2.92E-02	1098	6.35E-01	17.4	24.1	23.8	1271	0.229	Tower Extrusion Crown Extrusions	Olney Chaska	13512 1673
x2.7	73.0	2.67	1.6	1.57E-02	589	3.65E-01	9.99	24.9	13.2	729	0.229	Tower Extrusion	Olney	14573
x2.2	72.7	2.18	2.98	2.92E-02	1098	6.29E-01	17.3	23.9	23.6	1257	0.228	Extruded Aluminum Corporation	Belding	19936
x2.1	73.0	2.13	1.29	1.27E-02	475	2.98E-01	8.17	25.1	10.7	596	0.229	Tri City Extrusion	Bristol	1188
x2.0	72.5	1.98	1.19	1.17E-02	439	2.73E-01	7.52	24.9	9.84	545	0.228	Western Extrusions	Dallas	H 19334
HSS 72														
x1.3	72.4	1.27	0.769	7.54E-03	283	1.79E-01	4.95	25.1	6.41	358	0.227	Tower Extrusion	Olney	9840
HSS 70														
x4.5	70.5	4.52	2.54	2.49E-02	936	5.11E-01	14.5	23.4	19.7	1022	0.221	Tri City Extrusion	Bristol	2137
x9.5	69.9	9.53	4.89	4.80E-02	1803	8.40E-01	24.1	21.6	34.9	1680	0.219	Nanshan	Lafayette	1185
x4.8	69.9	4.78	2.64	2.59E-02	975	5.18E-01	14.8	23.1	20.2	1037	0.219	Tower Extrusion	Wylie-M	12004
x3.2	69.9	3.18	1.8	1.77E-02	664	3.70E-01	10.6	23.6	14.1	739	0.219	Pennex Aluminum Extruded Aluminum Corporation Tower Extrusion	Leetonia Belding Wylie-M	5208-H 21001 1082
x2.1	69.9	2.11	1.22	1.20E-02	448	2.57E-01	7.36	23.9	9.66	514	0.219	Pennex Aluminum	Leetonia	5691-H

TUBES RONDS



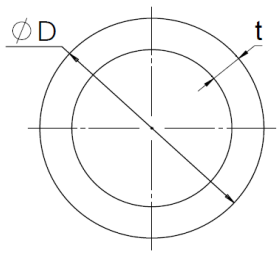
Identification de la section HSS D x t	Dimension extérieure (D)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 67														
x6.4	66.7	6.35	3.26	3.20E-02	1202	5.52E-01	16.6	21.4	23.2	1105	0.209	Tower Extrusion	Olney	3588
HSS 65														
x1.9	64.8	1.91	1.02	1.00E-02	376	1.86E-01	5.73	22.2	7.52	371	0.203	Bonnell	M	AE5500
HSS 64														
x13	63.5	12.70	5.49	5.38E-02	2025	6.93E-01	21.8	18.5	33.4	1386	0.199	Service Center Metals	Prince George	HT1259
x6.4	63.5	6.35	3.09	3.03E-02	1139	4.70E-01	14.8	20.3	20.8	940	0.199	Service Center Metals Extruded Aluminum Corporation Extruded Aluminum Corporation Tower Extrusion Pennex Aluminum	Prince George Belding Belding Olney Leetonia	HT1058 1245 5920 1660 4971-H
x4.8	63.5	4.78	2.38	2.33E-02	878	3.81E-01	12	20.8	16.4	761	0.199	Western Extrusions	Dallas	H 19129
x3.2	63.5	3.18	1.63	1.60E-02	601	2.74E-01	8.63	21.3	11.5	548	0.199	Bonnell Western Extrusions Extruded Aluminum Corporation Pennex Aluminum Service Center Metals Taber	CN Dallas Belding Leetonia Prince George Russelville	A-1921 H 19732 5924 5221-H HT1321 OH-05687
x3.0	63.5	3.05	1.57	1.54E-02	578	2.65E-01	8.33	21.4	11.1	529	0.199	Tri City Extrusion	Bristol	1104
x2.2	63.5	2.16	1.13	1.11E-02	416	1.96E-01	6.16	21.7	8.11	391	0.199	Tower Extrusion	Olney	5429
x2.1	63.5	2.13	1.11	1.09E-02	411	1.93E-01	6.09	21.7	8.03	387	0.199	Tri City Extrusion	Bristol	1105
x2.1	63.5	2.11	1.1	1.08E-02	406	1.91E-01	6.03	21.7	7.94	383	0.199	Tri City Extrusion	Bristol	2146
x1.9	63.5	1.91	0.999	9.80E-03	368	1.75E-01	5.5	21.8	7.22	349	0.199	Crown Extrusions	Chaska	13383
x1.8	63.5	1.83	0.96	9.41E-03	354	1.68E-01	5.3	21.8	6.95	336	0.199	International Extrusions	Garden City	KE8373
x1.7	63.5	1.70	0.895	8.78E-03	330	1.58E-01	4.96	21.8	6.49	315	0.199	Tri City Extrusion	Bristol	1089
x1.6	63.5	1.60	0.843	8.27E-03	311	1.49E-01	4.69	21.9	6.12	298	0.199	Extruded Aluminum Corporation	Belding	21000
HSS 63														
x1.5	63.0	1.50	0.784	7.69E-03	289	1.37E-01	4.34	21.7	5.66	273	0.198	Bonnell	M	AE3466
HSS 62														
x9.5	61.9	9.53	4.25	4.17E-02	1566	5.55E-01	17.9	18.8	26.4	1110	0.195	Tower Extrusion	Olney	14003
x2.1	61.6	2.13	1.08	1.06E-02	398	1.76E-01	5.71	21.0	7.53	352	0.193	Bonnell	M	AE4837
HSS 61														
x2.8	61.0	2.84	1.41	1.38E-02	519	2.19E-01	7.2	20.6	9.60	439	0.192	Tower Extrusion	Olney	15235
HSS 60														
x5.5	60.3	5.54	2.58	2.53E-02	952	3.61E-01	12	19.5	16.7	721	0.190	Crown Extrusions	Chaska	1674
x5.4	60.1	5.41	2.52	2.47E-02	928	3.50E-01	11.6	19.4	16.2	699	0.189	Western Extrusions	Dallas	H 19086
x4.8	60.3	4.78	2.25	2.21E-02	830	3.22E-01	10.7	19.7	14.7	645	0.190	Western Extrusions	Dallas	H 19183
x4.7	60.3	4.75	2.25	2.21E-02	828	3.22E-01	10.7	19.7	14.7	644	0.190	Crown Extrusions	Chaska	1355
x4.2	60.3	4.17	1.99	1.95E-02	734	2.91E-01	9.64	19.9	13.1	581	0.190	Bonnell	M	AE5784
x3.9	60.3	3.91	1.88	1.84E-02	693	2.77E-01	9.17	20.0	12.4	553	0.190	International Extrusions Gateway Extrusions	Garden City Woodbridge	KE8410 CES221
x3.8	60.3	3.81	1.83	1.79E-02	676	2.91E-01	8.98	20.0	12.2	541	0.190	Bonnell	C	A-1431
x3.7	60.3	3.71	1.79	1.76E-02	659	2.65E-01	8.78	20.0	11.9	530	0.190	Bonnell	M	AE5906
x3.7	60.3	3.68	1.78	1.75E-02	655	2.63E-01	8.73	20.1	11.8	527	0.190	Extruded Aluminum Corporation	Belding	3560
x3.7	60.3	3.68	1.78	1.75E-02	655	2.63E-01	8.73	20.1	11.8	527	0.190	Crown Extrusions	Chaska	12299
x2.8	60.3	2.77	1.36	1.33E-02	500	2.07E-01	6.88	20.4	9.16	415	0.190	Tower Extrusion	Olney	15322
x2.3	60.3	2.31	1.14	1.12E-02	421	1.77E-01	5.87	20.5	7.77	354	0.190	Western Extrusions	Dallas	H 19952
x1.7	60.3	1.70	0.849	8.33E-03	313	1.34E-01	4.46	20.7	5.84	269	0.190	Tri City Extrusion	Bristol	1187
HSS 59														
x3.9	58.6	3.91	1.82	1.78E-02	672	2.52E-01	8.61	19.4	11.7	505	0.184	Tower Extrusion	Wylie-M	1016
HSS 58														
x5.6	58.4	5.64	2.53	2.48E-02	934	3.29E-01	11.3	18.8	15.7	657	0.184	International Extrusions	Garden City	KE11695
HSS 57														
x7.9	57.2	7.92	3.32	3.26E-02	1226	3.80E-01	13.3	17.6	19.4	761	0.180	Service Center Metals	Prince George	HT1394
x6.4	57.2	6.35	2.75	2.70E-02	1012	3.31E-01	11.6	18.1	16.4	663	0.180	Tower Extrusion Tower Extrusion International Extrusions Extruded Aluminum Corporation Service Center Metals	Olney Wylie-M Garden City Belding Prince George	8380 2808 KE9051 5883 HT1450
x5.7	56.5	5.72	2.48	2.43E-02	913	3.00E-01	10.6	18.1	14.9	599	0.178	Bonnell	M	AE5862
x4.1	57.2	4.14	1.87	1.83E-02	689	2.43E-01	8.51	18.8	11.6	486	0.180	Tower Extrusion	Olney	12159
x3.2	57.2	3.18	1.46	1.43E-02	538	1.96E-01	6.87	19.1	9.25	393	0.180	Extruded Aluminum Corporation Crown Extrusions	Belding Chaska	20999 13217
x3.0	57.2	3.05	1.4	1.37E-02	518	1.90E-01	6.64	19.1	8.92	379	0.180	Tri City Extrusion	Bristol	1180T
x2.1	57.2	2.13	0.999	9.80E-03	368	1.39E-01	4.88	19.5	6.45	279	0.180	Tri City Extrusion	Bristol	1156
x2.1	57.2	2.11	0.988	9.69E-03	364	1.38E-01	4.83	19.5	6.38	276	0.180	Extruded Aluminum Corporation Bonnell	Belding CN	19453 A-1488
x1.7	57.2	1.70	0.803	7.87E-03	296	1.14E-01	3.98	19.6	5.23	228	0.180	Tri City Extrusion	Bristol	1123
x1.7	57.2	1.65	0.78	7.65E-03	288	1.11E-01	3.87	19.6	5.08	221	0.180	Pennex Aluminum	Leetonia	5540-H
x1.6	57.2	1.57	0.745	7.31E-03	275	1.06E-01	3.71	19.6	4.86	212	0.180	Tower Extrusion	Olney	4944
x1.5	57.2	1.52	0.722	7.08E-03	266	1.03E-01	3.6	19.7	4.71	206	0.180	Tri City Extrusion	Bristol	2145
HSS 55														
x3.2	54.6	3.18	1.39	1.36E-02	513	1.70E-01	6.23	18.2	8.40	340	0.172	Western Extrusions	Dallas	H 19457
HSS 54														
x9.5	54.0	9.53	3.6	3.53E-02	1329	3.43E-01	12.7	16.1	19.1	686	0.170	International Extrusions	Garden City	KE6420
x2.0	54.0	2.01	0.888	8.71E-03	328	1.11E-01	4.1	18.4	5.42	222	0.170	Tri City Extrusion	Bristol	2223
x1.7	54.0	1.70	0.757	7.42E-03	279	9.54E-02	3.53	18.5	4.64	191	0.170	Tri City Extrusion	Bristol	1122
x1.5	53.8	1.52	0.679	6.66E-03	250	8.56E-02	3.18	18.5	4.17	171	0.169	Bonnell	M	AE4501
x1.7	53.7	1.65	0.732	7.18E-03	270	9.14E-02	3.4	18.4	4.47	183	0.169	Bonnell	M	AE4910
HSS 52														
x4.4	52.2	4.45	1.81	1.78E-02	667	1.92E-01	7.35	17.0	10.2	384	0.164	Extruded Aluminum Corporation	Belding	17553

TUBES RONDS



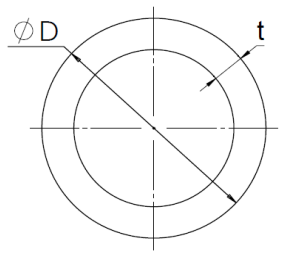
Identification de la section HSS D x t	Dimension extérieure (D)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 51														
x13	50.8	12.7	4.12	4.04E-02	1519	3.06E-01	12	14.2	19.1	612	0.160	Service Center Metals	Prince George	HT1322
x9.5	50.8	9.53	3.35	3.29E-02	1234	2.76E-01	10.9	15.0	16.5	553	0.160	Service Center Metals International Extrusions Western Extrusions	Prince George Garden City Dallas	HT1284 KE11591 H 19048
x6.4	50.8	6.35	2.4	2.35E-02	886	2.23E-01	8.78	15.9	12.6	446	0.160	Pries Enterpries Tower Extrusion Extruded Aluminum Corporation Nanshan Pennex Aluminum Service Center Metals Taber	Independance Olney Belding Lafayette Leetonia Prince George Russelville	4992 1629 2693 1286 5303-H HT1122 OH-05685
x5.0	50.8	4.95	1.93	1.89E-02	713	1.89E-01	7.45	16.3	10.4	378	0.160	Tower Extrusion	Olney	11004
x4.8	50.8	4.78	1.87	1.83E-02	690	1.84E-01	7.26	16.4	10.1	369	0.160	Western Extrusions Tower Extrusion Tower Extrusion Tower Extrusion Extruded Aluminum Corporation Service Center Metals Bonnell	Dallas Olney Wylie-M Wylie-M Belding Prince George C	H 19105 11620 122 9429 23748 HT1330 A-1286
x3.2	50.8	3.18	1.29	1.27E-02	475	1.35E-01	5.32	16.9	7.20	270	0.160	Pries Enterpries Bonnell Bonnell Crown Extrusions International Extrusions Extruded Aluminum Corporation Tower Extrusion Tower Extrusion Tower Extrusion Nanshan Pennex Aluminum Service Center Metals Western Extrusions Taber	Independance CN M Chaska Garden City Belding Olney Wylie-M Wylie-M Lafayette Leetonia Prince George Dallas Russelville	4150 A-1489 AE1158 1210 KE3974 5908 11619 106 7090 1501 5131-H HT1283 H 19560 OH-05683
x3.0	50.8	3.05	1.24	1.22E-02	457	1.31E-01	5.14	16.9	6.95	261	0.160	Tri City Extrusion	Bristol	1117
x2.8	50.8	2.77	1.13	1.11E-02	417	1.21E-01	4.75	17.0	6.38	241	0.160	Pries Enterpries	Independance	3031
x2.4	50.8	2.39	0.984	9.65E-03	363	1.06E-01	4.19	17.1	5.59	213	0.160	Extruded Aluminum Corporation Pennex Aluminum	Belding Leetonia	5919 5407-H
x2.3	50.8	2.29	0.944	9.26E-03	348	1.03E-01	4.04	17.2	5.38	205	0.160	Taber	Russelville	OH-03959
x2.2	50.8	2.24	0.924	9.06E-03	341	1.01E-01	3.96	17.2	5.27	201	0.160	International Extrusions Extruded Aluminum Corporation	Garden City Belding	KE5706 20511
x2.1	50.8	2.13	0.884	8.67E-03	326	9.66E-02	3.8	17.2	5.05	193	0.160	Tri City Extrusion	Bristol	1097
x2.0	50.8	2.03	0.843	8.27E-03	311	9.25E-02	3.64	17.2	4.83	185	0.160	Bonnell	C	A-1284
x2.0	50.8	1.96	0.813	7.97E-03	300	8.95E-02	3.52	17.3	4.66	179	0.160	Pennex Aluminum	Leetonia	5725-H
x1.8	50.8	1.78	0.742	7.28E-03	274	8.22E-02	3.24	17.3	4.27	164	0.160	Bonnell	M	AE3257
x1.7	50.8	1.70	0.711	6.97E-03	262	7.90E-02	3.11	17.4	4.10	158	0.160	Tri City Extrusion	Bristol	1084
x1.7	50.9	1.65	0.692	6.79E-03	255	7.75E-02	3.04	17.4	4.00	155	0.160	International Extrusions	Garden City	KE8828
x1.7	50.8	1.65	0.691	6.78E-03	255	7.69E-02	3.03	17.4	3.98	154	0.160	Bonnell Crown Extrusions Pennex Aluminum Western Extrusions Bonnell	M Chaska Leetonia Dallas N	AE0584 12059 5638-H H 19942 A-1270
x1.6	51.4	1.57	0.668	6.55E-03	270	9.14E-02	3.4	18.4	4.47	183	0.162	Bonnell	M	AE5946
x1.6	50.8	1.60	0.67	6.57E-03	247	7.48E-02	2.94	17.4	3.87	150	0.160	Tower Extrusion	Olney	616
x1.6	50.8	1.57	0.66	6.47E-03	243	7.37E-02	2.9	17.4	3.81	147	0.160	Tri City Extrusion	Bristol	2034
x1.3	50.8	1.27	0.535	5.25E-03	197	6.05E-02	2.38	17.5	3.11	121	0.160	Bonnell	N	AE1623
HSS 49														
x5.3	49.3	5.26	1.97	1.93E-02	726	1.78E-01	7.24	15.7	10.2	356	0.155	Crown Extrusions	Chaska	1366
x3.4	49.2	3.43	1.34	1.31E-02	493	1.30E-01	5.27	16.2	7.19	260	0.155	Extruded Aluminum Corporation	Belding	5850
x3.3	48.6	3.25	1.26	1.24E-02	463	1.20E-01	4.92	16.1	6.70	240	0.153	Tower Extrusion	Olney	20361
x2.2	49.2	2.16	0.864	8.47E-03	319	8.83E-02	3.59	16.6	4.77	177	0.155	International Extrusions	Garden City	KE5141
x1.5	49.0	1.52	0.616	6.04E-03	227	6.42E-02	2.62	16.8	3.44	128	0.154	Extruded Aluminum Corporation	Belding	19482
HSS 48														
x5.1	48.3	5.08	1.87	1.83E-02	688	1.62E-01	6.74	15.4	9.50	325	0.152	International Extrusions	Garden City	KE9526
x4.8	48.3	4.83	1.78	1.75E-02	658	1.57E-01	6.5	15.4	9.13	314	0.152	Pries Enterpries	Independance	7627
x4.8	47.6	4.78	1.74	1.71E-02	642	1.49E-01	6.26	15.2	8.79	298	0.150	Tower Extrusion	Olney	2396
x4.3	48.3	4.32	1.61	1.58E-02	595	1.45E-01	6.01	15.6	8.35	290	0.152	Tower Extrusion	Olney	172
x3.7	48.3	3.68	1.4	1.37E-02	515	1.29E-01	5.34	15.8	7.32	257	0.152	Extruded Aluminum Corporation International Extrusions Crown Extrusions	Belding Garden City Chaska	3260 KE8548 1295
x3.5	48.3	3.51	1.34	1.31E-02	492	1.24E-01	5.14	15.9	7.02	247	0.152	Pries Enterpries	Independance	7322
x3.4	48.0	3.40	1.29	1.27E-02	476	1.19E-01	4.96	15.8	6.77	238	0.151	Western Extrusions	Dallas	H 19573
x3.2	47.6	3.18	1.2	1.18E-02	443	1.10E-01	4.61	15.7	6.27	220	0.150	Gateway Extrusions	Woodbridge	CDT-89
x2.8	48.3	2.77	1.07	1.05E-02	395	1.03E-01	4.25	16.1	5.73	205	0.152	Tower Extrusion Tri City Extrusion	Olney Bristol	1740 1186
x2.2	48.3	2.16	0.847	8.31E-03	312	8.31E-02	3.44	16.3	4.58	166	0.152	Extruded Aluminum Corporation Pries Enterpries	Belding Independance	18730 5123
x1.5	48.3	1.52	0.606	5.94E-03	224	6.10E-02	2.53	16.5	3.32	122	0.152	International Extrusions	Garden City	KE3424
x1.5	48.0	1.52	0.603	5.91E-03	222	6.00E-02	2.5	16.4	3.29	120	0.151	Bonnell	CN	A-1387

TUBES RONDS



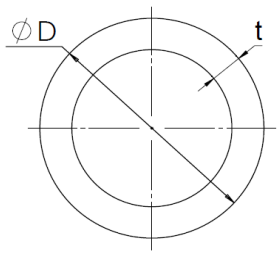
Identification de la section HSS D x t	Dimension extérieure (D)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 47														
x5.3	46.7	5.28	1.86	1.82E-02	687	1.50E-01	6.41	14.8	9.11	300	0.147	Tower Extrusion	Olney	12049
x3.2	47.5	3.18	1.2	1.18E-02	442	1.09E-01	4.59	15.7	6.24	218	0.149	Bonnell	M	AE1624
x3.0	46.6	3.05	1.13	1.11E-02	416	9.89E-02	4.25	15.4	5.77	198	0.146	Tower Extrusion	Olney	9572
x2.0	46.8	2.03	0.774	7.59E-03	286	7.17E-02	3.06	15.8	4.07	143	0.147	Extruded Aluminum Corporation	Belding	20020
HSS 46														
x10	46.0	10.0	3.06	3.00E-02	1130	1.97E-01	8.55	13.2	13.3	393	0.144	Extruded Aluminum Corporation	Belding	19729
x4.9	46.2	4.93	1.73	1.70E-02	637	1.38E-01	5.96	14.7	8.41	275	0.145	Western Extrusions	Dallas	H 19264
x4.0	45.6	3.96	1.4	1.37E-02	518	1.13E-01	4.96	14.8	6.88	226	0.143	Tower Extrusion	Olney	7515
x3.9	45.9	3.91	1.4	1.37E-02	516	1.15E-01	4.99	14.9	6.91	229	0.144	Bonnell	M	AE5623
x3.6	45.7	3.56	1.28	1.26E-02	471	1.05E-01	4.6	15.0	6.33	210	0.144	International Extrusions	Garden City	KE8636
HSS 45														
x5.7	45.3	5.66	1.91	1.87E-02	705	1.41E-01	6.23	14.2	8.95	282	0.142	Bonnell	M	AE4860
HSS 44														
x13	44.5	13.5	3.55	3.48E-02	1311	1.87E-01	8.4	11.9	13.7	373	0.140	Tri City Extrusion	Bristol	1088
x8.0	44.5	7.95	2.47	2.42E-02	911	1.59E-01	7.14	13.2	10.7	317	0.140	Tri City Extrusion	Bristol	1198
x6.4	44.5	6.35	2.06	2.02E-02	759	1.41E-01	6.37	13.6	9.29	283	0.140	Tower Extrusion	Olney	8379
x4.9	43.7	4.90	1.62	1.59E-02	597	1.14E-01	5.21	13.8	7.40	228	0.137	International Extrusions	Garden City	KE9052
x3.2	44.5	3.18	1.12	1.10E-02	411	8.80E-02	3.96	14.6	5.41	176	0.140	Service Center Metals	Prince George	HT1357
x2.5	44.5	2.54	0.906	8.88E-03	334	7.35E-02	3.31	14.8	4.46	147	0.140	Bonnell	M	AE4047
x2.4	44.5	2.36	0.846	8.30E-03	312	6.92E-02	3.12	14.9	4.18	138	0.140	Pries Enterprises	Independance	582
x2.1	44.5	2.13	0.768	7.53E-03	283	6.35E-02	2.86	15.0	3.82	127	0.140	Tri City Extrusion	Bristol	1151
x2.1	44.5	2.11	0.76	7.45E-03	280	6.29E-02	2.83	15.0	3.78	126	0.140	Pennex Aluminum	Leetonia	5406-H
x2.0	44.5	2.03	0.734	7.20E-03	271	6.09E-02	2.74	15.0	3.65	122	0.140	Tower Extrusion	Olney	807
x1.7	44.5	1.70	0.619	6.07E-03	228	5.22E-02	2.35	15.1	3.11	104	0.140	Tri City Extrusion	Bristol	1120
x1.5	44.5	1.52	0.557	5.46E-03	205	4.73E-02	2.13	15.2	2.80	95	0.140	Bonnell	N	A-1015
HSS 43														
x5.9	42.9	5.92	1.86	1.82E-02	687	1.21E-01	5.62	13.2	8.16	241	0.135	Tower Extrusion	Olney	11714
x1.7	43.2	1.65	0.584	5.73E-03	215	4.64E-02	2.15	14.7	2.84	92.82	0.136	Bonnell	M	AE4909
HSS 42														
x4.9	42.2	4.85	1.54	1.51E-02	568	1.00E-01	4.76	13.3	6.78	201	0.132	Extruded Aluminum Corporation	Belding	5844
x3.6	42.2	3.56	1.17	1.15E-02	431	8.09E-02	3.84	13.7	5.31	162	0.132	International Extrusions Gateway Extrusions	Garden City Woodbridge	KE3982 CES143
x3.4	42.2	3.36	1.17	1.15E-02	431	8.09E-02	3.84	13.7	5.31	162	0.132	Crown Extrusions	Chaska	1294
x3.4	42.2	3.35	1.11	1.09E-02	408	7.74E-02	3.67	13.8	5.05	155	0.132	Bonnell	M	AE5860
x3.3	42.0	3.33	1.09	1.07E-02	404	7.59E-02	3.62	13.7	4.98	152	0.132	Extruded Aluminum Corporation	Belding	3612
x2.3	42.2	2.29	0.776	7.61E-03	286	6.00E-02	2.7	14.1	3.63	114	0.132	Tower Extrusion	Olney	13296
HSS 41														
x6.4	41.3	6.35	1.89	1.85E-02	696	1.10E-01	5.31	12.5	7.82	219	0.130	Pennex Aluminum	Leetonia	5384-H
x3.3	41.3	3.30	1.07	1.05E-02	394	7.14E-02	3.46	13.5	4.77	143	0.130	Tower Extrusion	Olney	20362
x3.2	41.3	3.18	1.03	1.01E-02	380	6.93E-02	3.36	13.5	4.61	139	0.130	Tower Extrusion Extruded Aluminum Corporation Tower Extrusion	Olney Belding Olney	7544 1243 11272
x1.9	41.3	1.91	0.638	6.26E-03	235	4.57E-02	2.21	13.9	2.95	91.3	0.130	Tower Extrusion	Olney	18385
HSS 40														
x2.3	40.1	2.29	0.736	7.22E-03	272	4.87E-02	2.43	13.4	3.27	97.5	0.126	Crown Extrusions	Chaska	12320
HSS 39														
x6.0	39.1	6.05	1.7	1.67E-02	628	8.87E-02	4.54	11.9	6.68	177	0.123	Tower Extrusion	Olney	8775
x5.1	39.2	5.08	1.47	1.44E-02	544	8.08E-02	4.12	12.2	5.95	162	0.123	Extruded Aluminum Corporation	Belding	20743
x1.6	38.9	1.57	0.5	4.90E-03	184	3.21E-02	1.65	13.2	2.19	64.2	0.122	Gateway Extrusions	Woodbridge	CES015

TUBES RONDS



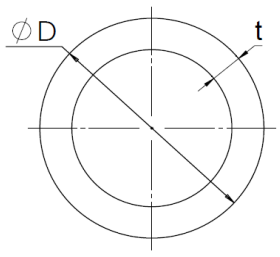
Identification de la section HSS D x t	Dimension extérieure (D)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 38														
x6.4	38.1	6.35	1.72	1.69E-02	633	8.28E-02	4.35	11.4	6.48	166	0.120	Service Center Metals Tower Extrusion Pennex Aluminum Western Extrusions	Prince George Olney Leetonia Dallas	HT1305 1659 5701-H H 19602
x4.8	38.1	4.78	1.35	1.32E-02	499	7.07E-02	3.71	11.9	5.33	141	0.120	Tower Extrusion Pennex Aluminum	Wylie-M Leetonia	2810 5167-H
x4.0	38.1	3.96	1.15	1.13E-02	425	6.26E-02	3.29	12.1	4.63	125	0.120	Tower Extrusion	Olney	5063
x3.8	38.1	3.81	1.11	1.09E-02	410	6.09E-02	3.2	12.2	4.49	122	0.120	Tower Extrusion	Olney	10994
x3.2	38.1	3.18	0.944	9.26E-03	348	5.34E-02	2.81	12.4	3.88	107	0.120	Bonnell Bonnell Extruded Aluminum Corporation Tower Extrusion Tower Extrusion Tower Extrusion International Extrusions Crown Extrusions Nanshan Pennex Aluminum Service Center Metals Western Extrusions Taber	CN M Belding Olney Wylie-M Wylie-M Garden City Chaska Lafayette Leetonia Prince George Dallas Russelville	A-1487 AE1880 20707 5833 126 8490 KE8463 1379 1637 5204-H HT1371 H 19782 OH-01033
x3.0	38.1	3.05	0.909	8.91E-03	335	5.18E-02	2.72	12.4	3.75	104	0.120	Tri City Extrusion Crown Extrusions	Bristol Chaska	2072 1680
x2.9	38.1	2.92	0.875	8.58E-03	322	5.02E-02	2.63	12.5	3.62	100	0.120	International Extrusions Bonnell	Garden City M	KE8885 AE0817
x2.9	38.1	2.87	0.861	8.44E-03	317	4.95E-02	2.6	12.5	3.56	99.0	0.120	International Extrusions	Garden City	KE10800
x2.8	38.1	2.79	0.84	8.24E-03	310	4.85E-02	2.55	12.5	3.48	97.0	0.120	Extruded Aluminum Corporation	Belding	5933
x2.8	37.8	2.84	0.847	8.31E-03	312	4.81E-02	2.54	12.4	3.49	96.2	0.119	Bonnell	M	AE3299
x2.3	38.1	2.29	0.697	6.84E-03	257	4.13E-02	2.17	12.7	2.93	82.6	0.120	Crown Extrusions	Chaska	12363
x2.1	38.1	2.11	0.646	6.34E-03	238	3.87E-02	2.03	12.7	2.73	77.3	0.120	Pennex Aluminum International Extrusions International Extrusions Extruded Aluminum Corporation Bonnell	Leetonia Garden City Garden City Belding M	5345-H KE10493 KE5705 20192 AE3275
x2.0	38.1	2.03	0.624	6.12E-03	230	3.75E-02	1.97	12.8	2.64	75.0	0.120	Tri City Extrusion Taber	Bristol Russelville	2116 OH-07558
x1.8	38.1	1.83	0.565	5.54E-03	208	3.43E-02	1.8	12.8	2.40	68.6	0.120	Bonnell	M	AE1862
x1.8	38.1	1.78	0.55	5.39E-03	203	3.35E-02	1.76	12.9	2.34	66.9	0.120	Crown Extrusions	Chaska	1389
x1.7	38.1	1.70	0.527	5.17E-03	194	3.22E-02	1.69	12.9	2.25	64.5	0.120	Tri City Extrusion	Bristol	1121
x1.7	38.1	1.65	0.512	5.02E-03	189	3.14E-02	1.65	12.9	2.19	62.8	0.120	Tower Extrusion International Extrusions Pennex Aluminum	Wylie-M Garden City Leetonia	937 KE5727 5271-H
x1.6	38.1	1.57	0.49	4.81E-03	181	3.01E-02	1.58	12.9	2.10	60.3	0.120	Tower Extrusion Gateway Extrusions Extruded Aluminum Corporation Bonnell	Olney Woodbridge Belding CN	5832 CES220 20193 A-1456
x1.3	38.3	1.35	0.423	4.15E-03	156	2.66E-02	1.39	13.1	1.84	53.3	0.120	Bonnell	M	AE5942
x1.3	38.1	1.27	0.398	3.90E-03	147	2.49E-02	1.31	13.0	1.72	49.8	0.120	International Extrusions	Garden City	KE6934
x1.2	38.1	1.24	0.39	3.82E-03	144	2.44E-02	1.28	13.0	1.69	48.9	0.120	Tri City Extrusion	Bristol	2258
HSS 37														
x3.2	37.5	3.18	0.927	9.09E-03	342	5.36E-02	2.7	12.2	3.74	101	0.118	Extruded Aluminum Corporation	Belding	20410
HSS 36														
x3.5	36.5	3.53	0.991	9.72E-03	365	5.02E-02	2.75	11.7	3.85	100	0.115	International Extrusions	Garden City	KE2862
x2.9	35.6	2.92	0.811	7.95E-03	299	4.01E-02	2.26	11.6	3.12	80.2	0.112	Tower Extrusion	Olney	10805
HSS 35														
x9.7	35.4	9.65	2.12	2.08E-02	781	7.39E-02	4.17	9.73	6.70	148	0.111	Tower Extrusion	Olney	386
x6.7	35.4	6.73	1.64	1.61E-02	606	6.58E-02	3.71	10.4	5.64	132	0.111	Crown Extrusions	Chaska	1604
x6.4	34.9	6.35	1.54	1.51E-02	569	6.09E-02	3.49	10.3	5.26	122	0.110	Service Center Metals	Prince George	HT1282
x4.8	34.9	4.83	1.24	1.22E-02	456	5.29E-02	3.03	10.8	4.40	106	0.110	Tri City Extrusion	Bristol	2044
x3.6	34.7	3.56	0.942	9.24E-03	347	4.25E-02	2.45	11.1	3.45	85.1	0.109	Crown Extrusions	Chaska	12528
x3.2	34.9	3.18	0.868	8.51E-03	316	4.02E-02	2.3	11.3	3.21	80.4	0.110	Pennex Aluminum	Leetonia	5380-H
x3.2	34.9	3.18	0.858	8.41E-03	316	4.02E-02	2.3	11.3	3.21	80.4	0.110	Service Center Metals	Prince George	HT1159
x1.6	34.9	1.57	0.447	4.38E-03	165	2.29E-02	1.31	11.8	1.75	45.9	0.110	Tower Extrusion	Olney	7352
x1.6	34.5	1.57	0.442	4.33E-03	163	2.22E-02	1.28	11.7	1.71	44.3	0.109	Crown Extrusions	Chaska	1312
x1.5	34.9	1.52	0.433	4.25E-03	160	2.23E-02	1.28	11.8	1.70	44.6	0.110	Taber Crown Extrusions	Russelville Chaska	OH-13437 12350
x1.3	34.9	1.27	0.364	3.57E-03	134	1.90E-02	1.09	11.9	1.44	38.0	0.110	Bonnell	N	A-1467
x1.2	34.9	1.24	0.357	3.50E-03	132	1.87E-02	1.07	11.9	1.41	37.3	0.110	Bonnell	M	AE0585
HSS 34														
x4.1	34.4	4.06	1.05	1.03E-02	387	4.53E-02	2.63	10.8	3.76	90.7	0.108	Tower Extrusion	Olney	20429
x4.1	34.3	4.06	1.05	1.03E-02	386	4.49E-02	2.62	10.8	3.74	89.8	0.108	Nanshan	Lafayette	1121
HSS 33														
x9.9	32.0	9.91	1.86	1.82E-02	687	5.03E-02	3.14	8.56	5.15	101	0.101	Bonnell	M	AE3990
x7.9	33.3	7.92	1.71	1.68E-02	632	5.58E-02	3.35	9.40	5.27	112	0.105	Tri City Extrusion	Bristol	1199
x3.9	33.4	3.86	0.971	9.52E-03	358	3.97E-02	2.38	10.5	3.38	79.3	0.105	Pennex Aluminum	Leetonia	5248-H
x3.4	33.4	3.38	0.863	8.46E-03	318	3.63E-02	2.17	10.7	3.05	72.6	0.105	Gateway Extrusions International Extrusions Extruded Aluminum Corporation	Woodbridge Garden City Belding	CES142 KE4236 5909
x3.3	33.4	3.30	0.846	8.30E-03	312	3.57E-02	2.14	10.7	3.00	71.4	0.105	Bonnell	M	AE5785
x1.6	33.3	1.57	0.426	4.18E-03	157	1.98E-02	1.19	11.2	1.59	39.6	0.105	Gateway Extrusions	Woodbridge	CES014

TUBES RONDS



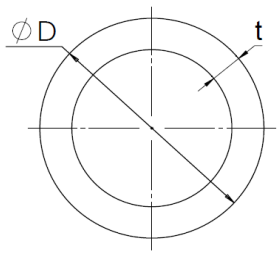
Identification de la section HSS D x t	Dimension extérieure (D)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 32														
x6.4	31.8	6.35	1.37	1.34E-02	506	4.33E-02	2.73	9.25	4.18	86.7	0.100	Service Center Metals	Prince George	HT1355
x4.8	31.8	4.78	1.1	1.08E-02	404	3.79E-02	2.39	9.68	3.51	75.8	0.100	Pennex Aluminum Nanshan	Leetonia Lafayette	9352-H 1575
x4.6	31.8	4.57	1.06	1.04E-02	390	3.70E-02	2.33	9.74	3.40	74.0	0.100	Extruded Aluminum Corporation	Belding	19636
x3.3	31.8	3.25	0.789	7.74E-03	291	2.99E-02	1.88	10.14	2.65	59.7	0.100	Extruded Aluminum Corporation	Belding	17198
x3.2	31.8	3.18	0.772	7.57E-03	285	2.94E-02	1.85	10.16	2.60	58.8	0.100	Taber Nanshan Gateway Extrusions Extruded Aluminum Corporation Crown Extrusions Pennex Aluminum Western Extrusions Bonnell	Russelville Lafayette Woodbridge Belding Chaska Leetonia Dallas M	OH-10064 1391 CES188 20298 1883 5355-H H 19851 AE5082
x3.0	31.8	3.05	0.745	7.31E-03	275	2.86E-02	1.8	10.20	2.52	57.1	0.100	Tri City Extrusion Tower Extrusion	Bristol Olney	2142 8929
x2.9	31.8	2.92	0.717	7.03E-03	264	2.77E-02	1.75	10.24	2.43	55.4	0.100	International Extrusions	Garden City	KE8883
x2.8	31.8	2.77	0.683	6.70E-03	252	2.67E-02	1.68	10.29	2.33	53.3	0.100	Tower Extrusion	Olney	4865
x2.4	31.8	2.39	0.597	5.85E-03	220	2.38E-02	1.5	10.41	2.06	47.7	0.100	Extruded Aluminum Corporation	Belding	5698
x2.4	31.8	2.36	0.591	5.80E-03	218	2.36E-02	1.49	10.42	2.04	47.3	0.100	Bonnell Crown Extrusions	N Chaska	A-1019 12255
x2.3	31.8	2.29	0.573	5.62E-03	211	2.31E-02	1.45	10.44	1.99	46.1	0.100	International Extrusions	Garden City	KE8565
x2.2	31.8	2.16	0.544	5.33E-03	201	2.20E-02	1.39	10.48	1.89	44.1	0.100	Pennex Aluminum	Leetonia	5679-H
x2.1	31.8	2.11	0.532	5.22E-03	196	2.16E-02	1.36	10.50	1.85	43.3	0.100	Bonnell Extruded Aluminum Corporation	M Belding	AE4932 5882
x2.0	31.8	2.03	0.514	5.04E-03	190	2.10E-02	1.32	10.53	1.79	42.0	0.100	Taber	Russelville	OH-08292
x1.8	31.8	1.75	0.447	4.38E-03	165	1.86E-02	0.117	10.62	1.58	37.2	0.100	Bonnell	M	AE3498
x1.7	31.8	1.65	0.423	4.15E-03	156	1.77E-02	1.11	10.65	1.49	35.4	0.100	Pennex Aluminum Tower Extrusion Bonnell	Leetonia Wylie-M CN	9803-H 1207 A-1458
x1.6	31.8	1.60	0.411	4.03E-03	151	1.72E-02	1.09	10.67	1.45	34.5	0.100	Pennex Aluminum Gateway Extrusions Tri City Extrusion	Leetonia Woodbridge Bristol	8875-H CES158 2060
x1.6	31.8	1.57	0.404	3.96E-03	149	1.70E-02	1.07	10.68	1.43	34.0	0.100	Pries Enterprises Crown Extrusions	Independance Chaska	290 12254
x1.3	31.8	1.27	0.329	3.23E-03	121	1.41E-02	0.889	10.78	1.18	28.2	0.100	Tower Extrusion	Wylie-M	3571
x1.3	31.8	1.27	0.329	3.23E-03	121	1.41E-02	0.889	10.78	1.18	28.2	0.100	International Extrusions	Garden City	KE10833
x1.2	32.0	1.19	0.313	3.07E-03	115	1.37E-02	0.856	10.90	1.13	27.4	0.101	Bonnell	M	AE5152
x1.2	31.8	1.24	0.323	3.17E-03	119	1.39E-02	0.874	10.79	1.16	27.7	0.100	Bonnell	CN	A-1016
HSS 31														
x3.8	31.1	3.81	0.885	8.68E-03	326	3.10E-02	1.99	9.74	2.85	62.0	0.098	Tower Extrusion	Olney	15441
x2.9	31.1	2.87	0.69	6.77E-03	254	2.56E-02	1.65	10.03	2.29	51.2	0.098	Tower Extrusion	Olney	9668
HSS 30														
x4.9	30.1	4.93	1.06	1.04E-02	390	3.22E-02	2.13	9.08	3.17	64.3	0.095	International Extrusions	Garden City	KE6580
x4.2	30.5	4.24	0.947	9.29E-03	349	3.08E-02	2.02	9.39	2.94	61.6	0.096	Tower Extrusion	Olney	7491
x2.4	30.5	2.41	0.576	5.65E-03	213	2.11E-02	1.38	9.95	1.90	42.1	0.096	Tower Extrusion	Wylie-M	4901
x1.6	29.9	1.57	0.38	3.73E-03	140	1.41E-02	0.944	10.04	1.27	28.3	0.094	Gateway Extrusions	Woodbridge	CES013
x1.5	29.6	1.52	0.364	3.57E-03	134	1.32E-02	0.895	9.93	1.20	26.5	0.093	Crown Extrusions	Chaska	1597
HSS 29														
x6.6	28.6	6.58	1.23	1.21E-02	454	2.89E-02	2.09	8.11	3.27	59.8	0.090	Bonnell	M	AE0272
x5.6	28.6	5.64	1.1	1.08E-02	406	2.83E-02	1.98	8.35	3.02	56.5	0.090	Bonnell	N	A-1010
x3.2	28.6	3.18	0.686	6.73E-03	253	2.07E-02	1.45	9.05	2.06	41.4	0.090	Extruded Aluminum Corporation Western Extrusions	Belding Dallas	5921 H 19176
x2.4	28.6	2.39	0.532	5.22E-03	196	1.69E-02	1.19	9.29	1.64	33.9	0.090	Extruded Aluminum Corporation	Belding	20795
x2.1	28.6	2.11	0.475	4.66E-03	175	1.54E-02	1.08	9.38	1.48	30.8	0.090	International Extrusions	Garden City	KE5372
x1.4	29.2	1.40	0.331	3.25E-03	122	1.18E-02	0.809	9.84	1.08	23.6	0.092	Tower Extrusion	Olney	2504
HSS 27														
x6.4	27.0	6.38	1.12	1.10E-02	413	2.40E-02	1.78	7.63	2.79	48.0	0.085	Bonnell	M	AE3999
x5.0	27.0	4.98	0.932	9.14E-03	344	2.18E-02	1.62	7.97	2.45	43.7	0.085	International Extrusions	Garden City	KE6927
x3.1	26.7	3.12	0.626	6.14E-03	231	1.63E-02	1.22	8.39	1.74	32.5	0.084	Bonnell	M	AE5783
x2.9	26.7	2.87	0.581	5.70E-03	214	1.54E-02	1.15	8.47	1.63	30.8	0.084	International Extrusions Extruded Aluminum Corporation	Garden City Belding	KE8838 1197
x2.7	26.7	2.72	0.554	5.43E-03	204	1.48E-02	1.11	8.52	1.56	29.6	0.084	Bonnell	M	AE5905
x2.5	26.7	2.46	0.508	4.98E-03	187	1.38E-02	1.04	8.60	1.45	27.7	0.084	Tri City Extrusion	Bristol	2006
HSS 26														
x7.2	25.5	7.19	1.12	1.10E-02	414	2.00E-02	1.57	6.96	2.54	40.1	0.080	International Extrusions	Garden City	KE7700
x3.3	25.8	3.30	0.632	6.20E-03	233	1.50E-02	1.16	8.03	1.68	30.0	0.081	Tri City Extrusion	Bristol	1029R

TUBES RONDS



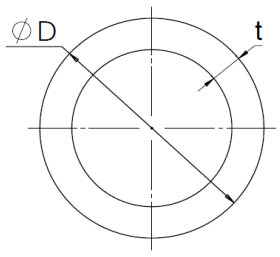
Identification de la section HSS D x t	Dimension extérieure (D)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 25														
x9.4	25.4	9.40	1.28	1.26E-02	472	2.03E-02	1.6	6.56	2.68	40.6	0.080	Bonnell	M	AE4657
x8.6	25.4	8.61	1.23	1.21E-02	454	2.02E-02	1.59	6.67	2.64	40.3	0.080	Gateway Extrusions	Woodbridge	CES219
x6.4	25.4	6.35	1.03	1.01E-02	380	1.91E-02	1.51	7.10	2.39	38.2	0.080	Service Center Metals International Extrusions Pennex Aluminum Taber	Prince George Garden City Leetonia Russelville	HT1281 KE6455 5702-H OH-10058
x6.0	25.4	5.97	0.987	9.68E-03	364	1.88E-02	1.48	7.18	2.32	37.6	0.080	Tri City Extrusion	Bristol	1196
x4.8	25.4	4.78	0.838	8.22E-03	309	1.73E-02	1.36	7.48	2.06	34.6	0.080	Pennex Aluminum	Leetonia	5609-H
x4.7	25.4	4.75	0.835	8.19E-03	308	1.73E-02	1.36	7.49	2.06	34.5	0.080	Tower Extrusion Tower Extrusion	Olney Olney	7493 10701
x3.2	25.4	3.18	0.601	5.89E-03	221	1.39E-02	1.1	7.93	1.58	27.9	0.080	Bonnell Pennex Aluminum Crown Extrusions International Extrusions Extruded Aluminum Corporation Tower Extrusion Tower Extrusion Tower Extrusion Tri City Extrusion Bonnell Service Center Metals Western Extrusions Taber	M Leetonia Chaska Garden City Belding Olney Wylie-M Wylie-M Bristol CN Prince George Dallas Russelville	AE1502 5265-H 1833 KE1457 5842 11621 121 9430 1029I A-1484 HT1280 H 19765 OH-07700
x3.0	25.4	3.05	0.58	5.69E-03	214	1.36E-02	1.07	7.97	1.53	27.2	0.080	Pries Enterpries Gateway Extrusions	Independance Woodbridge	2060 CES156
x2.9	25.4	2.92	0.559	5.48E-03	206	1.32E-02	1.04	8.01	1.48	26.4	0.080	International Extrusions	Garden City	KE8884
x2.5	25.4	2.54	0.494	4.84E-03	182	1.20E-02	0.948	8.13	1.33	24.1	0.080	International Extrusions	Garden City	KE0354
x2.4	25.4	2.36	0.463	4.54E-03	171	1.14E-02	0.901	8.18	1.26	22.9	0.080	Extruded Aluminum Corporation	Belding	5776
x2.3	25.4	2.29	0.45	4.41E-03	166	1.12E-02	0.88	8.21	1.22	22.3	0.080	Pennex Aluminum	Leetonia	5456-H
x2.2	25.4	2.16	0.427	4.19E-03	157	1.07E-02	0.844	8.25	1.17	21.4	0.080	Bonnell	CN	A-1265
x2.1	25.4	2.11	0.418	4.10E-03	154	1.05E-02	0.829	8.26	1.15	21.0	0.080	Pennex Aluminum	Leetonia	5256-H
x2.0	25.4	2.03	0.404	3.96E-03	149	1.02E-02	0.806	8.29	1.11	20.5	0.080	Tri City Extrusion International Extrusions Taber	Bristol Garden City Russelville	2108 KE9687 OH-01173
x1.9	25.4	1.91	0.381	3.74E-03	140	9.75E-03	0.768	9.33	1.05	19.5	0.080	Crown Extrusions	Chaska	1257
x1.9	25.4	1.85	0.372	3.65E-03	137	9.54E-03	0.752	8.35	1.03	19.1	0.080	Bonnell	M	AE3851
x1.8	25.4	1.83	0.367	3.60E-03	135	9.44E-03	0.744	8.35	1.02	18.9	0.080	Gateway Extrusions	Woodbridge	US146
x1.8	25.4	1.78	0.357	3.50E-03	132	9.24E-03	0.727	8.37	0.992	18.5	0.080	Bonnell	M	AE1853
x1.7	25.4	1.65	0.334	3.28E-03	123	8.71E-03	0.686	8.41	0.931	17.4	0.080	Bonnell Extruded Aluminum Corporation Crown Extrusions Pennex Aluminum Pries Enterpries	CN Belding Chaska Leetonia Independance	A-1464 5857 12428 5211-H 1445
x1.7	25.3	1.65	0.332	3.26E-03	122	8.57E-03	0.678	8.37	0.921	17.1	0.079	Tower Extrusion	Olney	9669
x1.6	25.4	1.60	0.324	3.18E-03	120	8.49E-03	0.669	8.43	0.906	17.0	0.080	Tri City Extrusion	Bristol	1095
x1.6	25.4	1.57	0.319	3.13E-03	118	8.38E-03	0.66	8.44	0.894	16.8	0.080	Bonnell Tower Extrusion Tower Extrusion	N Olney Wylie-M	WLB-186 2280 1483
x1.5	25.4	1.52	0.31	3.04E-03	114	8.16E-03	0.643	8.45	0.869	16.3	0.080	Pennex Aluminum	Leetonia	9767-H
x1.5	25.4	1.52	0.31	3.04E-03	114	8.16E-03	0.643	8.45	0.869	16.3	0.080	Taber	Russelville	OH-01015
x1.5	25.4	1.47	0.3	2.94E-03	111	7.94E-03	0.625	8.47	0.843	15.9	0.080	Crown Extrusions	Chaska	1358
x1.4	25.4	1.45	0.295	2.89E-03	109	7.82E-03	0.616	8.48	0.830	15.7	0.080	Bonnell	M	AE3319
x1.4	25.4	1.40	0.285	2.79E-03	105	7.60E-03	0.598	8.50	0.805	15.2	0.080	International Extrusions	Garden City	KE12320
x1.3	25.4	1.27	0.261	2.56E-03	96.2	7.01E-03	0.552	8.54	0.739	14.0	0.080	Pennex Aluminum Extruded Aluminum Corporation Bonnell	Leetonia Belding CN	4209-H 5617 A-1463
x1.3	25.2	1.27	0.259	2.54E-03	95.4	6.84E-03	0.543	8.47	0.727	13.7	0.079	International Extrusions	Garden City	KE4828
HSS 24														
x5.6	24.0	5.61	0.879	8.62E-03	324	1.50E-02	1.25	6.79	1.95	29.9	0.075	Bonnell	M	AE4000
x2.7	23.9	2.67	0.481	4.72E-03	178	1.01E-02	0.849	7.55	1.20	20.3	0.075	Tri City Extrusion	Bristol	1179
x2.7	23.6	2.67	0.476	4.67E-03	175	9.77E-03	0.828	7.46	1.18	19.5	0.074	Bonnell	M	AE0722
x2.4	23.8	2.41	0.439	4.31E-03	162	9.37E-03	0.787	7.61	1.11	18.7	0.075	Tri City Extrusion	Bristol	1119
x2.1	23.8	2.11	0.39	3.82E-03	144	8.54E-03	0.717	7.71	0.996	17.1	0.075	International Extrusions	Garden City	KE12310
x2.0	23.8	2.03	0.377	3.70E-03	139	8.31E-03	0.698	7.73	0.966	16.6	0.075	Gateway Extrusions	Woodbridge	US193
x1.7	23.8	1.65	0.311	3.05E-03	115	7.07E-03	0.594	7.85	0.810	14.1	0.075	Extruded Aluminum Corporation	Belding	18082
HSS 23														
x3.6	23.2	3.61	0.602	5.90E-03	222	1.10E-02	0.949	7.05	1.40	22.0	0.073	Bonnell	M	AE5969
x4.9	22.9	4.90	0.749	7.35E-03	276	1.20E-02	1.05	6.58	1.62	23.9	0.072	International Extrusions	Garden City	KE7662

TUBES RONDS



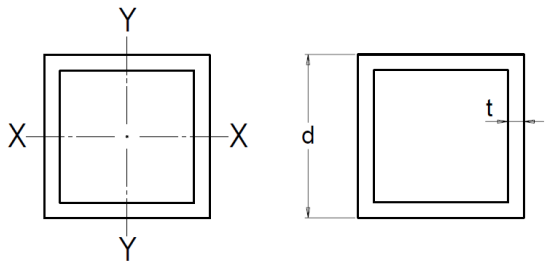
Identification de la section HSS D x t	Dimension extérieure (D)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 22														
x9.1	22.2	9.14	1.02	1.00E-02	375	1.19E-02	1.07	5.64	1.82	23.9	0.070	Bonnell	M	AE0982
x3.6	22.1	3.63	0.571	5.60E-03	210	9.31E-03	0.843	6.65	1.25	18.6	0.069	International Extrusions	Garden City	KE6796
x3.4	22.2	3.40	0.545	5.34E-03	201	9.18E-03	0.827	6.76	1.22	18.4	0.070	Gateway Extrusions	Woodbridge	CES150
x3.2	22.2	3.18	0.515	5.05E-03	190	8.84E-03	0.796	6.82	1.16	17.7	0.070	Western Extrusions International Extrusions Tri City Extrusion Bonnell	Dallas Garden City Bristol M	H 19708 KE8460 1009 AE1948
x2.5	21.6	2.54	0.412	4.04E-03	152	7.00E-03	0.649	6.79	0.926	14.0	0.068	Western Extrusions	Dallas	H 19452
x2.4	22.2	2.41	0.407	3.99E-03	150	7.46E-03	0.672	7.05	0.950	14.9	0.070	Western Extrusions	Dallas	H 19463
x2.1	22.2	2.11	0.361	3.54E-03	133	6.80E-03	0.612	7.15	0.855	13.6	0.070	Bonnell Crown Extrusions	M Chaska	AE3047 13044
x2.0	22.2	2.03	0.349	3.42E-03	129	6.62E-03	0.596	7.17	0.830	13.2	0.070	Gateway Extrusions	Woodbridge	CES149
x1.8	22.2	1.78	0.309	3.03E-03	114	6.00E-03	0.54	7.25	0.744	12.0	0.070	Bonnell	M	AE2298
x1.7	22.2	1.65	0.289	2.83E-03	107	5.67E-03	0.51	7.29	0.699	11.3	0.070	Bonnell Pries Enterpries Pries Enterpries	CN Independance Independance	A-1352 2092 5808
x1.7	22.1	1.65	0.287	2.81E-03	106	5.57E-03	0.504	7.25	0.691	11.1	0.069	Tower Extrusion	Olney	5787
x1.7	22.0	1.65	0.286	2.80E-03	105	5.48E-03	0.499	7.21	0.684	11.0	0.069	International Extrusions	Garden City	KE11733
x1.6	22.2	1.60	0.281	2.76E-03	104	5.53E-03	0.498	7.31	0.681	11.1	0.070	Western Extrusions	Dallas	H 19545
x1.6	22.2	1.57	0.277	2.72E-03	102	5.47E-03	0.492	7.32	0.672	10.9	0.070	Tower Extrusion	Olney	1310
x1.5	22.2	1.47	0.26	2.55E-03	95.9	5.19E-03	0.467	7.35	0.634	10.4	0.070	Extruded Aluminum Corporation	Belding	20135
x1.5	22.2	1.47	0.26	2.55E-03	95.8	5.17E-03	0.466	7.34	0.633	10.3	0.070	Bonnell	N	BON-400
x1.3	22.2	1.27	0.227	2.23E-03	83.5	4.60E-03	0.414	7.42	0.557	9.19	0.070	Crown Extrusions	Chaska	1364
x1.2	22.2	1.24	0.222	2.18E-03	81.9	4.52E-03	0.407	7.43	0.548	9.00	0.070	Bonnell	CN	A-1462
HSS 21														
x3.8	21.4	3.76	0.564	5.53E-03	208	8.44E-03	0.789	6.37	1.18	16.9	0.067	Tower Extrusion	Olney	11900
x4.7	20.6	4.75	0.642	6.30E-03	237	8.11E-03	0.787	5.86	1.23	16.2	0.065	Extruded Aluminum Corporation	Belding	20344
x4.0	21.3	3.96	0.586	5.75E-03	216	8.57E-03	0.803	6.30	1.21	17.1	0.067	Tri City Extrusion	Bristol	2283
x2.8	21.3	2.77	0.438	4.30E-03	161	7.10E-03	0.666	6.63	0.960	14.2	0.067	Extruded Aluminum Corporation	Belding	5754
x1.7	20.6	1.65	0.267	2.62E-03	98.3	4.45E-03	0.432	6.73	0.595	8.91	0.065	Extruded Aluminum Corporation	Belding	18081
HSS 20														
x3.6	20.2	3.61	0.51	5.00E-03	188	6.78E-03	0.671	6.01	1.01	13.6	0.064	Bonnell	M	AE5968
x2.4	19.6	2.41	0.352	3.45E-03	130	4.86E-03	0.497	6.12	0.713	9.72	0.061	Bonnell	M	AE0563
x1.0	20.0	0.99	0.16	1.57E-03	59	2.67E-03	0.267	6.72	0.357	5.34	0.063	Bonnell	M	AE5151
HSS 19														
x6.1	19.1	6.15	0.675	6.62E-03	249	6.35E-03	0.667	5.05	1.10	12.7	0.060	Gateway Extrusions	Woodbridge	CES218
x5.3	19.1	5.28	0.619	6.07E-03	228	6.20E-03	0.651	5.21	1.05	12.4	0.060	Tower Extrusion Tri City Extrusion	Olney Bristol	6355 1153
x4.8	19.1	4.78	0.58	5.69E-03	214	6.05E-03	0.636	5.32	1.01	12.1	0.060	Bonnell	N	A-1378
x4.5	19.1	4.46	0.563	5.52E-03	208	5.98E-03	0.628	5.37	0.989	12.0	0.060	Crown Extrusions	Chaska	1578
x4.4	19.1	4.45	0.553	5.42E-03	204	5.93E-03	0.623	5.39	0.976	11.9	0.060	Bonnell	M	AE0574
x3.8	19.1	3.81	0.494	4.84E-03	182	5.62E-03	0.59	5.55	0.902	11.2	0.060	Extruded Aluminum Corporation	Belding	20094
x3.2	19.1	3.18	0.429	4.21E-03	158	5.18E-03	0.544	5.72	0.810	10.4	0.060	Western Extrusions Crown Extrusions Pennex Aluminum Bonnell	Dallas Chaska Leetonia M	H 19719 12458 5752-H AE3397
x3.0	19.1	3.05	0.415	4.07E-03	153	5.07E-03	0.533	5.76	0.789	10.1	0.060	Tower Extrusion	Olney	12790
x2.9	19.1	2.92	0.401	3.93E-03	148	4.96E-03	0.521	5.79	0.767	9.92	0.060	International Extrusions Extruded Aluminum Corporation	Garden City Belding	KE7456 21008
x2.8	19.1	2.84	0.392	3.84E-03	145	4.89E-03	0.514	5.81	0.754	9.78	0.060	Bonnell	N	A-1281
x2.8	19.1	2.79	0.387	3.80E-03	143	4.84E-03	0.508	5.83	0.744	9.68	0.060	Extruded Aluminum Corporation	Belding	20117
x2.2	19.1	2.18	0.314	3.08E-03	114	4.14E-03	0.435	6.02	0.618	8.35	0.060	Bonnell	M	AE4315
x2.2	19.1	2.16	0.31	3.04E-03	114	4.14E-03	0.435	6.02	0.618	8.29	0.060	Extruded Aluminum Corporation Bonnell	Belding N	17352 A-1457
x2.1	19.1	2.11	0.304	2.98E-03	112	4.08E-03	0.428	6.03	0.607	8.16	0.060	Pennex Aluminum	Leetonia	5349-H
x1.9	19.1	1.91	0.278	2.73E-03	103	3.81E-03	0.4	6.10	0.561	7.62	0.060	Pennex Aluminum	Leetonia	5731-H
x1.7	19.1	1.65	0.245	2.40E-03	90.1	3.44E-03	0.361	6.18	0.501	6.88	0.060	Bonnell Bonnell Crown Extrusions Pennex Aluminum Western Extrusions	CN M Chaska Leetonia Dallas	A-1465 AE1492 1442 5232-H H 19577
x1.7	18.7	1.70	0.246	2.41E-03	90.8	3.31E-03	0.354	6.03	0.492	6.61	0.059	International Extrusions	Garden City	KE10272
x1.6	19.1	1.57	0.234	2.29E-03	86.4	3.32E-03	0.349	6.20	0.481	6.64	0.060	Pries Enterpries Tri City Extrusion Pries Enterpries	Independance Bristol Independance	1372 1103 5807
x1.6	19.1	1.57	0.22	2.16E-03	81.3	3.16E-03	0.332	6.23	0.455	6.31	0.060	Tower Extrusion	Olney	4154
x1.6	19.0	1.60	0.237	2.32E-03	87.2	3.16E-03	0.35	6.17	0.484	6.63	0.060	International Extrusions	Garden City	KE11031
x1.5	19.1	1.52	0.227	2.23E-03	83.8	3.24E-03	0.34	6.22	0.469	6.48	0.060	Tower Extrusion Tri City Extrusion	Wylie-M Bristol	196 2141
x1.4	19.1	1.40	0.21	2.06E-03	77.4	3.03E-03	0.318	6.26	0.436	6.06	0.060	Extruded Aluminum Corporation	Belding	5851
x1.3	19.1	1.27	0.192	1.88E-03	70.9	2.81E-03	0.295	6.30	0.402	5.62	0.060	International Extrusions International Extrusions Bonnell	Garden City Garden City CN	KE5308 KE11275 A-1461
x0.81	19.1	0.81	0.127	1.25E-03	46.6	1.95E-03	0.204	6.47	0.272	3.90	0.060	Bonnell	M	AE0586
HSS 18														
x4.6	18.2	4.62	0.536	5.26E-03	198	5.10E-03	0.559	5.08	0.888	10.20	0.057	Extruded Aluminum Corporation	Belding	21005
x1.9	18.2	1.91	0.264	2.59E-03	97.2	3.25E-03	0.358	5.78	0.505	6.50	0.057	Western Extrusions	Dallas	H 19561
HSS 17														
x4.6	17.1	4.62	0.493	4.83E-03	182	4.04E-03	0.472	4.72	0.757	8.04	0.054	Pries Enterpries	Independance	1671
x2.3	16.9	2.31	0.287	2.81E-03	106	2.88E-03	0.341	5.22	0.495	5.76	0.053	Bonnell	N	A-1429

TUBES RONDS



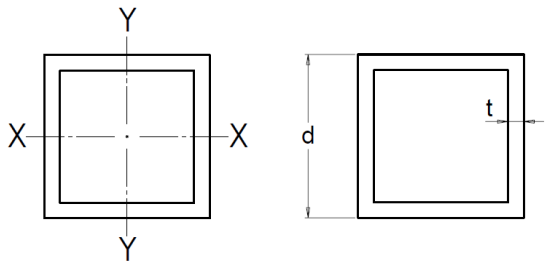
Identification de la section HSS D x t	Dimension extérieure (D)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 16														
x3.9	15.9	3.91	0.398	3.90E-03	147	2.91E-03	0.366	4.45	0.579	5.81	0.050	Extruded Aluminum Corporation	Belding	21007
x3.7	15.9	3.68	0.382	3.75E-03	141	2.85E-03	0.36	4.50	0.563	5.71	0.050	Crown Extrusions	Chaska	1262
x3.2	15.9	3.18	0.343	3.36E-03	127	2.71E-03	0.341	4.63	0.522	5.42	0.050	Tower Extrusion	Olney	7494
x2.5	15.9	2.54	0.288	2.82E-03	106	2.45E-03	0.308	4.80	0.456	4.89	0.050	Gateway Extrusions	Woodbridge	CES157
x2.1	15.9	2.11	0.247	2.42E-03	91.1	2.21E-03	0.278	4.92	0.402	4.41	0.050	Pennex Aluminum	Leetonia	5291-H
x1.7	15.9	1.65	0.2	1.96E-03	73.7	1.89E-03	0.238	5.06	0.335	3.77	0.050	Bonnell	CN	A-1466
x1.5	15.9	1.47	0.181	1.78E-03	66.6	1.74E-03	0.22	5.12	0.306	3.49	0.050	Tower Extrusion	Olney	4153
x1.0	15.9	1.02	0.128	1.26E-03	47.4	1.31E-03	0.165	5.26	0.224	2.62	0.050	Tower Extrusion	Olney	10477
HSS 14														
x2.7	14.3	2.74	0.27	2.65E-03	99.5	1.75E-03	0.245	4.20	0.373	3.51	0.045	Bonnell	M	AE5099
x2.2	13.7	2.24	0.218	2.14E-03	80.5	1.38E-03	0.201	4.13	0.298	2.75	0.043	Gateway Extrusions	Woodbridge	CES148
HSS 13														
x3.0	12.7	2.97	0.246	2.41E-03	90.7	1.17E-03	0.185	3.59	0.290	2.34	0.040	Tower Extrusion Pries Enterprises	Olney Independance	13482 3317
x2.4	12.7	2.44	0.213	2.09E-03	78.5	1.09E-03	0.172	3.73	0.261	2.18	0.040	Extruded Aluminum Corporation	Belding	21006
x1.7	12.7	1.65	0.155	1.52E-03	57.2	8.92E-04	0.141	3.95	0.203	1.78	0.040	Pries Enterprises	Independance	2726
HSS 11														
x2.1	11.1	2.11	0.162	1.59E-03	59.7	6.39E-04	0.115	3.27	0.174	1.28	0.035	Tri City Extrusion	Bristol	2225

TUBES CARRÉS, COINS CARRÉS



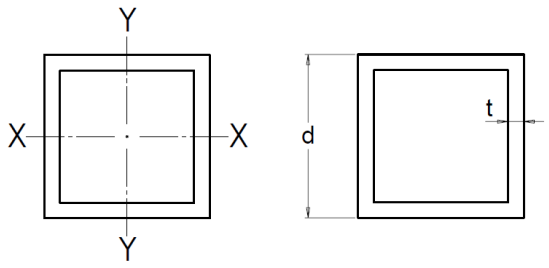
Identification de la section HSS d x t	Dimension extérieure (d)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴	m²			
HSS 254														
x13	254	12.7	33.2	3.26E-01	12258	119	939	98.6	1110	183380	1.02	Taber	Russelville	TM-13818
HSS 203														
x13	203	12.7	26.2	2.57E-01	9677	58.8	578.67	77.9	692	90892	0.813	Service Center Metals Nanshan	Prince George Lafayette	HSQ1638 1234
x9.5	203	9.52	20	1.96E-01	7379	46.2	455.15	79.2	536	70979	0.813	Nanshan	Lafayette	1242
x6.4	203	6.35	13.6	1.33E-01	5000	32.3	318.16	80.4	369	49272	0.813	Nanshan Service Center Metals	Lafayette Prince George	1228 HSQ1639
x4.8	203	4.78	10.3	1.01E-01	3790	24.9	244.90	81.0	282	37793	0.813	Taber Nanshan Service Center Metals	Russelville Lafayette Prince George	TM-11358 1534 HSQ1209
HSS 178														
x7.9	178	7.87	14.5	1.42E-01	5352	25.8	290.34	69.5	341	39575	0.711	Taber	Russelville	TM-11617
HSS 152														
x13	152	12.7	19.2	1.88E-01	7097	23.3	305.44	57.3	373	36316	0.610	Nanshan Service Center Metals	Lafayette Prince George	1435 HSQ0789
x9.5	152	9.52	14.8	1.45E-01	5444	18.6	244.13	58.5	292	28758	0.610	Nanshan Service Center Metals	Lafayette Prince George	1213 HSQ1637
x6.4	152	6.35	10.1	9.90E-02	3710	13.2	173.40	59.7	203	20236	0.610	Taber Nanshan Service Center Metals	Russelville Lafayette Prince George	OH-13986 1469 HSQ0788
x4.8	152	4.78	7.67	7.52E-02	2820	10.3	134.55	60.3	156	15627	0.610	Extrudex	Ohio	H-21586
x3.2	152	3.18	5.14	5.04E-02	1895	7.04	92.35	60.9	106	10674	0.610	Hydro Nanshan Western Extrusions Extrudex	Montreal Lafayette Dallas Ohio	AH-39038 1198 H 19281 H-19501
HSS 148														
x2.8	148	2.77	4.38	4.30E-02	1609	5.67	76.52	59.3	87.7	8583	0.592	Extrudex	Toronto	H-12287
HSS 127														
x9.5	127	9.52	12.1	1.19E-01	4476	10.4	163.19	48.1	198	16106	0.508	Nanshan Extrudex	Lafayette Toronto, Ohio	1579 H-20593
x6.4	127	6.35	8.31	8.15E-02	3065	7.46	117.41	49.3	139	11461	0.508	Taber Service Center Metals Extrudex	Russelville Prince George Ohio	OH-13552 HSQ1203 H-15003
x5.1	127	5.08	6.74	6.61E-02	2477	6.15	96.82	49.8	113	9409	0.508	Hydro	Montreal	AH-07124
x4.8	127	4.78	6.33	6.21E-02	2335	5.82	91.68	49.9	107	8899	0.508	Taber	Russelville	OH-12466
x3.2	127	3.18	4.26	4.18E-02	1573	4.02	63.33	50.6	73	6111	0.508	Service Center Metals	Prince George	HSQ1208
x3.1	127	3.05	4.23	4.15E-02	1511	3.87	60.98	50.6	70.3	5882	0.508	Hydro	Montreal	AH-07105
HSS 114														
x3.2	114	3.18	3.83	3.76E-02	1411	2.91	50.87	45.4	58.8	4424	0.457	Hydro Bonnell Extrudex	Montreal C Toronto	AH-07147 A-7043 H-7072
x2.5	114	2.54	3.09	3.03E-02	1136	2.37	41.38	45.6	47.6	3589	0.457	Extrudex	Toronto	H-7574
x2.4	114	2.36	2.87	2.81E-02	1058	2.21	38.66	45.7	44.4	3351	0.457	Bonnell	C	A-7047
HSS 111														
x2.8	111	2.77	3.25	3.19E-02	1197	2.33	42.07	44.1	48.5	3544	0.443	Extrudex	Toronto	H-13109
HSS 102														
x13	102	12.7	12.2	1.20E-01	4516	6.07	119.49	36.7	152	9640	0.406	Taber Service Center Metals Nanshan Western Extrusions Extrudex	Russelville Prince George Lafayette Dallas Ohio	OH-15500 HSQ0872 1578 H 19266 H-22210
x9.5	102	9.52	9.51	9.33E-02	3508	5.01	98.62	37.8	122	7852	0.406	Extrudex Nanshan Service Center Metals	Toronto, Ohio Lafayette Prince George	H-23024 1172 HSQ1065
x6.4	102	6.35	6.56	6.43E-02	2419	3.67	72.33	39.0	86.5	5681	0.406	Taber Service Center Metals Nanshan Pennex Aluminum Western Extrusions Metra Extrudex	Russelville Prince George Lafayette Leetonia Dallas Laval Toronto, Ohio	OH-13188 HSQ0328 1260 5246-H H 19361 998887 H-15202
x4.8	102	4.78	5.02	4.92E-02	1849	2.9	57.02	39.6	67.2	4447	0.406	Taber Pennex Aluminum Service Center Metals Western Extrusions Extrudex	Russelville Leetonia Prince George Dallas Québec	OH-14770 5245-H HSQ1104 H 19276 V-18063
x4.8	102	4.75	4.97	4.87E-02	1840	2.88	56.76	39.6	66.9	4426	0.406	Metra Hydro Extrudex Hydro	Laval Montreal Toronto, Ohio Montreal	94205 AH-07158 H-23960 MH-40245
x3.8	102	3.81	4.03	3.95E-02	1490	2.38	46.83	40.0	54.7	3636	0.406	Metra Extrudex	Laval Québec	94242 SA-05275
x3.2	102	3.18	3.39	3.32E-02	1250	2.02	39.77	40.2	46.2	3080	0.406	Hydro Service Center Metals Nanshan Crown Extrusions Pennex Aluminum Western Extrusions Bonnell Taber Extrudex Hydro	Montreal Prince George Lafayette Chaska Leetonia Dallas CN Russelville Toronto, Ohio Montreal	AH-7322 HSQ0327 1223 1992 5252-H H 19449 A-7044 OH-05066 H-20569 MH-38554
x2.4	102	2.41	2.58	2.53E-02	957	1.57	30.92	40.5	35.6	2385	0.406	Metra Hydro	Laval Montreal	996204 AH-07097
x2.4	102	2.36	2.54	2.49E-02	938	1.54	30.31	40.5	34.9	2338	0.406	Bonnell	C	A-7046
x2.3	102	2.29	2.47	2.42E-02	908	1.49	29.40	40.6	33.8	2267	0.406	Extrudex Extrudex	Toronto Québec	H-3203 V-15472

TUBES CARRÉS, COINS CARRÉS



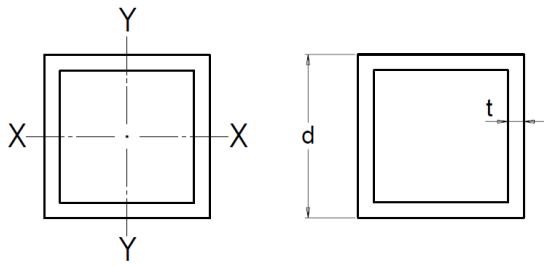
Identification de la section HSS d x t	Dimension extérieure (d)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴	m²			
HSS 92														
x6.4	92.1	6.35	5.97	5.85E-02	2177	2.68	58.25	35.1	70.1	4158	0.368	Hydro	Montreal	MH-54929
HSS 89														
x6.4	88.9	6.35	5.69	5.58E-02	2097	2.4	53.89	33.8	65	3719	0.356	Service Center Metals Nanshan	Prince George Lafayette	HSQ1368 1577
x3.2	88.9	3.18	2.94	2.88E-02	1089	1.34	30.04	35.0	35	2039	0.356	Metra	Laval	95933
HSS 76														
x13	76.2	12.7	8.75	8.58E-02	3226	2.25	59.18	26.4	77.8	3639	0.305	Nanshan	Lafayette	1576
x9.5	76.2	9.52	6.89	6.76E-02	2540	1.92	50.41	27.5	63.9	3050	0.305	Service Center Metals Nanshan Extrudex	Prince George Lafayette Québec	HSQ1003 1258 SA-05274
x6.4	76.2	6.35	4.81	4.72E-02	1774	1.45	38.18	28.6	46.6	2270	0.305	Hydro Service Center Metals Pennex Aluminum Crown Extrusions Nanshan Western Extrusions Taber Bonnell Extrudex Hydro Extrudex	Montreal Prince George Leetonia Chaska Lafayette Dallas Russelville C Toronto, Ohio Montreal Québec	AH-07211 HSQ0408 5334-H 12109 1131 H 19303 OH-08890 A-7027 H-6856 MH-39952 SA-05278
x5.6	76.2	5.56	4.26	4.18E-02	1572	1.32	34.52	28.9	41.7	2043	0.305	Bonnell	CN	A-7036
x4.8	76.2	4.78	3.7	3.63E-02	1364	1.17	30.58	29.2	36.6	1802	0.305	Hydro Service Center Metals Pennex Aluminum Taber Extrudex Hydro	Montreal Prince George Leetonia Russelville Toronto, Ohio Montreal	AH-07210 HSQ1165 5333-H OH-06022 H-24939 MH-16355
x4.8	76.2	4.75	3.68	3.61E-02	1358	1.16	30.45	29.2	36.4	1793	0.305	Bonnell Extrudex	N Québec	A-1414 V-14322
x4.0	76.2	3.96	3.11	3.05E-02	1145	0.999	26.21	29.5	31	1537	0.305	Service Center Metals	Prince George	HSQ1103
x3.2	76.2	3.18	2.52	2.47E-02	927	8.26	21.68	29.8	25.4	1265	0.305	Taber Pennex Aluminum Crown Extrusions Nanshan Service Center Metals Western Extrusions Bonnell Extrudex	Russelville Leetonia Chaska Lafayette Prince George Dallas CN Toronto, Ohio	OH-01180 5329-H 1354 1224 HSQ0326 H 19280 A-7033 H-5200
x3.1	76.2	3.05	2.41	2.36E-02	892	0.797	20.91	29.9	24.5	1219	0.305	Metra Hydro Extrudex	Laval Montreal Québec	94192 MH-15194 SA-05273
x2.4	76.2	2.39	1.91	1.87E-02	705	0.641	16.82	30.2	19.5	977	0.305	Hydro	Montreal	MH-10699
x2.3	76.2	2.29	1.83	1.79E-02	676	0.616	16.17	30.2	18.7	938	0.305	Pennex Aluminum	Leetonia	5581-H
x2.0	76.2	1.98	1.6	1.57E-02	588	0.54	14.18	30.3	16.4	822	0.305	Bonnell	CN	A-1496
HSS 67														
x3.2	66.675	3.18	2.19	2.15E-02	808	0.544	16.32	25.9	19.2	834	0.267	Extrudex	St-Nicolas	H-9847
HSS 64														
x6.4	63.5	6.35	3.94	3.86E-02	1452	0.8	25.20	23.5	31.2	1257	0.254	Extrudex Service Center Metals Nanshan Pennex Aluminum Bonnell	St-Nicolas Prince George Lafayette Leetonia C	H-24875 HSQ1114 1130 5773-H A-1920
x4.8	63.5	4.78	3.04	2.98E-02	1122	0.649	20.44	24.1	24.8	1009	0.254	Extrudex Bonnell Nanshan Pennex Aluminum	St-Nicolas C Lafayette Leetonia	H-27087 A-7059 1129 5268-H
x3.2	63.5	3.18	2.08	2.04E-02	766	0.466	14.68	24.7	17.3	716	0.254	Extrudex Bonnell Crown Extrusions Nanshan Pennex Aluminum Service Center Metals	St-Nicolas CN Chaska Lafayette Leetonia Prince George	H-7218 A-7015 1353 1237 4720-H HSQ0444
x1.9	63.5	1.9	1.23	1.21E-02	468	0.296	9.32	25.1	10.8	453	0.254	Extrudex	St-Nicolas	H-20640
HSS 61														
x6.4	61.2	6.35	3.78	3.71E-02	1393	0.708	23.13	22.5	28.8	1114	0.245	Extruded Aluminum Corporation	Belding	19506
HSS 57														
x4.8	57.2	4.78	2.71	2.66E-02	1000	0.461	16.14	21.5	19.7	720	0.229	Pennex Aluminum	Leetonia	5666-H
x3.1	57.2	3.05	1.79	1.76E-02	660	0.323	11.30	22.1	13.4	497	0.229	Pennex Aluminum	Leetonia	5247-H
HSS 55														
x1.6	55.372	1.57	0.922	9.04E-03	338	0.163	5.89	22.0	6.84	249	0.221	Extrudex	St-Nicolas	H-8730
HSS 54														
x3.2	54.0	3.18	1.75	1.72E-02	646	0.279	10.32	20.8	12.3	430	0.216	Pennex Aluminum	Leetonia	13784-H

TUBES CARRÉS, COINS CARRÉS



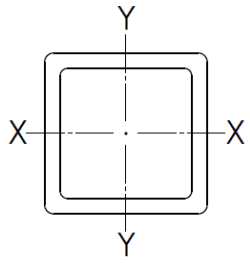
Identification de la section HSS d x t	Dimension extérieure (d)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 51														
x6.4	50.8	6.35	3.06	3.00E-02	1129	0.379	14.94	18.3	18.9	603	0.203	Bonnell Pennex Aluminum Crown Extrusions Nanshan Service Center Metals Western Extrusions Taber Extrudex	C Leetonia Chaska Lafayette Prince George Dallas Russelville St-Nicolas	A-7028 5565-H 12475 1109 HSQ0422 H 19326 OH-13262 H-17072
x4.8	50.8	4.78	2.38	2.33E-02	879	0.314	12.35	18.9	15.2	492	0.203	Taber Nanshan Pennex Aluminum Service Center Metals Extrudex	Russelville Lafayette Leetonia Prince George St-Nicolas	OH-15046 1366 5359-H HSQ0622 H-18426
x3.2	50.8	3.18	1.64	1.61E-02	605	0.23	9.04	19.5	10.8	355	0.203	Bonnell Pennex Aluminum Extruded Aluminum Corporation Crown Extrusions Nanshan Service Center Metals Western Extrusions Taber Extrudex	CN Leetonia Belding Chaska Lafayette Prince George Dallas Russelville St-Nicolas	A-7024 5152-H 5878 1352 1222 HSQ0325 H 19598 OH-01453 H-22327
x3.2	50.5	3.18	1.63	1.60E-02	602	0.226	8.94	19.4	10.7	350	0.202	Pries Enterpries	Independance	812
x3.1	50.8	3.05	1.58	1.55E-02	583	0.222	8.74	19.5	10.4	343	0.203	Extrudex	St-Nicolas	H-2270
x2.7	50.8	2.67	1.39	1.36E-02	513	0.199	7.83	19.7	9.28	306	0.203	Bonnell	N	A-1934
x2.4	50.8	2.41	1.27	1.25E-02	466	0.183	7.20	19.8	8.48	281	0.203	Extrudex	St-Nicolas	H-7217
x2.4	50.8	2.39	1.25	1.23E-02	462	0.181	7.13	19.8	8.40	278	0.203	Pennex Aluminum	Leetonia	5501-H
x2.4	50.8	2.36	1.24	1.22E-02	458	0.179	7.06	19.8	8.32	275	0.203	Extrudex Bonnell	St-Nicolas CN	H-23646 A-1480
x2.3	50.8	2.29	1.2	1.18E-02	444	0.174	6.87	19.8	8.08	267	0.203	Western Extrusions	Dallas	H 19301
x1.7	50.8	1.65	0.88	8.63E-03	325	0.131	5.15	20.1	5.98	200	0.203	Western Extrusions	Dallas	H 19550
x1.6	50.8	1.57	0.841	8.25E-03	310	0.125	4.94	20.1	5.73	191	0.203	Taber	Russelville	OH-15026
x1.5	50.8	1.52	0.817	8.01E-03	300	0.121	4.76	20.1	5.55	185	0.203	Extrudex	St-Nicolas	H-20641
HSS 45														
x2.2	45.085	2.16	1.01	9.90E-03	371	0.114	5.06	17.5	5.97	175	0.180	Extrudex	St-Nicolas	H-3154
HSS 44														
x3.2	44.5	3.18	1.42	1.39E-02	524	0.15	6.74	16.9	8.13	232	0.178	Western Extrusions Crown Extrusions Pennex Aluminum Service Center Metals Bonnell	Dallas Chaska Leetonia Prince George CN	H 19302 1291 5139-H HSQ0324 A-7034
x3.1	44.45	3.05	1.37	1.34E-02	505	0.145	6.52	16.9	7.85	225	0.178	Extrudex	St-Nicolas	H-2585
x2.4	44.5	2.39	1.09	1.07E-02	402	0.119	5.35	17.2	6.34	183	0.178	Extrudex Bonnell	St-Nicolas CN	H-7216 A-7039
x2.4	44.45	2.36	1.08	1.06E-02	397	0.118	5.31	17.2	6.28	181	0.178	Extrudex	St-Nicolas	H-25661
x1.6	44.5	1.57	0.732	7.18E-03	270	8.29E-02	3.73	17.5	4.34	127	0.178	Extrudex Bonnell	St-Nicolas CN	H-17559 A-1931
HSS 41														
x2.5	41.275	2.54	1.07	1.05E-02	394	9.88E-02	4.79	15.8	5.72	153	0.165	Extrudex	St-Nicolas	H-20639
HSS 38														
x6.4	38.1	6.35	2.19	2.15E-02	806	0.141	7.40	13.2	9.73	227	0.152	Pennex Aluminum Service Center Metals Extrudex	Leetonia Prince George St-Nicolas	5751-H HSQ1317 H-25464
x4.8	38.1	4.78	1.73	1.70E-02	637	0.12	6.30	13.7	8.01	191	0.152	Extrudex	St-Nicolas	H-22212
x3.2	38.1	3.18	1.2	1.18E-02	444	9.09E-02	4.77	14.3	5.83	142	0.152	Pries Enterpries Pennex Aluminum Extruded Aluminum Corporation Nanshan Service Center Metals Bonnell Taber	Independance Leetonia Belding Lafayette Prince George CN Russelville	1293 5056-H 5879 1128 HSQ0323 A-1438 OH-02792
x3.1	38.1	3.05	1.16	1.14E-02	428	8.82E-02	4.63	14.4	5.63	137	0.152	Extrudex Crown Extrusions	St-Nicolas Chaska	H-2179 1683
x2.4	38.1	2.41	0.938	9.20E-03	344	7.34E-02	3.85	14.6	4.62	114	0.152	Extrudex Pennex Aluminum	St-Nicolas Leetonia	H-7215 5676-H
x2.4	38.1	2.36	0.919	9.01E-03	337	7.21E-02	3.78	14.6	4.53	112	0.152	Extrudex Western Extrusions	St-Nicolas Dallas	H-23648 H 19148
x1.9	38.1	1.9	0.75	7.35E-03	275	6.03E-02	3.17	14.8	3.75	93	0.152	Extrudex	St-Nicolas	H-9367
x1.8	38.1	1.78	0.703	6.89E-03	259	5.70E-02	2.99	14.8	3.52	87	0.152	Extrudex	St-Nicolas	H-18396
x1.7	38.1	1.65	0.653	6.40E-03	241	5.34E-02	2.80	14.9	3.29	82	0.152	Taber	Russelville	OH-03893
x1.6	38.1	1.6	0.634	6.22E-03	234	5.20E-02	2.73	14.9	3.20	80	0.152	Pennex Aluminum	Leetonia	421-H
x1.6	38.1	1.57	0.624	6.12E-03	230	5.13E-02	2.69	14.9	3.15	78	0.152	Western Extrusions Extrudex	Dallas St-Nicolas	H 19623 H-23647
x1.3	38.1	1.27	0.507	4.97E-03	187	4.23E-02	2.22	15.0	2.59	65	0.152	Extrudex Bonnell Pennex Aluminum	St-Nicolas CN Leetonia	H-2322 A-1402 5151-H

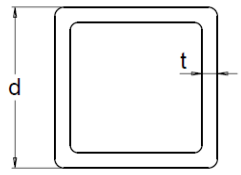
TUBES CARRÉS, COINS CARRÉS



Identification de la section HSS d x t	Dimension extérieure (d)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion J	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
mm x mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴	m²			
HSS 32														
x6.4	31.8	6.35	1.75	1.72E-02	645	7.37E-02	4.64	10.7	6.27	120	0.127	Pennex Aluminum	Leetonia	5772-H
x3.2	31.8	3.18	0.984	9.65E-03	363	5.00E-02	3.15	11.7	3.90	79	0.127	Pries Enterpries Pennex Aluminum Extruded Aluminum Corporation Crown Extrusions Nanshan Service Center Metals Western Extrusions Bonnell Taber Extrudex	Independance Leetonia Belding Chaska Lafayette Prince George Dallas CN Russelville St-Nicolas	3675 5164-H 5899 1218 1344 HSQ0322 H 19607 A-1481 OH-02977 H-8195
x3.2	31.75	3.18	0.987	9.68E-03	363	5.01E-02	3.16	11.7	2.59	65	0.127	Extrudex	St-Nicolas	H-6868
x3.1	31.75	3.05	0.952	9.34E-03	350	4.86E-02	3.06	11.8	3.78	76	0.127	Extrudex	St-Nicolas	H-3325
x2.4	31.8	2.36	0.753	7.38E-03	278	4.02E-02	2.53	12.0	3.07	63	0.127	Western Extrusions	Dallas	H 19149
x2.0	31.8	1.98	0.64	6.28E-03	236	3.50E-02	2.20	12.2	2.64	54	0.127	Pennex Aluminum	Leetonia	5146-H
x1.7	31.8	1.65	0.539	5.29E-03	199	3.01E-02	1.90	12.3	2.25	46	0.127	Extruded Aluminum Corporation	Belding	20480
x1.6	31.8	1.6	0.523	5.13E-03	193	2.93E-02	1.85	12.3	2.18	45	0.127	Pennex Aluminum	Leetonia	1961-H
HSS 29														
x3.2	28.6	3.18	0.875	8.58E-03	323	3.52E-02	2.47	10.5	3.09	56	0.114	Extruded Aluminum Corporation	Belding	5934
HSS 25														
x3.2	25.4	3.18	0.766	7.51E-03	282	2.37E-02	1.87	9.2	2.37	38	0.102	Pries Enterpries Service Center Metals Extruded Aluminum Corporation Crown Extrusions Nanshan Pennex Aluminum Western Extrusions Bonnell Taber	Independance Prince George Belding Chaska Lafayette Leetonia Dallas CN Russelville	1190 HSQ0321 5903 1212 1122 5096-H H 19620 A-1474 OH-02791
x3.2	25.273	3.18	0.764	7.49E-03	281	2.33E-02	1.84	9.1	2.34	37	0.101	Extrudex	St-Nicolas	H-6869
x3.1	25.4	3.05	0.741	7.27E-03	273	2.31E-02	1.82	9.2	2.30	37	0.102	Extrudex Crown Extrusions	St-Nicolas Chaska	H-4237 1922
x2.4	25.4	2.41	0.604	5.92E-03	222	1.97E-02	1.55	9.4	1.92	31	0.102	Extrudex	St-Nicolas	H-2439
x2.4	25.4	2.36	0.59	5.79E-03	218	1.95E-02	1.53	9.5	1.89	30	0.102	Bonnell	C	A-1940
x2.3	25.4	2.29	0.576	5.65E-03	212	1.90E-02	1.50	9.5	1.84	30	0.102	Extrudex	St-Nicolas	H-9376
x2.0	25.4	2.03	0.515	5.05E-03	190	1.74E-02	1.37	9.6	1.67	27	0.102	Taber Pennex Aluminum	Russelville Leetonia	OH-13979 5310-H
x1.8	25.4	1.78	0.456	4.47E-03	168	1.57E-02	1.24	9.7	1.49	24	0.102	Extruded Aluminum Corporation	Belding	5900
x1.7	25.4	1.65	0.425	4.17E-03	157	1.48E-02	1.17	9.7	1.40	23	0.102	Taber	Russelville	OH-12383
x1.6	25.4	1.6	0.413	4.05E-03	152	1.44E-02	1.14	9.7	1.36	22	0.102	Crown Extrusions Pennex Aluminum	Chaska Leetonia	1216 4289-H
x1.6	25.4	1.57	0.407	3.99E-03	150	1.43E-02	1.12	9.7	1.34	22	0.102	Extrudex Bonnell Pries Enterpries	St-Nicolas CN Independance	H-18984 A-1473 849
x1.3	25.4	1.27	0.332	3.26E-03	123	1.19E-02	0.94	9.9	1.11	18	0.102	Western Extrusions Bonnell	Dallas CN	H 19549 A-1403
x1.0	25.4	1.02	0.269	2.64E-03	99.1	9.84E-03	0.77	10.0	0.907	15	0.102	Bonnell	C	A-1522
HSS 22														
x2.4	22.2	2.39	0.514	5.04E-03	189	1.26E-02	1.13	8.2	1.42	20	0.089	Bonnell	N	A-1482
HSS 19														
x3.2	19.1	3.18	0.547	5.36E-03	202	8.81E-03	0.92	6.6	1.22	14	0.076	Bonnell Pennex Aluminum Service Center Metals Taber Extrudex Extrudex	CN Leetonia Prince George Russelville St-Nicolas St-Nicolas	A-1498 5123-H HSQ1202 OH-02790 H-26849 H-6859
x3.1	19.05	3.05	0.299	2.93E-03	195	8.63E-03	0.91	6.7	1.18	14	0.076	Extrudex	St-Nicolas	H-17510
x1.6	19.1	1.6	0.303	2.97E-03	112	5.72E-03	0.60	7.2	0.733	9	0.076	Pennex Aluminum	Leetonia	5219-H
x1.6	19.1	1.57	0.299	2.93E-03	110	5.65E-03	0.59	7.2	0.723	9	0.076	Extrudex Pries Enterpries Extruded Aluminum Corporation Western Extrusions Bonnell Taber	St-Nicolas Independance Belding Dallas CN Russelville	H-5140 2208 5691 H 19521 A-1475 OH-12506
x1.5	19.1	1.52	0.29	2.84E-03	107	5.51E-03	0.58	7.2	0.704	9	0.076	Crown Extrusions	Chaska	1229
HSS 16														
x1.6	15.9	1.6	0.248	2.43E-03	91.4	3.14E-03	0.40	5.9	0.491	5	0.064	Pennex Aluminum	Leetonia	5145-H
x1.6	15.9	1.57	0.244	2.39E-03	90.1	3.11E-03	0.39	5.9	0.485	5	0.064	Bonnell	N	A-1468
x1.3	15.875	1.27	0.202	1.98E-03	74.2	2.66E-03	0.34	6.0	0.407	4	0.064	Crown Extrusions Extrudex	Chaska St-Nicolas	12244 H-22243
HSS 13														
x1.6	12.7	1.6	0.193	1.89E-03	71	1.49E-03	0.23	4.6	0.298	2	0.051	Pennex Aluminum	Leetonia	5040-H
x1.6	12.7	1.57	0.19	1.86E-03	70.1	1.49E-03	0.23	4.6	0.294	2	0.051	Bonnell	CN	A-1478
x1.3	12.7	1.27	0.157	1.54E-03	58.1	1.28E-03	0.20	4.7	0.250	2	0.051	Crown Extrusions Bonnell	Chaska CN	1350 A-1470

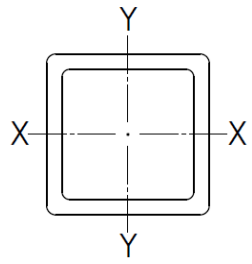
TUBES CARRÉS, COINS RONDS

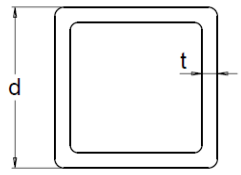




Identification de la section	Dimension extérieure (d)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
HSS d x t										J				
mm x mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴	m²			
HSS 254														
x9.5	254	9.52	25.3	2.48E-01	9315	92.7	730	99.8	854	144160	1.000	Western Extrusions	Dallas	H 19035
x6.4	254	6.35	17	1.67E-01	6282	64.2	506	101	583	97760	1.011	Bonnell	C	WLB-573
HSS 203														
x13	203	12.7	26.3	2.58E-01	9684	58.8	579	77.9	693	91151	0.810	Taber	Russelville	TM-12766
x13	203	12.7	25.5	2.50E-01	9400	56.1	552	77.2	665	90725	0.780	Western Extrusions	Dallas	H 19039
x9.5	203	9.52	20	1.96E-01	7388	46.3	456	79.2	537	71259	0.811	Taber	Russelville	TM-12726
x5.6	203	5.59	12	1.18E-01	4408	28.7	282	80.7	327	43768	0.807	Bonnell	C	WLB-546
x4.8	203	4.78	10.3	1.01E-01	3790	24.9	245	80	282	37988	0.807	Western Extrusions	Dallas	H 19100
HSS 171														
x4.8	171	4.78	8.63	8.46E-02	3184	14.8	172	68.1	199	22439	0.685	Tri City Extrusion	Bristol	2325
HSS 168														
x6.4	168	6.35	5.14	5.04E-02	1895	7.04	92.3	60.9	106	10670	0.609	Tri City Extrusion	Bristol	2292
HSS 152														
x13	152	12.7	1.92	1.88E-02	7097	23.2	305	57.2	372	36741	0.599	Western Extrusions	Dallas	H 19038
x6.4	152	6.35	10.1	9.90E-02	3710	13.2	173	59.7	203	20220	0.609	Tri City Extrusion	Bristol	2028
x6.4	152	6.35	10.1	9.90E-02	3710	13.1	172	59.4	202	21014	0.588	Tri City Extrusion	Bristol	2117
x6.4	152	6.35	10.3	1.01E-01	3571	12.5	164	59.1	193	19796	0.588	Hydro	Montreal	AH-56068
x4.8	152	4.78	7.81	7.66E-02	2681	9.5	125	59.5	146	14895	0.588	Hydro	Montreal	AH-56067
x4.8	152	4.78	7.65	7.50E-02	2820	10.3	135	60.3	156	15618	0.609	Tri City Extrusion	Bristol	2323
x4.8	152	4.78	7.65	7.50E-02	2820	10.2	133	60	155	16275	0.588	Tri City Extrusion	Bristol	2118
x4.8	152	4.78	7.65	7.50E-02	2820	10.2	134	60.3	156	15737	0.604	Western Extrusions	Dallas	H 19098
x4.8	152	4.78	7.67	7.52E-02	2826	10.3	135	60.3	157	15741	0.607	Bonnell	C	A-7062
x4.6	152	4.57	7.31	7.17E-02	2695	9.81	129	60.3	149	5006	0.604	Bonnell	C	WLB-593
x4.6	152	4.57	7.33	7.19E-02	2704	9.83	129	60.3	150	15295	0.599	Bonnell	C	WLB-590
x3.8	152	3.81	6.12	6.00E-02	2256	8.29	109	60.6	126	12666	0.604	Bonnell	C	WLB-605
x3.2	152	3.18	5.14	5.04E-02	1895	7.04	92.3	60.9	106	10681	0.608	Gateway Extrusions	Woodbridge	EA117
x3.2	152	3.18	5.14	5.04E-02	1895	7.04	92.3	60.9	106	10670	0.609	Tri City Extrusion	Bristol	2292
HSS 127														
x7.9	127	7.92	10.3	1.01E-01	3783	8.98	142	48.7	169	13943	0.507	Extrudex	Ohio	H-20777
x6.4	127	6.35	8.27	8.11E-02	3030	7.32	115	49.2	137	11435	0.497	Hydro	Montreal	AH-60928
x6.4	127	6.35	8.31	8.15E-02	3065	7.35	116	49	138	11966	0.486	Tri City Extrusion	Bristol	2119
x6.4	127	6.35	8.06	7.90E-02	2960	7.05	111	48.8	132	11496	0.486	Extrudex	Ohio	H-27671
x4.8	127	4.78	6.33	6.21E-02	2335	5.82	91.7	49.9	107	8895	0.507	Tri City Extrusion	Bristol	2265
x4.8	127	4.78	6.33	6.21E-02	2335	5.74	90.5	49.6	106	9323	0.486	Tri City Extrusion	Bristol	2120
x4.8	127	4.75	6.16	6.04E-02	2264	5.56	87.6	49.6	103	8890	0.492	Extrudex	Ohio	H-26322
HSS 126														
x3.2	126	3.18	4.21	4.13E-02	1553	3.9	61.9	50.1	71.4	5973	0.499	International Extrusions	Garden City	KE8444
HSS 114														
x4.8	114	4.78	5.53	5.42E-02	2034	4.01	70.1	44.4	82.7	6443	0.441	Extrudex	Toronto	H-15425
x3.2	114	3.18	3.83	3.76E-02	1411	2.91	50.9	45.4	58.8	4425	0.456	Bonnell	M	AE3352
HSS 108														
x3.1	108	3.05	3.47	3.40E-02	1279	2.35	43.4	42.8	50.3	3617	0.426	International Extrusions	Garden City	KE7788
HSS 102														
x11	102	11.1	10.9	1.07E-01	4018	5.55	109	37.2	137	8885	0.398	Extrudex	Ohio	H-13937
x9.5	102	9.52	9.51	9.33E-02	3508	4.98	98	37.7	121	8001	0.396	Western Extrusions	Dallas	H 19034
x6.4	102	6.35	6.25	6.13E-02	2315	3.42	67.3	38.4	81.4	5686	0.385	Metra	Laval	98210
x6.4	102	6.35	6.63	6.50E-02	2445	3.72	73.2	39	87.6	5826	0.401	Western Extrusions	Dallas	H 19838
x6.4	102	6.35	6.56	6.43E-02	2419	3.6	70.8	38.6	85.7	5968	0.385	Tri City Extrusion	Bristol	2121
x6.4	102	6.35	6.56	6.43E-02	2419	3.67	72.3	39	86.5	5678	0.406	Tri City Extrusion	Bristol	2294
x6.4	102	6.35	6.49	6.36E-02	2393	3.61	71	38.8	85.2	5719	0.396	International Extrusions	Garden City	KE12475
x6.4	102	6.35	6.56	6.43E-02	2419	3.67	72.3	39	86.5	5684	0.405	International Extrusions	Garden City	KE7447
x6.4	102	6.35	6.28	6.16E-02	2315	3.42	67.3	38.4	81.4	5686	0.385	Taber	Russelville	OH-12110
x6.4	102	6.35	6.56	6.43E-02	2419	3.67	72.3	39	86.5	5684	0.405	Bonnell	M	AE2971
x6.4	102	6.35	6.56	6.43E-02	2280	3.35	66	38.4	79.9	5473	0.385	Hydro	Montreal	AH-07325
x6.4	102	6.35	6.3	6.18E-02	2315	3.42	67.3	38.4	81.4	5686	0.385	Extrudex	Toronto, Ohio	H-11781
x6.4	102	6.35	6.59	6.46E-02	2385	3.59	70.7	38.8	84.8	5663	0.395	Hydro	Montreal	MH-17278
x4.8	102	4.78	4.96	4.86E-02	1830	2.85	56.1	39.5	66.2	4437	0.398	Hydro	Montreal	AH-42559
x4.8	102	4.78	5.02	4.92E-02	1849	2.9	57	39.6	67.2	4463	0.404	Tri City Extrusion	Bristol	2211
x4.8	102	4.78	5.07	4.97E-02	1869	2.94	57.8	39.6	68.1	4536	0.406	Extruded Aluminum Corporation	Belding	17305
x4.8	102	4.78	4.99	4.89E-02	1841	2.88	56.6	39.5	66.8	4449	0.401	International Extrusions	Garden City	KE8104
x4.8	102	4.78	5.02	4.92E-02	1849	2.9	57	39.6	67.2	4451	0.405	Crown Extrusions	Chaska	13716
x4.8	102	4.78	4.93	4.83E-02	1817	2.82	55.4	39.4	65.6	4439	0.396	Bonnell	N	A-7116
x4.8	102	4.78	5.02	4.92E-02	1849	2.9	57	39.6	67.2	4445	0.406	Tri City Extrusion	Bristol	2321
x4.8	102	4.78	5.03	4.93E-02	1849	2.88	56.6	39.4	67	4582	0.394	Extrudex	Toronto, Ohio	H-10075
x4.8	102	4.78	4.99	4.89E-02	1849	2.88	56.6	39.4	67	4582	0.394	Extrudex	Québec	V-18401
x4.8	102	4.75	4.86	4.77E-02	1795	2.77	54.6	39.3	64.6	4431	0.393	Metra	Laval	997486
x3.8	102	3.81	4.04	3.96E-02	1490	2.38	46.8	39.9	54.6	3679	0.401	Bonnell	C	A-7017
x3.2	102	3.18	3.44	3.37E-02	1270	2.06	40.5	40.2	47	3194	0.398	Taber	Russelville	OH-10793
x3.2	102	3.18	3.39	3.32E-02	1250	2.02	39.8	40.2	46.2	3079	0.406	Tri City Extrusion	Bristol	2033
x3.2	102	3.18	3.39	3.32E-02	1250	2.02	39.8	40.2	46.2	3084	0.405	Gateway Extrusions	Woodbridge	CES127
x3.2	102	3.18	3.39	3.32E-02	1250	2.02	39.8	40.2	46.2	3083	0.405	International Extrusions	Garden City	KE2260
x3.2	102	3.18	3.39	3.32E-02	1250	2.01	39.6	40.1	46	3173	0.396	Crown Extrusions	Chaska	12408
x3.2	102	3.18	3.46	3.39E-02	1276	2.07	40.8	40.3	47.3	3189	0.401	Western Extrusions	Dallas	H 19365
x3.2	102	3.18	3.32	3.26E-02	1224	1.95	38.5	40	44.8	3091	0.396	Pennex Aluminum	Leetonia	5753-H
x3.2	102	3.18	3.39	3.32E-02	1250	2.02	39.8	40.2	46.2	3081	0.406	Bonnell	M	AE3353
x3.2	102	3.18	3.39	3.32E-02	1250	2.02	39.7	40.2	46.1	3118	0.401	Bonnell	C	WLB-582
x3.2	102	3.18	3.3	3.24E-02	1224	1.95	38.5	40	44.8	3091	0.395	Metra	Laval	998758
x3.1	102	3.05	3.08	3.02E-02	1795	2.77	54.6	39.3	64.6	4431	0.393	Metra	Laval	998907
x3.1	102	3.05	3.08	3.02E-02	1143	1.79	35.3	39.6	41.4	3005	0.385	Extrudex	Québec	V-13046
x2.5	102	2.54	2.73	2.68E-02	1005	1.64	32.3	40.4	37.3	2506	0.404	Bonnell	M	AE3240
HSS 89														
x5.7	88.9	5.72	5.16	5.06E-02	1902	2.2	49.6	34	59.4	3412	0.354	International Extrusions	Garden City	KE3919
x4.8	88.9	4.78	3.7	3.63E-02	1366	1.17	30.6	29.2	36.6	1810	0.303	Tri City Extrusion	Bristol	2042
HSS 87														
x4.8	87.3	4.75	4.23	4.15E-02	1560	1.77	40.6	33.7	48.2	2782	0.344	Extruded Aluminum Corporation	Belding	20734

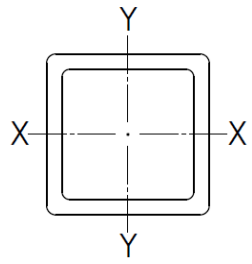
TUBES CARRÉS, COINS RONDS

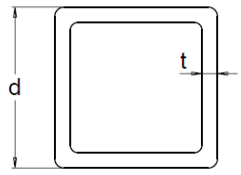




Identification de la section	Dimension extérieure (d)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
HSS d x t										J				
mm x mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴	m²			
HSS 86														
x13	85.7	12.7	10.1	9.90E-02	3710	3.39	79.1	30.2	102	5479	0.337	Extrudex	Toronto	H-3134
HSS 79														
x6.4	79.4	6.35	5.01	4.91E-02	1847	1.65	41.5	29.9	50.6	2589	0.312	International Extrusions	Garden City	KE7455
x6.4	79.4	6.35	4.98	4.88E-02	1836	1.63	41.1	29.8	50.2	2582	0.309	Bonnell	M	AE3095
x9.5	78.7	9.52	7.15	7.01E-02	2638	2.15	54.5	28.5	68.9	3402	0.314	Western Extrusions	Dallas	H 19262
HSS 76														
x9.5	76.2	9.52	6.53	6.40E-02	2323	1.66	43.6	26.7	56.4	2881	0.278	Hydro	Montreal	MH-44928
x9.5	76.2	9.52	6.98	6.85E-02	2573	1.94	51	27.5	64.8	3125	0.302	Extruded Aluminum Corporation	Belding	17073
x9.5	76.2	9.52	6.61	6.48E-02	2436	1.77	46.5	27	60	3056	0.283	Bonnell	N	A-1936
x6.4	76.2	6.35	4.55	4.46E-02	1739	1.41	37	28.4	45.3	2259	0.294	Hydro	Montreal	AH-07264
x6.4	76.2	6.35	4.76	4.67E-02	1755	1.43	37.5	28.5	45.9	2267	0.297	Western Extrusions	Dallas	H 19323
x6.4	76.2	6.35	4.81	4.72E-02	1774	1.45	38.2	28.6	46.6	2269	0.304	Gateway Extrusions	Woodbridge	CES159
x6.4	76.2	6.35	4.74	4.65E-02	1748	1.42	37.2	28.5	45.6	2287	0.294	Gateway Extrusions	Woodbridge	BT003
x6.4	76.2	6.35	4.81	4.72E-02	1774	1.44	37.8	28.5	46.4	2336	0.294	Crown Extrusions	Chaska	1826
x6.4	76.2	6.35	4.69	4.60E-02	1731	1.39	36.4	28.3	44.8	2311	0.288	Taber	Russelville	OH-08917
x6.4	76.2	6.35	4.81	4.72E-02	1774	1.44	37.8	28.5	46.4	2336	0.294	Tri City Extrusion	Bristol	2025
x6.4	76.2	6.35	4.81	4.72E-02	1774	1.45	38.2	28.6	46.6	2269	0.304	Tri City Extrusion	Bristol	2293
x6.4	76.2	6.35	4.78	4.69E-02	1757	1.43	37.5	28.5	45.9	2275	0.297	Extrudex	Toronto, Ohio	H-13783
x6.4	76.2	6.35	4.59	4.50E-02	1687	1.34	35.1	28.2	43.4	2258	0.286	Extrudex	Toronto, Ohio	H-22173
x6.4	76.2	6.35	4.55	4.46E-02	1670	1.31	34.5	28	42.8	2256	0.283	Extrudex	Toronto	H-22283
x6.4	76.2	6.35	4.86	4.77E-02	1755	1.43	37.5	28.5	45.9	2265	0.297	Hydro	Montreal	MH-55880
x5.3	76.2	5.33	4.1	4.02E-02	1512	1.27	33.3	29	40.2	2000	0.299	International Extrusions	Garden City	KE6404
x5.1	76.2	5.08	3.97	3.89E-02	1462	1.24	32.6	29.1	39.2	1940	0.305	Extruded Aluminum Corporation	Belding	20097
x5.1	76.2	5.08	3.75	3.68E-02	1384	1.14	29.9	28.7	36.3	1896	0.288	Extruded Aluminum Corporation	Belding	18477
x4.8	76.2	4.83	3.74	3.67E-02	1378	1.17	30.7	29.1	36.8	1861	0.297	Pries Enterprises	Independance	4467
x4.8	76.2	4.78	3.58	3.51E-02	1332	1.12	29.4	29	35.4	1798	0.294	Metra	Laval	998012
x4.8	76.2	4.78	3.7	3.63E-02	1364	1.16	30.4	29.1	36.5	1844	0.297	Crown Extrusions	Chaska	13278
x4.8	76.2	4.78	3.68	3.61E-02	1356	1.15	30.3	29.2	36.3	1802	0.299	International Extrusions	Garden City	KE6153
x4.8	76.2	4.78	3.7	3.63E-02	1364	1.16	30.6	29.2	36.6	1803	0.303	International Extrusions	Garden City	KE3986
x4.8	76.2	4.78	3.7	3.63E-02	1364	1.17	30.6	29.2	36.6	1802	0.304	Tri City Extrusion	Bristol	2440
x4.8	76.2	4.78	3.54	3.47E-02	1304	1.08	28.4	28.8	34.4	1802	0.288	Taber	Russelville	OH-10763
x4.8	76.2	4.78	3.67	3.60E-02	1347	1.14	29.9	29.1	35.9	1805	0.297	Extrudex	Toronto	H-23747
x4.8	76.2	4.75	3.67	3.60E-02	1349	1.15	30.1	29.2	36.1	1795	0.299	Extrudex	Ohio	H-13387
x4.8	76.2	4.75	3.68	3.61E-02	1358	1.16	30.4	29.2	36.4	1795	0.303	Western Extrusions	Dallas	H 19867
x4.1	76.2	4.06	3.1	3.04E-02	1137	0.971	25.5	29.2	30.4	1572	0.293	Extrudex	Toronto	H-14181
x4.1	76.2	4.06	3.19	3.13E-02	1171	1.02	26.7	29.5	31.7	1570	0.302	Extrudex	Toronto	H-6826
x3.2	76.2	3.18	2.52	2.47E-02	927	0.826	21.7	29.8	25.4	1265	0.304	Bonnell	M	AE3048
x3.2	76.2	3.18	2.52	2.47E-02	927	0.824	21.6	29.8	25.4	1286	0.299	Bonnell	M	AE4165
x3.2	76.2	3.18	2.52	2.47E-02	927	0.826	21.7	29.8	25.4	1265	0.304	Tri City Extrusion	Bristol	2220
x3.2	76.2	3.18	2.44	2.39E-02	901	0.789	20.7	29.6	24.4	1269	0.294	International Extrusions	Garden City	KE12159
x3.2	76.2	3.18	2.52	2.47E-02	927	0.826	21.7	29.8	25.4	1267	0.303	International Extrusions	Garden City	KE3975
x3.2	76.2	3.18	2.52	2.47E-02	927	0.826	21.7	29.8	25.4	1267	0.303	International Extrusions	Garden City	KE1042
x3.2	76.2	3.18	2.49	2.44E-02	919	0.814	21.4	29.8	25.1	1265	0.299	International Extrusions	Garden City	KE6200
x3.2	76.2	3.18	2.48	2.43E-02	910	0.802	21	29.7	24.8	1265	0.297	Extrudex	Toronto	H-23746
x3.2	76.2	3.18	2.45	2.40E-02	901	0.789	20.7	29.6	24.4	1269	0.294	Extrudex	Ohio	H-30389
x3.2	76.2	3.18	2.46	2.41E-02	910	0.802	21	29.7	24.8	1265	0.297	Extrudex	Québec	V-18636
x3.1	76.2	3.05	2.34	2.29E-02	838	0.722	18.9	29.4	22.5	1214	0.287	Hydro	Montreal	MH-42811
x2.5	76.2	2.54	2.02	1.98E-02	747	0.675	17.7	30.1	20.6	1035	0.302	Gateway Extrusions	Woodbridge	CES136
x2.5	76.2	2.54	2.02	1.98E-02	743	0.67	17.6	30	20.5	1032	0.300	Extrudex	Toronto	H-13792
x2.4	76.2	2.36	1.89	1.85E-02	698	0.635	16.7	30.2	19.3	969	0.304	International Extrusions	Garden City	KE9660
x2.4	76.2	2.36	1.89	1.85E-02	697	0.634	16.6	30.2	19.3	968	0.304	Gateway Extrusions	Woodbridge	CES138
x2.3	76.2	2.29	1.83	1.79E-02	676	0.615	16.1	30.2	18.7	956	0.299	Bonnell	C	WLB-571
x2.0	76.2	2.01	1.58	1.55E-02	586	0.534	14	30.2	16.2	829	0.299	Extrudex	Québec	V-12342
HSS 75														
x5.1	74.9	5.08	3.85	3.78E-02	1419	1.16	31	28.6	37.2	1799	0.298	International Extrusions	Garden City	KE1009
HSS 67														
x4.8	67.5	4.78	3.24	3.18E-02	1193	0.784	23.2	25.6	28.1	1228	0.265	International Extrusions	Garden City	KE8228
HSS 64														
x6.4	64.3	6.35	3.83	3.76E-02	1412	0.774	24.1	23.4	30.2	1312	0.241	International Extrusions	Garden City	KE10464
x6.4	63.5	6.35	3.94	3.86E-02	1452	0.8	25.2	23.5	31.2	1258	0.253	International Extrusions	Garden City	KE8741
x6.4	63.5	6.35	3.83	3.76E-02	1412	0.763	24	23.2	30	1257	0.242	Taber	Russelville	OH-13278
x4.8	63.5	4.78	3.04	2.98E-02	1122	0.649	20.4	24.1	24.8	1010	0.253	International Extrusions	Garden City	KE7959
x4.8	63.5	4.78	3.04	2.98E-02	1122	0.647	20.4	24	24.7	1025	0.249	Crown Extrusions	Chaska	12326
x3.8	63.5	3.81	2.41	2.36E-02	889	0.523	16.5	24.2	19.7	835	0.245	Extruded Aluminum Corporation	Belding	18484
x3.2	63.5	3.18	2.08	2.04E-02	766	0.466	14.7	24.7	17.3	717	0.253	Bonnell	M	AE1090
x3.2	63.5	3.18	2.06	2.02E-02	758	0.458	14.4	24.6	17.1	716	0.249	International Extrusions	Garden City	KE6737
x3.2	63.5	3.18	2.08	2.04E-02	766	0.466	14.7	24.7	17.3	718	0.253	International Extrusions	Garden City	KE11179
x3.2	63.5	3.18	2.08	2.04E-02	766	0.466	14.7	24.7	17.3	718	0.253	International Extrusions	Garden City	KE0956
x3.2	63.5	3.18	2.08	2.04E-02	766	0.466	14.7	24.7	17.3	718	0.253	International Extrusions	Garden City	KE9869
x3.2	63.5	3.18	2.08	2.04E-02	766	0.464	14.6	24.6	17.3	730	0.249	Crown Extrusions	Chaska	12327
x3.2	63.5	3.18	2.09	2.05E-02	770	0.469	14.8	24.7	17.5	726	0.253	Western Extrusions	Dallas	H 19917
x2.5	63.5	2.54	1.68	1.65E-02	619	0.384	12.1	24.9	14.2	589	0.253	International Extrusions	Garden City	KE2800
x2.4	63.5	2.36	1.55	1.52E-02	571	0.354	11.1	24.9	13	554	0.249	Pennex Aluminum	Leetonia	5778-H
x2.0	63.5	2.03	1.36	1.33E-02	500	0.315	9.92	25.1	11.5	482	0.253	Crown Extrusions	Chaska	12230
x1.9	63.5	1.9	1.27	1.25E-02	469	0.297	9.35	25.2	10.8	454	0.253	International Extrusions	Garden City	KE8342
x1.9	63.5	1.9	1.27	1.25E-02	469	0.297	9.35	25.2	10.8	454	0.253	International Extrusions	Garden City	KE11180
x1.9	63.5	1.9	1.27	1.25E-02	469	0.297	9.35	25.2	10.8	452	0.253	Bonnell	N	BCE-276
HSS 60														
x3.2	60.3	3.18	1.94	1.90E-02	715	0.386	12.8	23.2	15.2	619	0.233	International Extrusions	Garden City	KE6746
x3.2	60.3	3.18	1.92	1.88E-02	708	0.381	12.6	23.2	15.1	609	0.233	Extruded Aluminum Corporation	Belding	5864
HSS 59														
x3.2	58.8	3.18	1.91	1.87E-02	706	0.363	12.4	22.7	14.7	573	0.230	International Extrusions	Garden City	KE6490
HSS 56														
x6.4	56.4	6.35	3.44	3.37E-02	1270	0.538	19.1	20.6	23.9	852	0.223	International Extrusions	Garden City	KE8227
x4.8	55.8	4.78	2.64	2.59E-02	974	0.426	15.3	20.9	18.7	666	0.222	Gateway Extrusions	Woodbridge	CES113
HSS 53														
x3.2	52.8	3.18	1.69	1.66E-02	622	0.255	9.64	20.2	11.5	402	0.206	International Extrusions	Garden City	KE8223

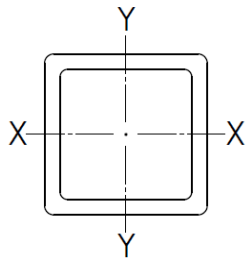
TUBES CARRÉS, COINS RONDS

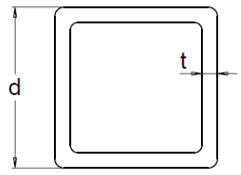




Identification de la section	Dimension extérieure (d)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
HSS d x t										J				
mm x mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴	m²			
HSS 52														
x4.4	52.5	4.44	2.31	2.27E-02	854	0.331	12.6	19.7	15.4	517	0.209	Extruded Aluminum Corporation	Belding	19298
x3.2	52.4	3.18	1.65	1.62E-02	608	0.242	9.25	20	11.1	391	0.201	Extruded Aluminum Corporation	Belding	20836
HSS 51														
x6.4	50.8	6.35	3.06	3.00E-02	1129	0.379	14.9	18.3	18.9	606	0.201	Pries Enterprises	Independance	7513
x6.4	50.8	6.35	2.87	2.81E-02	1060	0.34	13.4	17.9	17.3	591	0.187	Nanshan	Lafayette	1504
x6.4	50.8	6.35	3.06	3.00E-02	1129	0.379	14.9	18.3	18.9	603	0.202	Crown Extrusions	Chaska	13718
x6.4	50.8	6.35	3.06	3.00E-02	1129	0.379	14.9	18.3	18.9	603	0.202	International Extrusions	Garden City	KE5537
x6.4	50.8	6.35	3.06	3.00E-02	1129	0.379	14.9	18.3	18.9	602	0.203	Tri City Extrusion	Bristol	2078
x6.4	50.8	6.35	3.06	3.00E-02	1129	0.379	14.9	18.3	18.9	602	0.203	Tri City Extrusion	Bristol	2085
x6.4	50.8	6.35	2.97	2.91E-02	1094	0.359	14.1	18.1	18.1	596	0.192	Western Extrusions	Dallas	H 19707
x6.4	50.8	6.35	2.99	2.93E-02	1103	0.362	14.3	18.1	18.3	607	0.192	Western Extrusions	Dallas	H 19299
x6.4	50.8	6.35	2.97	2.91E-02	1094	0.359	14.1	18.1	18.1	596	0.192	Taber	Russelville	OH-12685
x4.8	50.8	4.78	2.38	2.33E-02	879	0.298	11.7	18.4	14.9	520	0.187	Pries Enterprises	Independance	2248
x4.8	50.8	4.78	2.38	2.33E-02	879	0.314	12.3	18.9	15.2	492	0.203	Tri City Extrusion	Bristol	2089
x4.8	50.8	4.78	2.38	2.33E-02	879	0.314	12.3	18.9	15.2	493	0.202	International Extrusions	Garden City	KE5338
x4.8	50.8	4.78	2.38	2.33E-02	879	0.311	12.2	18.8	15.2	504	0.196	Crown Extrusions	Chaska	1704
x4.8	50.8	4.78	2.34	2.29E-02	862	0.303	11.9	18.8	14.8	490	0.195	Nanshan	Lafayette	1108
x4.8	50.8	4.78	2.23	2.19E-02	822	0.277	10.9	18.4	13.8	491	0.186	Western Extrusions	Dallas	H 19143
x4.8	50.8	4.78	2.38	2.33E-02	879	0.314	12.3	18.9	15.2	493	0.202	Western Extrusions	Dallas	H 19702
x4.8	50.8	4.78	2.28	2.24E-02	840	0.291	11.4	18.6	14.3	488	0.191	Taber	Russelville	OH-09338
x4.8	50.8	4.75	2.23	2.19E-02	821	0.278	10.9	18.4	13.8	490	0.186	International Extrusions	Garden City	KE12082
x3.2	50.8	3.18	1.64	1.61E-02	605	0.219	8.62	19	10.6	379	0.187	Pries Enterprises	Independance	1194
x3.2	50.8	3.18	1.62	1.59E-02	597	0.225	8.84	19.4	10.6	355	0.198	Western Extrusions	Dallas	H 19314
x3.2	50.8	3.18	1.64	1.61E-02	603	0.228	9	19.5	10.8	356	0.201	Gateway Extrusions	Woodbridge	CES118
x3.2	50.8	3.18	1.59	1.56E-02	588	0.219	8.63	19.3	10.4	354	0.195	International Extrusions	Garden City	KE6491
x3.2	50.8	3.18	1.62	1.59E-02	597	0.225	8.84	19.4	10.6	355	0.198	International Extrusions	Garden City	KE7996
x3.2	50.8	3.18	1.64	1.61E-02	605	0.23	9.04	19.5	10.8	356	0.202	International Extrusions	Garden City	KE6576
x3.2	50.8	3.18	1.64	1.61E-02	605	0.229	9.03	19.5	10.8	358	0.201	International Extrusions	Garden City	KE1679
x3.2	50.8	3.18	1.64	1.61E-02	605	0.23	9.04	19.5	10.8	356	0.202	International Extrusions	Garden City	KE11181
x3.2	50.8	3.18	1.59	1.56E-02	587	0.219	8.62	19.3	10.4	354	0.195	Extruded Aluminum Corporation	Belding	5858
x3.2	50.8	3.18	1.64	1.61E-02	605	0.228	8.99	19.4	10.8	363	0.198	Crown Extrusions	Chaska	12192
x3.2	50.8	3.18	1.64	1.61E-02	605	0.227	8.93	19.4	10.8	369	0.195	Crown Extrusions	Chaska	12078
x3.2	50.8	3.18	1.64	1.61E-02	605	0.225	8.85	19.3	10.7	373	0.192	Crown Extrusions	Chaska	13239
x3.2	50.8	3.18	1.64	1.61E-02	605	0.23	9.04	19.5	10.8	355	0.203	Tri City Extrusion	Bristol	2026
x3.2	50.8	3.18	1.64	1.61E-02	605	0.225	8.85	19.3	10.7	373	0.192	Tri City Extrusion	Bristol	2036
x3.2	50.8	3.18	1.57	1.54E-02	579	0.214	8.41	19.2	10.2	355	0.192	Pennex Aluminum	Leetonia	5328-H
x3.2	50.8	3.18	1.6	1.57E-02	589	0.22	8.65	19.3	10.4	356	0.195	Western Extrusions	Dallas	H 19207
x3.2	50.8	3.18	1.64	1.61E-02	605	0.228	8.99	19.4	10.8	363	0.198	Western Extrusions	Dallas	H 19966
x3.2	50.8	3.18	1.57	1.54E-02	579	0.214	8.41	19.2	10.2	355	0.192	Western Extrusions	Dallas	H 19346
x3.2	50.8	3.18	1.64	1.61E-02	605	0.23	9.04	19.5	10.8	355	0.203	Bonnell	M	AE0569
x3.2	50.8	3.18	1.61	1.58E-02	594	0.223	8.78	19.4	10.6	354	0.197	Taber	Russelville	OH-13189
x3.1	50.8	3.1	1.6	1.57E-02	591	0.224	8.82	19.5	10.6	356	0.198	Bonnell	M	AE5410
x3.1	50.8	3.05	1.46	1.43E-02	540	0.195	7.69	19	9.38	343	0.187	International Extrusions	Garden City	KE9465
x3.1	50.8	3.05	1.49	1.46E-02	549	0.199	7.84	19	9.56	349	0.187	International Extrusions	Garden City	KE12608
x3.1	50.8	3.05	1.57	1.54E-02	581	0.221	8.71	19.5	10.4	344	0.201	International Extrusions	Garden City	KE6918
x2.4	50.8	2.41	1.24	1.22E-02	459	0.178	6.99	19.7	8.28	280	0.198	International Extrusions	Garden City	KE8103
x2.4	50.8	2.36	1.24	1.22E-02	456	0.178	7.02	19.8	8.27	276	0.201	Gateway Extrusions	Woodbridge	CES012
x2.4	50.8	2.36	1.24	1.22E-02	458	0.179	7.06	19.8	8.32	276	0.202	Bonnell	M	AE6126
x2.3	50.8	2.29	1.11	1.09E-02	411	0.153	6.01	19.3	7.23	269	0.187	International Extrusions	Garden City	KE12607
x2.0	50.8	2.03	1.08	1.06E-02	396	0.157	6.19	19.9	7.25	242	0.202	International Extrusions	Garden City	KE5806
x2.0	50.8	2.03	1.07	1.05E-02	395	0.156	6.15	19.9	7.21	241	0.201	Gateway Extrusions	Woodbridge	CES117
x1.6	50.8	1.57	0.836	8.20E-03	308	0.124	4.89	20.1	5.68	191	0.201	Gateway Extrusions	Woodbridge	CES011
x1.5	50.8	1.52	0.816	8.00E-03	301	0.122	4.8	20.1	5.56	186	0.203	International Extrusions	Garden City	KE12095
HSS 50														
x6.4	50.3	6.35	2.93	2.87E-02	1082	0.347	13.8	17.9	17.7	577	0.190	International Extrusions	Garden City	KE12158
HSS 48														
x3.2	47.6	3.18	1.53	1.50E-02	564	0.187	7.84	18.2	9.42	289	0.190	Extruded Aluminum Corporation	Belding	21093
HSS 44														
x4.8	44.5	4.78	2.03	1.50E-02	750	0.198	8.9	16.2	11.2	318	0.172	International Extrusions	Garden City	KE6736
x3.2	44.5	3.18	1.42	1.39E-02	524	0.145	6.55	16.7	8.02	245	0.167	Pries Enterprises	Independance	6069
x3.2	44.5	3.18	1.39	1.36E-02	511	0.144	6.47	16.8	7.85	231	0.171	International Extrusions	Garden City	KE12221
x3.2	44.5	3.18	1.4	1.37E-02	516	0.146	6.56	16.8	7.95	232	0.172	International Extrusions	Garden City	KE6263
x3.2	44.5	3.18	1.37	1.34E-02	507	0.142	6.37	16.7	7.75	232	0.170	Western Extrusions	Dallas	H 19931
x3.2	44.5	3.18	1.42	1.39E-02	524	0.15	6.74	16.9	8.13	233	0.177	Bonnell	M	AE1543
x2.5	44.5	2.54	1.06	1.04E-02	390	0.107	4.82	16.6	5.89	192	0.161	Tri City Extrusion	Bristol	2197
x1.5	44.5	1.52	0.71	6.96E-03	262	0.0804	3.62	17.5	4.21	123	0.176	International Extrusions	Garden City	KE8341
x1.9	44.3	1.9	0.857	8.40E-03	316	0.0937	4.23	17.2	4.99	149	0.172	Extruded Aluminum Corporation	Belding	18797
x2.5	44.1	2.51	1.12	1.10E-02	413	0.119	5.38	17	6.43	187	0.172	International Extrusions	Garden City	NE1994
x3.2	43.9	3.18	1.38	1.35E-02	509	0.140	6.39	16.6	7.75	224	0.170	Gateway Extrusions	Woodbridge	CES132
HSS 42														
x3.2	42.1	3.18	1.34	1.31E-02	494	0.123	5.83	15.8	7.15	204	0.159	Pries Enterprises	Independance	2716
HSS 40														
x4.8	39.7	4.75	1.75	1.72E-02	646	0.131	6.6	14.2	8.41	218	0.151	International Extrusions	Garden City	KE6876

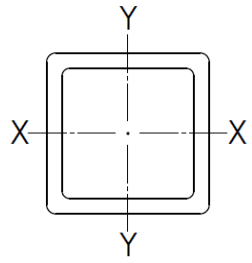
TUBES CARRÉS, COINS RONDS

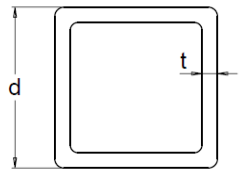




Identification de la section	Dimension extérieure	Épaisseur	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
HSS d x t	(d)	(t)								J				
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 38														
x6.4	38.1	6.35	2.19	2.15E-02	806	0.141	7.39	13.2	9.73	228	0.151	International Extrusions	Garden City	KE5322
x5.1	38.1	5.08	1.82	1.78E-02	671	0.125	6.55	13.6	8.37	199	0.151	Pries Enterprises	Independance	4752
x3.2	38.1	3.18	1.2	1.18E-02	444	9.00E-02	4.72	14.2	5.8	146	0.147	Pries Enterprises	Independance	4753
x3.2	38.1	3.18	1.2	1.18E-02	442	9.02E-02	4.73	14.3	5.79	142	0.150	Gateway Extrusions	Woodbridge	US176
x3.2	38.1	3.18	1.2	1.18E-02	444	9.09E-02	4.77	14.3	5.82	142	0.152	Tri City Extrusion	Bristol	2218
x3.2	38.1	3.18	1.2	1.18E-02	444	9.07E-02	4.76	14.3	5.82	144	0.150	Tri City Extrusion	Bristol	2179
x3.2	38.1	3.18	1.18	1.16E-02	435	8.80E-02	4.62	14.2	5.67	141	0.147	Tri City Extrusion	Bristol	1162
x3.2	38.1	3.18	1.19	1.17E-02	437	8.85E-02	4.65	14.2	5.7	143	0.147	Pennex Aluminum	Leetonia	5633-H
x3.2	38.1	3.18	1.13	1.11E-02	417	8.21E-02	4.31	14	5.34	141	0.142	Pennex Aluminum	Leetonia	5604-H
x3.2	38.1	3.18	1.2	1.18E-02	444	9.09E-02	4.77	14.3	5.82	142	0.151	International Extrusions	Garden City	KE3970
x3.2	38.1	3.18	1.2	1.18E-02	443	9.09E-02	4.77	14.3	5.82	142	0.151	International Extrusions	Garden City	KE6492
x3.2	38.1	3.18	1.19	1.17E-02	437	8.85E-02	4.65	14.2	5.7	143	0.147	International Extrusions	Garden City	KE8848
x3.2	38.1	3.18	1.11	1.09E-02	410	7.91E-02	4.15	13.9	5.19	141	0.139	International Extrusions	Garden City	KE12669
x3.2	38.1	3.18	1.19	1.17E-02	439	8.92E-02	4.68	14.3	5.73	142	0.148	Extruded Aluminum Corporation	Belding	5860
x3.2	38.1	3.18	1.2	1.18E-02	444	9.00E-02	4.72	14.2	5.8	146	0.147	Crown Extrusions	Chaska	12162
x3.2	38.1	3.18	1.21	1.19E-02	448	9.18E-02	4.82	14.3	5.88	145	0.151	Western Extrusions	Dallas	H 19923
x3.2	38.1	3.18	1.2	1.18E-02	444	8.99E-02	4.72	14.2	5.8	146	0.147	Bonnell	M	AE4163
x3.2	38.1	3.18	1.2	1.18E-02	444	8.99E-02	4.77	14.3	5.82	142	0.152	Bonnell	M	AE1669
x3.2	38.1	3.18	1.2	1.18E-02	444	8.99E-02	4.77	14.3	5.82	142	0.152	Bonnell	CN	A-1439
x3.2	38.1	3.18	1.2	1.18E-02	444	8.74E-02	4.59	14	5.71	150	0.142	Taber	Russelville	OH-14045
x3.1	38.1	3.1	1.08	1.06E-02	400	7.75E-02	4.07	13.9	5.07	138	0.139	International Extrusions	Garden City	KE11606
x3.1	38.1	3.05	1.13	1.11E-02	416	8.43E-02	4.43	14.2	5.43	138	0.146	Gateway Extrusions	Woodbridge	CES180
x3.0	38.1	2.97	1.11	1.09E-02	409	8.36E-02	4.39	14.3	5.35	134	0.147	Bonnell	C	A-1942
x2.5	38.1	2.46	0.939	9.21E-03	346	7.29E-02	3.83	14.5	4.61	116	0.148	International Extrusions	Garden City	KE10008
x2.4	38.1	2.41	0.934	9.16E-03	344	7.34E-02	3.85	14.6	4.62	114	0.152	Bonnell	M	AE3139
x2.4	38.1	2.39	0.912	8.94E-03	336	7.12E-02	3.74	14.5	4.49	112	0.148	Pennex Aluminum	Leetonia	5667-H
x2.3	38.1	2.29	0.849	8.33E-03	313	6.53E-02	3.43	14.4	4.14	109	0.144	Western Extrusions	Dallas	H 19465
x2.3	38.1	2.29	0.888	8.71E-03	327	7.03E-02	3.69	14.6	4.4	109	0.151	International Extrusions	Garden City	KE2837
x2.3	38.1	2.29	0.888	8.71E-03	327	6.96E-02	3.65	14.6	4.38	112	0.147	Crown Extrusions	Chaska	1433
x2	38.1	2.03	0.744	7.30E-03	274	5.71E-02	3	14.4	3.61	98.5	0.142	Tri City Extrusion	Bristol	2198
x2.0	38.1	2.03	0.795	7.80E-03	293	6.32E-02	3.32	14.7	3.95	102	0.147	Crown Extrusions	Chaska	12308
x1.9	38.1	1.9	0.748	7.34E-03	276	6.04E-02	3.17	14.8	3.75	93.3	0.151	International Extrusions	Garden City	KE9840
x1.8	38.1	1.78	0.701	6.87E-03	258	5.69E-02	2.99	14.8	3.52	87.5	0.152	Bonnell	M	AE3003
x1.7	38.1	1.65	0.633	6.21E-03	233	5.08E-02	2.67	14.8	3.15	81.9	0.147	Bonnell	M	AE1863
x1.6	38.1	1.6	0.634	6.22E-03	234	5.20E-02	2.73	14.9	3.2	79.8	0.152	Gateway Extrusions	Woodbridge	CES186
x1.6	38.1	1.6	0.619	6.07E-03	228	5.01E-02	2.63	14.8	3.1	79.8	0.148	Gateway Extrusions	Woodbridge	CES222
x1.6	38.1	1.57	0.624	6.12E-03	230	5.12E-02	2.69	14.9	3.15	78.5	0.152	Extruded Aluminum Corporation	Belding	5915
x1.6	38.1	1.57	0.606	5.94E-03	224	4.90E-02	2.57	14.8	3.03	78.8	0.147	International Extrusions	Garden City	KE11296
x1.6	38.1	1.57	0.622	6.10E-03	229	5.10E-02	2.68	14.9	3.14	78.9	0.150	International Extrusions	Garden City	KE4291
x1.6	38.1	1.57	0.624	6.12E-03	230	5.12E-02	2.69	14.9	3.15	78.9	0.151	International Extrusions	Garden City	KE8266
x1.6	38.1	1.57	0.623	6.11E-03	230	5.11E-02	2.68	14.9	3.14	78.5	0.151	Bonnell	CN	A-1495
x1.6	38.1	1.55	0.585	5.74E-03	216	4.67E-02	2.45	14.7	2.9	78	0.144	International Extrusions	Garden City	KE11484
x1.5	38.1	1.52	0.605	5.93E-03	223	4.97E-02	2.61	14.9	3.06	77.5	0.150	Bonnell	M	AE3378
x1.5	38.1	1.52	0.606	5.94E-03	223	4.99E-02	2.62	14.9	3.07	76.7	0.152	Tri City Extrusion	Bristol	1077
x1.4	38.1	1.4	0.556	5.45E-03	205	4.61E-02	2.42	15	2.82	70.6	0.152	Gateway Extrusions	Woodbridge	US179
x1.3	38.1	1.27	0.508	4.98E-03	187	4.25E-02	2.23	15	2.59	65	0.152	International Extrusions	Garden City	KE11295
x1.3	38.1	1.27	0.507	4.97E-03	187	4.23E-02	2.22	15	2.58	65	0.151	International Extrusions	Garden City	KE0013
x1.2	38.1	1.17	0.468	4.59E-03	173	3.93E-02	2.06	15.1	2.39	60.3	0.151	International Extrusions	Garden City	KE10753
HSS 36														
x3.2	36.1	3.18	1.12	1.10E-02	413	7.46E-02	4.14	13.4	5.09	119	0.140	International Extrusions	Garden City	KE4316
x1.6	35.7	1.57	0.569	5.58E-03	210	4.03E-02	2.26	13.9	2.67	64.1	0.138	International Extrusions	Garden City	NE1991
HSS 35														
x2.0	35.0	2.01	0.671	6.58E-03	248	4.30E-02	2.46	13.2	2.98	74.5	0.130	International Extrusions	Garden City	KE11596
x4.0	34.9	3.96	1.32	1.29E-02	486	7.74E-02	4.43	12.6	5.62	129	0.133	Western Extrusions	Dallas	H 19141
x1.8	34.9	1.78	0.639	6.27E-03	236	4.33E-02	2.48	13.6	2.93	66.7	0.139	Crown Extrusions	Chaska	12418
x1.6	34.9	1.57	0.558	5.47E-03	206	3.78E-02	2.16	13.5	2.56	59.8	0.136	Gateway Extrusions	Woodbridge	CES120
HSS 33														
x1.7	33.4	1.65	0.553	5.42E-03	204	3.37E-02	2.02	12.9	2.4	54.2	0.129	Bonnell	M	AE1866
x3.2	33.0	3.18	1.03	1.01E-02	379	5.61E-02	3.4	12.2	4.23	92.1	0.127	Tri City Extrusion	Bristol	2056
HSS 32														
x5.1	31.8	5.08	1.47	1.44E-02	542	6.66E-02	4.19	11.1	5.48	107	0.126	Gateway Extrusions	Woodbridge	1004
x4.8	31.8	4.78	1.4	1.37E-02	515	6.44E-02	4.06	11.2	5.26	104	0.126	International Extrusions	Garden City	KE8862
x3.2	31.8	3.18	0.961	9.42E-03	354	4.80E-02	3.02	11.6	3.77	78	0.122	Western Extrusions	Dallas	H 19312
x3.2	31.8	3.18	0.984	9.65E-03	363	5.00E-02	3.15	11.7	3.9	78.6	0.126	Tri City Extrusion	Bristol	2037
x3.2	31.8	3.18	0.961	9.42E-03	542	6.66E-02	4.19	11.1	3.77	78.1	0.122	Gateway Extrusions	Woodbridge	CES179
x3.2	31.8	3.18	0.962	9.43E-03	355	4.81E-02	3.03	11.6	3.78	78.4	0.122	International Extrusions	Garden City	KE6198
x3.2	31.8	3.18	0.967	9.48E-03	356	4.83E-02	3.04	11.6	3.8	79.2	0.122	International Extrusions	Garden City	KE12220
x3.2	31.8	3.18	0.984	9.65E-03	363	5.00E-02	3.15	11.7	3.9	78.6	0.126	Bonnell	M	AE2070
x3.2	31.8	3.18	0.968	9.49E-03	357	4.84E-02	3.05	11.6	3.8	79.4	0.122	Bonnell	M	AE4196
x3.2	31.8	3.18	0.972	9.53E-03	358	4.86E-02	3.06	11.6	3.82	79.9	0.122	Bonnell	M	AE2336
x3.2	31.8	3.18	0.962	9.43E-03	355	4.81E-02	3.03	11.6	3.78	78.4	0.122	Taber	Russelville	OH-01518
x2.8	31.8	2.77	0.848	8.32E-03	313	4.34E-02	2.74	11.8	3.37	70.6	0.122	International Extrusions	Garden City	KE8265
x2.5	31.8	2.54	0.805	7.89E-03	297	4.25E-02	2.68	12	3.26	66.3	0.126	Bonnell	M	AE4941
x2.5	31.8	2.54	0.805	7.89E-03	297	4.19E-02	2.64	11.9	3.24	68.7	0.122	Crown Extrusions	Chaska	12630
x2.5	31.8	2.46	0.769	7.54E-03	284	4.03E-02	2.54	11.9	3.1	64.7	0.123	International Extrusions	Garden City	KE10007
x2.4	31.8	2.41	0.768	7.53E-03	283	4.09E-02	2.57	12	3.12	63.9	0.126	Bonnell	M	AE3143
x2.4	31.8	2.36	0.742	7.28E-03	274	3.93E-02	2.47	12	3.01	62.7	0.123	Western Extrusions	Dallas	H 19962
x2.3	31.8	2.29	0.731	7.17E-03	269	3.92E-02	2.47	12.1	2.98	61.3	0.126	Crown Extrusions	Chaska	1276
x2.3	31.8	2.29	0.708	6.94E-03	261	3.73E-02	2.35	12	2.86	60.5	0.122	International Extrusions	Garden City	KE9770
x2.3	31.8	2.29	0.709	6.95E-03	261	3.73E-02	2.35	12	2.86	60.6	0.122	Bonnell	M	AE1765
x2.0	31.8	2.03	0.655	6.42E-03	242	3.46E-02	2.18	12	2.66	58.5	0.119	Crown Extrusions	Chaska	1667
x1.8	31.8	1.83	0.574	5.63E-03	212	3.11E-02	1.96	12.1	2.35	50.6	0.122	Western Extrusions	Dallas	H 19748
x1.8	31.8	1.83	0.574	5.63E-03	212	3.10E-02	1.96	12.1	2.35	50.5	0.122	Bonnell	M	AE1141
x1.7	31.8	1.65	0.509	4.99E-03	188	2.73E-02	1.72	12.1	2.07	46.5	0.119	International Extrusions	Garden City	KE10089
x1.7	31.8	1.65	0.521	5.11E-03	192	2.85E-02	1.79	12.2	2.14	46.4	0.122	Bonnell	M	AE1858
x1.6	31.8	1.57	0.503	4.93E-03	186	2.77E-02	1.75	12.2	2.08	45.3	0.122	Extruded Aluminum Corporation	Belding	19826
x1.6	31.8	1.57	0.503	4.93E-03	186	2.77E-02	1.75	12.2	2.08	45.3	0.122	Bonnell	M	AE1465
x1.5	31.8	1.45	0.449	4.40E-03	165	2.44E-02	1.54	12.1	1.84	41.6	0.119	International Extrusions	Garden City	KE0926
x1.4	31.8	1.42	0.452	4.43E-03	167	2.50E-02	1.58	12.3	1.87	40.9	0.122	International Extrusions	Garden City	KE11822
x1.4	31.8	1.42	0.452	4.43E-03	167	2.50E-02	1.58	12.3	1.87	40.9	0.122	Bonnell	M	AE0571

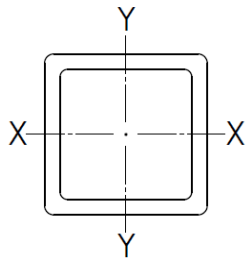
TUBES CARRÉS, COINS RONDS

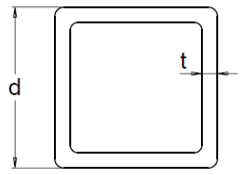




Identification de la section	Dimension extérieure (d)	Épaisseur (t)	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
HSS d x t										J				
mm x mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴	m²			
HSS 31														
x2.8	31.2	2.84	0.859	8.42E-03	317	4.23E-02	2.71	11.6	3.35	69.2	0.120	Bonnell	M	AE5225
HSS 29														
x3.2	28.6	3.18	0.853	8.37E-03	314	3.37E-02	2.36	10.4	2.98	55.5	0.109	International Extrusions	Garden City	KE6493
x3.2	28.6	3.18	0.867	8.50E-03	320	3.46E-02	2.42	10.4	3.05	55.8	0.111	Bonnell	M	AE1864
x1.9	28.6	1.88	0.526	5.16E-03	194	2.26E-02	1.58	10.8	1.92	37.2	0.109	Western Extrusions	Dallas	H 19462
x1.8	28.6	1.78	0.501	4.91E-03	185	2.18E-02	1.53	10.9	1.84	35.4	0.110	Bonnell	M	AE1393
x1.7	28.6	1.65	0.482	4.73E-03	178	2.14E-02	1.5	11	1.79	34.4	0.110	Pries Enterprises	Independance	4849
x1.6	28.6	1.6	0.444	4.35E-03	164	1.92E-02	1.35	10.8	1.62	32.5	0.107	Bonnell	M	AE5472
HSS 28														
x1.6	28.4	1.57	0.434	4.26E-03	160	1.86E-02	1.31	10.8	1.58	31.4	0.107	International Extrusions	Garden City	KE5371
HSS 27														
x2.5	27.0	2.54	0.632	6.20E-03	233	2.25E-02	1.66	9.82	2.09	38.9	0.100	Bonnell	M	AE1221
HSS 25														
x3.2	25.4	3.18	0.766	7.51E-03	282	2.37E-02	1.87	9.16	2.37	37.7	0.101	Bonnell	M	AE0570
x3.2	25.4	3.18	0.742	7.28E-03	274	2.25E-02	1.77	9.06	2.27	37.3	0.096	Tri City Extrusion	Bristol	1021
x3.2	25.4	3.18	0.766	7.51E-03	282	2.37E-02	1.87	9.16	2.37	37.7	0.101	Tri City Extrusion	Bristol	2079
x3.2	25.4	3.18	0.801	7.86E-03	295	2.46E-02	1.94	9.14	2.48	39.8	0.100	Extruded Aluminum Corporation	Belding	15309
x3.2	25.4	3.18	0.766	7.51E-03	282	2.37E-02	1.87	9.16	2.37	37.7	0.101	Gateway Extrusions	Woodbridge	US107
x3.2	25.4	3.18	0.766	7.51E-03	282	2.31E-02	1.82	9.05	2.34	39	0.096	Crown Extrusions	Chaska	12160
x3.2	25.4	3.18	0.766	7.51E-03	282	2.31E-02	1.82	9.05	2.34	39	0.096	Pennex Aluminum	Leetonia	5593-H
x3.2	25.4	3.18	0.695	6.82E-03	256	1.99E-02	1.57	8.82	2.05	36.3	0.091	Pennex Aluminum	Leetonia	5635-H
x3.2	25.4	3.18	0.743	7.29E-03	274	2.25E-02	1.77	9.06	2.27	37.5	0.096	International Extrusions	Garden City	KE3934
x3.2	25.4	3.18	0.766	7.51E-03	282	2.37E-02	1.86	9.16	2.37	37.8	0.100	International Extrusions	Garden City	KE6495
x3.2	25.4	3.18	0.77	7.55E-03	284	2.38E-02	1.87	9.16	2.38	38.3	0.100	International Extrusions	Garden City	KE7428
x3.2	25.4	3.18	0.77	7.55E-03	284	2.38E-02	1.87	9.16	2.38	38.3	0.100	International Extrusions	Garden City	KE2830
x3.2	25.4	3.18	0.76	7.45E-03	280	2.34E-02	1.84	9.14	2.34	37.6	0.099	Western Extrusions	Dallas	H 19818
x3.2	25.4	3.18	0.741	7.27E-03	273	2.22E-02	1.75	9.01	2.25	38	0.095	Western Extrusions	Dallas	H 19396
x3.2	25.4	3.18	0.748	7.34E-03	276	2.26E-02	1.78	9.06	2.28	37.9	0.096	Western Extrusions	Dallas	H 19221
x3.2	25.4	3.18	0.736	7.22E-03	271	2.21E-02	1.74	9.04	2.24	37.1	0.096	Western Extrusions	Dallas	H 19206
x3.2	25.4	3.18	0.764	7.49E-03	282	2.36E-02	1.86	9.16	2.36	37.7	0.100	Bonnell	M	AE2983
x3.2	24.8	3.18	0.72	7.06E-03	266	2.03E-02	1.64	8.75	2.12	35	0.092	International Extrusions	Garden City	KE12155
x3.1	25.4	3.05	0.716	7.02E-03	264	2.19E-02	1.72	9.1	2.19	36.2	0.096	Bonnell	M	AE0177
x2.5	25.4	2.54	0.629	6.17E-03	232	2.04E-02	1.61	9.38	1.99	32.2	0.100	Gateway Extrusions	Woodbridge	CES177
x2.5	25.4	2.54	0.616	6.04E-03	227	1.97E-02	1.55	9.31	1.94	32.2	0.097	International Extrusions	Garden City	KE10006
x2.5	25.4	2.54	0.634	6.22E-03	234	2.06E-02	1.62	9.39	2.01	32.7	0.101	Tri City Extrusion	Bristol	2096
x2.5	25.4	2.54	0.598	5.86E-03	220	1.88E-02	1.48	9.22	1.86	31.9	0.095	Tri City Extrusion	Bristol	2095
x2.4	25.4	2.39	0.595	5.83E-03	219	1.95E-02	1.54	9.44	1.9	30.7	0.100	Western Extrusions	Dallas	H 19556
x2.4	25.4	2.36	0.568	5.57E-03	210	1.83E-02	1.44	9.34	1.79	30.3	0.096	Pennex Aluminum	Leetonia	5774-H
x2.3	25.4	2.34	0.585	5.74E-03	216	1.93E-02	1.52	9.46	1.87	30.3	0.101	Bonnell	M	AE4307
x2.3	25.4	2.29	0.552	5.41E-03	203	1.78E-02	1.4	9.36	1.74	29.5	0.096	Bonnell	M	AE3283
x2.3	25.4	2.29	0.555	5.44E-03	205	1.80E-02	1.41	9.37	1.76	29.9	0.096	Extruded Aluminum Corporation	Belding	19646
x2.3	25.4	2.29	0.573	5.62E-03	211	1.87E-02	1.47	9.4	1.82	30.9	0.097	Crown Extrusions	Chaska	1864
x2.3	25.4	2.29	0.55	5.39E-03	203	1.78E-02	1.4	9.36	1.74	29.3	0.096	Tri City Extrusion	Bristol	2221
x2.3	25.4	2.29	0.551	5.40E-03	203	1.78E-02	1.4	9.36	1.74	29.5	0.096	Bonnell	M	AE1762
x2.3	25.4	2.29	0.056	5.46E-04	205	1.81E-02	1.42	9.39	1.76	29.6	0.097	International Extrusions	Garden City	KE8481
x2.3	25.4	2.29	0.555	5.44E-03	205	1.80E-02	1.41	9.37	1.76	29.9	0.096	International Extrusions	Garden City	KE8135
x2.2	25.4	2.24	0.55	5.39E-03	203	1.80E-02	1.42	9.43	1.75	29.3	0.098	Western Extrusions	Dallas	H 19583
x2.0	25.4	2.03	0.507	4.97E-03	187	1.69E-02	1.33	9.52	1.63	27.1	0.098	Bonnell	M	AE1138
x1.9	25.4	1.9	0.486	4.77E-03	179	1.66E-02	1.3	9.62	1.58	25.8	0.101	Tri City Extrusion	Bristol	2098
x1.8	25.4	1.78	0.456	4.47E-03	168	1.54E-02	1.21	9.56	1.48	25.6	0.096	Crown Extrusions	Chaska	1427
x1.8	25.4	1.78	0.456	4.47E-03	168	1.57E-02	1.24	9.66	1.49	24.6	0.101	Crown Extrusions	Chaska	1275
x1.7	25.4	1.7	0.438	4.30E-03	161	1.47E-02	1.16	9.54	1.41	24.9	0.095	Western Extrusions	Dallas	H 19397
x1.7	25.4	1.65	0.407	3.99E-03	150	1.38E-02	1.09	9.58	1.32	22.9	0.096	International Extrusions	Garden City	KE6494
x1.7	25.4	1.65	0.408	4.00E-03	150	1.38E-02	1.09	9.59	1.32	23	0.096	Bonnell	M	AE3540
x1.6	25.4	1.6	0.417	4.09E-03	154	1.46E-02	1.15	9.74	1.38	22.9	0.100	Extruded Aluminum Corporation	Belding	20989
x1.6	25.4	1.6	0.396	3.88E-03	146	1.35E-02	1.06	9.6	1.28	22.4	0.096	Pennex Aluminum	Leetonia	5210-H
x1.6	25.4	1.59	0.41	4.02E-03	151	1.43E-02	1.13	9.74	1.35	22.2	0.101	Tri City Extrusion	Bristol	2097
x1.6	25.4	1.57	0.39	3.82E-03	144	1.33E-02	1.05	9.61	1.27	22.2	0.096	Bonnell	M	AE0898
x1.6	25.4	1.57	0.389	3.81E-03	144	1.33E-02	1.04	9.61	1.26	22.1	0.096	Extruded Aluminum Corporation	Belding	18565
x1.6	25.4	1.57	0.407	3.99E-03	150	1.43E-02	1.12	9.75	1.34	22.1	0.101	Gateway Extrusions	Woodbridge	US365
x1.6	25.4	1.57	0.389	3.81E-03	144	1.33E-02	1.04	9.61	1.26	22	0.096	Tri City Extrusion	Bristol	1022
x1.6	25.4	1.57	0.395	3.87E-03	146	1.36E-02	1.07	9.66	1.29	22	0.098	Western Extrusions	Dallas	H 19588
x1.6	25.4	1.57	0.392	3.84E-03	145	1.34E-02	1.06	9.64	1.28	22	0.097	Bonnell	M	AE4190
x1.6	25.4	1.57	0.381	3.74E-03	140	1.28E-02	1.01	9.54	1.22	21.9	0.095	Taber	Russelville	OH-01105
x1.6	24.6	1.57	0.37	3.63E-03	136	1.16E-02	0.943	9.22	1.15	19.9	0.092	International Extrusions	Garden City	KE12121
x1.5	25.4	1.52	0.395	3.87E-03	146	1.36E-02	1.07	9.66	1.29	22.5	0.096	International Extrusions	Garden City	KE3933
x1.5	25.4	1.52	0.378	3.71E-03	139	1.29E-02	1.02	9.63	1.23	21.5	0.096	International Extrusions	Garden City	KE10423
x1.5	25.4	1.52	0.39	3.82E-03	144	1.36E-02	1.07	9.73	1.28	21.6	0.099	International Extrusions	Garden City	KE8943
x1.5	25.4	1.52	0.395	3.87E-03	146	1.39E-02	1.09	9.76	1.3	21.6	0.100	International Extrusions	Garden City	KE2987
x1.5	25.4	1.52	0.395	3.87E-03	146	1.36E-02	1.07	9.66	1.29	22.5	0.096	Crown Extrusions	Chaska	12608
x1.5	25.4	1.45	0.36	3.53E-03	133	1.24E-02	0.974	9.66	1.17	20.6	0.096	Bonnell	M	AE0129
x1.4	25.4	1.4	0.346	3.39E-03	127	1.19E-02	0.938	9.67	1.13	19.8	0.096	International Extrusions	Garden City	KE12015
x1.3	25.4	1.27	0.331	3.25E-03	122	1.19E-02	0.934	9.85	1.11	18.4	0.100	International Extrusions	Garden City	KE0012
x1.3	25.4	1.27	0.324	3.18E-03	120	1.15E-02	0.904	9.79	1.07	18.3	0.098	Pennex Aluminum	Leetonia	5606-H
x1.3	24.6	1.27	0.332	3.26E-03	122	1.11E-02	0.9	9.51	1.07	17.8	0.094	Gateway Extrusions	Woodbridge	CES191
x1.3	24.6	1.27	0.307	3.01E-03	113	1.00E-02	0.813	9.41	0.974	16.8	0.093	Bonnell	M	AE4823
x1.2	25.4	1.19	0.313	3.07E-03	116	1.13E-02	0.891	9.89	1.05	17.4	0.101	Bonnell	M	AE0135
x1.1	25.4	1.12	0.281	2.76E-03	104	9.89E-03	0.779	9.77	0.926	16.5	0.096	Bonnell	CN	A-1520
x1.0	25.4	1.02	0.241	2.36E-03	88.8	8.35E-03	0.657	9.7	0.783	14.1	0.097	Tri City Extrusion	Bristol	1074
HSS 24														
x1.0	23.8	1.02	0.251	2.46E-03	92.6	7.84E-03	0.659	9.2	0.783	13	0.090	Tri City Extrusion	Bristol	1001
HSS 22														
x2.2	22.2	2.18	0.474	4.65E-03	175	1.18E-02	1.06	8.22	1.32	18.7	0.088	Bonnell	M	AE5932
x1.0	22.2	1.02	0.217	2.13E-03	80.1	5.72E-03	0.514	8.45	0.618	9.99	0.082	Tri City Extrusion	Bristol	1085
x2.2	22.0	2.18	0.432	4.24E-03	159	9.90E-03	0.9	7.89	1.14	17.7	0.080	Bonnell	M	AE5954
HSS 21														
x1.6	21.5	1.57	0.34	3.33E-03	125	8.25E+00	0.768	8.11	0.933	13.3	0.083	Pries Enterprises	Independance	508
x1.6	21.1	1.57	0.316	3.10E-03	116	7.17E-03	0.68	7.85	0.834	12.2	0.079	Bonnell	M	AE1503

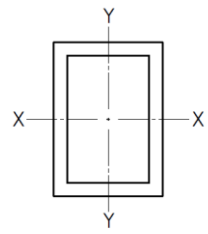
TUBES CARRÉS, COINS RONDS

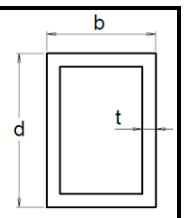




Identification de la section	Dimension extérieure	Épaisseur	Masse	Charge morte	Aire	I	S	r	Z	Constante de torsion	Aire par mètres de longueur	Extrudeur	Emplacement	Identification de la section du fabricant
HSS d x t	(d)	(t)								J				
mm x mm	mm	mm	kg/m	kN/m	mm²	10⁶ mm⁴	10³ mm³	mm	10³ mm³	10³ mm⁴	m²			
HSS 19														
x3.2	19.1	3.18	0.534	5.24E-03	197	8.42E-03	0.884	6.54	1.17	14.1	0.072	Western Extrusions	Dallas	H 19285
x3.2	19.1	3.18	0.542	5.32E-03	200	8.65E-03	0.908	6.58	1.2	14.3	0.074	International Extrusions	Garden City	KE11124
x3.2	19.1	3.18	0.546	5.35E-03	201	8.77E-03	0.92	6.6	1.21	14.2	0.075	Tri City Extrusion	Bristol	1167
x3.2	19.1	3.18	0.54	5.30E-03	199	8.55E-03	0.898	6.56	1.19	14.3	0.073	Bonnell	M	AE2273
x3.1	19.1	3.05	0.46	4.51E-03	170	6.61E-03	0.694	6.24	0.957	12.7	0.065	International Extrusions	Garden City	KE7601
x3.1	19.1	3.05	0.529	5.19E-03	195	8.62E-03	0.905	6.65	1.18	13.9	0.076	Extruded Aluminum Corporation	Belding	5692
x2.3	19.1	2.29	0.416	4.08E-03	153	7.24E-03	0.76	6.87	0.965	11.9	0.074	International Extrusions	Garden City	KE7914
x1.7	19.1	1.73	0.319	3.13E-03	118	5.87E-03	0.616	7.06	0.76	9.42	0.074	Bonnell	N	A-1448
x1.7	19.1	1.65	0.312	3.06E-03	115	5.85E-03	0.614	7.13	0.752	9.17	0.076	Bonnell	M	AE1994
x1.6	19.1	1.57	0.299	2.93E-03	110	5.64E-03	0.593	7.16	0.723	8.84	0.076	Tri City Extrusion	Bristol	1108
x1.6	19.1	1.57	0.281	2.76E-03	104	5.09E-03	0.535	7.01	0.663	8.75	0.071	Tri City Extrusion	Bristol	1034
x1.6	19.1	1.57	0.299	2.93E-03	110	5.64E-03	0.592	7.15	0.723	8.91	0.075	International Extrusions	Garden City	KE9817
x1.6	19.1	1.57	0.299	2.93E-03	110	5.65E-03	0.593	7.16	0.723	8.84	0.076	Gateway Extrusions	Woodbridge	CES185
x1.6	19.1	1.57	0.287	2.81E-03	106	5.29E-03	0.555	7.07	0.684	8.76	0.072	Western Extrusions	Dallas	H 19393
x1.5	19.1	1.47	0.263	2.58E-03	97.1	4.82E-03	0.506	7.05	0.625	8.29	0.071	Pennex Aluminum	Leetonia	5536-H
x1.4	19.1	1.4	0.268	2.63E-03	98.6	5.15E-03	0.541	7.23	0.654	8.08	0.076	Bonnell	M	AE0862
x1.4	18.9	1.4	0.265	2.60E-03	98	5.01E-03	0.53	7.16	0.642	7.9	0.074	International Extrusions	Garden City	KE3328
x1.4	19.1	1.35	0.259	2.54E-03	95.3	5.00E-03	0.525	7.24	0.633	7.87	0.075	International Extrusions	Garden City	KE10573
x1.3	19.1	1.27	0.242	2.37E-03	89.3	4.69E-03	0.493	7.25	0.594	7.42	0.074	Pennex Aluminum	Leetonia	5754-H
x1.1	19.1	1.14	0.212	2.08E-03	78.1	4.07E-03	0.428	7.22	0.516	6.77	0.072	Western Extrusions	Dallas	H 19300
HSS 18														
x3.2	18.3	3.18	0.526	5.16E-03	194	7.69E-03	0.841	6.3	1.11	12.6	0.073	International Extrusions	Garden City	KE12222
x2.0	18.3	2.03	0.364	3.57E-03	134	6.00E-03	0.656	6.69	0.823	9.6	0.073	International Extrusions	Garden City	KE12172
x1.1	18.3	1.14	0.218	2.14E-03	80.4	3.97E-03	0.434	7.03	0.52	6.2	0.073	International Extrusions	Garden City	KE12111
HSS 16														
x3.2	15.9	3.18	0.437	4.29E-03	161	4.60E-03	0.58	5.34	0.784	7.54	0.063	Tri City Extrusion	Bristol	2111
x1.6	15.9	1.57	0.239	2.34E-03	87.9	2.98E-03	0.376	5.83	0.469	4.85	0.061	Bonnell	N	A-1447
x1.3	15.9	1.27	0.201	1.97E-03	74.2	2.65E-03	0.334	5.97	0.407	4.2	0.062	International Extrusions	Garden City	KE8996
x1.1	15.9	1.14	0.184	1.80E-03	67.7	2.47E-03	0.311	6.03	0.375	3.87	0.063	International Extrusions	Garden City	KE11195
x1.1	15.9	1.14	0.181	1.78E-03	66.7	2.41E-03	0.303	6.01	0.368	3.86	0.062	International Extrusions	Garden City	KE11297
x1.1	15.6	1.14	0.18	1.77E-03	66.2	2.32E-03	0.297	5.92	0.359	3.68	0.061	International Extrusions	Garden City	KE8340
HSS 15														
x1.3	15.2	1.27	0.193	1.89E-03	71.3	2.34E-03	0.307	5.73	0.375	3.69	0.060	International Extrusions	Garden City	KE7816
x1.3	15.0	1.27	0.179	1.76E-03	66.1	2.02E-03	0.269	5.52	0.333	3.42	0.056	International Extrusions	Garden City	KE12174
x1.1	15.4	1.14	0.176	1.73E-03	65	2.20E-03	0.287	5.82	0.347	3.47	0.060	Gateway Extrusions	Woodbridge	CES008
x1.1	15.2	1.14	0.175	1.72E-03	64.4	2.14E-03	0.28	5.76	0.34	3.39	0.060	International Extrusions	Garden City	KE9488
x1.1	15.2	1.14	0.175	1.72E-03	64.5	2.14E-03	0.281	5.76	0.34	3.39	0.060	International Extrusions	Garden City	KE2228
x1.1	15.2	1.09	0.167	1.64E-03	61.4	2.05E-03	0.268	5.77	0.325	3.27	0.059	International Extrusions	Garden City	KE10535
x1.0	15.0	1.02	0.154	1.51E-03	56.9	1.86E-03	0.248	5.72	0.298	2.95	0.059	International Extrusions	Garden City	KE12210
HSS 13														
x1.7	12.7	1.65	0.199	1.95E-03	73.3	1.52E-03	0.24	4.56	0.306	2.45	0.050	International Extrusions	Garden City	KE7718
x1.6	12.7	1.57	0.19	1.86E-03	70.1	1.47E-03	0.232	4.58	0.294	2.35	0.050	Extruded Aluminum Corporation	Belding	20319

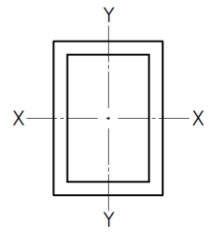
TUBES RECTANGULAIRES, COINS CARRÉS

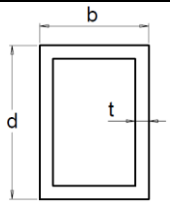




Identification de la section	Dimensions extérieures		Épaisseur (t)	Masse	Charge morte	Aire	Aire par mètres de longueur	Axe X-X				Axe Y-Y				Constante de torsion	Extrudeur	Emplacement	Identification de la section du fabricant
HSS d x b x t	Hauteur (d)	Largeur (b)						I_x	S_x	r_x	Z_x	I_y	S_y	r_y	Z_y	J			
mm x mm x mm	mm	mm	mm	kg/m	kN/m	mm²	m²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴			
HSS 305																			
x51x4.8	305	50.8	4.76	8.94	8.77E-02	3296	0.711	31.3	206	97.5	280	1.6	63	22	70.9	5348	Bonnell	C	WLB-619
HSS 203																			
x152x6.4	203	152	6.35	11.9	1.17E-01	4355	0.710	26.1	257	77.4	306	16.7	219	61.8	250	31212	Extrudex	Toronto	H-21471
x127x9.5	203	127	9.52	16.1	1.58E-01	5927	0.660	32.6	321	74.2	396	15.4	242	50.9	283	32732	Service Center Metals	Prince George	HR1635
x102x12.7	203	102	12.7	19.2	1.88E-01	7097	0.610	35.3	348	70.6	447	11.2	221	39.7	266	27412	Crown Extrusions Service Center Metals	Chaska Prince George	12604 HR1636
x102x9.5	203	102	9.52	14.8	1.45E-01	5444	0.610	28.1	276	71.8	349	9.13	180	40.9	211	21972	Crown Extrusions Service Center Metals	Chaska Prince George	13720 HR2147
x102x6.4	203	102	6.35	10.1	9.90E-02	3710	0.610	19.8	195	73.1	242	6.61	130	42.2	148	15643	Service Center Metals Nanshan Extrudex	Prince George Lafayette Ohio	HR0876 1466 H-25679
x102x4.8	203	102	4.78	7.65	7.50E-02	2820	0.610	15.3	151	73.7	186	5.17	102	42.8	114	12151	Nanshan	Lafayette	1147
x76x6.4	203	76.2	6.35	9.19	9.01E-02	3387	0.559	16.7	164	70.2	210	3.43	90	31.8	103	9241	Service Center Metals Extrudex	Prince George Ohio	HR2226 H-19567
x51x6.4	203	50.8	6.35	8.31	8.15E-02	3065	0.508	13.6	134	66.5	179	1.34	52.8	20.9	62	4161	Service Center Metals	Prince George	HR2365
x51x3.2	203	50.8	3.18	4.26	4.18E-02	1573	0.508	7.26	71.5	68	93.8	0.779	30.7	22.3	33.9	2362	Bonnell Crown Extrusions Nanshan Western Extrusions Hydro	C Chaska Lafayette Dallas Montreal	A-7081 13187 1236 H 19356 AH-40361
HSS 178																			
x76x3.2	178	76.2	3.18	4.26	4.18E-02	1573	0.508	6.36	71.5	63.6	88.9	1.69	44.3	32.7	45	4229	Bonnell	C	A-7003
x51x3.2	178	50.8	3.18	3.83	3.76E-02	1411	0.457	5.13	57.7	60.3	74.8	0.688	27.1	22.1	30	2009	Bonnell Extrudex	C Québec	A-7004 V-15438
HSS 159																			
x89x6.4	159	88.9	6.35	8.12	7.96E-02	2984	0.495	9.86	124	57.5	154	3.91	88	36.2	102	8803	Extrudex	Toronto	H-8744
HSS 152																			
x102x13	152	102	12.7	15.7	1.54E-01	5806	0.509	17	223	54	283	8.64	170	38.6	209	18196	Crown Extrusions Service Center Metals	Chaska Prince George	12603 HR0791
x102x9.5	152	102	9.52	12.1	1.19E-01	4476	0.509	13.7	179	55.2	223	7.07	139	39.7	166	14642	Service Center Metals	Prince George	HR1624
x102x6.4	152	102	6.35	8.31	8.15E-02	3065	0.509	9.77	128	56.5	156	5.14	101	41	117	10471	Extrudex Nanshan Service Center Metals Taber Extrudex	Québec Lafayette Prince George Russelville Toronto, Ohio	V-14663 1132 HR0790 OH-13998 H-13661
x102x4.8	152	102	4.78	6.35	6.23E-02	2335	0.509	7.61	99.8	57.1	120	4.03	79.4	41.6	90.7	8148	Extrudex	Ohio	H-27086
x102x3.2	152	102	3.18	4.26	4.18E-02	1573	0.509	5.24	68.8	57.7	82	2.8	55.2	42.2	62	5608	Crown Extrusions Service Center Metals	Chaska Prince George	12448 HR1210
x76x13	152	76.2	12.7	14	1.37E-01	5161	0.457	13.8	181	51.7	238	4.23	111	28.6	139	10567	Pennex Aluminum	Leetonia	50066
x76x6.4	152	76.2	6.35	7.44	7.30E-02	2742	0.457	8.05	106	54.2	133	2.64	69.2	31	80.4	6318	Extrudex Extruded Aluminum Corporation Crown Extrusions Service Center Metals	Ohio Belding Chaska Prince George	H-15081 18461 13641 HR1316
x76x4.8	152	76.2	4.78	5.67	5.56E-02	2092	0.457	6.29	82.5	54.8	102	2.09	55	31.6	62.6	4961	Service Center Metals	Prince George	HR0335
x76x4.8	152	76.2	4.75	5.67	5.56E-02	2081	0.457	6.26	82.1	54.8	102	2.09	54.7	31.7	62.3	4938	Extrudex	Ohio	H-1317
x76x3.2	152	76.2	3.18	3.83	3.76E-02	1411	0.457	4.34	57	55.5	70	1.47	38.6	32.3	43.1	3445	Service Center Metals Nanshan Extrudex	Prince George Lafayette Ohio	HR1212 1694 H-13662
x64x3.2	152	63.5	3.18	3.61	3.54E-02	1331	0.432	3.89	51.1	54.1	63.9	0.98	30.9	27.1	34.4	2496	Bonnell	C	A-7066
x51x6.4	152	50.8	6.35	6.56	6.43E-02	2419	0.406	6.33	83	51.1	109	1.02	40.2	20.5	47.6	2920	Metra Nanshan Crown Extrusions Service Center Metals Extrudex	Laval Lafayette Chaska Prince George Toronto, Ohio	990086 1368 12602 HR1108 H-15283
x51x4.8	152	50.8	4.78	5.12	5.02E-02	1849	0.406	4.96	65.1	51.8	84.5	0.829	32.7	21.2	37.6	2341	Hydro Extrudex Extrudex	Montreal Québec Toronto	MH-39222 V-17255 H-20019
x51x3.2	152	50.8	3.18	3.39	3.32E-02	1250	0.406	3.44	45.2	52.5	57.9	0.596	23.5	21.8	26.2	1658	Bonnell Pennex Aluminum Extruded Aluminum Corporation Nanshan Western Extrusions Service Center Metals Extrudex	C Leetonia Belding Lafayette Dallas Prince George Ohio	A-7060 5696-H 20846 1480 H 19357 HR0446 H-1318
x51x3.1	152	50.8	3.05	3.27	3.21E-02	1202	0.406	3.32	43.5	52.6	55.7	0.576	22.7	21.9	25.2	1600	Hydro Hydro Extrudex Extrudex	Montreal Montreal Québec Toronto	AH-07139 MH-58773 V-18404 H-17430
x51x2.3	152	50.8	2.29	2.46	2.41E-02	908	0.406	2.54	33.3	52.9	42.4	0.448	17.6	22.2	19.3	1237	Bonnell	C	A-7061
x44x3.2	152	44.4	3.18	3.28	3.22E-02	1210	0.394	3.22	42.3	51.6	54.9	0.442	19.9	19.1	22.3	1289	Bonnell	C	A-7023
x44x2.5	152	44.4	2.54	2.63	2.58E-02	974	0.394	2.62	34.4	51.9	44.5	0.366	16.5	19.4	18.2	1061	Extrudex Extrudex	Québec Toronto	V-14581 H-7567
x44x2.3	152	44.4	2.34	1.89	1.85E-02	898	0.394	2.43	31.8	52	41.1	0.341	15.3	19.5	16.8	985	Hydro	Montreal	MH-69160
x38x3.2	152	38.1	3.18	3.17	3.11E-02	1169	0.381	3	39.3	50.6	51.9	0.313	16.4	16.4	18.5	956	Service Center Metals	Prince George	HR1214
x25x3.2	152	25.4	3.18	2.95	2.89E-02	1089	0.356	2.55	33.4	48.4	45.9	0.124	9.76	10.7	11.3	418	Nanshan	Lafayette	1615
HSS 140																			
x64x3.2	140	63.5	3.18	3.17	3.11E-02	1169	0.406	2.48	39	46	48.1	0.833	26.2	26.7	29.5	1960	Bonnell	C	A-7056
HSS 127																			
x102x3.2	127	102	3.18	3.84	3.77E-02	1411	0.458	3.4	53.6	49.1	63.1	2.41	47.5	41.3	54.1	4309	Extrudex	Toronto	H-8751
x76x6.4	127	76.2	6.35	6.56	6.43E-02	2419	0.406	5.11	80.4	45.9	99.9	2.24	58.9	30.5	69.1	4904	Service Center Metals	Prince George	HR1361
x76x4.8	127	76.2	4.78	5.02	4.92E-02	1849	0.406	4.01	63.1	46.6	77.4	1.78	46.8	31.1	53.9	3858	Crown Extrusions Pennex Aluminum	Chaska Leetonia	12476 5237-H
x76x3.2	127	76.2	3.18	3.39	3.32E-02	1250	0.406	2.78	43.8	47.2	53.1	1.26	33	31.7	37.2	2683	Service Center Metals Pennex Aluminum Bonnell	Prince George Leetonia C	HR1213 5233-H A-7053
x76x2.4	127	76	2.36	2.55	2.50E-02	937	0.406	2.11	33.3	47.5	40	0.956	25.2	31.9	28.1	2033	Extrudex	Toronto	H-6636
x64x4.8	127	63.5	4.78	4.7	4.61E-02	1728	0.381	3.56	56	45.4	70	1.17	36.9	26.1	42.6	2797	Extrudex	Toronto	H-9550
x64x4.8	127	63.5	4.75	4.68	4.59E-02	1719	0.381	3.54	55.7	45.4	69.7	1.17	36.8	26.1	42.4	2784	Hydro Hydro	Montreal Montreal	AH-07233 MH-16356
x64x3.2	127	63.5	3.18	3.18	3.12E-02	1174	0.381	2.49	39.3	46.1	48.4	0.837	26.4	26.7	29.6	1978	Bonnell	C	A-7065
x51x6.4	127	50.8	6.35	5.66	5.55E-02	2097	0.356	3.93	61.9	43.3	80.4	0.861	33.9	20.3	40.5	2309	Extrudex	Québec	V-17254
x51x4.8	127	50.8	4.78	4.36	4.28E-02	1607	0.356	3.1	48.9	43.9	62.6	0.7	27.6	20.9	32	1853	Taber	Russelville	OH-12413
x51x4.8	127	50.8	4.75	4.32	4.24E-02	1602	0.356	3.09	48.7	43.9	62.4	0.699	27.5	20.9	31.9	1847	Extrudex	Québec	V-19240
x51x3.2	127	50.8	3.18	2.95	2.89E-02	1089	0.356	2.17	34.1	44.6	43.1	0.504	19.9	21.5	22.3	1314	Metra Bonnell Pennex Aluminum Nanshan Crown Extrusions Western Extrusions Service Center Metals Taber Hydro Extrudex Extrudex	Laval CN Leetonia Lafayette Chaska Dallas Prince George Russelville Montreal Québec Toronto, Ohio	98214 A-7050 5234-H 1550 1406 H 19755 HR0334 OH-01381 MH-1008107 V-17069 H-21569
x51x2.5	127	50.8	2.54	2.37	2.32E-02	877	0.356	1.77	27.8	44.9	34.9	0.416	16.4	21.8	18.2	1078	Extrudex	Québec	V-15486
x51x2.4	127	50.8	2.39	2.24	2.20E-02	826	0.356	1.67	26.3	44.9	32.9	0.394	15.5	21.8	17.2	1020	Pennex Aluminum	Leetonia	5553-H
x51x2.4	127	50.8	2.36	2.22	2.18E-02	818	0.356	1.65	26	44.9	32.6	0.391	15.4	21.9	17	1010	Bonnell	CN	A-7058
x44x4.8	127	44.4	4.78	4.19	4.11E-02	1546	0.343	2.88	45.3	43.1	58.9	0.513	23.1	18.2	27	1434	Extruded Aluminum Corporation	Belding	5859
x44x3.2	127	44.4	3.18	2.84	2.79E-02	1048	0.343	2.01	31.7	43.8	40.6	0.373	16.8	18.9	18.9	1026	Extrudex Service Center Metals Extruded Aluminum Corporation Bonnell Taber	Toronto Prince George Belding CN Russelville	H-10365 HR1268 5912 A-7021 OH-01380
x44x3.1	127	44.4	3.05	2.72	2.67E-02	1008	0.343	1.94	30.5	43.9	39.1	0.361	16.2	18.9	18.3	991	Metra	Laval	94199
x38x3.2	127	38.1	3.18	2.72	2.67E-02	1008	0.330	1.86	29.2	42.9	38.1	0.264	13.8	16.2	15.7	765	Metra	Laval	997168
x25x3.2	127	25.4	3.18	2.52	2.47E-02	927	0.305	1.55	24.4	40.9	33.1	0.104	8.18	10.6	9.54	339	Nanshan	Lafayette	1238

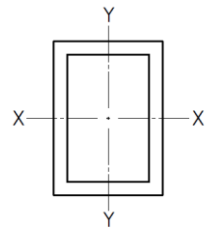
TUBES RECTANGULAIRES, COINS CARRÉS

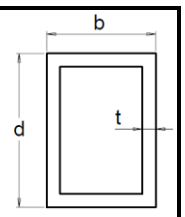




Identification de la section	Dimensions extérieures		Épaisseur (t)	Masse	Charge morte	Aire	Aire par mètres de longueur	Axe X-X				Axe Y-Y				Constante de torsion	Extrudeur	Emplacement	Identification de la section du fabricant
HSS d x b x t	Hauteur (d)	Largeur (b)						I_x	S_x	r_x	Z_x	I_y	S_y	r_y	Z_y	J			
mm x mm x mm	mm	mm	mm	kg/m	kN/m	mm²	m²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴			
HSS 114																			
x51x3.2	114	50.8	3.18	2.73	2.68E-02	1008	0.330	1.66	29.1	40.6	36.4	0.459	18.1	21.3	20.4	1145	Bonnell	C	A-7049
x51x2.4	114	50.8	2.39	2.08	2.04E-02	766	0.330	1.28	22.4	40.9	27.9	0.359	14.1	21.7	15.7	889	Bonnell	C	A-7054
x44x3.2	114	44.4	3.18	2.62	2.57E-02	968	0.317	1.54	26.9	39.9	34.2	0.339	15.3	18.7	17.3	897	Bonnell Crown Extrusions Pennex Aluminum Service Center Metals Extrudex	CN Chaska Leetonia Prince George Québec	A-7020 12013 5582-H HR1111 V-12282
x44x2.9	114	44.4	2.92	2.42	2.37E-02	893	0.317	1.43	25	40	31.6	0.316	14.2	18.8	16	835	Western Extrusions	Dallas	H 19834
x44x2.8	114	44.4	2.79	2.31	2.27E-02	856	0.317	1.37	24	40	30.4	0.305	13.7	18.9	15.4	803	Metra Hydro	Laval Montreal	95373 AH-07138
x44x2.4	114	44.4	2.39	1.99	1.95E-02	735	0.317	1.19	20.8	40.2	26.2	0.267	12	19	13.4	699	Bonnell	CN	A-9342
x44x2.3	114	44.4	2.29	1.92	1.88E-02	705	0.317	1.14	20	40.2	25.1	0.257	11.5	19.1	12.8	672	Extrudex	Toronto	H-15644
x32x5.4	114	31.8	5.38	3.95	3.87E-02	1457	0.292	2.01	35.2	37.2	47.5	0.225	14.2	12.4	17.4	691	Western Extrusions	Dallas	H 19385
HSS 108																			
x32x6.4	108	31.8	6.35	4.37	4.29E-02	1613	0.280	1.96	36.2	34.8	49.3	0.233	14.7	12	18.6	712	Taber	Russelville	OH-12539
HSS 102																			
x76x6.4	102	76.2	6.35	5.69	5.58E-02	2097	0.356	2.94	57.9	37.5	71.2	1.85	48.5	29.7	57.9	3545	Nanshan Crown Extrusions Extrudex	Lafayette Chaska Toronto, Ohio	1094 12110 H-1070
x76x4.8	102	76.2	4.78	4.37	4.29E-02	1607	0.356	2.33	45.8	38.1	55.5	1.48	38.7	30.3	45.3	2796	Extrudex	Ohio	H-25447
x76x3.2	102	76.2	3.18	2.95	2.89E-02	1089	0.356	1.63	32.1	38.7	38.2	1.04	27.3	30.9	31.3	1951	Bonnell Crown Extrusions Pennex Aluminum Nanshan Hydro	C Chaska Leetonia Lafayette Montreal	A-1415 1296 5737-H 1138 MH-13744
x51x9.5	102	50.8	9.52	6.85	6.72E-02	2540	0.305	2.95	58.1	34.1	77	0.89	35	18.7	44.7	2244	Extrudex	Toronto	H-12575
x51x6.4	102	50.8	6.35	4.81	4.72E-02	1774	0.305	2.21	43.5	35.3	55.8	0.7	27.6	19.9	33.3	1713	Hydro Service Center Metals Pennex Aluminum Nanshan Western Extrusions Pries Enterprises Taber Extrudex Extrudex	Montreal Prince George Leetonia Lafayette Dallas Independance Russelville Québec Toronto, Ohio	MH-36644 HR1019 5685-H 1110 H 19130 3674 OH-13960 V-18402 H-16405
x51x4.8	102	50.8	4.78	3.7	3.63E-02	1364	0.305	1.76	34.6	35.9	43.7	0.572	22.5	20.5	26.4	1376	Service Center Metals Pennex Aluminum Nanshan Metra	Prince George Leetonia Lafayette Laval	HR1411 5660-H 1511 94152
x51x4.8	102	50.8	4.75	3.66	3.59E-02	1358	0.305	1.75	34.5	35.9	43.5	0.569	22.4	20.5	26.3	1370	Hydro Hydro Extrudex Extrudex	Montreal Montreal Québec Toronto, Ohio	AH-07242 MH-40244 SA-05475 H-2249
x51x3.2	102	50.8	3.18	2.52	2.47E-02	927	0.305	1.24	24.4	36.5	30.3	0.413	16.3	21.1	18.5	978	Bonnell Pennex Aluminum Crown Extrusions Nanshan Service Center Metals Western Extrusions Taber	CN Leetonia Chaska Lafayette Prince George Dallas Russelville	A-7055 5236-H 12009 1314 HR0445 H 19450 OH-05578
x51x3.1	102	50.8	3.05	2.41	2.36E-02	892	0.305	1.19	23.5	36.6	29.2	0.399	15.7	21.2	17.8	943	Metra Hydro Hydro Extrudex Extrudex	Laval Montreal Montreal Québec Toronto, Ohio	94153 AH-7321 MH-39221 SA-05474 H-9368
x44x6.4	102	44.4	6.35	4.59	4.50E-02	1694	0.292	2.03	39.9	34.6	52	0.506	22.8	17.3	27.8	1324	Taber	Russelville	OH-14769
x44x4.8	102	44.4	4.83	3.58	3.51E-02	1317	0.292	1.63	32.1	35.2	41.2	0.421	18.9	17.9	22.4	1082	Extrudex	Ohio	H-21468
x44x3.2	102	44.4	3.18	2.41	2.36E-02	887	0.292	1.14	22.5	35.9	28.3	0.305	13.7	18.5	15.6	769	Bonnell Crown Extrusions Extruded Aluminum Corporation Pennex Aluminum Service Center Metals Taber	CN Chaska Belding Leetonia Prince George Russelville	A-7000 1303 5877 5411-H HR0332 OH-01761
x44x2.9	102	44.4	2.92	2.22	2.18E-02	819	0.292	1.06	20.9	36	26.2	0.284	12.8	18.6	14.5	716	Western Extrusions	Dallas	H 19847
x44x2.8	102	44.4	2.79	2.14	2.10E-02	785	0.292	1.02	20	36	25.1	0.274	12.3	18.7	13.9	689	Hydro	Montreal	AH-07101
x44x2.5	102	44.4	2.54	1.94	1.90E-02	716	0.292	0.935	18.4	36.1	23	0.253	11.4	18.8	12.8	633	Bonnell	CN	A-7010
x44x2.3	102	44.4	2.29	1.75	1.72E-02	647	0.292	0.849	16.7	36.2	20.9	0.231	10.4	18.9	11.6	577	Metra Bonnell Hydro Extrudex Extrudex	Laval CN Montreal Québec Toronto, Ohio	95684 A-7090 MH-05200 V-00986 H-3200
x44x1.6	102	44.4	1.57	1.22	1.20E-02	450	0.292	0.601	11.8	36.5	14.6	0.166	7.45	19.2	8.2	410	Bonnell	CN	A-7006
x38x6.4	102	38.1	6.35	4.39	4.31E-02	1613	0.279	1.84	36.3	33.8	48.1	0.347	18.2	14.7	22.5	971	Extrudex	Ohio	H-26334
x38x4.6	102	38.1	4.57	3.24	3.18E-02	1194	0.279	1.42	28	34.5	36.4	0.281	14.8	15.3	17.5	771	Bonnell	C	A-1939
x38x3.2	102	38.1	3.18	2.3	2.26E-02	847	0.279	1.04	20.5	35.1	26.3	0.214	11.2	15.9	12.9	578	Taber	Russelville	OH-12865
x38x3.1	102	38.1	3.05	2.2	2.16E-02	814	0.279	1.01	19.8	35.2	25.3	0.207	10.9	16	12.4	558	Metra Extrudex	Laval Québec	94198 V-00762
x38x2.4	102	38.1	2.39	1.75	1.72E-02	644	0.279	0.809	15.9	35.4	20.2	0.17	8.91	16.2	9.99	453	Pennex Aluminum Bonnell	Leetonia C	5567-H A-1938
x25x3.2	102	25.4	3.18	2.08	2.04E-02	766	0.254	0.848	16.7	33.3	22.3	0.084	6.6	10.5	7.75	260	Taber Nanshan Service Center Metals Bonnell	Russelville Lafayette Prince George CN	OH-12347 1645 HR1085 A-7070
x25x3.1	102	25.4	3.05	2.04	2.00E-02	737	0.254	0.819	16.1	33.3	21.5	0.082	6.42	10.5	7.49	252	Hydro Extrudex	Montreal Québec	MH-42033 V-14772
x25x2.3	102	25.4	2.29	1.52	1.49E-02	560	0.254	0.534	12.5	33.7	16.5	0.066	5.17	10.8	5.86	201	Bonnell	C	A-7141
HSS 89																			
x44x3.2	88.9	44.4	3.18	2.19	2.15E-02	806	0.267	0.816	18.4	31.8	22.9	0.27	12.2	18.3	14	643	Service Center Metals Bonnell	Prince George C	HR1110 A-1919
HSS 87																			
x61x4.8	86.7	61	4.75	3.57	3.50E-02	1312	0.295	1.34	30.8	31.9	37.9	0.76	24.9	24.1	29.4	1512	Hydro	Montreal	AH-07120
HSS 86																			
x48x3.2	85.7	47.6	3.18	2.2	2.16E-02	806	0.267	0.78	18.2	31.1	22.5	0.307	12.9	19.5	14.8	691	Extrudex	Toronto	H-5260
HSS 83																			
x32x5.1	82.6	31.8	5.08	2.88	2.82E-02	1058	0.229	0.806	19.5	27.6	25.8	0.159	10	12.3	12.4	441	Extrudex	Ohio	H-26321
HSS 79																			
x41x1.6	79.4	41.3	1.57	1	9.81E-03	370	0.241	0.313	7.89	29.1	9.63	0.113	5.48	17.5	6.11	259	Metra	Laval	996700

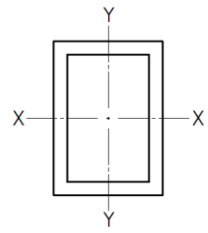
TUBES RECTANGULAIRES, COINS CARRÉS

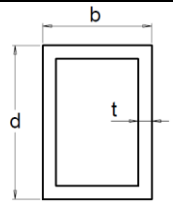




Identification de la section	Dimensions extérieures		Épaisseur (t)	Masse	Charge morte	Aire	Aire par mètres de longueur	Axe X-X				Axe Y-Y				Constante de torsion	Extrudeur	Emplacement	Identification de la section du fabricant
HSS d x b x t	Hauteur (d)	Largeur (b)						I_x	S_x	r_x	Z_x	I_y	S_y	r_y	Z_y	J			
mm x mm x mm	mm	mm	mm	kg/m	kN/m	mm²	m²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴			
HSS 76																			
x64x2.5	76.2	63.5	2.54	1.85	1.81E-02	684	0.279	0.59	15.5	29.4	18.3	0.444	14	25.5	16.1	776	Bonnell	C	A-7063
x51x6.4	76.2	50.8	6.35	3.94	3.86E-02	1452	0.254	1.06	27.8	27	35.3	0.54	21.3	19.3	26.1	1137	Metra Service Center Metals Pennex Aluminum Crown Extrusions Nanshan Taber Hydro Extrudex Extrudex	Laval Prince George Leetonia Chaska Lafayette Russelville Montreal Québec Toronto, Ohio	94213 HR1043 5343-H 12479 1536 OH-10693 MH-16582 V-18335 H-24170
x51x4.8	76.2	50.8	4.78	3.05	2.99E-02	1122	0.254	0.855	22.4	27.6	27.9	0.443	17.4	19.9	20.8	917	Extrudex	Toronto, Ohio	H-18513
x51x4.8	76.2	50.8	4.76	3.03	2.97E-02	1119	0.254	0.854	22.4	27.6	27.9	0.442	17.4	19.9	20.8	915	Crown Extrusions	Chaska	12477
x51x4.8	76.2	50.8	4.75	3.03	2.97E-02	1116	0.254	0.852	22.4	27.6	27.8	0.441	17.4	19.9	20.7	913	Extrudex	Québec	V-00164
x51x3.2	76.2	50.8	3.18	2.08	2.04E-02	766	0.254	0.611	16	28.2	19.5	0.321	12.6	20.5	14.7	654	Hydro Pennex Aluminum Extruded Aluminum Corporation Crown Extrusions Nanshan Western Extrusions Bonnell Taber	Montreal Leetonia Belding Chaska Lafayette Dallas CN Russelville	AH-7327 5121-H 5791 1470 1152 H 19599 A-7037 OH-02798
x51x3.1	76.2	50.8	3.05	1.99	1.95E-02	737	0.254	0.59	15.5	28.3	18.8	0.311	12.2	20.5	14.1	632	Metra Hydro Extrudex Extrudex	Laval Montreal Québec Toronto, Ohio	94209 MH-13613 SA-05466 H-5261
x51x2.6	76.2	50.8	2.59	1.71	1.68E-02	631	0.254	0.511	13.4	28.5	16.2	0.271	10.7	20.7	12.2	548	Bonnell	CN	A-7030
x44x3.2	76.2	44.4	3.18	1.97	1.93E-02	726	0.241	0.557	14.6	27.7	18.1	0.236	10.6	18	12.3	520	Metra Service Center Metals Nanshan Pennex Aluminum Bonnell Taber	Laval Prince George Lafayette Leetonia CN Russelville	998558 HR0331 1522 5004-H A-7040 OH-01823
x44x2.4	76.2	44.4	2.39	1.5	1.47E-02	553	0.241	0.434	11.4	28	13.9	0.186	8.37	18.3	9.53	406	Bonnell Extrudex	C Ohio	A-1933 H-21882
x44x1.6	76.2	44.4	1.57	1	9.81E-03	370	0.241	0.297	7.8	28.3	9.43	0.129	5.8	18.7	6.49	287	Bonnell	C	A-7124
x38x4.8	76.2	38.1	4.78	2.71	2.66E-02	1000	0.229	0.7	18.4	26.5	23.6	0.222	11.7	14.9	14.1	543	Metra Pennex Aluminum Service Center Metals Taber Hydro Extrudex	Laval Leetonia Prince George Russelville Montreal Toronto, Ohio	998154 5678-H HR1367 OH-10694 MH-15692 H-16550
x38x3.2	76.2	38.1	3.18	1.86	1.82E-02	685	0.229	0.503	13.2	27.1	16.6	0.165	8.66	15.5	10	395	Metra Pennex Aluminum Crown Extrusions Nanshan Bonnell Taber Extrudex	Laval Leetonia Chaska Lafayette CN Russelville Toronto, Ohio	997698 5517-H 1607 1481 A-1497 OH-10040 H-13665
x38x3.1	76.2	38.1	3.05	1.78	1.75E-02	660	0.229	0.486	12.8	27.1	16	0.16	8.38	15.6	9.7	382	Metra Hydro Hydro Extrudex	Laval Montreal Montreal Québec	94190 AH-07150 MH-41535 SA-05465
x32x3.2	76.2	31.8	3.18	1.75	1.72E-02	645	0.216	0.449	11.8	26.4	15.1	0.108	6.79	12.9	7.94	282	Pennex Aluminum	Leetonia	5041-H
x25x3.2	76.2	25.4	3.18	1.64	1.61E-02	605	0.203	0.396	10.4	25.6	13.6	6.38E-02	5.02	10.3	5.95	183	Taber Pennex Aluminum Extruded Aluminum Corporation Crown Extrusions Nanshan Bonnell Extrudex	Russelville Leetonia Belding Chaska Lafayette CN Ohio	OH-07896 5544-H 20092 12014 1519 A-1915 H-22330
x25x3.1	76.2	25.4	3.05	1.57	1.54E-02	582	0.203	0.382	10	25.6	13.2	6.20E-02	4.88	10.3	5.76	177	Metra Hydro Extrudex Extrudex	Laval Montreal Québec Toronto	94196 MH-07995 V-14770 H-22492
x25x2.4	76.2	25.4	2.39	1.25	1.23E-02	462	0.203	0.31	8.14	25.9	10.6	5.18E-02	4.08	10.6	4.69	146	Bonnell	C	A-1927
x19x2.0	76.2	19	2.03	1.01	9.90E-03	371	0.190	0.234	6.13	25.1	8.16	2.37E-02	2.48	7.99	2.86	72.9	Extrudex	Toronto	H-11036
HSS 70																			
x51x2.4	69.9	50.8	2.39	1.5	1.47E-02	553	0.241	0.386	11	26.4	13.2	2.34E-01	9.23	20.6	10.6	449	Pennex Aluminum	Leetonia	5554-H
HSS 64																			
x51x3.2	63.5	50.8	3.18	1.86	1.82E-02	685	0.229	0.393	12.4	23.9	14.9	2.75E-01	10.8	20	12.7	501	Service Center Metals	Prince George	HR1421
x38x3.2	63.5	38.1	3.18	1.64	1.61E-02	605	0.203	0.319	10	23	12.5	1.40E-01	7.36	15.2	8.64	306	Service Center Metals Pennex Aluminum Nanshan Bonnell	Prince George Leetonia Lafayette C	HR0448 5214-H 1470 A-7014
x38x1.8	63.5	38.1	1.83	0.972	9.53E-03	358	0.203	0.198	6.23	23.5	7.57	8.89E-02	4.67	15.8	5.3	191	Crown Extrusions	Chaska	12093
x32x3.2	63.5	31.8	3.18	1.53	1.50E-02	565	0.191	0.282	8.89	22.4	11.3	9.13E-02	5.75	12.7	6.79	221	Service Center Metals Crown Extrusions Pennex Aluminum Western Extrusions	Prince George Chaska Leetonia Dallas	HR1088 1284 5163-H H 19619
x32x1.4	63.5	31.8	1.42	0.713	6.99E-03	263	0.191	0.14	4.41	23.1	5.42	4.73E-02	2.98	13.4	3.33	111	Bonnell	N	A-1928
x25x1.6	63.5	25.4	1.6	0.744	7.30E-03	274	0.178	0.136	4.29	22.3	5.43	3.17E-02	2.5	10.8	2.81	82.7	Bonnell	C	A-1536
HSS 57																			
x44x3.2	57.2	44.4	3.18	1.64	1.61E-02	605	0.203	0.275	9.63	21.3	11.7	0.184	8.28	17.4	9.79	343	Bonnell Western Extrusions Taber	C Dallas Russelville	A-1930 H 19192 OH-07485
x25x1.6	57.2	25.4	1.57	0.678	6.65E-03	250	0.165	0.103	3.61	20.3	4.52	2.85E-02	2.24	10.7	2.53	71	Bonnell	N	A-1913
x13x3.2	57.2	12.7	3.18	1.09	1.07E-02	403	0.140	0.128	4.49	17.8	6.27	8.67E-03	1.37	4.64	1.79	28.7	Crown Extrusions	Chaska	13114
HSS 51																			
x44x3.2	50.8	44.4	3.18	1.53	1.50E-02	565	0.190	0.207	8.14	19.1	9.86	0.167	7.51	17.2	8.96	284	Bonnell	C	A-7029
x38x3.2	50.8	38.1	3.18	1.42	1.39E-02	524	0.178	0.184	7.24	18.7	8.9	0.116	6.07	14.8	7.23	222	Taber Crown Extrusions Pennex Aluminum Nanshan Service Center Metals Bonnell	Russelville Chaska Leetonia Lafayette Prince George CN	OH-02797 12043 5213-H 1287 HR0330 A-1408
x25x4.8	50.8	25.4	4.78	1.73	1.70E-02	637	0.152	0.185	7.28	17	9.64	5.57E-02	4.38	9.35	5.6	140	Service Center Metals	Prince George	HR1156
x25x3.2	50.8	25.4	3.18	1.2	1.18E-02	444	0.152	0.138	5.44	17.6	6.98	4.38E-02	3.45	9.93	4.16	107	Bonnell Pennex Aluminum Crown Extrusions Extruded Aluminum Corporation Nanshan Service Center Metals Western Extrusions Taber Pries Enterprises	CN Leetonia Chaska Belding Lafayette Prince George Dallas Russelville Independance	A-7045 5071-H 1378 5790 1239 HR0329 H 19510 OH-02796 1162
x25x2.4	50.8	25.4	2.36	0.916	8.98E-03	338	0.152	0.109	4.29	18	4.51	3.54E-02	2.79	10.2	3.27	85.3	Bonnell	N	A-1519
x25x2.0	50.8	25.4	1.98	0.776	7.61E-03	286	0.152	9.39E-02	3.7	18.1	4.63	3.09E-02	2.43	10.4	2.81	73.8	Bonnell	CN	A-1476
x25x1.6	50.8	25.4	1.57	0.624	6.12E-03	230	0.152	7.69E-02	3.03	18.3	3.76	2.56E-02	2.02	10.6	2.3	60.7	Bonnell	CN	A-1911
x19x4.8	50.8	19	4.78	1.56	1.53E-02	576	0.140	0.153	6.01	16.3	8.25	2.63E-02	2.76	6.76	3.68	76.1	Crown Extrusions	Chaska	12564
HSS 44																			
x25x2.4	44.5	25.4	2.39	0.843	8.27E-03	311	0.140	7.86E-02	3.53	15.9	4.43	3.17E-02	2.5	10.1	2.95	71.5	Bonnell	CN	A-1405
x25x1.6	44.5	25.4	1.57	0.57	5.59E-03	210	0.140	5.53E-02	2.49	16.2	3.06	2.28E-02	1.79	10.4	2.06	50.5	Bonnell	C	A-7042
x19x1.9	44.5	19	1.9	0.617	6.05E-03	227	0.127	5.42E-02	2.44	15.4	3.12	1.36E-02	1.43	7.74	1.67	35.2	Pennex Aluminum	Leetonia	4256-H

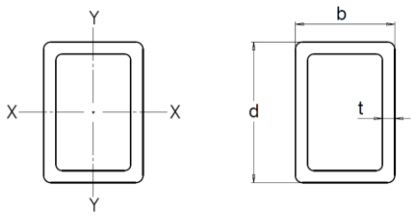
TUBES RECTANGULAIRES, COINS CARRÉS





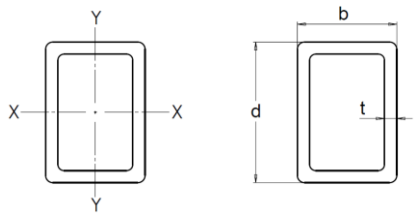
Identification de la section	Dimensions extérieures		Épaisseur (t)	Masse	Charge morte	Aire	Aire par mètres de longueur	Axe X-X				Axe Y-Y				Constante de torsion	Extrudeur	Emplacement	Identification de la section du fabricant
HSS d x b x t	Hauteur (d)	Largeur (b)						I_x	S_x	r_x	Z_x	I_y	S_y	r_y	Z_y	J			
mm x mm x mm	mm	mm	mm	kg/m	kN/m	mm²	m²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴			
HSS 38																			
x32x4.8	38.1	31.8	4.78	1.56	1.53E-02	576	0.140	0.103	5.42	13.4	7	7.56E-02	4.76	11.5	6.08	140	Service Center Metals	Prince George	HR0451
x25x3.2	38.1	25.4	3.18	0.984	9.65E-03	363	0.127	6.63E-02	3.48	13.5	4.42	3.37E-02	2.66	9.64	3.25	71.1	Taber Pennex Aluminum Extruded Aluminum Corporation Nanshan Service Center Metals Bonnell	Russelville Leetonia Belding Lafayette Prince George CN	OH-02795 5212-H 20525 1285 HR1084 A-7035
x25x1.6	38.1	25.4	1.57	0.516	5.06E-03	190	0.127	3.79E-02	1.99	14.1	2.42	1.99E-02	1.57	10.2	1.82	40.6	Bonnell	CN	A-1479
x19x3.2	38.1	19	3.18	0.875	8.58E-03	323	0.114	5.39E-02	2.83	12.9	3.71	1.65E-02	1.74	7.16	2.18	41.3	Service Center Metals Crown Extrusions Pennex Aluminum Bonnell	Prince George Chaska Leetonia CN	HR1211 1238 5142-H A-1348
x19x2.4	38.1	19	2.36	0.672	6.59E-03	248	0.114	4.34E-02	2.28	13.2	2.92	1.38E-02	1.45	7.46	1.74	33.7	Bonnell	N	A-1926
x19x1.6	38.1	19	1.57	0.461	4.52E-03	170	0.114	3.12E-02	1.64	13.6	2.06	1.02E-02	1.08	7.76	1.25	24.5	Western Extrusions	Dallas	H 19821
x19x1.3	38.1	19	1.27	0.376	3.69E-03	139	0.114	2.59E-02	1.36	13.7	1.69	8.61E-03	0.904	7.88	1.03	20.4	Bonnell	C	A-1442
HSS 32																			
x25x3.2	31.8	25.4	3.18	0.875	8.58E-03	323	0.114	4.17E-02	2.63	11.4	3.33	2.87E-02	2.26	9.44	2.82	53.9	Crown Extrusions	Chaska	1412
HSS 27																			
x19x1.3	27.0	19	1.27	0.3	2.94E-03	111	0.092	1.11E-02	0.823	10	1	6.38E-03	0.67	7.6	0.783	12.6	Pennex Aluminum	Leetonia	5184-H
HSS 25																			
x19x3.2	25.4	19	3.18	0.656	6.43E-03	242	0.089	1.87E-02	1.47	8.79	1.92	1.14E-02	1.19	6.86	1.54	22.8	Crown Extrusions Bonnell	Chaska CN	1571 A-1440
x13x3.2	25.4	12.7	3.18	0.547	5.36E-03	202	0.076	1.37E-02	1.08	8.24	1.47	3.93E-03	0.619	4.41	0.832	10.2	Service Center Metals Bonnell	Prince George C	HR1215 A-7025
x13x1.6	25.4	12.7	1.57	0.299	2.93E-03	110	0.076	8.58E-03	0.675	8.83	0.866	2.72E-03	0.428	4.97	0.517	6.65	Bonnell	C	A-1500
HSS 22																			
x19x1.6	22.2	19	1.57	0.326	3.20E-03	120	0.082	8.23E-03	0.741	8.28	0.906	6.41E-03	0.673	7.31	0.811	11.2	Extruded Aluminum Corporation	Belding	20017
HSS 19																			
x11x1.3	19.1	11.1	1.27	0.19	1.86E-03	70	0.060	3.19E-03	0.335	6.74	0.424	1.32E-03	0.236	4.33	0.285	2.97	Pennex Aluminum	Leetonia	5203-H

TUBES RECTANGULAIRES, COINS RONDS



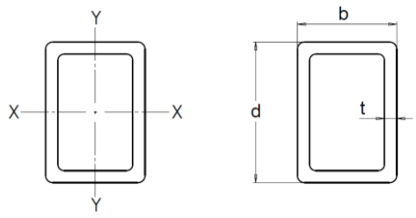
Identification de la section	Dimensions extérieures		Épaisseur (t)	Masse	Charge morte	Aire	Aire par mètres de longueur	Axe X-X				Axe Y-Y				Constante de torsion	Extrudeur	Emplacement	Identification de la section du fabricant
HSS d x b x t	Hauteur (d)	Largeur (b)						I_x	S_x	r_x	Z_x	I_y	S_y	r_y	Z_y	J			
mm x mm x mm	mm	mm	mm	kg/m	kN/m	mm²	m²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴			
HSS 394																			
x89x6.4	394	88.9	6.35	16.7	1.64E-01	6141	0.943	106	541	132	711	9.12	205	38.5	230	29305	Taber	Russelville	TM-12234
HSS 305																			
x152x6.4	305	152	6.35	15.3	1.50E-01	5637	0.909	69.3	455	111	558	23.5	308	64.6	344	55105	Bonnell	C	WLB-589
x76x6.4	305	76.2	6.35	12.7	1.25E-01	4677	0.761	47.9	314	101	415	5	131	32.7	148	15283	Taber	Russelville	TM-11868
x51x4.8	305	50.8	4.83	9.06	8.88E-02	3339	0.710	31.7	208	97.4	284	1.62	63.6	22	71.7	5398	Western Extrusions	Dallas	H 19062
HSS 304																			
x102x7.9	304	102	7.87	16.8	1.65E-01	6178	0.811	67.4	443	104	570	11.4	225	43	255	32206	Taber	Russelville	TM-12764
HSS 263																			
x85x4.6	263	85.3	4.57	8.22	8.06E-02	3021	0.675	24.1	183	89.4	238	4.12	96.5	36.9	107	12005	Extrudex	Toronto	H-20789
HSS 254																			
x203x6.0	254	203	5.99	14.5	1.42E-01	5329	0.909	51.5	405	98.3	477	36.5	359	82.8	409	65346	Bonnell	C	WLB-547
x152x5.6	254	152	5.59	12	1.18E-01	4415	0.810	39.6	312	94.7	376	17.9	235	63.7	264	38182	Bonnell	C	WLB-554
x127x12.7	254	127	12.7	24.5	2.40E-01	9032	0.761	72.3	569	89.5	721	23.4	368	50.9	434	56445	Tower	Olney	15019
x76x3.8	254	76.2	3.81	6.67	6.54E-02	2458	0.660	18.6	146	87	188	2.74	72	33.4	79	7849	Tower	Olney	16011
x64x4.0	254	63.5	3.99	6.7	6.57E-02	2469	0.634	17.8	140	84.9	184	1.91	60.2	27.8	66.4	5784	Tower	Olney	14725
x51x3.6	254	50.8	3.56	5.74	5.63E-02	2117	0.609	14.6	115	83	154	1.06	41.7	22.4	46.1	3388	Bonnell	C	WLB-620
x51x3.2	254	50.8	3.18	5.14	5.04E-02	1895	0.608	13.1	103	83.2	138	0.962	37.9	22.5	41.5	3083	Western Extrusions	Dallas	H 19061
HSS 248																			
x181x6.4	248	181	6.35	14.3	1.40E-01	5277	0.852	47.1	380	94.5	452	29	320	74.2	364	55194	Taber	Russelville	TM-11453
HSS 229																			
x76x6.4	229	76.2	6.35	10.1	9.90E-02	3710	0.608	22.6	198	78.1	256	3.82	100	32.1	114	10738	Tower	Olney	17975
HSS 203																			
x152x12.7	203	152	12.7	22.7	2.23E-01	8387	0.700	47	462	74.8	569	29.5	387	59.3	462	57300	Western Extrusions	Dallas	H 19054
x152x7.6	203	152	7.62	14.1	1.38E-01	5184	0.707	30.6	301	76.9	361	19.5	256	61.3	296	36793	Taber	Russelville	TM-13538
x152x4.8	203	152	4.78	8.94	8.77E-02	3296	0.706	20	197	77.9	233	12.8	169	62.4	191	24027	Bonnell	C	WLB-537
x152x4.8	203	152	4.78	8.96	8.79E-02	3303	0.709	20.1	198	78	234	12.9	169	62.5	192	24033	Bonnell	C	WLB-545
x127x9.5	203	127	9.52	16	1.57E-01	5893	0.650	32.3	318	74	392	15.2	240	50.9	281	32685	Taber	Russelville	TM-12160
x102x9.5	203	102	9.52	14.8	1.45E-01	5439	0.604	28	276	71.8	348	9.11	179	40.9	210	22027	Crown Extrusions	Chaska	12382
x102x6.4	203	102	6.35	10	9.81E-02	3701	0.604	19.7	194	73	241	6.58	130	42.2	148	15640	Bonnell	C	WLB-613
x102x6.4	203	102	6.35	10.1	9.90E-02	3718	0.610	19.9	196	73.2	243	6.62	130	42.2	148	15740	Western Extrusions	Dallas	H 19329
x102x6.4	203	102	6.35	10.1	9.90E-02	3710	0.604	19.8	195	73.1	242	6.6	130	42.2	148	15736	Western Extrusions	Dallas	H 19330
x102x6.4	203	102	6.35	10	9.81E-02	3709	0.608	19.8	195	73.1	242	6.6	130	42.2	148	15632	Extrudex	Toronto	H-20817
x102x4.8	203	102	4.78	7.45	7.31E-02	2735	0.588	14.5	142	72.7	177	4.96	97.6	42.6	110	12232	Extrudex	Ohio	H-27076
x102x3.8	203	102	3.81	6.12	6.00E-02	2256	0.604	12.4	122	74	149	4.21	82.9	43.2	92.1	9879	Bonnell	C	WLB-650
x76x9.5	203	76.2	9.52	13.5	1.32E-01	4960	0.548	23.5	231	68.8	302	4.61	121	30.5	144	12889	Tri City Extrusion	Bristol	2054
x64x6.4	203	63.5	6.35	8.73	8.56E-02	3209	0.525	15	147	68.3	193	2.24	70.5	26.4	81.4	6517	Extrudex	Ohio	H-15316
x51x6.4	203	50.8	6.35	8.29	8.13E-02	3047	0.500	13.4	132	66.3	177	1.33	52.4	20.9	61.5	4165	Extrudex	Ohio	H-1080
x51x3.2	203	50.8	3.18	4.22	4.14E-02	1556	0.500	7.1	69.9	67.5	92.1	0.769	30.3	22.2	33.5	2361	Crown Extrusions	Chaska	12419
x51x3.2	203	50.8	3.18	4.26	4.18E-02	1573	0.042	7.26	71.5	68	93.8	0.779	30.7	22.3	33.9	2364	Gateway Extrusions	Woodbridge	EA116
x51x3.2	203	50.8	3.18	4.27	4.19E-02	1571	0.505	7.24	71.3	67.9	93.6	0.778	30.6	22.3	33.8	2360	Extrudex	Toronto, Ohio	H-20790
HSS 178																			
x51x3.2	178	50.8	3.18	3.83	3.76E-02	1411	0.457	5.13	57.7	60.3	74.8	0.688	27.1	22.1	30	2008	Bonnell	M	AE4310
HSS 162																			
x44x3.2	162	44.4	3.18	3.44	3.37E-02	1270	0.412	3.77	46.6	54.5	60.8	0.468	21.1	19.2	23.5	1387	Bonnell	M	AE4308
HSS 152																			
x102x6.4	152	102	6.35	8.31	8.15E-02	3065	0.507	9.77	128	56.5	156	5.14	101	41	117	10470	Western Extrusions	Dallas	H 19291
x102x6.4	152	102	6.35	8.31	8.15E-02	3065	0.507	9.77	128	56.5	156	5.14	101	41	117	10464	Tri City Extrusion	Bristol	2467
x102x6.4	152	102	6.35	8.15	7.99E-02	2995	0.492	9.38	123	56	151	4.97	97.9	40.7	114	10462	Extrudex	Ohio	H-16426
x102x4.8	152	102	4.78	6.33	6.21E-02	2335	0.507	7.61	99.8	57.1	120	4.03	79.4	41.6	90.7	8144	Tri City Extrusion	Bristol	2027
x102x3.8	152	102	3.81	5.07	4.97E-02	1871	0.503	6.16	80.9	57.4	96.9	3.29	64.7	41.9	73.3	6655	Western Extrusions	Dallas	H 19366
x102x3.8	152	102	3.81	5.07	4.97E-02	1871	0.503	6.16	80.9	57.4	96.9	3.29	64.7	41.9	73.3	6655	Bonnell	C	A-7005
x102x3.2	152	102	3.18	4.26	4.18E-02	1573	0.500	5.23	68.7	57.7	81.9	2.8	55	42.2	62	5705	Tri City Extrusion	Bristol	2192
x76x9.5	152	76.2	9.52	10.8	1.06E-01	4001	0.457	11.2	14.7	147	189	3.55	93.2	93.2	113	8726	Crown Extrusions	Chaska	1556
x76x9.5	152	76.2	9.52	10.8	1.06E-01	3992	0.456	11.2	147	52.9	188	3.54	93	29.8	112	8673	Taber	Russelville	TM-13239
x76x6.4	152	76.2	6.35	7.44	7.30E-02	2742	0.446	8.02	105	54.1	132	2.62	68.9	30.9	80.2	6447	Tri City Extrusion	Bristol	2052
x76x6.4	152	76.2	6.35	7.52	7.37E-02	2775	0.454	8.2	108	54.4	135	2.67	70	31	81.4	6459	Crown Extrusions	Chaska	13641
x76x6.4	152	76.2	6.35	7.25	7.11E-02	2672	0.441	7.66	101	53.5	127	2.55	66.8	30.9	77.9	6306	Taber	Russelville	OH-13793
x76x3.2	152	76.2	3.18	3.83	3.76E-02	1411	0.452	4.34	56.9	55.4	69.9	1.47	38.6	32.3	43.1	3484	Western Extrusions	Dallas	H 19929
x76x3.2	152	76.2	3.18	3.83	3.76E-02	1411	0.452	4.34	56.9	55.4	69.9	1.47	38.6	32.3	43.1	3484	Bonnell	C	A-7016
x51x6.4	152	50.8	6.35	6.49	6.36E-02	2385	0.393	6.12	80.3	50.7	106	0.997	39.2	20.4	46.7	2947	Extrudex	Toronto	H-21485
x51x6.4	152	50.8	6.35	6.69	6.56E-02	2417	0.404	6.31	82.9	51.1	109	1.02	40.1	20.5	47.6	2920	Hydro	Montreal	MH-55881
x51x4.8	152	50.8	4.78	4.98	4.88E-02	1830	0.398	4.85	63.7	51.5	83.1	0.818	32.2	21.1	37.1	2334	Extrudex	Toronto, Ohio	H-23748
x51x4.8	152	50.8	4.78	5	4.90E-02	1843	0.401	4.93	64.6	51.7	84	0.825	32.5	21.2	37.4	2347	Crown Extrusions	Chaska	12239
x51x4.8	152	50.8	4.78	2.02	1.98E-02	1849	0.406	4.96	65.1	51.8	84.5	0.829	32.7	21.2	37.6	2340	Tri City Extrusion	Bristol	2176
x51x3.8	152	50.8	3.81	4.04	3.96E-02	1490	0.401	4.06	53.3	52.2	68.7	0.692	27.2	21.5	30.8	1962	Extruded Aluminum Corporation	Belding	21133
x51x3.2	152	50.8	3.18	3.39	3.32E-02	1250	0.396	3.43	45	52.4	57.8	0.591	23.3	21.7	26.1	1704	Taber	Russelville	OH-14048
x51x3.2	152	50.8	3.18	3.38	3.31E-02	1246	0.401	3.42	44.9	52.4	57.6	0.593	23.3	21.8	26.1	1670	Crown Extrusions	Chaska	12238
x51x3.2	152	50.8	3.18	3.39	3.32E-02	1250	0.405	3.44	45.2	52.5	57.9	0.596	23.5	21.8	26.2	1661	Gateway Extrusions	Woodbridge	US364
x51x3.2	152	50.8	3.18	3.39	3.32E-02	1250	0.406	3.44	45.2	52.5	57.9	0.596	23.5	21.8	26.2	1659	Tri City Extrusion	Bristol	2041
x51x3.2	152	50.8	3.18	3.39	3.32E-02	1250	0.406	3.44	45.2	52.5	57.9	0.596	23.5	21.8	26.2	1659	Bonnell	M	AE0044
x51x3.2	152	50.8	3.18	3.33	3.27E-02	1224	0.395	3.3	43.2	51.9	56	0.58	22.8	21.8	25.5	1663	Extrudex	Ohio	H-13989
x44x3.2	152	44.4	3.18	3.28	3.22E-02	1210	0.393	3.22	42.3	51.6	54.9	0.442	19.9	19.1	22.3	1288	Bonnell	M	AE3250
x38x3.2	152	38.1	3.18	3.13	3.07E-02	1156	0.373	2.92	38.3	50.2	50.9	0.308	16.2	16.3	18.2	959	Crown Extrusions	Chaska	12407
x25x3.2	152	25.4	3.18	2.95	2.89E-02	1089	0.355	2.55	33.4	48.4	45.9	0.124	9.76	10.7	11.3	418	Bonnell	M	AE3351
HSS 140																			
x51x3.2	140	50.8	3.18	3.15	3.09E-02	1161	0.376	2.72	38.9	48.4	49.6	0.545	21.5	21.7	24	1483	Crown Extrusions	Chaska	12249
HSS 127																			
x108x6.4	127	108	6.35	7.31	7.17E-02	2606	0.443	5.79	91.2	47.2	111	4.53	83.9	41.7	99.8	8255	Extrudex	Toronto	H-3293
x76x6.4	127	76.2	6.35	6.59	6.46E-02	2419	0.395	5.08	80	45.8	99.6	2.23	58.5	30.4	68.9	5017	Extrudex	Ohio	H-17298
x76x6.4	127	76.2	6.35	6.53	6.40E-02	2419	0.396	5.08	80	45.8	99.6	2.23	58.5	30.4	68.9	5017	Extrudex	Québec	V-16482
x76x4.8	127	76.2	4.75	4.98	4.88E-02	1840	0.395	3.97	62.5	46.5	76.9	1.77	46.3	31	53.5	3940	Metra	Laval	998129
x64x3.2	127	63.5	3.18	3.14	3.08E-02	1152	0.373	2.41	37.9	45.7	47	0.816	25.7	26.6	29	1960	Extrudex	Ohio	H-25948
x51x6.4	127	50.8	6.35	5.64	5.53E-02	2071	0.345	3.82	60.2	43	78.7	0.844	33.2	20.2	39.8	2324	Extrudex	Toronto	H-21486
x51x6.4	127	50.8	6.35	5.69	5.58E-02	2097	0.354	3.93	61.9	43.3	80.4	0.86	33.9	20.3	40.5	2312	Pries	Independance	6721
x51x6.4	127	50.8	6.35	5.69	5.58E-02	2097	0.347	3.92	61.7	43.2	80.3	0.855	33.7	20.2	40.3	2348	Pries	Independance	1988
x51x6.4	127	50.8	6.35	5.8	5.69E-02	2094	0.353	3.92	61.7	43.3	80.3	0.859	33.8	20.3	40.4	2310	Hydro	Montreal	MH-55884
x51x4.8	127	50.8	4.78	4.36	4.28E-02	1607	0.355	3.1	48.9	43.9	62.6	0.7	27.6	20.9	32	1853	Tri City Extrusion	Bristol	2153
x51x4.8	127	50.8	4.78	4.36	4.28E-02	1607	0.354	3.1	48.8	43.9	62.6	0.7	27.6	20.9	32	1855	Extruded Aluminum Corporation	Belding	21916
x51x4.8	127	50.8	4.78	4.33	4.25E-02	1598	0.350	3.07	48.3	43.8	62	0.695	27.4	20.9	31.8	1852	Crown Extrusions	Chaska	12355
x51x4.8	127	50.8	4.75	4.31	4.23E-02	1597	0.353	3.08	48.5	43.9	62.2	0.696	27.4	20.9	31.8	1844	Metra	Laval	998870
x51x4.8	127	50.8	4.75	4.42	4.33E-02	1597	0.353	3.08	48.5	43.9	62.1	0.696	27.4	20.9	31.8	1845	Hydro	Montreal	MH-55483
x51x4.8	127	50.8	4.75	4.16	4.08E-02	1540	0.339	2.86	45	43.1	58.6	0.663	26.1	20.7	30.4	1844	Extrudex	Québec	V-15409
x51x3.2	127	50.8	3.18	2.92	2.86E-02	1082	0.350	2.14	33.7	44.5	42.7	0.5	19.7	21.5	22.2	1319	Metra	Laval	998856
x51x3.2	127	50.8	3.18	2.95	2.89E-02	1089	0.355	2.17	34.1	44.6	43.1	0.504	19.9	21.5	22.3	1314	Pries	Independance	6072
x51x3.2	127	50.8	3.18	2.95	2.89E-02	1089	0.355	2.17	34.1	44.6	43.1	0.504	19.9	21.5	22.3	1314	Tri City Extrusion	Bristol	2441
x51x3.2	127	50.8	3.18	2.93	2.87E-02	1080	0.350	2.13	33.6	44.4	42.5	0.499	19.7	21.5	22.1	1312	Extruded Aluminum Corporation	Belding	18363
x51x3.2	127	50.8	3.18	2.93	2.87E-02	1080	0.350	2.13	33.6	44.4	42.5	0.499	19.7	21.5	22.1	1312	Crown Extrusions	Chaska	12248
x51x3.2	127	50.8	3.18	2.94	2.88E-02	1082	0.350	2.14	33.7	44.5	42.7	0.5	19.7	21.5	22.2	1319	Western Extrusions	Dallas	H 19210
x51x3.2	127	50.8	3.18	2.95	2.89E-02	1089	0.355	2.17	34.1	44.6	43.1	0.504	19.9	21.5	22.3	1315	Bonnell	M	AE3229
x51x3.2	127	50.8	3.18	2.89	2.83E-02	1063	0.345	2.06	32.5	44.1	41.4	0.488	19.2	21.4	21.7	1318	Extrudex	Toronto, Ohio	H-13988
x51x3.2	127	50.8	3.18	3	2.94E-02	1080	0.350	2.13	33.6	44.4	42.5	0.499	19.7	21.5	22.1	1312	Hydro	Montreal	MH-55879
x44x3.2	127	44.4	3.18	2.85	2.79E-02	1048	0.340	2.01	31.7	43.8	40.6	0.373	16.8	18.9	18.9	1032	Extrudex	Ohio	H-14131
x44x3.2	127	44.4	3.18	2.84	2.79E-02	1048	0.342	2.01	31.7	43.8	40.6	0.373	16.8	18.9	18.9	1027	Bonnell	M	AE3348
x32x3.2	127	31.8	3.18	2.72	2.67E-02	1002	0.316	1.82	28.7	42.6	37.6	0.178	11.2	13.3	12.9	556	Tri City Extrusion	Bristol	2253
x25x3.2	127	25.4	3.18	2.52	2.47E-02	925	0.302	1.54	24.2	40.8	33	0.104	8.16	10.6	9.51	338	Extrudex	Ohio	H-17937
x25x3.2	127	25.4	3.18	2.59	2.54E-02	953	0.299	1.63	25.7	41.4	34.6	0.105	8.27	10.5	9.72	351	Tri City Extrusion	Bristol	2058
x25x3.2	127	25.4	3.18	2.52	2.47E-02	927	0.302	1.55	24.4	40.8	33.1	0.104	8.17	10.6	9.53	340	Pries	Independance	3924
x25x3.2	127	25.4	3.18	2.57	2.52E-02	927	0.304	1.55	24.4	40.8	33.1	0.104	8.18	10.6	9.53	339	Hydro	Montreal	MH-52384

TUBES RECTANGULAIRES, COINS RONDS



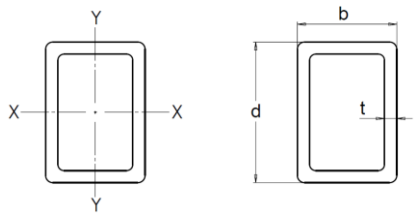
Identification de la section	Dimensions extérieures		Épaisseur (t)	Masse	Charge morte	Aire	Aire par mètres de longueur	Axe X-X				Axe Y-Y				Constante de torsion	Extrudeur	Emplacement	Identification de la section du fabricant
HSS d x b x t	Hauteur (d)	Largeur (b)						I_x	S_x	r_x	Z_x	I_y	S_y	r_y	Z_y	J			
mm x mm x mm	mm	mm	mm	kg/m	kN/m	mm²	m²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴			
HSS 114																			
x102x3.2	114	102	3.18	3.61	3.54E-02	1331	0.430	2.66	46.5	44.7	54.3	2.22	43.6	40.8	50.1	3688	Bonnell	M	AE4864
x89x4.6	114	88.9	4.57	4.66	4.57E-02	1717	0.390	3.15	55.2	42.9	66.7	2.14	48.1	35.3	56.1	4151	Gateway Extrusions	Woodbridge	CES227
x64x4.8	114	63.5	4.78	4.36	4.28E-02	1607	0.353	2.73	47.8	41.2	59.4	1.07	33.6	25.8	39	2429	Bonnell	M	AE2225
x52x7.1	114	52.4	7.14	5.85	5.74E-02	2156	0.325	3.28	57.4	39	74.7	0.895	34.2	20.4	41.6	2317	Extruded Aluminum Corporation	Belding	5863
x51x4.8	114	50.8	4.78	3.98	3.90E-02	1466	0.322	2.31	40.4	39.7	51.7	0.624	24.6	20.6	28.7	1608	Extruded Aluminum Corporation	Belding	5862
x51x4.8	114	50.8	4.78	4.01	3.93E-02	1477	0.325	2.34	41	39.8	52.3	0.631	24.8	20.7	29	1612	Crown Extrusions	Chaska	12227
x51x3.2	114	50.8	3.18	2.73	2.68E-02	1008	0.330	1.66	29.1	40.6	36.4	0.459	18.1	21.3	20.4	1145	Bonnell	M	AE0165
x44x3.2	114	44.4	3.18	2.63	2.58E-02	946	0.308	1.47	25.7	39.4	33	0.329	14.8	18.6	16.8	898	Extrudex	Québec	V-01415
x44x3.2	114	44.4	3.18	2.62	2.57E-02	968	0.317	1.54	26.9	39.9	34.2	0.339	15.3	18.7	17.3	897	Bonnell	M	AE0166
x35x3.1	114	34.8	3.05	2.36	2.31E-02	872	0.297	1.3	22.8	38.6	29.6	0.189	10.8	14.7	12.3	546	Tri City Extrusion	Bristol	1079
x32x3.2	114	31.8	3.18	2.41	2.36E-02	887	0.291	1.29	22.5	38.1	29.7	0.157	9.92	13.3	11.4	471	Bonnell	M	AE4195
x25x3.2	114	25.4	3.18	2.3	2.26E-02	847	0.279	1.16	20.4	37.1	27.5	0.094	7.39	10.5	8.64	299	Bonnell	M	AE2515
x25x3.2	114	25.4	3.18	2.3	2.26E-02	847	0.279	1.16	20.4	37.1	27.5	0.094	7.39	10.5	8.64	300	Bonnell	M	AE3345
x19x3.2	114	19	3.18	2.19	2.15E-02	806	0.266	1.04	18.2	35.9	25.2	0.047	4.98	7.67	6.02	162	Bonnell	M	AE2603
x16x3.1	114	15.9	3.05	2.05	2.01E-02	756	0.260	0.943	16.5	35.3	23.2	0.03	3.74	6.26	4.61	104	Bonnell	M	AE1953
HSS 102																			
x76x6.4	102	76.2	6.35	5.57	5.46E-02	2053	0.339	2.82	55.5	37.1	68.9	1.78	46.7	29.4	56.1	3607	Metra	Laval	997916
x76x6.4	102	76.2	6.35	5.62	5.51E-02	2071	0.345	2.87	56.6	37.3	69.8	1.81	47.5	29.6	56.9	3570	Tri City Extrusion	Bristol	2024
x76x6.4	102	76.2	6.35	5.67	5.56E-02	2092	0.349	2.93	57.6	37.4	70.9	1.84	48.3	29.6	57.6	3580	Taber	Russelville	OH-12259
x76x6.4	102	76.2	6.35	5.69	5.58E-02	2062	0.345	2.86	56.2	37.2	69.5	1.8	47.3	29.6	56.6	3531	Hydro	Montreal	MH-57813
x76x4.8	102	76.2	4.78	4.36	4.28E-02	1608	0.354	2.33	45.9	38.1	55.5	1.48	38.7	30.3	45.3	2808	Pries	Independance	4727
x76x4.8	102	76.2	4.78	4.36	4.28E-02	1607	0.354	2.33	45.8	38.1	55.4	1.47	38.7	30.3	45.2	2795	Bonnell	M	AE5133
x76x4.8	102	76.2	4.75	4.33	4.25E-02	1597	0.353	2.31	45.5	38.1	55.1	1.47	38.5	30.3	45	2783	Extruded Aluminum Corporation	Belding	5889
x76x4.8	102	76.2	4.75	4.26	4.18E-02	1590	0.350	2.3	45.2	38	54.8	1.46	38.2	30.3	44.7	2782	Hydro	Montreal	AH-07145
x76x3.2	102	76.2	3.18	2.95	2.89E-02	1089	0.350	1.63	32	38.7	38.2	1.04	27.3	30.9	31.3	1979	Western Extrusions	Dallas	H 19530
x76x3.2	102	76.2	3.18	2.93	2.87E-02	1082	0.350	1.61	31.7	38.6	37.9	1.03	27.1	30.9	31.1	1959	Bonnell	C	A-1411
x64x4.8	102	63.5	4.75	3.7	3.63E-02	1371	0.303	1.75	34.5	35.8	43.8	0.851	26.8	24.9	31.8	2036	Extrudex	Québec	V-17955
x53x4.4	102	52.5	4.44	3.5	3.43E-02	1291	0.307	1.69	33.3	36.2	41.8	0.583	22.2	21.3	25.9	1378	Extruded Aluminum Corporation	Belding	19297
x51x6.4	102	50.8	6.35	4.83	4.74E-02	1774	0.297	2.2	43.3	35.2	55.7	0.695	27.4	19.8	33.2	1746	Extrudex	Ohio	H-20861
x51x6.4	102	50.8	6.35	4.81	4.72E-02	1774	0.304	2.21	43.5	35.3	55.8	0.7	27.6	19.9	33.3	1713	Tri City Extrusion	Bristol	2174
x51x6.4	102	50.8	6.35	4.81	4.72E-02	1774	0.294	2.19	43.1	35.1	55.6	0.691	27.2	19.7	33.1	1759	Gateway Extrusions	Woodbridge	BT002
x51x6.4	102	50.8	6.35	4.79	4.70E-02	1766	0.299	2.19	43.1	35.2	55.4	0.697	27.4	19.8	33.1	1712	Extruded Aluminum Corporation	Belding	19730
x51x6.4	102	50.8	6.35	4.81	4.72E-02	1774	0.304	2.21	43.5	35.3	55.8	0.7	27.6	19.9	33.3	1713	Extruded Aluminum Corporation	Belding	5911
x51x6.4	102	50.8	6.35	4.72	4.63E-02	1742	0.294	2.13	41.9	35	54.2	0.681	26.8	19.8	32.5	1711	Western Extrusions	Dallas	H 19160
x51x6.4	102	50.8	6.35	4.76	4.67E-02	1748	0.294	2.14	42.1	35	54.5	0.683	26.9	19.8	32.6	1725	Extrudex	Toronto	H-27490
x51x6.4	102	50.8	6.35	4.72	4.63E-02	1748	0.294	2.14	42.1	35	54.5	0.683	26.9	19.8	32.6	1725	Extrudex	Québec	V-16900
x51x4.9	102	50.8	4.85	3.92	3.84E-02	1445	0.297	1.89	37.1	36.1	46.8	0.594	23.4	20.3	27.7	1481	Taber	Russelville	OH-14034
x51x4.8	102	50.8	4.78	3.71	3.64E-02	1364	0.294	1.74	34.3	35.7	43.6	0.564	22.2	20.3	26.2	1419	Extrudex	Toronto	H-23267
x51x4.8	102	50.8	4.78	3.7	3.63E-02	1364	0.303	1.76	34.6	35.9	43.7	0.571	22.5	20.5	26.4	1376	Crown Extrusions	Chaska	13719
x51x4.8	102	50.8	4.78	3.68	3.61E-02	1358	0.299	1.74	34.3	35.8	43.4	0.567	22.3	20.4	26.2	1382	Tri City Extrusion	Bristol	2043
x51x4.8	102	50.8	4.78	3.72	3.65E-02	1373	0.305	1.78	35	36	44.1	0.575	22.6	20.5	26.6	1396	Western Extrusions	Dallas	H 19518
x51x4.8	102	50.8	4.78	3.68	3.61E-02	1364	0.294	1.74	34.3	35.7	43.6	0.564	22.2	20.3	26.2	1419	Extrudex	Québec	V-18295
x51x4.1	102	50.8	4.06	3.18	3.12E-02	1173	0.304	1.54	30.2	36.2	37.9	0.505	19.9	20.7	23	1207	Pries	Independance	2600
x51x3.6	102	50.8	3.56	2.71	2.66E-02	999	0.294	1.28	25.3	35.9	31.9	0.433	17.1	20.8	19.6	1058	Tri City Extrusion	Bristol	2057
x51x3.2	102	50.8	3.2	2.53	2.48E-02	935	0.304	1.25	24.6	36.5	30.5	0.416	16.4	21.1	18.6	985	Bonnell	M	AE0830
x51x3.2	102	50.8	3.18	2.41	2.36E-02	893	0.291	1.15	22.6	35.9	28.5	0.391	15.4	20.9	17.6	983	Metra	Laval	998772
x51x3.2	102	50.8	3.18	2.46	2.41E-02	910	0.297	1.2	23.5	36.2	29.4	0.402	15.8	21	18.1	977	Metra	Laval	998859
x51x3.2	102	50.8	3.18	2.52	2.47E-02	927	0.304	1.24	24.4	36.5	30.3	0.413	16.3	21.1	18.5	978	Tri City Extrusion	Bristol	2039
x51x3.2	102	50.8	3.18	2.52	2.47E-02	927	0.288	1.22	23.9	36.2	30	0.402	15.8	20.8	18.3	1029	Pries	Independance	1442
x51x3.2	102	50.8	3.18	2.52	2.47E-02	927	0.303	1.24	24.4	36.5	30.3	0.413	16.2	21.1	18.5	980	Gateway Extrusions	Woodbridge	CES129
x51x3.2	102	50.8	3.18	2.51	2.46E-02	925	0.302	1.23	24.3	36.5	30.2	0.411	16.2	21.1	18.4	977	Extruded Aluminum Corporation	Belding	5888
x51x3.2	102	50.8	3.18	2.49	2.44E-02	919	0.299	1.22	24	36.4	29.8	0.408	16	21.1	18.3	976	Crown Extrusions	Chaska	12226
x51x3.2	102	50.8	3.18	2.47	2.42E-02	912	0.297	1.2	23.6	36.3	29.5	0.403	15.9	21	18.1	982	Western Extrusions	Dallas	H 19253
x51x3.2	102	50.8	3.18	2.44	2.39E-02	901	0.294	1.17	23.1	36.1	29	0.397	15.6	21	17.9	980	Western Extrusions	Dallas	H 19212
x51x3.2	102	50.8	3.18	2.52	2.47E-02	927	0.304	1.24	24.4	36.5	30.3	0.413	16.3	21.1	18.5	978	Bonnell	M	AE2999
x51x3.2	102	50.8	3.18	2.5	2.45E-02	919	0.299	1.22	24	36.4	29.8	0.408	16	21.1	18.3	975	Extrudex	Ohio	H-20862
x51x3.2	102	50.8	3.18	2.48	2.43E-02	910	0.297	1.2	23.5	36.2	29.4	0.402	15.8	21	18.1	977	Extrudex	Toronto, Ohio	H-21813
x51x3.2	102	50.8	3.18	2.5	2.45E-02	919	0.299	1.22	24	36.4	29.8	0.408	16	21.1	18.3	976	Hydro	Montreal	MH-16166
x51x3.2	102	50.8	3.18	2.52	2.47E-02	925	0.302	1.23	24.3	36.5	30.2	0.411	16.2	21.1	18.4	977	Hydro	Montreal	MH-55877
x51x3.2	102	50.8	3.18	2.46	2.41E-02	910	0.297	1.2	23.5	36.2	29.4	0.402	15.8	21	18.1	977	Extrudex	Québec	V-18637
x51x3.1	102	50.8	3.05	2.43	2.38E-02	892	0.293	1.18	23.3	36.4	29	0.393	15.5	21	17.7	983	Extrudex	Toronto	H-10076
x51x3.1	102	50.8	3.05	2.36	2.31E-02	867	0.275	1.13	22.3	36.1	27.9	0.383	15.1	21	17.2	947	Extrudex	Ohio	H-28611
x51x3.1	102	50.8	3.05	2.36	2.31E-02	857	0.294	1.11	21.8	36	27.4	0.379	14.9	21	17	921	Hydro	Montreal	MH-03315
x51x3.1	102	50.8	3.05	2.41	2.36E-02	892	0.293	1.18	23.3	36.4	29	0.393	15.5	21	17.7	983	Extrudex	Québec	V-18337
x44x3.2	102	44.4	3.18	2.41	2.36E-02	887	0.291	1.14	22.5	35.9	28.3	0.305	13.7	18.5	15.6	769	Bonnell	M	AE0167
x44x3.2	102	44.4	3.18	2.36	2.31E-02	870	0.284	1.1	21.6	35.5	27.4	0.297	13.3	18.5	15.2	768	Extruded Aluminum Corporation	Belding	5871
x38x3.2	102	38.1	3.18	2.3	2.26E-02	827	0.271	0.995	19.6	34.7	25.3	0.208	10.9	15.9	12.5	572	Hydro	Montreal	MH-61425
x38x3.2	102	38.1	3.18	2.25	2.21E-02	829	0.271	1	19.7	34.7	25.4	0.208	10.9	15.9	12.5	577	Extruded Aluminum Corporation	Belding	5869
x38x3.2	102	38.1	3.18	2.26	2.22E-02	834	0.273	1.01	19.9	34.8	25.7	0.21	11	15.9	12.6	576	Bonnell	M	AE2291
x38x3.2	102	38.1	3.18	2.3	2.26E-02	847	0.279	1.04	20.5	35.1	26.3	0.214	11.2	15.9	12.9	578	Bonnell	M	AE3170
x32x3.2	102	31.8	3.18	2.12	2.08E-02	780	0.256	0.879	17.3	33.6	23	0.135	8.49	13.1	9.84	406	Extrudex	Ohio	H-20701
x29x2.3	102	28.6	2.29	1.58	1.55E-02	580	0.257	0.683	13.4	34.3	17.5	0.086	6.04	12.2	6.82	259	Extrudex	Ohio	H-27570
x25x3.2	102	25.4	3.18	2.08	2.04E-02	766	0.249	0.845	16.6	33.2	22.3	0.083	6.56	10.4	7.72	264	Pries	Independance	2219
x25x3.2	102	25.4	3.18	2.08	2.04E-02	766	0.253	0.848	16.7	33.3	22.3	0.084	6.6	10.5	7.74	261	Gateway Extrusions	Woodbridge	US362
x25x3.2	102	25.4	3.18	2.08	2.04E-02	766	0.253	0.848	16.7	33.3	22.3	0.084	6.6	10.5	7.74	260	Bonnell	M	AE5575
x25x3.2	102	25.4	3.18	2.06	2.02E-02	758	0.249	0.826	16.3	33	21.9	0.083	6.51	10.4	7.64	259	Extrudex	Ohio	H-17949
x25x2.4	102	25.4	2.41	1.6	1.57E-02	589	0.253	0.665	13.1	33.6	17.4	0.068	5.39	10.8	6.14	210	Gateway Extrusions	Woodbridge	US102
HSS 95																			
x64x6.4	95.2	63.5	6.35	5.09	4.99E-02	1886	0.317	2.24	47	34.5	58.7	1.15	36.2	24.7	43.5	2418	Extrudex	Québec	V-14199
HSS 92																			
x41x4.8	92.1	41.3	4.75	3.15	3.09E-02	1157	0.259	1.15	25.1	31.6	32.4	0.311	15.1	16.4	18	811	Extrudex	Toronto	H-24942
HSS 89																			
x64x5.5	88.9	63.5	5.54	4.09	4.01E-02	1508	0.290	1.55	34.9	32.1	43.6	0.909	28.6	24.6	34.4	1900	Pennex Aluminum	Leetonia	5506-H
x64x3.1	88.9	63.5	3.05	2.36	2.31E-02	876	0.296	0.969	21.8	33.3	26.3	0.575	18.1	25.6	20.9	1151	Extrudex	Québec	V-14198
x44x3.2	88.9	44.4	3.18	2.19	2.15E-02	806	0.265	0.815	18.3	31.8	22.9	0.27	12.1	18.3	13.9	643	Gateway Extrusions	Woodbridge	CES225
x38x3.2	88.9	38.1	3.18	2.07	2.03E-02	764	0.251	0.739	16.6	31.1	21.1	0.189	9.91	15.7	11.4	486	Tri City Extrusion	Bristol	1065
x38x3.2	88.9	38.1	3.18	2.07	2.03E-02	764	0.251	0.739	16.6	31.1	21.1	0.189	9.92	15.7	11.4	486	Pennex Aluminum	Leetonia	5279-H
HSS 83																			
x70x3.2	82.6	69.8	3.18	2.49	2.44E-02	919	0.299	0.919	22.3	31.6	26.5	0.708	20.3	27.8	23.6	1243	Pries	Independance	4291
x70x3.2	82.6	69.8	3.18	2.42	2.37E-02	893	0.294	0.878	21.3	31.4	26.4	0.679	19.5	27.6	22.7	1219	Pries	Independance	4322
x44x3.2	82.6	44.4	3.18	2.08	2.04E-02	766	0.253	0.679	16.4	29.8	20.4	0.253	11.4	18.2	13.1	581	Bonnell	M	AE2227
x36x1.8	82.6	36	1.78	1.12	1.10E-02	413	0.237	0.36	8.73	29.6	10.9	0.097	5.39	15.3	6.02	244	Extruded Aluminum Corporation	Belding	20649
x25x2.4	82.6	25.4	2.36	1.32	1.29E-02	488	0.215	0.379	9.17	27.9	12	0.055	4.36	10.7	5	160	Tri City Extrusion	Bristol	2280
HSS 82																			
x15x2.1	82	15.2	2.08	1.05	1.03E-02	388	0.194	0.265	6.47	26.2	8.85	0.015	2.02	6.3	2.38	51	Gateway Extrusions	Woodbridge	CES007
HSS 79																			
x61x2.5	79.2	60.5	2.49	1.82	1.78E-02	671	0.267	0.605	15.3	30	18.3	0.396	13.1	24.3	15.2	782	Extruded Aluminum Corporation	Belding	19580

TUBES RECTANGULAIRES, COINS RONDS



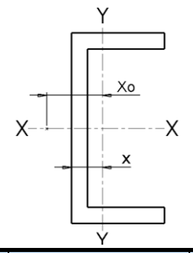
Identification de la section	Dimensions extérieures		Épaisseur (t)	Masse	Charge morte	Aire	Aire par mètres de longueur	Axe X-X				Axe Y-Y				Constante de torsion	Extrudeur	Emplacement	Identification de la section du fabricant
HSS d x b x t	Hauteur (d)	Largeur (b)						I_x	S_x	r_x	Z_x	I_y	S_y	r_y	Z_y	J			
mm x mm x mm	mm	mm	mm	kg/m	kN/m	mm²	m²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴			
HSS 76																			
x51x6.4	76.2	50.8	6.35	3.88	3.80E-02	1426	0.243	1.02	26.8	26.8	34.3	0.523	20.6	19.1	25.4	1146	Extrudex	Toronto	H-24842
x51x6.4	76.2	50.8	6.35	3.94	3.86E-02	1452	0.253	1.06	27.8	27	35.3	0.54	21.2	19.3	26.1	1137	Tri City Extrusion	Bristol	2309
x51x6.4	76.2	50.8	6.35	3.94	3.86E-02	1452	0.246	1.05	27.6	26.9	35.2	0.535	21	19.2	26	1163	Extruded Aluminum Corporation	Belding	20588
x51x6.4	76.2	50.8	6.35	3.95	3.87E-02	1456	0.253	1.06	27.9	27	35.5	0.541	21.3	19.3	26.2	1147	Western Extrusions	Dallas	H 19922
x51x6.4	76.2	50.8	6.35	3.9	3.82E-02	1432	0.246	1.03	27.1	26.9	34.6	0.528	20.8	19.2	25.6	1134	Extrudex	Ohio	H-27874
x51x6.4	76.2	50.8	6.35	3.73	3.66E-02	1326	0.232	0.9	23.6	26	30.9	0.473	18.6	18.9	23.2	1090	Hydro	Montreal	MH-18021
x51x4.8	76.2	50.8	4.78	3.04	2.98E-02	1122	0.253	0.855	22.4	27.6	27.9	0.443	17.4	19.9	20.8	917	Tri City Extrusion	Bristol	2171
x51x4.8	76.2	50.8	4.78	3.04	2.98E-02	1122	0.243	0.844	22.2	27.4	27.8	0.435	17.1	19.7	20.6	951	Gateway Extrusions	Woodbridge	BT001
x51x3.2	76.2	50.8	3.18	2.05	2.01E-02	761	0.249	0.602	15.8	28.1	19.3	0.317	12.5	20.4	14.5	660	Metra	Laval	998797
x51x3.2	76.2	50.8	3.18	2.08	2.04E-02	766	0.253	0.611	16	28.2	19.5	0.321	12.6	20.5	14.7	655	Bonnell	M	AE3169
x51x3.2	76.2	50.8	3.18	2.06	2.02E-02	760	0.249	0.601	15.8	28.1	19.3	0.317	12.5	20.4	14.5	658	Pennex Aluminum	Leetonia	5642-H
x51x3.2	76.2	50.8	3.18	2.08	2.04E-02	766	0.253	0.611	16	28.2	19.5	0.321	12.6	20.5	14.7	656	Gateway Extrusions	Woodbridge	US363
x51x3.2	76.2	50.8	3.18	2.08	2.04E-02	766	0.253	0.611	16	28.2	19.5	0.321	12.6	20.5	14.7	655	Tri City Extrusion	Bristol	1054
x51x3.2	76.2	50.8	3.18	2.05	2.01E-02	757	0.249	0.599	15.7	28.1	19.2	0.316	12.4	20.4	14.4	653	Crown Extrusions	Chaska	12175
x51x3.2	76.2	50.8	3.18	2.09	2.05E-02	770	0.253	0.615	16.1	28.3	19.7	0.323	12.7	20.5	14.7	663	Western Extrusions	Dallas	H 19924
x51x3.2	76.2	50.8	3.18	2.08	2.04E-02	766	0.249	0.609	16	28.2	19.5	0.32	12.6	20.4	16.6	667	Western Extrusions	Dallas	H 19070
x51x3.2	76.2	50.8	3.18	2.04	2.00E-02	749	0.246	0.586	15.4	28	18.9	0.311	12.2	20.4	14.2	654	Extrudex	Toronto, Ohio	H-15290
x51x3.2	76.2	50.8	3.18	2.1	2.06E-02	771	0.249	0.614	16.1	28.2	19.7	0.322	12.7	20.4	14.7	672	Hydro	Montreal	MH-55878
x51x3.2	76.2	50.8	3.18	2.02	1.98E-02	749	0.246	0.586	15.4	28	18.9	0.311	12.2	20.4	14.2	654	Extrudex	Québec	V-17261
x51x3.1	76.2	50.8	3.05	1.98	1.94E-02	728	0.249	0.578	15.2	28.2	18.5	0.305	12	20.5	13.9	630	Bonnell	M	AE2224
x51x3.1	76.2	50.8	3.05	1.93	1.89E-02	708	0.242	0.548	14.4	27.8	17.7	0.292	11.5	20.3	13.4	635	Extrudex	Toronto	H-11967
x44x3.8	76.2	44.4	3.81	2.34	2.29E-02	861	0.241	0.649	17	27.4	21.2	0.272	12.2	17.8	14.4	605	Bonnell	M	AE2984
x44x3.2	76.2	44.4	3.18	1.97	1.93E-02	726	0.241	0.557	14.6	27.7	18.1	0.236	10.6	18	12.3	520	Tri City Extrusion	Bristol	2191
x44x3.2	76.2	44.4	3.18	1.97	1.93E-02	726	0.240	0.557	14.6	27.7	18	0.236	10.6	18	12.3	521	Extruded Aluminum Corporation	Belding	5931
x44x3.2	76.2	44.4	3.18	1.97	1.93E-02	726	0.241	0.557	14.6	27.7	18.1	0.236	10.6	18	12.3	520	Bonnell	M	AE4161
x38x4.8	76.2	38.1	4.78	2.77	2.72E-02	994	0.220	0.688	18.1	26.3	23.3	0.218	11.4	14.8	13.9	554	Hydro	Montreal	MH-67423
x38x3.2	76.2	38.1	3.18	1.75	1.72E-02	642	0.212	0.441	11.6	26.2	14.9	0.15	7.85	15.3	9.23	394	Extrudex	Toronto	H-17139
x38x3.2	76.2	38.1	3.18	1.86	1.82E-02	685	0.228	0.503	13.2	27.1	16.6	0.165	8.65	15.5	10	395	Tri City Extrusion	Bristol	2563
x38x3.2	76.2	38.1	3.18	1.86	1.82E-02	685	0.228	0.503	13.2	27.1	16.6	0.165	8.66	15.5	10	395	Gateway Extrusions	Woodbridge	CES224
x38x3.2	76.2	38.1	3.18	1.86	1.82E-02	685	0.228	0.503	13.2	27.1	16.6	0.165	8.66	15.5	10	395	Bonnell	M	AE3091
x38x3.2	76.2	38.1	3.18	1.86	1.82E-02	685	0.223	0.501	13.2	27	16.6	0.164	8.61	15.5	10	403	Bonnell	M	AE4164
x38x3.2	76.2	38.1	3.18	1.79	1.76E-02	661	0.218	0.468	12.3	26.6	15.7	0.157	8.22	15.4	9.6	395	Bonnell	M	AE5793
x38x3.2	76.2	38.1	3.18	1.82	1.78E-02	668	0.220	0.479	12.6	26.8	15.9	0.159	8.35	15.4	9.73	394	Extrudex	Toronto	H-24941
x38x3.2	76.2	38.1	3.18	1.86	1.82E-02	699	0.227	0.518	13.6	27.2	17	0.168	8.81	15.5	10.2	407	Hydro	Montreal	MH-15766
x38x3.2	76.2	38.1	3.18	1.73	1.70E-02	642	0.212	0.441	11.6	26.2	14.9	0.15	7.85	15.3	9.23	394	Extrudex	Québec	V-15349
x38x3.1	76.2	38.1	3.05	1.79	1.76E-02	660	0.228	0.486	12.8	27.1	16	0.16	8.38	15.6	9.7	382	Pries	Independance	4754
x38x2.5	76.2	38.1	2.54	1.49	1.46E-02	553	0.226	0.412	10.8	27.3	13.5	0.137	7.2	15.7	8.23	328	Metra	Laval	998855
x38x2.5	76.2	38.1	2.54	1.5	1.47E-02	555	0.223	0.413	10.8	27.3	13.5	0.137	7.2	15.7	8.25	334	Extruded Aluminum Corporation	Belding	21134
x38x2.5	76.2	38.1	2.54	1.53	1.50E-02	566	0.226	0.428	11.2	27.5	13.9	0.14	7.37	15.7	8.44	338	Hydro	Montreal	MH-55883
x38x2.4	76.2	38.1	2.41	1.33	1.30E-02	493	0.212	0.346	9.07	26.5	11.6	0.119	6.26	15.6	7.22	313	Extrudex	Québec	V-15234
x38x2.0	76.2	38.1	2.03	1.22	1.20E-02	448	0.227	0.34	8.93	27.6	11	0.114	5.99	16	6.76	270	Pries	Independance	1409
x25x4.8	76.2	25.4	4.78	2.38	2.33E-02	879	0.202	0.545	14.3	24.9	19.3	0.082	6.45	9.65	8.1	241	Western Extrusions	Dallas	H 19146
x25x4.8	76.2	25.4	4.75	2.37	2.32E-02	871	0.199	0.537	14.1	24.8	19	0.081	6.38	9.65	8.02	240	Extrudex	Toronto	H-20802
x25x3.2	76.2	25.4	3.18	1.62	1.59E-02	598	0.198	0.386	10.1	25.4	13.4	0.063	4.94	10.2	5.87	183	Pennex Aluminum	Leetonia	5655-H
x25x3.2	76.2	25.4	3.18	1.64	1.61E-02	605	0.202	0.395	10.4	25.6	13.6	0.064	5.02	10.3	5.95	183	Tri City Extrusion	Bristol	1055
x25x3.2	76.2	25.4	3.18	1.57	1.54E-02	579	0.192	0.359	9.42	24.9	12.7	0.06	4.73	10.2	5.64	181	Tri City Extrusion	Bristol	2154
x25x3.2	76.2	25.4	3.18	1.57	1.54E-02	579	0.192	0.359	9.42	24.9	12.7	0.06	4.73	10.2	5.64	181	Pennex Aluminum	Leetonia	5264-H
x25x3.2	76.2	25.4	3.18	1.6	1.57E-02	584	0.192	0.365	9.57	25	12.8	0.06	4.75	10.2	5.68	183	Hydro	Montreal	MH-56645
x25x3.1	76.2	25.4	3.05	1.58	1.55E-02	596	0.203	0.398	10.4	25.8	13.6	0.063	4.97	10.3	5.88	183	Hydro	Montreal	AH-07294
x25x3.1	76.2	25.4	3.05	1.54	1.51E-02	566	0.195	0.36	9.44	25.2	12.5	0.06	4.7	10.3	5.56	176	Extrudex	Toronto, Ohio	H-11026
x25x3.1	76.2	25.4	3.05	1.53	1.50E-02	566	0.195	0.36	9.44	25.2	12.5	0.06	4.7	10.3	5.56	176	Extrudex	Québec	V-18635
x25x1.9	76.2	25.4	1.9	1.01	9.90E-03	386	0.202	0.271	7.11	26.5	9.06	0.045	3.52	10.8	3.99	126	Hydro	Montreal	MH-07345
x25x1.6	76.2	25.4	1.57	0.83	8.14E-03	306	0.199	0.208	5.45	26.1	7.03	0.036	2.86	10.9	3.2	103	Bonnell	M	AE2290
HSS 67																			
x29x3.2	67.2	29.2	3.18	1.48	1.45E-02	547	0.182	0.283	8.41	22.7	11	0.074	5.07	11.6	6.03	202	Bonnell	M	AE5975
HSS 64																			
x64x6.4	63.5	63.5	6.35	2.83	2.78E-02	1045	0.215	0.497	15.7	21.8	20.3	0.497	15.7	21.8	20.3	865	Taber	Russelville	OH-13278
x38x3.2	63.5	38.1	3.18	1.64	1.61E-02	605	0.203	0.319	10	23	12.5	0.14	7.36	15.2	8.64	307	Tri City Extrusion	Bristol	2304
x38x3.2	63.5	38.1	3.18	1.64	1.61E-02	605	0.203	0.319	10	23	12.5	0.14	7.36	15.2	8.64	307	Bonnell	M	AE1106
x38x1.5	63.5	38.1	1.52	0.709	6.95E-03	262	0.177	0.098	3.86	19.4	4.59	0.063	3.29	15.5	3.76	118	Extruded Aluminum Corporation	Belding	21321
x25x2.5	63.5	25.4	2.54	1.37	1.34E-02	506	0.172	0.261	8.21	22.7	10.4	0.051	3.97	9.99	4.81	139	Pries	Independance	1817
HSS 62																			
x49x4.8	61.6	49.3	4.75	2.61	2.56E-02	963	0.176	0.459	14.9	21.8	19.1	0.317	12.9	18.1	16.2	668	Pries	Independance	788
HSS 60																			
x48x4.8	60.3	47.6	4.78	2.53	2.48E-02	931	0.210	0.448	14.9	21.9	18.5	0.305	12.8	18.1	15.6	578	Extruded Aluminum Corporation	Belding	5865
HSS 57																			
x44x4.8	57.2	44.4	4.78	2.38	2.33E-02	879	0.203	0.378	13.2	20.7	16.5	0.25	11.2	16.9	13.7	474	Tri City Extrusion	Bristol	2160
x44x3.3	57.2	44.4	3.3	1.65	1.62E-02	607	0.195	0.269	9.41	21	11.6	0.181	8.14	17.3	9.71	349	Pries	Independance	4468
x44x3.2	57.2	44.4	3.18	1.62	1.59E-02	596	0.198	0.268	9.39	21.2	11.5	0.18	8.1	17.4	9.61	342	Extruded Aluminum Corporation	Belding	5867
HSS 54																			
x29x1.7	54	28.6	1.65	0.679	6.66E-03	250	0.157	9.22E-02	3.42	19.2	4.28	0.035	2.42	11.7	2.77	85	Extruded Aluminum Corporation	Belding	18564
HSS 51																			
x38x3.2	50.8	38.1	3.18	1.39	1.36E-02	512	0.171	0.176	6.94	18.6	8.59	0.111	5.85	14.8	7.01	220	Bonnell	M	AE3103
x38x3.2	50.8	38.1	3.18	1.4	1.37E-02	516	0.172	0.179	7.03	18.6	8.68	0.113	5.91	14.8	7.07	221	Crown Extrusions	Chaska	12376
x38x3.2	50.8	38.1	3.18	1.42	1.39E-02	524	0.177	0.184	7.24	18.7	8.9	0.116	6.07	14.8	7.23	222	Extruded Aluminum Corporation	Belding	5926
x38x3.2	50.8	38.1	3.18	1.4	1.37E-02	516	0.172	0.179	7.03	18.6	8.69	0.113	5.92	14.8	7.08	221	Tri City Extrusion	Bristol	2290
x38x3.2	50.8	38.1	3.18	1.42	1.39E-02	524	0.177	0.184	7.24	18.7	8.9	0.116	6.07	14.8	7.23	222	Tri City Extrusion	Bristol	2498
x38x3.2	50.8	38.1	3.18	1.42	1.39E-02	525	0.178	0.184	7.25	18.7	8.91	0.116	6.07	14.8	7.24	222	Western Extrusions	Dallas	H 19889
x38x3.2	50.8	38.1	3.18	1.42	1.39E-02	522	0.175	0.183	7.19	18.7	8.85	0.115	6.03	14.8	7.19	222	Bonnell	M	AE3550
x36x3.2	50.8	36	3.18	1.41	1.38E-02	519	0.174	0.180	7.09	18.6	8.76	0.103	5.7	14.1	6.81	207	Extruded Aluminum Corporation	Belding	20654
x30x1.8	50.8	30.1	1.78	0.752	7.37E-03	277	0.162	0.097	3.81	18.7	4.66	0.042	2.8	12.3	3.21	92.3	Extruded Aluminum Corporation	Belding	20653
x29x2.0	50.8	28.6	2.03	0.81	7.94E-03	299	0.153	0.099	3.9	18.2	4.86	0.04	2.8	11.6	3.25	93	Pennex Aluminum	Leetonia	5728-H
x25x3.2	50.8	25.4	3.18	1.2	1.18E-02	444	0.142	0.133	5.24	17.3	6.87	0.042	3.28	9.69	4.05	112	Taber	Russelville	OH-14047
x25x3.2	50.8	25.4	3.18	1.13	1.11E-02	417	0.142	0.122	4.81	17.1	6.33	0.04	3.15	9.78	3.85	106	Pennex Aluminum	Leetonia	5605-H
x25x3.2	50.8	25.4	3.18	1.24	1.22E-02	456	0.151	0.143	5.65	17.7	7.23	0.045	3.51	9.9	4.26	111	Gateway Extrusions	Woodbridge	CES223
x25x3.2	50.8	25.4	3.18	1.2	1.18E-02	442	0.150	0.137	5.39	17.6	6.93	0.044	3.42	9.92	4.14	107	Crown Extrusions	Chaska	12130
x25x3.2	50.8	25.4	3.18	1.18	1.16E-02	435	0.147	0.133	5.23	17.5	6.76	0.043	3.35	9.89	4.06	107	Crown Extrusions	Chaska	12161
x25x3.2	50.8	25.4	3.18	1.2	1.18E-02	442	0.150	0.137	5.39	17.6	6.94	0.044	3.42	9.92	4.14	107	Tri City Extrusion	Bristol	2059
x25x3.2	50.8	25.4	3.18	1.2	1.18E-02	444	0.152	0.138	5.43	17.6	6.98	0.044	3.45	9.93	4.16	107	Tri City Extrusion	Bristol	2219
x25x3.2	50.8	25.4	3.18	1.2	1.18E-02	441	0.147	0.136	5.35	17.5	6.91	0.043	3.39	9.87	4.12	109	Western Extrusions	Dallas	H 19458
x25x3.2	50.8	25.4	3.18	1.2	1.18E-02	444	0.146	0.138	5.43	17.6	6.98	0.044	3.45	9.93	4.16	107	Bonnell	M	AE1079
x25x3.2	50.8	25.4	3.18	1.2	1.18E-02	444	0.147	0.137	5.39	17.6	6.95	0.043	3.4	9.87	4.13	110	Pries	Independance	1360
x25x2.4	50.8	25.4	2.36	0.916	8.98E-03	338	0.152	0.109	4.29	18	5.41	0.035	2.79	10.2	3.27	85.4	Tri City Extrusion	Bristol	2282
x25x2.3	50.8	25.4	2.29	0.865	8.48E-03	319	0.147	0.101	3.97	17.8	5.05	0.033	2.62	10.2	3.08	82.2	Crown Extrusions	Chaska	12298
x25x2.1	50.8	25.4	2.08	0.793	7.78E-03	292	0.147	9.33E-02	36.7	17.9	4.65	0.031	2.44	10.3	2.84	76.8	Extruded Aluminum Corporation	Belding	5922
x25x1.6	50.8	25.4	1.57	0.624	6.12E-03	230	0.152	7.69E-02	3.03	18.3	3.76	0.026	2.02	10.6	2.3	60.8	Bonnell	M	AE2075
x25x1.6	50.8	25.4	1.57	0.606	5.94E-03	224	0.147	7.28E-02	2.86	18	3.59	0.025	1.94	10.5	3.59	60.8	Bonnell	M	AE4193
x25x1.5	50.8	25.4	1.52	0.582	5.71E-03	215	0.146	6.93E-02	2.73	18	3.43	0.024	1.86	10.5	2.12	59.3	Tri City Extrusion	Bristol	1076
x24x1.0	50.8	23.8	1.02	0.388	3.80E-03	143	0.144	4.67E-02	1.84	18.1	2.3	0.015	1.22	10.1	1.36	36.9	Tri City Extrusion	Bristol	1004
x19x3.2	50.8	19	3.18	1.09	1.07E-02	403	0.139	0.115	4.53	16.9	6.02	0.022	2.28	7.33	2.82	60.7	Gateway Extrusions	Woodbridge	CES114
HSS 49																			
x37x3.2	49.2	36.5	3.18	1.34	1.31E-02	496	0.166	0.160	6.5	18	8.05	0.099	5.42	14.1	6.51	196	Extruded Aluminum Corporation	Belding	5866
HSS 48																			
x35x4.0	47.6	34.9	3.96	1.6	1.57E-02	591	0.157	0.170	7.15	17	9.09	0.102	5.82	13.1	7.21	213	Extruded Aluminum Corporation	Belding	19913
HSS 44																			
x38x1.8	44.4	38.1	1.78	0.759	7.44E-03	280	0.163	8.15E-02	3.67	17.1	4.36	0.064	3.36	15.1	3.91	111	Gateway Extrusions	Woodbridge	CES187
x37x1.8	44.4	36.6	1.78	0.757	7.42E-03	279	0.162	8.09E-02	3.64	17	4.33	0.06	3.25	14.6	3.78	106	Extruded Aluminum Corporation	Belding	20645
x36x1.8	44.4	36	1.78	0.751	7.36E-03	277	0.161	8.00E-02	3.6	17	4.29	0.057	3.19	14.4	3.7	103	Extruded Aluminum Corporation	Belding	21045
x30x1.8	44.4	30.1	1.78	0.69	6.77E-03	255	0.149	6.99E-02	3.14	16.6	3.81	0.038	2.5	12.2	2.89	76.4	Extruded Aluminum Corporation	Belding	20632
HSS 43																			
x29x4.8	43.2	28.6	4.78	1.63	1.60E-02	601	0.141	0.133	6.15	14.9	8.04	0.065	4.54	10.4	5.82	143	Extruded Aluminum Corporation	Belding	20236
x18x4.0	42.9	17.5	3.96	1.13	1.11E-02	416	0.120	8.10E-02	3.78	14	5.12	0.017	1.9	6.32	2.48	46.3	Tri City Extrusion	Bristol	2281
HSS 42																			
x23x1.5	42	23	1.52	0.494	4.84E-03	182	0.125	4.10E-02	1.95	15	2.44	0.016	1.39	9.36	1.6	38.1	Bonnell	M	AE3255
HSS 41																			
x32x3.3	41.4	31.8	3.3	1.14	1.12E-02	419	0.138	9.17E-02	4.43	14.8	5.6	0.599	3.77	12	4.64	120	Pries	Independance	4480
x29x3.2	41.3	28.6	3.18	1.05	1.03E-02	386	0.132	8.17E-02	3.96	14.5	5.05	0.045	3.16	10.8	3.88	98	Extruded Aluminum Corporation	Belding	5868
x39x2.0	41	39	2.01	0.794	7.79E-03	293	0.152	7.15E-02	3.49	15.6	4.18	0.066	3.4	15	4.04	113	Bonnell	M	AE0643

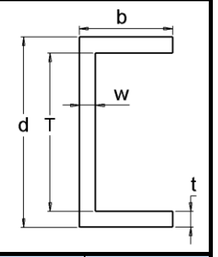
TUBES RECTANGULAIRES, COINS RONDS



Identification de la section	Dimensions extérieures		Épaisseur (t)	Masse	Charge morte	Aire	Aire par mètres de longueur	Axe X-X				Axe Y-Y				Constante de torsion	Extrudeur	Emplacement	Identification de la section du fabricant
HSS d x b x t	Hauteur (d)	Largeur (b)						I_x	S_x	r_x	Z_x	I_y	S_y	r_y	Z_y	J			
mm x mm x mm	mm	mm	mm	kg/m	kN/m	mm²	m²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	10^3 mm⁴			
HSS 40																			
x28x2.0	40	28	2.03	0.699	6.85E-03	258	0.133	5.60E-02	2.8	14.7	3.43	0.032	2.27	11.1	2.67	64	Tri City Extrusion	Bristol	1059
x20x1.7	40	20	1.65	0.503	4.93E-03	185	0.117	3.72E-02	1.86	14.2	2.34	0.012	1.23	8.14	1.42	29.8	Tri City Extrusion	Bristol	1057
x30x3.2	39.8	29.7	3.18	1.09	1.07E-02	404	0.136	8.35E-02	4.2	14.4	5.26	0.052	3.47	11.3	4.24	102	Extruded Aluminum Corporation	Belding	18755
HSS 38																			
x24x5.0	38.3	23.7	5	1.41	1.38E-02	520	0.122	8.50E-02	4.44	12.8	5.95	0.037	3.08	8.38	4.06	84	Gateway Extrusions	Woodbridge	CES119
x38x3.2	38.1	38.1	3.18	1.2	1.18E-02	444	0.142	8.74E-02	4.59	14	5.71	0.087	4.59	14	5.71	150	Taber	Russelville	OH-14045
x25x3.2	38.1	25.4	3.18	0.984	9.65E-03	363	0.126	6.62E-02	3.48	13.5	4.42	0.034	2.66	9.64	3.26	71.2	Tri City Extrusion	Bristol	2444
x25x2.6	38.1	25.4	2.59	0.812	7.96E-03	300	0.124	5.60E-02	2.94	13.7	3.69	0.029	2.28	9.83	2.75	61.5	Bonnell	M	AE3622
x25x2.3	38.1	25.4	2.29	0.709	6.95E-03	261	0.122	4.89E-02	2.57	13.7	3.22	0.026	2.02	9.9	2.41	55.2	Bonnell	M	AE5755
x25x1.6	38.1	25.4	1.57	0.515	5.05E-03	190	0.126	3.79E-02	1.99	14.1	2.42	0.02	1.57	10.2	1.82	40.6	Western Extrusions	Dallas	H 19195
x25x1.6	38.1	25.4	1.57	0.503	4.93E-03	186	0.123	3.64E-02	1.91	14	2.34	0.019	1.52	10.2	1.76	40.3	Crown Extrusions	Chaska	1506
x25x1.6	38.1	25.4	1.57	0.516	5.06E-03	190	0.124	3.78E-02	1.98	14.1	2.42	0.02	1.56	10.2	1.82	41.4	Western Extrusions	Dallas	H 19152
x25x1.5	38.1	25.4	1.52	0.483	4.74E-03	178	0.122	3.47E-02	1.82	14	2.24	0.019	1.46	10.2	1.69	39.6	Bonnell	M	AE3078
x25x1.4	38.1	25.4	1.4	0.446	4.37E-03	164	0.122	3.22E-02	1.69	14	2.07	0.017	1.35	10.2	1.57	37	Tri City Extrusion	Bristol	1075
x25x1.3	38.1	25.4	1.27	0.399	3.91E-03	147	0.120	2.86E-02	1.5	14	1.84	0.015	1.21	10.2	1.4	33.8	Bonnell	M	AE2228
x24x1.0	38.1	23.8	1.04	0.333	3.27E-03	123	0.121	2.45E-02	1.28	14.1	1.56	0.012	0.992	9.81	1.13	25.2	Tri City Extrusion	Bristol	1003
x19x3.2	38.1	19	3.18	0.875	8.58E-03	323	0.114	5.39E-02	2.83	12.9	3.71	0.017	1.73	7.16	2.18	41.3	Tri City Extrusion	Bristol	2227
x36x2.5	38	36	2.49	0.931	9.13E-03	343	0.147	7.14E-02	3.76	14.4	4.53	0.065	3.64	13.8	4.36	106	Gateway Extrusions	Woodbridge	CES100
HSS 32																			
x25x3.2	31.8	25.4	3.18	0.853	8.37E-03	314	0.109	3.98E-02	2.51	11.3	3.2	0.028	2.17	9.36	2.72	53.8	Bonnell	M	AE6080
x25x1.5	31.8	25.4	1.52	0.43	4.22E-03	159	0.109	2.22E-02	1.4	11.8	1.7	0.016	1.23	9.94	1.46	30.3	Bonnell	M	AE6081
x19x1.6	31.8	19	1.57	0.407	3.99E-03	150	0.101	1.98E-02	1.25	11.5	1.55	8.71E-03	0.914	76.2	1.07	19.1	Bonnell	M	AE5181
x16x2.0	31.8	15.9	1.98	0.442	4.33E-03	163	0.088	1.86E-02	1.17	10.7	1.54	6.09E-03	0.768	6.12	0.938	16.1	Pennex Aluminum	Leetonia	5242-H
HSS 27																			
x16x2.0	26.6	15.7	2.01	0.416	4.08E-03	153	0.083	1.33E-02	1	9.32	1.28	5.54E-03	0.706	6.01	8.64	12.6	Gateway Extrusions	Woodbridge	CES147
HSS 25																			
x13x3.2	25.4	12.7	3.18	0.547	5.36E-03	202	0.076	1.37E-02	1.08	8.24	1.47	3.93E-03	0.618	9.34	0.832	10.2	Bonnell	M	AE3065
x10x1.5	25.4	10.3	1.47	0.244	2.39E-03	90.1	0.066	6.14E-03	0.484	8.26	0.655	1.42E-03	0.276	3.98	0.339	4.15	Pennex Aluminum	Leetonia	5535-H
HSS 24																			
x19x1.5	23.8	18.5	1.5	0.315	3.09E-03	116	0.082	8.91E-03	0.748	8.76	0.921	5.95E-03	0.643	7.16	0.77	11.4	Tri City Extrusion	Bristol	1173
HSS 21																			
x15x3.0	21.2	15.1	3	0.493	4.83E-03	182	0.072	9.34E-03	0.881	7.17	1.17	5.16E-03	0.681	5.32	0.897	10.8	Bonnell	M	AE3322

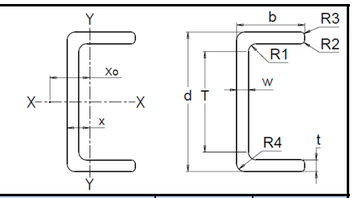
PROFILÉS EN C, COINS CARRÉS





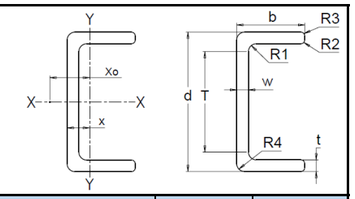
Identification de la section	Profondeur (d)	Dimensions de l'âme		Dimensions de l'aile		Masse (ω)	Charge morte	Aire	Aire par unité de longueur		Axe X-X			Axe Y-Y				Centre de cisaillement	Constante de torsion	Constante de gauchissement	Extrudeur	Emplacement	Identification de la section du fabricant
C d x ω		Hauteur (T)	Épaisseur (w)	Largeur (b)	Épaisseur (t)				Total	Sans le dessus de l'aile supérieure	I_x	S_x	r_x	I_y	S_y	r_y	x	x_0	J	C_W			
mm x (kg/m)	mm	mm	mm	mm	mm	kg/m	kN/m	mm^2	m^2	m^2	10^6 mm^4	10^3 mm^3	mm	10^6 mm^4	10^3 mm^3	mm	mm	mm	10^3 mm^4	10^9 mm^6			
C 166																							
x5.5	166	153	6.35	83.6	6.35	5.52	5.41E-02	2034	0.653	0.570	8.66	104	65.2	1.38	22.9	26.0	23.3	50.1	28.0	6.15	Tri City Extrusion Inc.	Bristol	675
C 127																							
x2.8	127	117	4.78	50.8	4.78	2.84	2.78E-02	1046	0.448	0.397	2.46	38.7	48.5	2.43E-02	6.44	15.2	13.1	27.6	8.25	0.642	Tri City Extrusion Inc.	Bristol	873
x1.5	127	121	3.18	25.4	3.18	1.48	1.45E-02	544	0.349	0.324	1.08	17.1	44.6	2.30E-02	1.12	6.50	1.12	9.61	1.88	6.62E-02	Tri City Extrusion Inc.	Bristol	848
C 108																							
x1.1	108	103	2.54	25.4	2.54	1.06	1.04E-02	390	0.313	0.287	0.59	10.9	38.8	1.84E-02	0.903	6.86	5.05	10.7	0.86	3.76E-02	Tri City Extrusion Inc.	Bristol	947
C 53																							
x1.6	53.37	43.8	4.78	38.1	4.78	1.55	1.52E-02	573	0.250	0.211	0.25	9.33	20.8	8.13E-02	3.23	11.9	13.0	24.7	4.36	3.45E-02	Tri City Extrusion Inc.	Bristol	50087
C 51																							
x0.82	50.8	44.5	3.18	25.4	3.18	0.820	8.05E-03	302	0.197	0.171	0.11	4.52	19.5	1.81E-02	1.01	7.73	7.51	14.7	1.03	7.24E-03	Tri City Extrusion Inc.	Bristol	50010
C 44																							
x0.77	44.5	38.1	3.18	25.4	3.18	0.766	7.51E-03	282	0.184	0.159	8.35E-02	3.76	17.2	1.73E-02	0.991	7.83	7.94	15.4	0.961	5.22E-03	Tri City Extrusion Inc.	Bristol	941
C 38																							
x1.04	38.1	31.8	3.18	44.5	3.18	1.04	1.02E-02	383	0.248	0.203	9.48E-02	4.98	15.7	7.82E-02	2.83	14.3	16.8	33.8	1.31	1.78E-02	Tri City Extrusion Inc.	Bristol	50092
x0.71	38.1	31.8	3.18	25.4	3.18	0.711	6.97E-03	262	0.171	0.146	5.78E-02	3.03	14.8	1.64E-02	0.967	7.91	8.43	16.2	0.889	3.58E-03	Tri City Extrusion Inc.	Bristol	50124
C 25																							
x0.82	25.4	19.1	3.18	38.1	3.18	0.820	8.05E-03	302	0.197	0.159	3.19E-02	2.51	10.3	4.41E-02	1.96	12.1	15.6	30.0	1.03	4.37E-03	Tri City Extrusion Inc.	Bristol	50091
x0.60	25.4	19.1	3.18	25.4	3.18	0.601	5.90E-03	222	0.146	0.121	2.19E-02	1.72	9.93	1.42E-02	0.900	7.99	9.67	18.0	0.749	1.33E-03	Tri City Extrusion Inc.	Bristol	684
x0.38	25.4	19.1	3.18	12.7	3.18	0.383	3.75E-03	141	0.095	0.083	1.19E-02	0.934	9.17	1.92E-03	0.229	3.69	4.31	6.55	0.473	1.71E-04	Tri City Extrusion Inc.	Bristol	50011

PROFILÉS EN C, COINS RONDS



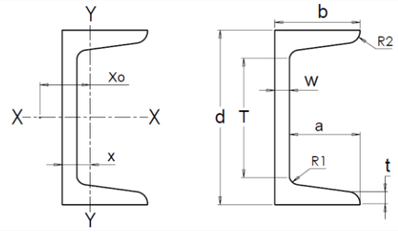
Identification de la section	Profondeur (d)	Dimensions de l'âme		Dimensions de l'aile		Rayons				Masse (ω)	Charge morte	Aire	Aire par unité de longueur		Axe X-X			Axe Y-Y				Centre de cisaillement	Constante de torsion	Constante de gauchissement	Extrudeur	Emplacement	Identification de la section du fabricant
C d x ω		Hauteur (T)	Épaisseur (w)	Largeur (b)	Épaisseur (t)	R1	R2	R3	R4				Total	Sans le dessus de l'aile supérieure	I_x	S_x	r_x	I_y	S_y	r_y	x	x_0	J	C_W			
mm x (kg/m)	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg/m	kN/m	mm^2	m^2	m^2	10^6 mm^4	10^3 mm^3	mm	10^6 mm^4	10^3 mm^3	mm	mm	mm	10^3 mm^4	10^9 mm^6			
C 267																											
x6.1	267	251	6.35	50.8	6.35	1.57	0.38	0.38	0.38	6.13	6.01E-02	2259	0.724	0.674	19.6	147	93.2	0.372	9.01	12.8	20.2	18.7	31.4	4.75	Tower Extrusions	Olney	12376
C 254																											
x9.1	254	215	6.35	88.9	10.4	8.89	-	-	-	9.13	8.96E-02	3366	0.851	0.762	34.6	273	101	2.64	41.9	28	25.9	55.2	98.9	27.5	Taber Extrusions	Russellville	OC-11037
C 229																											
x7.4	229	193	5.84	82.6	8.89	8.89	-	-	-	7.41	7.27E-02	2733	0.777	0.694	22.6	198	91	1.83	31	25.9	23.6	50.4	55.8	15.5	Taber Extrusions	Russellville	OC-7656
C 219																											
x5.1	219	206	6.35	44.4	6.35	0.25	0.25	0.25	0.25	5.09	4.99E-02	1875	0.603	0.558	11	101	76.7	0.241	6.77	11.3	8.98	16.7	26.4	2.04	Tower Extrusions	Olney	5102
x4.7	219	206	6.35	31.8	6.35	0.25	0.25	0.25	0.25	4.65	4.56E-02	1714	0.552	0.521	9.21	84.1	73.3	0.088	3.44	7.16	11.3	9.23	23	0.765	Tower Extrusions	Olney	5104
C 217																											
x5.1	217	204	6.35	44.4	6.35	0.25	0.25	0.25	0.25	5.06	4.96E-02	1865	0.599	0.554	10.8	99.6	76.2	0.24	6.76	11.3	8.98	16.8	25	2	Tower Extrusions	Olney	5838
C 203																											
x8.6	203	164	6.35	95.2	10.4	8.89	-	-	-	8.61	8.45E-02	3176	0.774	0.679	21.9	216	83.1	2.97	46.2	30.6	31	64.7	90.1	19.6	Taber Extrusions	Russellville	OC-7655
x8.6	203	164	6.35	95.2	10.4	8.89	0.79	0.79	0.79	8.61	8.45E-02	3175	0.774	0.679	21.9	216	83.1	2.96	46.1	30.6	31	64.7	90.1	19.6	Western Extrusions Corp.	Dallas	19096
x6.2	203	170	4.83	76.2	8.89	7.62	0	0	0	6.17	6.05E-02	2275	0.701	0.625	15.6	153	82.7	1.35	25.7	24.4	23.7	50.3	43.7	9.01	Western Extrusions Corp.	Dallas	19289
x6.2	203	170	4.83	76.2	8.89	7.62	-	-	-	6.17	6.05E-02	2275	0.701	0.625	15.6	153	82.7	1.35	25.7	24.4	23.6	50.3	43.7	9.01	Taber Extrusions	Russellville	OC-7654
C 178																											
x7.0	178	143	5.33	88.9	9.65	7.62	-	-	-	7.01	6.88E-02	2587	0.701	0.612	14.1	158	73.7	2.13	36.5	28.7	30.5	63.4	62.3	10.8	Taber Extrusions	Russellville	OC-7653
x4.8	178	148	4.32	69.8	7.37	7.62	0	0	0	4.77	4.68E-02	1758	0.627	0.557	9.2	103	72.3	0.874	18	22.3	21.4	45.6	24.3	4.49	Western Extrusions Corp.	Dallas	19293
x4.8	178	148	4.32	69.8	7.37	7.62	-	-	-	4.77	4.68E-02	1758	0.627	0.557	9.2	103	72.3	0.874	18	22.3	21.3	45.6	24.3	4.49	Taber Extrusions	Russellville	OC-7652
C 157																											
x5.3	157	128	5.33	82.6	7.11	7.62	0.79	0.79	0.79	5.32	5.22E-02	1961	0.634	0.551	8.03	102	64	1.36	24.1	26.4	25.8	54.6	29	5.44	Tower Extrusions	Olney	11848
x7.3	152	119	8.89	82.6	8.89	7.62	0.51	-	-	7.29	7.15E-02	2689	0.617	0.534	9.48	124	59.4	1.74	30	25.4	24.6	49	75.7	6.3	Pries Enterprises Inc.	Independence	4751
x6.0	152	119	5.33	82.6	8.89	7.62	0	0	0	6.0	5.89E-02	2211	0.624	0.541	8.76	11.5	62.9	1.57	28.9	26.6	28.4	58.5	46.8	5.8	Western Extrusions Corp.	Dallas	19200
x6.0	152	119	5.33	82.6	8.89	7.62	-	-	-	6.0	5.89E-02	2211	0.624	0.541	8.76	115	62.9	1.57	28.9	26.6	28.4	58.5	46.8	5.8	Taber Extrusions	Russellville	OC-7651
x4.2	152	122	4.32	63.5	7.37	7.62	0	0	0	4.22	4.14E-02	1555	0.549	0.486	5.98	78.4	62	0.639	14.7	20.3	20	41.9	21.8	2.38	Western Extrusions Corp.	Dallas	19364
x4.2	152	122	4.32	63.5	7.37	7.62	-	-	-	4.22	4.14E-02	1555	0.549	0.486	5.98	78.4	62	0.639	14.7	20.3	20.1	41.9	21.7	2.38	Taber Extrusions	Russellville	OC-7650
C 148																											
x3.9	148	128	4.78	71.4	5.33	4.75	0.38	0.38	0.38	3.87	3.80E-02	1429	0.572	0.501	4.97	67.1	59	0.719	14	22.4	20.2	43.7	12.3	2.58	Tower Extrusions	Olney	10754
C 141																											
x3.8	141	128	6.35	44.4	6.35	0.25	0.25	0.25	0.25	3.75	3.68E-02	1381	0.447	0.402	3.7	52.3	51.7	0.217	6.47	12.5	11	20.9	18.9	0.708	Tower Extrusions	Olney	3930
C 127																											
x4.6	127	95.5	4.83	69.8	8.13	7.62	0	0	0	4.6	4.51E-02	1695	0.524	0.454	4.64	73	52.3	0.855	18.7	22.5	24.2	49.5	30.3	2.18	Western Extrusions Corp.	Dallas	19292
x4.6	127	95.5	4.83	69.8	8.13	7.62	-	-	-	4.6	4.51E-02	1695	0.524	0.454	4.64	73	52.3	0.855	18.7	22.5	24.1	49.5	30.3	2.18	Taber Extrusions	Russellville	OC-7649
x4.5	127	107	9.53	34.9	9.53	0.51	4.78	4.78	4.78	4.53	4.44E-02	1669	0.375	0.34	3.21	50.5	43.8	0.131	5.16	8.85	9.58	13.2	50.7	0.32	Western Extrusions Corp.	Dallas	19053
x3.3	127	98.6	3.81	57.2	6.6	7.62	0	0	0	3.29	3.23E-02	1213	0.475	0.418	3.28	51.7	52	0.406	10.5	18.3	18.6	38.5	14.1	1.05	Western Extrusions Corp.	Dallas	19378
x3.3	127	98.5	3.81	57.2	6.6	7.67	-	-	-	3.29	3.23E-02	1213	0.475	0.418	3.28	51.7	52	0.406	10.5	18.3	18.5	38.5	14.1	1.05	Taber Extrusions	Russellville	OC-7648
x2.8	127	116	4.78	50.8	4.78	0.79	0.79	0.79	0.79	2.84	2.79E-02	1045	0.448	0.397	2.46	38.7	48.5	0.242	6.42	15.2	13	27.5	8.25	0.64	Western Extrusions Corp.	Dallas	19037
C 109																											
x5.3	109	64.5	9.53	44.4	12.7	9.53	0.79	0.79	0.79	5.32	5.22E-02	1961	0.377	0.332	3.14	57.7	40	0.334	11.3	13.1	14.8	23.5	89.4	0.538	Tower Extrusions	Olney	14799
C 108																											
x3.8	108	88.2	6.35	44.4	9.53	0.38	0.38	0.38	0.38	3.83	3.76E-02	1411	0.381	0.336	2.43	45	41.5	0.264	8.85	13.7	14.6	27.2	31.1	0.457	Tower Extrusions	Olney	12751
C 103																											
x3.2	103	88.7	6.35	47.6	6.35	0.79	0.79	0.79	0.79	3.2	3.14E-02	1179	0.384	0.336	1.81	35.1	39.2	0.241	7.12	14.3	13.8	26.5	16.1	0.399	Tower Extrusions	Olney	13129
x10.6	103	76.8	12.7	114	12.7	0.38	0.38	0.38	0.38	10.6	1.04E-01	3891	0.637	0.523	6.48	126	40.8	5.08	72.5	36.1	44.3	83.5	211	8	Tower Extrusions	Olney	13478
C 102																											
x9.6	102	67.5	12.7	102	12.7	4.57	4.57	4.67	4.57	9.57	9.39E-02	3530	0.587	0.485	5.56	109	39.7	3.55	56.1	31.7	38.4	71	195	5.29	Tower Extrusions	Olney	14802
x5.4	102	82.2	9.53	63.5	9.53	0.38	0.38	0.38	0.38	5.41	5.31E-02	1996	0.439	0.375	3.02	59.4	38.9	0.759	17.9	19.5	21.2	38.8	60.7	1.15	Tower Extrusions	Olney	10264
x3.5	102	74.6	4.83	57.2	7.37	6.35	0	0	0	3.47	3.40E-02	1279	0.423	0.366	2.17	42.7	41.2	0.425	11.3	18.2	19.7	39.3	19.2	0.679	Western Extrusions Corp.	Dallas	19362
x3.5	102	74.6	4.83	57.2	7.37	6.35	-	-	-	3.47	3.40E-02	1279	0.423	0.366	2.17	42.7	41.2	0.425	11.3	18.2	19.8	39.3	19.2	0.679	Taber Extrusions	Russellville	OC-7647
x3.3	102	76.6	6.35	50.8	6.35	6.35	6.35	-	-	3.3	3.24E-02	1217	0.394	0.344	1.85	36.4	39	0.278	7.69	15.1	14.7	28.1	17.8	0.439	Pries Enterprises Inc.	Independence	1197
x3.3	102	88.5	6.35	50.8	6.35	0.38	0.38	0.38	0.38	3.28	3.22E-02	1210	0.394	0.344	1.84	36.2	39	0.289	8.08	15.5	15.1	29.4	16.4	0.463	Tower Extrusions	Olney	12857
x2.8	102	73.5	4.78	46	6.35	7.92	0.79	0.79	1.57	2.81	2.76E-02	1035	0.378	0.332	1.65	32.5	40	0.209	6.57	14.2	14.1	27.8	12.6	0.333	Tower Extrusions	Olney	11310
x2.6	102	77.6	3.81	50.8	5.84	6.35	0	0	0	2.59	2.54E-02	954	0.4	0.349	1.63	32	41.3	0.25	7.32	16.2	16.6	34	9.04	0.409	Western Extrusions Corp.	Dallas	19363
x2.6	102	77.6	3.81	50.8	5.84	6.35	-	-	-	2.59	2.54E-02	954	0.4	0.349	1.63	32	41.3	0.25	7.32	16.2	16.5	34	9.04	0.409	Taber Extrusions	Russellville	OC-7646
x2.6	102	95.1	3.18	102	3.18	0.25	0.25	0.25	0.25	2.57	2.52E-02	948	0.606	0.504	1.79	35.3	43.5	1.05	15.8	33.3	35.1	76.4	3.33	1.83	Tower Extrusions	Olney	3222
x2.0	102	79.9	3.81	38.1	4.7	6.35	0	0	0	1.97	1.93E-02	727	0.349	0.311	1.12	22.1	39.3	0.096	3.48	11.5	10.4	21.1	5	0.159	Western Extrusions Corp.	Dallas	19178

PROFILÉS EN C, COINS RONDS



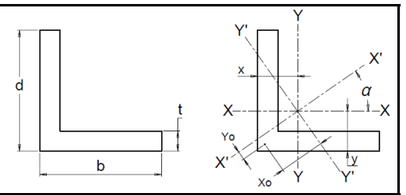
Identification de la section	Profondeur (d)	Dimensions de l'âme		Dimensions de l'aile		Rayons				Masse (ω)	Charge morte	Aire	Aire par unité de longueur		Axe X-X			Axe Y-Y				Centre de cisaillement	Constante de torsion	Constante de gauchissement	Extrudeur	Emplacement	Identification de la section du fabricant
C d x ω		Hauteur (T)	Épaisseur (w)	Largeur (b)	Épaisseur (t)	R1	R2	R3	R4				Total	Sans le dessus de l'aile supérieure	I_x	S_x	r_x	I_y	S_y	r_y	x	x_0	J	C_W			
mm x (kg/m)	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg/m	kN/m	mm^2	m^2	m^2	10^6 mm^4	10^3 mm^3	mm	10^6 mm^4	10^3 mm^3	mm	mm	mm	10^3 mm^4	10^9 mm^6			
C 89																											
x6.3	88.9	62.7	6.35	76.2	12.7	0.38	0.38	0.38	0.38	6.34	6.22E-02	2339	0.47	0.394	2.97	66.8	35.6	1.34	30.5	24	32.1	60.9	101	1.64	Tower Extrusions	Olney	15837
C 76																											
x2.4	76.2	57.1	6.35	38.1	6.35	3.18	3.18	-	-	2.41	2.36E-02	887	0.292	0.254	0.727	19.1	28.6	0.113	426	11.3	11.7	20.8	12.4	0.096	Pries Enterprises Inc.	Independence	4369
x2.4	76.2	50.3	4.32	44.4	6.6	6.35	0	0	0	2.38	2.33E-02	876	0.321	0.277	0.819	21.5	30.6	0.174	6.04	14.1	15.7	30.3	10.8	0.152	Western Extrusions Corp.	Dallas	19298
x2.4	76.2	50.3	4.32	44.4	6.6	6.35	-	-	-	2.38	2.33E-02	876	0.321	0.277	0.819	21.5	30.6	0.174	6.04	14.1	15.8	30.3	10.8	0.152	Taber Extrusions	Russellville	OC-7645
x1.7	76.2	53.3	3.3	38.1	5.08	6.35	0	0	0	1.69	1.66E-02	623	0.298	0.26	0.587	15.4	30.7	0.09	3.54	12	12.6	25	4.6	0.081	Western Extrusions Corp.	Dallas	19286
x1.7	76.2	53.3	3.3	38.1	5.08	6.35	-	-	-	1.69	1.66E-02	623	0.298	0.26	0.587	15.4	30.7	0.09	3.54	12	12.4	25	4.6	0.081	Taber Extrusions	Russellville	OC-7644
C 70																											
x3.1	69.9	50.8	6.35	63.5	6.35	3.18	0	0	6.35	3.14	3.08E-02	1156	0.381	0.318	0.898	25.7	27.9	0.47	11.6	20.2	23.1	45.3	15.9	0.337	Western Extrusions Corp.	Dallas	19204

PROFILÉS STRUCTURAUX EN C



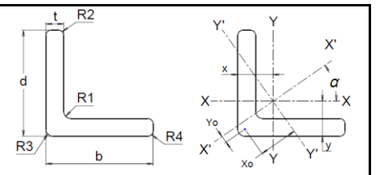
Identification de la section	Profondeur (d)	Dimensions de l'âme		Dimensions de l'aile		Distance	Rayons		Masse (ω)	Charge morte	Aire	Aire par unité de longueur		Axe X-X			Axe Y-Y				Centre de cisaillement	Constante de torsion	Constante de gauchissement	Extrudeur	Emplacement	Identification de la section du fabricant
C d x ω		Hauteur (T)	Épaisseur (w)	Largeur (b)	Épaisseur (t)	a	R1	R2				Total	Sans le dessus de l'aile supérieure	I_x	S_x	r_x	I_y	S_y	r_y	x	x_0	J	C_W			
mm x (kg/m)	mm	mm	mm	mm	mm	mm	mm	mm	kg/m	kN/m	mm^2	m^2	m^2	10^6 mm⁴	10^3 mm³	mm	10^6 mm⁴	10^3 mm³	mm	mm	mm	10^3 mm⁴	10^9 mm⁶			
C 394																										
x13	394	328	6.35	89.7	6.35	83.4	12.7	-	13	1.28E-01	4785	1.13	1.04	114	580	154	2.85	41.4	24.4	20.8	43.3	217	71.3	Taber Extrusions	Russellville	TM-12075
x11	394	330	5.59	82.6	5.59	77.0	13.46	-	11.2	1.10E-01	4119	1.11	1.02	97.6	496	154	2.04	31.8	22.2	18.5	38.8	150	51.6	Taber Extrusions	Russellville	TM-12595
C 381																										
x26	381	310	18.3	94.5	10.2	76.2	12.7	6.1	25.9	2.54E-01	9565	1.1	1.01	170	892	133	4.84	63.4	22.5	20.6	32	1149	113	Taber Extrusions	Russellville	TM-10984
C 305																										
x11	305	249	7.62	75.2	7.11	67.6	9.65	4.32	11	1.08E-01	4040	0.896	0.82	54.4	357	116	1.66	28.2	20.3	17.5	34.5	162	24.3	Taber Extrusions	Russellville	TM-12267
x9.4	305	248	7.62	75.2	7.62	67.6	9.65	4.32	9.37	9.19E-02	3454	0.896	0.82	42.6	280	111	1.04	16.8	17.3	13.5	26.3	91.5	16.2	Western Extrusion Corp.	Dallas	19187
C 254																										
x12	254	190	13.4	73.3	13.4	59.9	8.64	3.56	12	1.18E-01	4408	0.774	0.701	33.4	263	87.1	1.05	17.7	15.5	13.7	20.6	244	11.4	Western Extrusion Corp.	Dallas	19278
x8.0	254	205	6.1	66	6.1	59.9	8.64	3.56	7.97	7.82E-02	2938	0.76	0.694	28.6	225	98.7	0.977	19.7	18.2	16.4	32.7	95.5	9.78	Western Extrusion Corp.	Dallas	19287
x7.9	254	205	6.1	66	6.1	59.9	8.64	3.56	7.92	7.77E-02	2919	0.76	0.694	28.4	223	98.6	0.992	19.4	18.4	16.5	32.7	92.3	9.97	Taber Extrusions	Russellville	OC-11879
C 229																										
x10	229	182	11.4	67.3	5.84	55.9	8.38	3.56	10.3	1.01E-01	3782	0.704	0.637	25.3	221	81.7	1.01	18.9	16.4	14.7	24.6	178	8.32	Taber Extrusions	Russellville	OC-09711
C 203																										
x11	203	134	9.65	76.2	9.65	66.6	13.97	5.59	10.9	1.07E-01	4032	0.692	0.615	24.9	245	78.5	1.93	34.3	21.9	22.1	40.2	263	11.2	Taber Extrusions	Russellville	OC-04454
x9.8	203	145	12.4	64.2	12.4	51.8	8.13	3.33	9.78	9.59E-02	3607	0.638	0.574	18.7	184	72	0.859	17.3	15.4	14.7	22.9	191	5.46	Western Extrusion Corp.	Dallas	19288
x9.6	203	158	12.4	64.2	5.59	51.8	8.13	3.3	9.63	9.45E-02	3552	0.638	0.574	18.3	180	71.7	0.834	16.4	15.3	14.5	22.3	183	5.36	Taber Extrusions	Russellville	OC-03596
x8.4	203	158	10.0	61.8	5.59	51.8	8.13	3.3	8.38	8.22E-02	3088	0.633	0.571	16.7	165	73.6	0.749	15.3	15.6	14.2	24.2	121	4.78	Taber Extrusions	Russellville	OC-08180
x7.0	203	158	7.62	59.5	5.59	51.9	8.13	3.3	6.99	6.86E-02	2579	0.629	0.569	14.9	146	76	0.636	13.7	15.7	14	26	76	4.04	Taber Extrusions	Russellville	OC-08337
x6.5	203	157	6.35	58.2	6.35	51.9	8.13	3.3	6.46	6.34E-02	2381	0.626	0.568	14.5	143	78	0.601	13.8	15.9	14.6	28	68.8	3.77	Western Extrusion Corp.	Dallas	19353
x6.4	203	158	6.35	58.2	5.59	51.9	8.13	3.3	6.36	6.24E-02	2346	0.626	0.568	14.2	140	77.8	0.603	13.4	16	14.5	28	63.9	3.81	Taber Extrusions	Russellville	OC-03538
C 178																										
x7.6	178	136	10.6	58.4	5.33	47.8	7.87	3.3	7.58	7.44E-02	2796	0.568	0.51	11.3	128	63.7	0.582	12.7	14.4	13.5	21.9	112	2.81	Taber Extrusions	Russellville	OC-07886
x6.3	178	136	7.98	55.7	5.33	47.7	7.87	3.3	6.3	6.18E-02	2322	0.563	0.507	10.1	114	65.9	0.497	11.5	14.6	13.5	24	67.8	2.38	Taber Extrusions	Russellville	OC-07523
x5.3	178	136	5.84	53.6	5.33	47.8	7.87	3.3	5.27	5.17E-02	1943	0.559	0.505	9.1	102	68.4	0.428	10.5	14.8	13.7	26.2	46.1	2.05	Taber Extrusions	Russellville	OC-03537
C 152																										
x11	152	92	12.7	76.2	9.65	63.5	9.65	6.35	10.6	1.04E-01	3903	0.583	0.507	13	170	57.6	1.86	34	21.8	23.6	39.9	303	5.66	Taber Extrusions	Russellville	OC-08371
x6.7	152	112	11.1	54.8	5.08	43.7	7.62	3.05	6.74	6.61E-02	2486	0.501	0.446	7.33	96.2	54.3	0.462	10.8	13.6	13.2	20.5	102	1.6	Taber Extrusions	Russellville	OC-03536
x5.5	152	106	7.98	51.7	7.98	43.7	7.62	3.05	5.52	5.42E-02	2035	0.495	0.443	6.51	85.4	56.5	3.76	9.72	13.7	13	22.6	59.5	1.28	Western Extrusion Corp.	Dallas	19295
x5.4	152	112	7.98	51.7	5.08	43.7	7.62	3.05	5.43	5.33E-02	2003	0.495	0.443	6.38	83.7	56.4	0.375	9.39	13.7	13	22.5	55.7	1.3	Taber Extrusions	Russellville	OC-02564
x4.5	152	112	5.72	49.4	5.08	43.7	7.62	3.05	4.5	4.41E-02	1659	0.49	0.441	5.71	74.9	58.7	0.318	8.47	13.8	13	24.7	36.4	1.1	Taber Extrusions	Russellville	OC-02563
x4.2	152	112	5.08	48.8	5.08	43.7	7.62	3.05	4.24	4.16E-02	1562	0.489	0.44	5.52	72.5	59.5	0.301	8.2	13.9	13.2	25.4	32.6	1.04	Taber Extrusions	Russellville	OC-02562
x4.2	152	112	5.08	49.4	5.08	44.3	7.62	3.05	4.18	4.10E-02	1542	0.491	0.442	5.43	71.2	59.3	0.291	8	13.7	13	25.1	30.9	1.01	Western Extrusion Corp.	Dallas	19661
x4.1	152	112	5.08	48.8	5.08	43.7	7.62	3.05	4.14	4.06E-02	1528	0.489	0.44	5.36	70.3	59.2	0.28	7.77	13.5	12.8	24.5	30.5	0.971	Western Extrusion Corp.	Dallas	19294
C 76																										
x3.4	76.2	33.5	9.53	50.8	9.65	41.3	4.83	9.65	3.35	3.29E-02	1236	0.337	0.286	0.964	25.3	27.9	0.202	5.41	12.8	13.5	21	33.2	0.153	Taber Extrusions	Russellville	OC-07588

PROFILÉS EN ANGLE JAMBES ÉGALES COINS CARRÉS



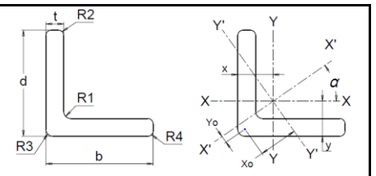
Identification de la section	Dimensions extérieures		Épaisseur (t)	Masse	Charge morte	Aire	Axe X-X					Axe Y-Y					Constante de torsion	Constante de gauchissement	Axe X'-X'		Axe Y'-Y'		r_0	Ω	tan α	Extrudeur	Emplacement	Identification de la section du fabricant
L b x d x t	Longueur (b)	Hauteur (d)					I_x	S_x	r_x	Z_x	y	I_y	S_y	r_y	Z_y	x	J	C_W	r'_x	y_0	r'_y	x_0						
mm x mm x mm	mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^3 mm⁴	10^9 mm⁶	mm	mm	mm	mm	mm					
L 102x102																												
x9.5	102	102	9.53	5	4.91E-02	1845	1.81E+00	25	31.4	45	29.0	1.81	25	31.4	45	29.0	55.4	4.29E-02	39.6	0	20	33.8	55.7	0.633	1	Tri City Extrusion Inc.	Bristol	597
x3.2	102	102	3.18	1.72	1.69E-02	635	6.62E-01	8.83	32.3	15.9	26.7	0.662	8.83	32.3	15.9	26.7	2.2	1.78E-03	40.8	0	20.4	35.3	57.7	0.626	1	Pennex Aluminum	Leetonia	5584-S
L 76x76																												
x8	76.2	76.2	7.95	3.11	3.05E-02	1148	6.29E-01	11.6	23.4	20.9	22.0	0.629	11.6	23.4	20.9	22.0	23.8	1.03E-02	29.5	0	15	25.1	41.5	0.635	1	Western Extrusions Corp.	Dallas	19154
x6.4	76.2	76.2	6.35	2.52	2.47E-02	927	5.18E-01	9.45	23.6	17	21.4	0.518	9.45	23.6	17	21.4	12.4	5.47E-03	29.8	0	15	25.5	42.1	0.631	1	Pennex Aluminum	Leetonia	5546-S
x4.8	76.2	76.2	4.78	1.91	1.87E-02	705	4.01E-01	7.25	23.9	13	20.8	0.401	7.25	23.9	13	20.8	5.41	2.41E-03	30.2	0	15.1	25.9	42.6	0.629	1	Pennex Aluminum	Leetonia	5583-S
x3.2	76.2	76.2	3.18	1.28	1.26E-02	474	2.75E-01	4.92	24.1	8.85	20.2	0.275	4.92	24.1	8.85	20.2	1.62	7.36E-04	30.5	0	15.3	26.3	43.1	0.627	1	Western Extrusions Corp.	Dallas	19618
x3.2	76.2	76.2	3.18	1.28	1.26E-02	474	2.75E-01	4.92	24.1	8.85	20.2	0.275	4.92	24.1	8.85	20.2	1.62	7.36E-04	30.5	0	15.3	26.3	43.1	0.627	1	Pennex Aluminum	Leetonia	5545-S
L 64x64																												
x6.4	63.5	63.5	6.35	2.08	2.04E-02	766	2.93E-01	6.46	19.5	11.6	18.2	0.293	6.46	19.5	11.6	18.2	10.2	3.06E-03	24.7	0	12.5	21	34.7	0.634	1	Pennex Aluminum	Leetonia	5675-S
x4.8	63.5	63.5	4.78	1.58	1.55E-02	584	2.28E-01	4.97	19.8	8.96	17.6	0.228	4.97	19.8	8.96	17.6	4.45	1.37E-03	25	0	12.6	21.4	35.2	0.63	1	Pennex Aluminum	Leetonia	5391-S
x4.8	63.5	63.5	4.75	1.57	1.54E-02	581	2.27E-01	4.95	19.8	8.91	17.6	0.227	4.95	19.8	8.91	17.6	4.35	1.35E-03	25	0	12.6	21.4	35.2	0.63	1	Western Extrusions Corp.	Dallas	19940
x3.2	63.5	63.5	3.18	1.07	1.05E-02	393	1.57E-01	3.39	20	6.1	17.1	0.157	3.39	20	6.1	17.1	1.34	4.20E-04	25.3	0	12.7	21.8	35.7	0.627	1	Pennex Aluminum	Leetonia	4776-S
L 51x51																												
x6.4	50.8	50.8	6.35	1.64	1.61E-02	605	1.45E-01	4.04	15.5	7.29	15.0	0.145	4.04	15.5	7.29	15.0	8	1.49E-04	19.5	0	99.3	16.4	27.3	0.64	1	Western Extrusions Corp.	Dallas	19878
x6.4	50.8	50.8	6.35	1.64	1.61E-02	605	1.45E-01	4.04	15.5	7.29	15.0	0.145	4.04	15.5	7.29	15.0	8	1.49E-03	19.5	0	9.93	16.4	27.3	0.64	1	Tri City Extrusion Inc.	Bristol	596
x6.4	50.8	50.8	6.35	1.64	1.61E-02	605	1.45E-01	4.04	15.5	7.29	15.0	0.145	4.04	15.5	7.29	15.0	8	1.49E-03	19.5	0	9.93	16.4	27.3	0.64	1	Pennex Aluminum	Leetonia	5054-S
x4.8	50.8	50.8	4.78	1.25	1.23E-02	462	1.14E-01	3.13	15.7	5.63	14.5	0.114	3.13	15.7	5.63	14.5	3.5	6.75E-04	19.8	0	10	16.9	27.9	0.633	1	Western Extrusions Corp.	Dallas	19194
x4.8	50.8	50.8	4.78	1.25	1.23E-02	462	1.14E-01	3.13	15.7	5.63	14.5	0.114	3.13	15.7	5.63	14.5	3.5	6.75E-04	19.8	0	10	16.9	27.9	0.633	1	Pennex Aluminum	Leetonia	5258-S
x4.8	50.8	50.8	4.75	1.25	1.23E-02	460	1.13E-01	3.11	15.7	5.61	14.5	0.113	3.11	15.7	5.61	14.5	3.44	6.65E-04	19.8	0	10	16.9	27.9	0.633	1	Tri City Extrusion Inc.	Bristol	50122
x4.8	50.8	50.8	4.75	1.25	1.23E-02	460	1.13E-01	3.11	15.7	5.61	14.5	0.113	3.11	15.7	5.61	14.5	3.44	6.65E-04	19.8	0	10	16.9	27.9	0.633	1	Pries Enterprises Inc.	Independence	268
x3.2	50.8	50.8	3.18	0.848	8.32E-03	313	7.91E-02	2.14	15.9	3.86	13.9	7.91E-02	2.14	15.9	3.86	13.9	1.06	2.10E-04	20.1	0	10.1	17.3	28.4	0.628	1	Western Extrusions Corp.	Dallas	19511
x3.2	50.8	50.8	3.18	0.848	8.32E-03	313	7.91E-02	2.14	15.9	3.86	13.9	7.91E-02	2.14	15.9	3.86	13.9	1.06	2.10E-04	20.1	0	10.1	17.3	28.4	0.628	1	Tri City Extrusion Inc.	Bristol	50138
x3.2	50.8	50.8	3.18	0.848	8.32E-03	313	7.91E-02	2.14	15.9	3.86	13.9	7.91E-02	2.14	15.9	3.86	13.9	1.06	2.10E-04	20.1	0	10.1	17.3	28.4	0.628	1	Pries Enterprises Inc.	Independence	896
x3.2	50.8	50.8	3.18	0.848	8.32E-03	313	7.91E-02	2.14	15.9	3.86	13.9	7.91E-02	2.14	15.9	3.86	13.9	1.06	2.10E-04	20.1	0	10.1	17.3	28.4	0.628	1	Pennex Aluminum	Leetonia	5140-S
x2.4	50.8	50.8	2.39	0.642	6.30E-03	237	6.08E-02	1.63	16	2.94	13.6	6.82E-02	1.63	16	2.94	13.6	0.484	9.19E-05	20.3	0	10.2	17.5	28.6	0.627	1	Pennex Aluminum	Leetonia	5757-S
L 44x44																												
x3.2	44.4	44.4	3.18	0.738	7.24E-03	272	5.23E-02	1.63	13.9	2.93	12.3	5.23E-02	1.63	13.9	2.93	12.3	0.927	1.39E-04	17.5	0	8.81	15	24.7	0.63	1	Pennex Aluminum	Leetonia	5591-S
L 38x38																												
x6.4	38.1	38.1	6.35	1.2	1.18E-02	444	5.77E-02	2.2	11.4	3.96	11.8	5.77E-02	2.2	11.4	3.96	11.8	5.79	5.72E-04	14.3	0	74.2	11.8	20	0.652	1	Western Extrusions Corp.	Dallas	19864
x6.4	38.1	38.1	6.35	1.2	1.18E-02	444	5.77E-02	2.2	11.4	3.96	11.8	5.77E-02	2.2	11.4	3.96	11.8	5.79	5.72E-04	14.3	0	7.42	11.8	20	0.652	1	Pries Enterprises Inc.	Independence	3252
x6.4	38.1	38.1	6.35	1.2	1.18E-02	444	5.77E-02	2.2	11.4	3.96	11.8	5.77E-02	2.2	11.4	3.96	11.8	5.79	5.72E-04	14.3	0	7.42	11.8	20	0.652	1	Pennex Aluminum	Leetonia	5135-S
x4.8	38.1	38.1	4.78	0.925	9.07E-03	341	4.59E-02	1.71	11.6	3.08	11.3	4.59E-02	1.71	11.6	3.08	11.3	2.54	2.67E-04	14.6	0	7.45	12.3	20.5	0.64	1	Tri City Extrusion Inc.	Bristol	129
x4.8	38.1	38.1	4.78	0.925	9.07E-03	341	4.59E-02	1.71	11.6	3.08	11.3	4.59E-02	1.71	11.6	3.08	11.3	2.54	2.67E-04	14.6	0	7.45	12.3	20.5	0.64	1	Pennex Aluminum	Leetonia	5169-S
x4.8	38.1	38.1	4.75	0.92	9.03E-03	339	4.57E-02	1.7	11.6	3.07	11.3	4.57E-02	1.7	11.6	3.07	11.3	2.5	2.63E-04	14.6	0	74.5	12.3	20.5	0.64	1	Western Extrusions Corp.	Dallas	19880
x3.2	38.1	38.1	3.18	0.629	6.17E-03	232	3.24E-02	1.18	11.8	2.13	10.7	3.24E-02	1.18	11.8	2.13	10.7	0.783	8.54E-05	14.9	0	75.2	12.8	21	0.631	1	Western Extrusions Corp.	Dallas	19932
x3.2	38.1	38.1	3.18	0.629	6.17E-03	232	3.24E-02	1.18	11.8	2.13	10.7	3.24E-02	1.18	11.8	2.13	10.7	0.783	8.54E-05	14.9	0	7.52	12.8	21	0.631	1	Tri City Extrusion Inc.	Bristol	50123
x3.2	38.1	38.1	3.18	0.629	6.17E-03	232	3.24E-02	1.18	11.8	2.13	10.7	3.24E-02	1.18	11.8	2.13	10.7	0.783	8.54E-05	14.9	0	7.52	12.8	21	0.631	1	Pries Enterprises Inc.	Independence	1972
x3.2	38.1	38.1	3.18	0.629	6.17E-03	232	3.24E-02	1.18	11.8	2.13	10.7	3.24E-02	1.18	11.8	2.13	10.7	0.783	8.54E-05	14.9	0	7.52	12.8	21	0.631	1	Pennex Aluminum	Leetonia	5018-S
x3.0	38.1	38.1	3	0.595	5.84E-03	219	3.08E-02	1.12	11.8	2.02	10.6	3.08E-02	1.12	11.8	2.02	10.6	0.648	7.25E-05	15	0	7.53	12.8	21.1	0.631	1	Tri City Extrusion Inc.	Bristol	299
x1.9	38.1	38.1	1.9	0.384	3.77E-03	142	2.04E-02	0.731	12	1.32	10.2	2.04E-02	0.731	12	1.32	10.2	0.179	1.96E-05	15.2	0	7.61	13.1	21.4	0.627	1	Pennex Aluminum	Leetonia	5106-S
x1.6	38.1	38.1	1.6	0.324	3.18E-03	119	1.73E-02	0.619	12	1.11	10.1	1.73E-02	0.619	12	1.11	10.1	0.1	1.18E-05	15.2	0	7.63	13.2	21.5	0.626	1	Pennex Aluminum	Leetonia	5462-S
L 32x32																												
x4.8	31.8	31.8	4.78	0.761	7.47E-03	280	2.57E-02	1.16	9.56	2.1	9.69	2.57E-02	1.16	9.56	2.1	9.69	2.08	1.46E-04	12	0	6.19	10	16.8	0.647	1	Tri City Extrusion Inc.	Bristol	252
x4.8	31.8	31.8	4.78	0.761	7.47E-03	280	2.57E-02	1.16	9.56	2.1	9.69	2.57E-02	1.16	9.56	2.1	9.69	2.08	1.46E-04	12	0	6.19	10	16.8	0.647	1	Pries Enterprises Inc.	Independence	3403
x4.8	31.8	31.8	4.78	0.761	7.47E-03	280	2.57E-02	1.16	9.56	2.1	9.69	2.57E-02	1.16	9.56	2.1	9.69	2.08	1.46E-04	12	0	6.19	10	16.8	0.647	1	Pennex Aluminum	Leetonia	5026-S
x3.2	31.8	31.8	3.18	0.519	5.09E-03	192	1.83E-02	0.808	9.77	1.46	9.12	1.83E-02	0.808	9.77	1.46	9.12	0.637	4.79E-05	12.3	0	62.4	10.5	17.4	0.634	1	Western Extrusions Corp.	Dallas	19743
x3.2	31.8	31.8	3.18	0.519	5.09E-03	192	1.83E-02	0.808	9.77	1.46	9.12	1.83E-02	0.808	9.77	1.46	9.12	0.637	4.79E-05	12.3	0	6.24	10.5	17.4	0.634	1	Pennex Aluminum	Leetonia	5308-S
L 25x25																												
x6.4	25.4	25.4	6.35	0.766	7.51E-03	282	1.53E-02	0.915	7.37	1.65	8.62	1.53E-02	0.915	7.37	1.65	8.62	3.59	1.35E-04	9.17	0	4.98	6.99	12.6	0.69	1	Pries Enterprises Inc.	Independence	3955
x6.4	25.4	25.4	6.35	0.766	7.51E-03	282	1.53E-02	0.915	7.37	1.65	8.62	1.53E-02	0.915	7.37	1.65	8.62	3.59	1.35E-04	9.17	0	4.98	6.99	12.6	0.69	1	Pennex Aluminum	Leetonia	5282-S
x4.8	25.4	25.4	4.78	0.596	5.85E-03	220	1.25E-02	0.721	7.54	1.3	8.08	1.25E-02	0.721	7.54	1.3	8.08	1.61	6.84E-05	9.45	0	4.94	7.65	13.1	0.66	1	Pennex Aluminum	Leetonia	5053-S
x3.2	25.4	25.4	3.18	0.41	4.02E-03	151	9.04E-03	0.506	7.73	0.911	7.52	9.04E-03	0.506	7.73	0.911	7.52	0.499	2.33E-05	9.74	0	4.97	8.21	13.7	0.64	1	Western Extrusions Corp.	Dallas	19994
x3.2	25.4	25.4	3.18	0.41	4.02E-03	151	9.04E-03	0.506	7.73	0.911	7.52	9.04E-03	0.506	7.73	0.911	7.52	0.499	2.33E-05	9.74	0	4.97	8.21	13.7	0.64	1	Tri City Extrusion Inc.	Bristol	136
x3.2	25.4	25.4	3.18	0.41	4.02E-03	151	9.04E-03	0.506	7.73	0.911	7.52	9.04E-03	0.506	7.73	0.911	7.52	0.499	2.33E-05	9.74	0	4.97	8.21	13.7	0.64	1	Pries Enterprises Inc.	Independence	195
x3.2	25.4	25.4	3.18	0.41	4.02E-03	151	9.04E-03	0.506	7.73	0.911	7.52	9.04E-03	0.506	7.73	0.911	7.52	0.499	2.33E-05	9.74	0	4.97	8.21	13.7	0.64	1	Pries Enterprises Inc.	Independence	3276
x3.2	25.4	25.4	3.18	0.41	4.02E-03	151	9.04E-03	0.506	7.73	0.911	7.52	9.04E-03	0.506	7.73	0.911	7.52	0.499	2.33E-05	9.74	0	4.97	8.21	13.7	0.64	1	Pennex Aluminum	Leetonia	5016-S
x1.6	25.4	25.4	1.6	0.214	2.10E-03	78.7	4.98E-03	0.27	7.95	0.486	6.94	4.98E-03	0.27	7.95	0.486	6.94	0.068	3.36E-06	10	0	5.05	8.64	14.2	0.629	1	Pennex Aluminum	Leetonia	5017-S
L 19x19																												
x3.2	19	19	3.18	0.301	2.95E-03	111	3.60E-06	0.274	5.7	0.495	5.91	3.60E-06	0.274	5.7	0.495	5.91	0.362	8.93E-06	7.16	0	3.71	5.89	9.98	0.652	1	Western Extrusions Corp.	Dallas	19812
x3.2	19	19	3.18	0.301	2.95E-03	111	3.60E-03	0.274	5.7	0.495	5.91	3.60E-03	0.274	5.7	0.495	5.91	0.362	8.93E-06	7.16	0	3.71	5.89	9.98	0.652	1	Pennex Aluminum	Leetonia	5187-S
x1.6	19	19	1.6	0.158	1.55E-03	58.4	2.04E-03	0.149	5.91	0.268	5.34	2.04E-03	0.149	5.91	0.268	5.34	0.05	1.37E-06	7.46	0	3.76	6.38	10.5	0.631	1	Pennex Aluminum	Leetonia	5090-S
L 16x16																												
x3.2	15.9	15.9	3.18	0.246	2.41E-03	90.7	2.00E-03	0.185	4.69	0.334	5.12	2.00E-03	0.185	4.69	0.334	5.12	0.293	4.76E-06	5.87	0	3.09	4.71	8.13	0.665	1	Pennex Aluminum	Leetonia	5620-S
L 13x13																												
x3.2	12.7	12.7	3.18	0.191	1.87E-03	70.6	9.59E-04	0.114	3.69	0.206	4.31	9.59E-04	0.114	3.69	0.206	4.31	0.225	2.11E-06	4.58	0	2.49	3.49	6.28	0.69	1	Western Extrusions Corp.	Dallas	19913
x3.2	12.7	12.7	3.18	0.191	1.87E-03	70.6	9.59E-04	0.114	3.69	0.206	4.31	9.59E-04	0.114	3.69	0.206	4.31	0.225	2.11E-06	4.58	0	2.49	3.49	6.28	0.69	1	Pries Enterprises Inc.	Independence	815
x3.2	12.7	12.7	3.18	0.191	1.87E-03	70.6	9.59E-04	0.114	3.69	0.206	4.31	9.59E-04	0.114	3.69	0.206	4.31	0.225	2.11E-06	4.58	0	2.49	3.49	6.28	0.69	1	Pennex Aluminum	Leetonia	5186-S

PROFILÉS EN ANGLE JAMBES ÉGALES COINS RONDS



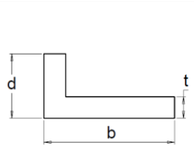
Identification de la section	Dimensions extérieures		Épaisseur (t)	Rayons				Masse	Charge morte	Aire	Axe X-X					Axe Y-Y					Constante de torsion	Constante de gauchissement	Axe X'-X'		Axe Y'-Y'		r_0	Ω	tan α	Extrudeur	Emplacement	Identification de la section du fabricant
L b x d x t	Longueur (b)	Hauteur (d)		R1	R2	R3	R4				I_x	S_x	r_x	Z_x	y	I_y	S_y	r_y	Z_y	x	J	C_W	r'_x	y_0	r'_y	x_0						
mm x mm x mm	mm	mm	mm	mm	mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^3 mm⁴	10^9 mm⁶	mm	mm	mm	mm	mm					
L 152x152																																
x9.5	152	152	9.53	9.53	0	0	0	7.68	7.53E-02	2832	6.42	57.9	47.6	104	41.5	6.42	57.9	47.6	104	41.5	90.1	1.53E-01	60.1	0	30.4	51.3	84.6	0.633	1	Western Extrusions Corp.	Dallas	19224
x3.2	152	152	3.18	0.76	0.25	-	-	2.6	2.55E-02	958	2.27	20.1	48.7	36.1	39.2	2.27	20.1	48.7	36.1	39.2	3.37	6.09E-03	61.6	0	30.8	53.3	87	0.625	1	Tower Extrusions	Olney	7664
L 127x127																																
x13	127	127	12.7	6.35	0.76	-	-	8.33	8.17E-02	3073	4.69	51.7	39	93.2	36.4	4.69	51.7	39	93.2	36.4	167	1.95E-01	49.2	0	25	41.7	69.2	0.637	1	Tower Extrusions	Olney	11513
L 106x106																																
x3.2	106	106	3.18	0.25	0.25	-	-	1.79	1.76E-02	661	0.746	9.55	33.6	17.2	27.7	0.746	9.55	33.6	17.2	27.7	2.27	2.00E-03	42.5	0	21.3	36.7	60.1	0.626	1	Tower Extrusions	Olney	8882
L 102x102																																
x13	102	102	12.7	6.35	0.76	-	-	6.58	6.45E-02	2428	2.32	32.4	30.9	58.3	30.2	2.32	32.4	30.9	58.3	30.2	131	9.48E-02	38.9	0	19.9	32.5	54.4	0.644	1	Tower Extrusions	Olney	13460
x9.5	102	102	9.53	11.1	0.25	-	-	5.08	4.98E-02	1871	1.82	25	31.2	45	29.0	1.82	25	31.2	45	29.0	60.6	4.27E-02	39.3	0	20.1	32.8	55	0.644	1	Tower Extrusions	Olney	9541
x6.4	102	102	6.35	0.25	0.25	-	-	3.39	3.33E-02	1250	1.26	17.1	31.8	30.8	27.9	1.26	17.1	31.8	30.8	27.9	16.9	1.35E-02	40.2	0	20.2	34.6	56.8	0.628	1	Tower Extrusions	Olney	3036
x4.8	102	102	4.78	0.38	0.38	-	-	2.57	2.52E-02	947	0.973	13.1	32	23.5	27.3	0.973	13.1	32	23.5	27.3	7.37	5.88E-03	40.5	0	20.3	35	57.2	0.627	1	Tower Extrusions	Olney	10988
L 76x76																																
x13	76.2	76.2	12.7	0.25	0.25	-	-	4.81	4.72E-02	1774	0.922	17.6	22.8	31.7	23.7	0.922	17.6	22.8	31.7	23.7	92.5	3.66E-02	28.6	0	14.8	23.6	39.9	0.652	1	Tower Extrusions	Olney	9424
x9.5	76.2	76.2	9.53	0.25	0.25	-	-	3.69	3.62E-02	1361	0.732	13.6	23.2	24.6	22.5	0.732	13.6	23.2	24.6	22.5	40.4	1.70E-02	29.2	0	14.9	24.6	41	0.640	1	Tower Extrusions	Olney	9908
x6.4	76.2	76.2	6.35	0.25	0.25	-	-	2.52	2.47E-02	927	0.518	9.45	23.6	17	21.4	0.518	9.45	23.6	17	21.4	12.4	5.46E-03	29.8	0	15	25.5	42.1	0.631	1	Tower Extrusions	Olney	3102
x4.8	76.2	76.2	4.78	0.38	0.38	-	-	1.91	1.87E-02	705	0.401	7.24	23.9	13	20.8	0.401	7.24	23.9	13	20.8	5.41	2.41E-03	30.1	0	15.1	25.9	42.6	0.629	1	Tower Extrusions	Olney	9591
x3.2	76.2	76.2	3.18	0.38	0.38	-	-	1.28	1.26E-02	474	0.275	4.91	24.1	8.85	20.2	0.275	4.91	24.1	8.85	20.2	1.62	7.35E-04	30.5	0	15.3	26.3	43	0.627	1	Tower Extrusions	Olney	13575
x3.2	76.2	76.2	3.18	0.25	0.25	-	-	1.28	1.26E-02	474	0.275	4.91	24.1	8.85	20.2	0.275	4.91	24.1	8.85	20.2	1.64	7.36E-04	30.5	0	15.3	26.3	43	0.627	1	Tower Extrusions	Wylie-H	3694
L 64x64																																
x9.5	63.5	63.5	9.53	0.41	0.41	-	-	3.03	2.97E-02	1119	0.409	9.27	19.1	16.7	19.4	0.409	9.27	19.1	16.7	19.4	33	9.28E-03	24.1	0	12.4	20	33.6	0.647	1	Tower Extrusions	Wylie-M	418
x4.8	63.5	63.5	4.78	0.38	0.38	-	-	1.58	1.55E-02	584	0.228	4.97	19.8	8.95	17.6	0.228	4.97	19.8	8.95	17.6	4.45	1.36E-03	25	0	12.6	21.4	35.2	0.630	1	Tower Extrusions	Wylie-H	3561
x3.2	63.5	63.5	3.18	0.38	0.38	-	-	1.07	1.05E-02	393	0.157	3.38	20	6.09	17.1	0.157	3.38	20	6.09	17.1	1.34	4.19E-04	25.3	0	12.7	21.8	35.7	0.627	1	Tower Extrusions	Olney	14914
L 57x57																																
x6.4	57.2	57.2	6.35	0.25	0.25	-	-	1.86	1.82E-02	685	0.21	5.18	17.5	9.34	16.6	0.21	5.18	17.5	9.34	16.6	9.09	2.18E-03	22.1	0	11.2	18.7	31	0.636	1	Tower Extrusions	Olney	9442
L 56x56																																
x4.8	55.6	55.6	4.78	4.83	1.52	-	-	1.39	1.36E-02	512	0.15	3.75	17.1	6.77	15.7	0.15	3.75	17.1	6.77	15.7	4.1	8.82E-04	21.6	0	11	18.2	30.3	0.640	1	Pries Enterprises Inc.	Independence	4483
L 51x51																																
x6.4	50.8	50.8	6.35	0.25	0.25	-	-	1.64	1.61E-02	605	0.145	4.04	15.5	7.29	15.0	0.145	4.04	15.5	7.29	15.0	7.95	1.49E-03	19.5	0	9.93	16.4	27.3	0.640	1	Tower Extrusions	Olney	667
x6.4	50.8	50.8	6.35	2.36	0.81	-	-	1.64	1.61E-02	606	0.145	4.04	15.4	7.28	15.0	0.145	4.04	15.4	7.28	15.0	8.12	1.48E-03	19.5	0	9.93	16.3	27.3	0.643	1	Tower Extrusions	Olney	13068
x6.4	50.8	50.8	6.35	0.41	0.41	-	-	1.64	1.61E-02	605	0.145	4.04	15.5	7.29	15.0	0.145	4.04	15.5	7.29	15.0	8	1.49E-03	19.5	0	9.93	16.4	27.3	0.640	1	Tower Extrusions	Wylie-M	787
x6.4	50.8	50.8	6.35	0.41	0.41	-	-	1.64	1.61E-02	605	0.145	4.04	15.5	7.29	15.0	0.145	4.04	15.5	7.29	15.0	8	1.49E-03	19.5	0	9.93	16.4	27.3	0.640	1	Tower Extrusions	Wylie-H	8445
x6.4	50.8	50.8	6.35	0.79	0.79	-	-	1.64	1.61E-02	605	0.145	4.04	15.5	7.28	15.0	0.145	4.04	15.5	7.28	15.0	7.99	1.48E-03	19.5	0	9.93	16.4	27.3	0.640	1	Pries Enterprises Inc.	Independence	459
x6.4	50.8	50.8	6.35	6.35	3.18	-	-	1.65	1.62E-02	609	0.142	3.96	15.3	7.21	15.0	0.142	3.96	15.3	7.21	15.0	8.73	1.41E-03	19.2	0	9.85	15.6	26.7	0.656	1	Pries Enterprises Inc.	Independence	2204
x4.8	50.8	50.8	4.78	0.25	0.25	-	-	1.25	1.23E-02	462	0.114	3.13	15.7	5.63	14.5	0.114	3.13	15.7	5.63	14.5	3.49	6.74E-04	19.8	0	10	16.9	27.9	0.633	1	Tower Extrusions	Olney	1185
x4.8	50.8	50.8	4.78	0.41	0.41	-	-	1.25	1.23E-02	462	0.114	3.13	15.7	5.63	14.5	0.114	3.13	15.7	5.63	14.5	3.5	6.74E-04	19.8	0	9	16.9	27.9	0.633	1	Tower Extrusions	Wylie-M	147
x4.8	50.8	50.8	4.78	0.41	0.41	-	-	1.25	1.23E-02	462	0.114	3.13	15.7	5.63	14.5	0.114	3.13	15.7	5.63	14.5	3.5	6.74E-04	19.8	0	9	16.9	27.9	0.633	1	Tower Extrusions	Wylie-H	8400
x3.2	50.8	50.8	3.18	0.25	0.25	-	-	0.847	8.31E-03	312	7.90E-02	2.14	15.9	3.86	13.9	7.90E-02	2.14	15.9	3.86	13.9	1.06	2.10E-04	20.1	0	10.1	17.3	28.4	0.629	1	Tower Extrusions	Olney	2449
x3.2	50.8	50.8	3.18	0.64	1.57	-	-	0.845	8.29E-03	312	7.83E-02	2.12	15.9	3.83	13.9	7.83E-02	2.12	15.9	3.83	13.9	1.06	2.06E-04	20	0	10.1	17.2	28.3	0.629	1	Tower Extrusions	Olney	20829
x3.2	50.8	50.8	3.18	0.41	0.41	-	-	0.847	8.31E-03	312	7.90E-02	2.14	15.9	3.85	13.9	7.90E-02	2.14	15.9	3.85	13.9	1.06	2.10E-04	20.1	0	10.1	17.3	28.4	0.629	1	Tower Extrusions	Wylie-M	127
x3.2	50.8	50.8	3.18	0.25	0.25	-	-	0.847	8.31E-03	312	7.90E-02	2.14	15.9	3.86	13.9	7.90E-02	2.14	15.9	3.86	13.9	1.06	2.10E-04	20.1	0	10.1	17.3	28.4	0.629	1	Tower Extrusions	Wylie-H	501
L 44x44																																
x4.8	44.4	44.4	4.78	0.38	0.38	0.38	0.38	1.09	1.07E-02	402	7.46E-02	2.36	13.6	4.26	12.9	7.46E-02	2.36	13.6	4.26	12.9	3.03	4.39E-04	17.2	0	87.2	14.6	24.2	0.636	1	Western Extrusions Corp.	Dallas	19084
x4.8	44.4	44.4	4.78	0.38	0.38	-	-	1.09	1.07E-02	402	7.47E-02	2.36	13.6	4.26	12.9	7.47E-02	2.36	13.6	4.26	12.9	3.01	4.40E-04	17.2	0	8.72	14.6	24.2	0.636	1	Tower Extrusions	Olney	11886
x4.8	44.4	44.4	4.78	4.75	3.18	-	-	1.09	1.07E-02	402	7.27E-02	2.29	13.4	4.18	12.9	7.27E-02	2.29	13.4	4.18	12.9	3.24	4.11E-04	16.9	0	8.63	14	23.6	0.650	1	Pries Enterprises Inc.	Independence	4368
x3.2	44.4	44.4	3.18	0.25	0.25	-	-	0.738	7.24E-03	272	5.23E-02	1.63	13.9	2.93	12.3	5.23E-02	1.63	13.9	2.93	12.3	0.906	1.39E-04	17.5	0	8.81	15	24.7	0.630	1	Tower Extrusions	Olney	6834
L 38x38																																
x12.5	38.1	38.1	12.45	1.6	1.6	-	-	2.15	2.11E-02	793	9.26E-02	3.82	10.8	6.86	13.9	9.26E-02	3.82	10.8	6.86	13.9	38.3	2.59E-03	13.2	0	7.62	8.86	17.7	0.748	1	Tower Extrusions	Wylie-M	918
x6.4	38.1	38.1	6.35	0.25	0.25	-	-	1.2	1.18E-02	444	5.76E-02	2.19	11.4	3.96	11.8	5.76E-02	2.19	11.4	3.96	11.8	5.79	5.71E-04	14.3	0	7.42	11.8	20	0.652	1	Tower Extrusions	Olney	7922
x4.8	38.1	38.1	4.78	0.25	0.25	-	-	0.925	9.07E-03	341	4.59E-02	1.71	11.6	3.08	11.3	4.59E-02	1.71	11.6	3.08	11.3	2.54	2.67E-04	14.6	0	7.45	12.3	20.5	0.640	1	Tower Extrusions	Olney	6732
x4.8	38.1	38.1	4.78	0.41	0.41	-	-	0.925	9.07E-03	341	4.59E-02	1.71	11.6	3.08	11.3	4.59E-02	1.71	11.6	3.08	11.3	2.55	2.66E-04	14.6	0	7.45	12.3	20.5	0.640	1	Tower Extrusions	Wylie-M	136
x4.8	38.1	38.1	4.78	0.25	0.25	-	-	0.925	9.07E-03	341	4.59E-02	1.71	11.6	3.08	11.3	4.59E-02	1.71	11.6	3.08	11.3	2.54	2.67E-04	14.6	0	7.45	12.3	20.5	0.640	1	Tower Extrusions	Wylie-H	4763
x4.8	38.1	38.1	4.78	4.78	3.18	-	-	0.927	9.09E-03	342	4.44E-02	1.64	11.4	3.02	11.3	4.44E-02	1.64	11.4	3.02	11.3	2.75	2.46E-04	14.4	0	7.34	11.6	19.9	0.658	1	Pries Enterprises Inc.	Independence	1211
x3.2	38.1	38.1	3.18	0.38	0.38	-	-	0.629	6.17E-03	232	3.23E-02	1.18	11.8	2.13	10.7	3.23E-02	1.18	11.8	2.13	10.7	0.772	8.52E-05	14.9	0	7.52	12.8	21	0.632	1	Tower Extrusions	Olney	957
x3.2	38.1	38.1	3.18	0.41	0.41	-	-	0.629	6.17E-03	232	3.23E-02	1.18	11.8	2.13	10.7	3.23E-02	1.18	11.8	2.13	10.7	0.78	8.52E-05	14.9	0	7.52	12.8	21	0.632	1	Tower Extrusions	Wylie-M	101
x3.2	38.1	38.1	3.18	0.41	0.41	-	-	0.629	6.17E-03	232	3.23E-02	1.18	11.8	2.13	10.7	3.23E-02	1.18	11.8	2.13	10.7	0.78	8.52E-05	14.9	0	7.52	12.8	21	0.632	1	Tower Extrusions	Wylie-H	624
L 32x32																																
x4.8	31.8	31.8	4.78	3.18	0	0	0	0.766	7.51E-03	283	2.57E-02	1.16	9.53	2.1	9.69	2.57E-02	1.16	9.54	2.1	9.69	2.2	1.45E-04	12	0	61.9	9.75	16.6	0.657	1	Western Extrusions Corp.	Dallas	19461
x4.8	31.8	31.8	4.78	2.36	2.36	-	-	0.76	7.46E-03	280	2.51E-02	1.13	9.46	2.06	9.69	2.51E-02	1.13	9.46	2.06	9.69	2.14	1.41E-04	6.15	0	12	9.75	16.6	0.655	1	Tower Extrusions	Olney	13340
x4.8	31.8	31.8	4.78	4.78	3.18	-	-	0.762	7.48E-03	281	2.47E-02	1.11	9.37	2.04	9.69	2.47E-02	1.11	9.37	2.04	9.69	2.29	1.31E-04	11.8	0	6.06	9.24	16.2	0.673	1	Pries Enterprises Inc.	Independence	1213
x4.8	31.8	31.8	4.75	0.38	0.38	-	-	0.757	7.43E-03	279	2.55E-02	0.116	9.56	2.08	9.68	2.55E-02	0.116	9.56	2.08	9.68	2.05	1.44E-04	12	0	6.19	10	16.8	0.647	1	Tower Extrusions	Olney	9350
x3.2	31.8	31.8	3.18	0.25	0.25	-	-	0.519	5.09E-03	192	1.83E-02	0.807	9.77	1.46	9.12	1.83E-02	0.807	9.77	1.46	9.12	0.636	4.78E-05	12.3	0	6.24	10.5	17.3	0.634	1	Tower Extrusions	Olney	1477
x3.2	31.8	31.8	3.18	0.41	0.41	-	-	0.519	5.09E-03	192	1.83E-02	0.807	9.77	1.45	9.12	1.83E-02	0.807	9.77	1.45	9.12	0.638	4.77E-05	12.3	0	6.24	10.5	17.3	0.635	1	Tower Extrusions	Wylie-M	100
x3.2	31.8	31.8	3.18	0.41	0.41	-	-	0.519	5.09E-03	192	1.83E-02	0.807	9.77	1.45	9.12	1.83E-02	0.807	9.77	1.45	9.12	0.638	4.77E-05	12.3	0	6.24	10.5	17.3	0.635	1	Tower Extrusions	Wylie-H	26

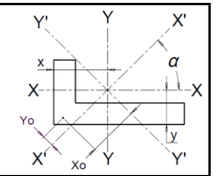
PROFILÉS EN ANGLE JAMBES ÉGALES COINS RONDS



Identification de la section	Dimensions extérieures		Épaisseur (t)	Rayons				Masse	Charge morte	Aire	Axe X-X					Axe Y-Y					Constante de torsion	Constante de gauchissement	Axe X'-X'		Axe Y'-Y'		r_0	Ω	tan α	Extrudeur	Emplacement	Identification de la section du fabricant
L b x d x t	Longueur (b)	Hauteur (d)		R1	R2	R3	R4				I_x	S_x	r_x	Z_x	y	I_y	S_y	r_y	Z_y	x	J	C_W	r'_x	y_0	r'_y	x_0						
mm x mm x mm	mm	mm	mm	mm	mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^3 mm⁴	10^9 mm⁶	mm	mm	mm	mm	mm					
L 27x27																															
x6.4	27	27	6.35	0.38	0.38	-	-	0.82	8.04E-03	302	1.87E-02	1.04	7.87	1.88	9.03	1.87E-02	1.04	7.87	1.88	9.03	3.87	1.69E-04	9.8	0	5.27	7.59	13.5	0.683	1	Tower Extrusions	Olney	15846
L 25x25																															
x6.4	25.4	25.4	6.35	0.25	0.25	-	-	0.765	7.50E-03	282	1.53E-02	0.914	7.37	1.65	8.62	1.53E-02	0.914	7.37	1.65	8.62	3.59	1.35E-04	9.16	0	4.97	6.98	12.6	0.690	1	Tower Extrusions	Olney	7921
x4.8	25.4	25.4	4.78	0.25	0.25	-	-	0.596	5.85E-03	220	1.25E-02	0.721	7.54	1.3	8.08	1.25E-02	0.721	7.54	1.3	8.08	1.61	6.83E-05	9.44	0	4.94	7.65	13.1	0.660	1	Tower Extrusions	Olney	1576
x3.2	25.4	25.4	3.18	0	1.57	3.18	1.57	0.398	3.90E-03	147	8.57E-03	0.48	7.64	0.881	7.52	8.57E-03	0.48	7.64	0.881	7.52	0.481	2.15E-05	96.8	0	48	8.2	13.6	0.634	1	Western Extrusions Corp.	Dallas	19806
x3.2	25.4	25.4	3.18	0.38	0.38	-	-	0.41	4.02E-03	151	9.03E-03	0.505	7.73	0.91	7.52	9.03E-03	0.505	7.73	0.910	7.52	0.499	2.32E-05	9.74	0	4.96	8.19	13.7	0.640	1	Tower Extrusions	Olney	179
x3.2	25.4	25.4	3.18	0.41	0.41	-	-	0.41	4.02E-03	151	9.03E-03	0.505	7.73	0.91	7.52	9.03E-03	0.505	7.73	0.910	7.52	0.501	2.32E-05	9.74	0	4.96	8.19	13.7	0.640	1	Tower Extrusions	Wylie-M	102
x3.2	25.4	25.4	3.18	0.25	0.25	-	-	0.41	4.02E-03	151	9.04E-03	0.505	7.73	0.911	7.52	9.04E-03	0.505	7.73	0.911	7.52	0.501	2.32E-05	9.74	0	4.97	8.2	13.7	0.640	1	Tower Extrusions	Wylie-H	1011
L 22x22																															
x3.2	22.2	22.2	3.18	0.25	0.25	-	-	0.355	3.48E-03	131	5.91E-03	0.381	6.71	0.687	6.71	5.91E-03	0.381	6.71	0.687	6.71	0.431	1.50E-05	8.45	0	4.33	7.05	11.8	0.645	1	Tower Extrusions	Olney	3693
L 19x19																															
x4.8	19	19	4.75	0.25	0.25	-	-	0.43	4.22E-03	158	4.85E-03	0.385	5.53	0.694	6.45	4.85E-03	0.385	5.53	0.694	6.45	1.13	2.39E-05	6.88	0	3.73	5.24	9.41	0.690	1	Tower Extrusions	Olney	3692

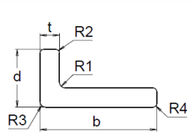
PROFILÉS EN ANGLE JAMBES INÉGALES COINS CARRÉS

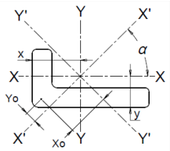




Identification de la section	Dimensions extérieures		Épaisseur (t)	Masse	Charge morte	Aire	Axe X-X					Axe Y-Y					Constante de torsion	Constante de gauchissement	Axe X'-X'		Axe Y'-Y'		β_w	r_0	Ω	tan α	y_s	x_s	Extrudeur	Emplacement	Identification de la section du fabricant
L b x d x t	Longueur (b)	Hauteur (d)					I_x	S_x	r_x	Z_x	y	I_y	S_y	r_y	Z_y	x	J	C_W	r'_x	y_0	r'_y	x_0									
mm x mm x mm	mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^3 mm⁴	10^9 mm⁶	mm	mm	mm	mm	mm	mm			mm	mm			
L 102																														
x51x6.4	102	50.8	6.35	2.52	2.47E-02	927	1.75E-01	4.39	13.7	7.99	10.9	1.00E+00	15.3	32.9	26.7	36.5	12.5	7.38E-03	10.9	15.9	33.9	29.0	70.3	48.6	0.537	-0.268	7.85	32.1	Western Extrusions Corp.	Dallas	19986
x51x4.8	102	50.8	4.78	1.91	1.87E-02	705	1.37E-01	3.39	14	6.04	10.3	7.72E-01	11.7	33.1	20.4	35.9	5.34	3.26E-03	11.1	16.3	34.2	29.5	70.7	49.3	0.532	-0.272	7.99	32.8	Western Extrusions Corp.	Dallas	19205
x51x4.8	102	50.8	4.78	1.91	1.87E-02	705	1.37E-01	3.39	14	6.04	10.3	7.72E-01	11.7	33.1	20.4	35.9	5.34	3.26E-03	11.1	16.3	34.2	29.5	70.7	49.3	0.532	-0.272	7.99	32.8	Pries Enterprises Inc.	Independence	1196
L 89																														
x32x3.2	88.9	31.8	3.18	1.01	9.91E-03	373	2.37E-02	0.902	7.97	1.64	5.46	3.12E-01	5.69	28.9	9.51	34.0	1.27	6.07E-04	6.62	8.84	29.3	30.8	70.1	43.9	0.468	-0.158	3.94	31.8	Western Extrusions Corp.	Dallas	19685
L 76																														
x51x9.5	76.2	50.8	9.53	3.03	2.97E-02	1119	2.26E-01	6.08	14.2	11.2	13.7	6.38E-01	12.8	23.9	22.9	26.4	33	1.05E-02	10.9	16.2	25.5	15.1	39.4	35.5	0.612	-0.428	8.98	20.2	Pries Enterprises Inc.	Independence	3277
x51x6.4	76.2	50.8	6.35	2.08	2.04E-02	766	1.63E-01	4.26	14.6	7.68	12.5	4.53E-01	8.88	24.3	15.9	25.2	10.2	3.46E-03	11	17.2	26.1	15.8	39.7	36.8	0.595	-0.441	9.39	21.4	Western Extrusions Corp.	Dallas	19559
x51x6.4	76.2	50.8	6.35	2.08	2.04E-02	766	1.63E-01	4.26	14.6	7.68	12.5	4.53E-01	8.88	24.3	15.9	25.2	10.2	3.46E-03	11	17.2	26.1	15.8	39.7	36.8	0.595	-0.441	9.39	21.4	Pries Enterprises Inc.	Independence	3286
x51x3.2	76.2	50.8	3.18	1.07	1.05E-02	393	8.88E-02	2.25	15	3.96	11.4	2.41E-01	4.63	24.8	8.33	24.1	1.32	4.73E-04	11.3	18.1	26.7	16.3	40.0	37.9	0.586	-0.451	9.78	22.3	Western Extrusions Corp.	Dallas	19516
L 64																														
x38x6.4	63.5	38.1	6.35	1.64	1.61E-02	605	6.71E-02	2.35	10.5	4.32	9.53	2.46E-01	5.96	20.2	10.6	22.2	7.99	1.79E-03	8.23	12.1	21.2	14.8	37.6	29.7	0.585	-0.356	6.44	18	Western Extrusions Corp.	Dallas	19112
x38x4.8	63.5	38.1	4.78	1.25	1.23E-02	462	5.32E-02	1.82	10.7	3.29	8.95	1.92E-01	4.59	20.4	8.16	21.6	3.49	8.09E-04	8.31	12.6	21.5	15.3	37.8	30.4	0.574	-0.364	6.61	18.7	Western Extrusions Corp.	Dallas	19092
x38x3.2	63.5	38.1	3.18	0.848	8.32E-03	312	3.74E-02	1.26	10.9	2.22	8.35	1.33E-01	3.13	20.6	5.58	21.0	1.05	2.52E-04	8.42	13	21.8	15.7	38.0	31	0.568	-0.372	6.78	19.2	Western Extrusions Corp.	Dallas	19466
L 54																														
x35x3.2	54	34.9	3.18	0.738	7.24E-03	272	2.80E-02	1.04	10.1	1.85	8.05	8.26E-02	2.27	17.4	4.07	17.6	0.915	1.59E-04	7.68	12.1	18.6	12.0	29.5	26.4	0.583	-0.422	6.48	15.8	Western Extrusions Corp.	Dallas	19060
L 51																														
x44x6.4	50.8	44.4	6.35	1.53	1.50E-02	565	9.86E-02	3.11	13.2	5.6	12.7	1.38E-01	3.96	15.7	7.17	15.9	7.44	1.22E-03	9.17	14.9	18.3	4.21	11.1	25.7	0.637	-0.750	9.38	12.3	Western Extrusions Corp.	Dallas	19686
x38x4.8	50.8	38.1	4.75	1.08	1.06E-02	400	4.98E-02	1.77	11.2	3.18	9.92	1.03E-01	2.98	16	5.39	16.3	2.97	4.62E-04	8.18	13.1	17.8	8.22	20.9	24.9	0.614	-0.549	7.53	13.5	Western Extrusions Corp.	Dallas	19110
x38x3.2	50.8	38.1	3.18	0.738	7.24E-03	272	3.53E-02	1.23	11.4	2.18	9.35	7.20E-02	2.05	16.3	3.72	15.7	0.917	1.48E-04	8.27	13.6	18	8.41	21.0	25.5	0.608	-0.559	7.75	13.9	Western Extrusions Corp.	Dallas	19810
x25x6.4	50.8	25.4	6.35	1.2	1.18E-02	444	1.89E-02	1.01	6.53	1.98	6.64	1.13E-01	3.6	16	6.21	19.3	5.79	7.68E-04	5.37	6.97	16.4	12.8	34.3	22.6	0.584	-0.247	3.69	14.1	Western Extrusions Corp.	Dallas	19670
x25x3.2	50.8	25.4	3.18	0.629	6.17E-03	232	1.10E-02	0.549	6.87	1	5.45	6.26E-02	1.92	16.4	3.34	18.2	0.777	1.15E-04	5.49	7.94	16.9	14.5	34.9	24.3	0.537	-0.268	3.93	16.1	Pries Enterprises Inc.	Independence	239
x14x4.8	50.8	14.3	4.78	0.781	7.66E-03	288	2.75E-03	0.255	3.09	0.603	3.52	7.25E-02	2.5	15.9	4.02	21.8	2.13	2.85E-04	2.76	2.74	15.9	14.0	41.2	21.6	0.561	-0.089	1.49	14.2	Western Extrusions Corp.	Dallas	19263
L 38																														
x25x4.8	38.1	25.4	4.75	0.757	7.43E-03	279	1.41E-02	0.759	7.1	1.4	6.84	3.98E-02	1.6	11.9	2.85	13.2	2.05	1.63E-04	5.46	8.11	12.8	7.53	19.7	17.8	0.612	-0.428	4.49	10.1	Western Extrusions Corp.	Dallas	19111
x25x3.2	38.1	25.4	3.18	0.519	5.09E-03	192	1.02E-02	0.533	7.3	0.96	6.27	2.83E-02	1.11	12.2	1.99	12.6	0.632	5.40E-05	5.52	8.62	13.1	7.92	19.9	18.4	0.595	-0.441	4.69	10.7	Western Extrusions Corp.	Dallas	19744
x19x3.2	38.1	19	3.18	0.465	4.56E-03	171	4.39E-03	0.299	5.06	0.559	4.38	2.55E-02	1.06	12.2	1.83	13.9	0.568	4.61E-05	4.07	5.73	12.6	10.5	26.1	17.8	0.548	-0.260	2.88	11.6	Western Extrusions Corp.	Dallas	19683
x13x3.2	38.1	12.7	3.18	0.41	4.02E-03	151	1.31E-03	0.133	2.94	0.282	2.86	2.20E-02	0.978	12.1	1.61	15.6	0.501	4.02E-05	2.53	2.95	12.2	11.7	30.0	17.3	0.515	-0.127	1.46	12	Western Extrusions Corp.	Dallas	19766
L 25																														
x13x3.2	25.4	12.7	3.18	0.301	2.95E-03	111	1.18E-03	0.126	3.27	0.247	3.32	7.08E-03	0.45	7.99	0.776	9.67	0.361	1.20E-05	2.69	3.48	8.2	6.4	17.1	11.3	0.584	-0.247	1.85	7.05	Western Extrusions Corp.	Dallas	19675

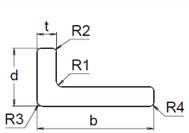
PROFILÉS EN L JAMBES INÉGALES COINS RONDS

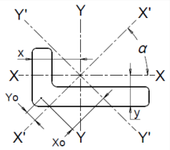




Identification de la section	Dimensions extérieures		Épaisseur (t)	Rayons				Masse	Charge morte	Aire	Axe X-X					Axe Y-Y					Constante de torsion	Constante de gauchissement	Axe X'-X'		Axe Y'-Y'		βw	r_0	Ω	tan α	y_s	x_s	Extrudeur	Emplacement	Identification de la section du fabricant
L b x d x t	Longueur (b)	Hauteur (d)		R1	R2	R3	R4				I_x	S_x	r_x	Z_x	y	I_y	S_y	r_y	Z_y	x	J	C_w	r'_x	y_0	r'_y	x_0								
mm x mm x mm	mm	mm	mm	mm	mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^3 mm⁴	10^9 mm⁶	mm	mm	mm	mm	mm	mm			mm	mm			
L 203																																		
x102x13	203	102	12.7	12.7	0.25	-	-	10.2	1.00E-01	3744	2.81	35.1	27.4	64.2	21.9	16.1	123	65.6	215	72.4	211	4.69E-01	22	31	67.6	56.9	139.2	96.2	0.546	-0.264	15.4	62.9	Tower Extrusions	Olney	9543
x76x8	203	76.2	7.95	12.7	0.38	-	-	5.95	5.84E-02	2193	0.809	12.9	19.2	23.7	13.6	9.58	75.3	66.1	128	77.0	50	1.13E-01	16	20.9	67	66.9	157.8	98.2	0.491	-0.167	9.58	69.4	Tower Extrusions	Olney	12745
x37x9.5	203	36.5	9.53	0.38	0.38	-	-	5.95	5.84E-02	2193	0.106	3.58	6.95	9.22	6.91	8.79	77.8	63.3	121	90.2	66.1	1.63E-01	6.31	6	63.4	68.5	177.3	93.7	0.462	-0.046	2.85	68.7	Tower Extrusions	Olney	15077
L 178																																		
x51x4.8	178	50.8	4.78	6.35	2.3876	-	0.381	2.92	2.86E-02	1076	0.151	3.49	11.8	6.5	7.61	3.57	33.4	57.6	54.7	71.2	8.71	1.63E-02	10.1	12.4	58	65.5	147.6	88.9	0.438	-0.109	5.25	66.4	Tower Extrusions	Olney	12440
x38x3.2	178	38.1	3.18	0.38	0.38	-	-	1.83	1.80E-02	675	0.045	1.36	8.19	2.54	4.71	2.19	21.2	57	33.8	74.7	2.35	4.85E-03	7.13	8.3	57.1	71.3	154.1	92	0.392	-0.071	3.2	71.7	Tower Extrusions	Olney	12147
L 152																																		
x102x13	152	102	12.7	0.38	0.38	-	-	8.31	8.15E-02	3065	2.61	34.1	29.2	61.4	25.2	7.24	71	48.6	128	50.2	162	2.21E-01	22.1	34.5	52.2	31.7	78.4	73.5	0.595	-0.44	18.8	42.9	Tower Extrusions	Olney	13476
x102x9.5	152	102	9.53	0.38	0.38	-	-	6.32	6.20E-02	2329	2.04	26.3	29.6	46.7	24.1	5.61	54.4	49.1	97.8	49.1	69.9	9.78E-02	22.3	35.4	52.8	32.2	78.7	74.7	0.589	-0.446	19.2	43.8	Tower Extrusions	Olney	20318
x102x6.4	152	102	6.35	0.25	0.25	-	-	4.26	4.18E-02	1573	1.42	18	30.1	31.7	22.9	3.86	37	49.5	66.6	47.9	21.6	3.02E-02	22.5	36.2	53.4	32.7	78.9	75.7	0.586	-0.451	19.6	44.6	Tower Extrusions	Olney	4120
x76x13	152	76.2	12.7	1.57	0.38	-	-	7.44	7.30E-02	2742	1.12	19.2	20.2	35.8	17.6	6.53	67.5	48.8	117	55.5	146	1.89E-01	16.3	22.9	50.3	42.1	103.8	71.4	0.549	-0.261	11.5	46.5	Tower Extrusions	Olney	4290
x76x13	152	76.2	12.7	0.38	0.38	-	-	7.44	7.30E-02	2742	1.12	19.2	20.2	35.8	17.6	6.53	67.5	48.8	117	55.5	145	1.89E-01	16.3	22.9	50.3	42.2	103.8	71.4	0.548	-0.261	11.5	46.6	Tower Extrusions	Olney	13477
x76x6.4	152	76.2	6.35	0.38	0.38	-	-	3.83	3.76E-02	1411	0.625	10.2	21	18.1	15.2	3.5	35.3	49.8	61.5	53.1	19.1	2.61E-02	16.7	24.6	51.4	44.5	104.9	74.2	0.53	-0.273	12.1	49.4	Tower Extrusions	Olney	18647
x64x6.4	152	63.5	6.35	6.35	0.38	-	-	3.63	3.56E-02	1339	0.368	7.12	16.6	12.9	11.9	3.3	34.2	49.7	58.5	56.1	18.6	2.47E-02	13.6	18.6	50.6	48.7	114.1	73.9	0.502	-0.2	8.7	51.4	Tower Extrusions	Olney	15381
x38x6.4	152	38.1	6.35	0.38	0.38	-	-	3.17	3.11E-02	1169	0.081	2.55	8.31	5.31	6.47	2.76	31.1	48.6	50	63.4	15.8	2.28E-02	7.21	8.38	48.8	55.8	127.9	74.9	0.433	-0.086	3.58	56.3	Tower Extrusions	Olney	11217
L 140																																		
x127x6.4	140	127	6.35	0.38	0.38	-	-	4.48	4.39E-02	1653	2.59	27.4	39.6	49	32.6	3.27	32.5	44.5	59	39.1	22.5	3.15E-02	26.5	45.3	53.3	8.89	22.8	75.4	0.624	-0.822	29.4	35.6	Tower Extrusions	Olney	13422
L 127																																		
x76x9.5	127	76.2	9.53	0.41	0.41	-	-	5	4.91E-02	1845	0.849	14.6	21.5	26.3	17.9	3.07	36.6	40.8	65.1	43.3	55.3	5.14E-02	16.6	25.2	43	30.6	75.7	60.8	0.574	-0.364	13.2	37.4	Tri City Extrusion Inc.	Bristol	747
x76x6.4	127	76.2	6.35	0.38	0.38	-	-	3.39	3.33E-02	1250	0.598	10.1	21.9	17.8	16.7	2.13	25	41.2	44.6	42.1	16.9	1.61E-02	16.8	26.1	43.5	31.3	76.0	62	0.568	-0.371	13.6	38.4	Tower Extrusions	Olney	13405
x64x6.4	127	63.5	6.35	6.35	0.38	-	-	3.19	3.13E-02	1178	0.354	7.01	17.3	12.6	13.0	2.01	24.3	41.3	42.5	44.8	16.4	1.48E-02	13.8	19.9	42.6	36.3	87.6	61	0.539	-0.268	9.83	40.2	Tower Extrusions	Olney	15382
x51x4.8	127	50.8	4.78	6.35	1.6	-	0.381	2.26	2.22E-02	834	0.143	3.43	13.1	6.21	9.15	1.43	17.9	41.4	30.4	47.2	6.78	6.07E-03	10.8	14.5	42.1	41.3	96.9	61.7	0.496	-0.186	6.73	43.3	Tower Extrusions	Olney	12439
x51x3.2	127	50.8	3.18	0.41	0.41	-	-	1.5	1.47E-02	554	0.1	2.36	13.4	4.11	8.52	0.963	12	41.7	20.4	46.6	1.91	1.85E-03	11	15.3	42.4	42.5	97.2	62.9	0.484	-0.193	6.97	44.7	Tower Extrusions	Wylie-H	8405
x41x3.2	127	41.3	3.18	0.38	0.381	-	1.6	1.42	1.39E-02	524	0.055	1.56	10.2	2.79	6.36	0.895	11.5	41.4	19.1	49.2	1.79	1.78E-03	8.53	11.2	41.7	45.9	102.7	63.6	0.449	-0.138	4.82	47	Tower Extrusions	Olney	21202
L 118																																		
x95x3.2	117	95.2	3.18	0.25	0.25	-	-	1.8	1.77E-02	665	0.578	7.95	29.5	14	22.5	0.964	11.5	38.1	20.9	33.4	2.31	2.11E-03	20.7	35	43.5	15.3	37.2	61.5	0.614	-0.657	20.9	32	Tower Extrusions	Olney	7615
L 114																																		
x58x3.2	114	58.4	3.18	0.38	0.38	-	-	1.46	1.43E-02	538	0.146	3.08	16.5	5.34	11.1	0.76	10.1	37.6	17.7	38.9	1.93	1.43E-03	13	19.4	38.9	33.2	77.9	56.2	0.532	-0.286	9.54	37.2	Tower Extrusions	Olney	10208
x51x6.4	114	50.8	6.35	1.57	3.18	6.35	0	2.7	2.65E-02	996	0.176	4.34	13.3	8.02	10.3	1.36	18.8	36.9	32.3	41.9	13.3	1.01E-02	10.7	15.3	37.7	35.3	83.1	54.9	0.51	-0.224	7.22	37.7	Western Extrusions Corp.	Dallas	19211
x51x4.8	114	50.8	4.78	1.57	2.39	6.35	0	2.05	2.01E-02	755	0.138	3.37	13.5	6.05	9.69	1.04	14.4	37.2	24.7	41.3	5.76	4.45E-03	10.8	15.8	38	36	83.5	55.8	0.503	-0.229	7.38	38.6	Western Extrusions Corp.	Dallas	19211
x38x6.4	114	38.1	6.35	0.38	0.38	-	-	2.52	2.47E-02	927	0.077	2.49	9.09	4.9	7.32	1.25	18.2	36.7	30	45.3	12.4	9.63E-03	7.67	9.68	37	38.7	90.8	55	0.474	-0.136	4.4	39.6	Tower Extrusions	Olney	13404
L 102																																		
x76x13	102	76.2	12.7	0.25	0.25	-	-	5.69	5.58E-02	2097	1.01	18.3	21.9	33.2	21.0	2.1	30.9	31.7	55.8	33.9	110	6.55E-02	16.2	25.2	34.9	15.9	42.3	48.7	0.625	-0.542	14.6	26	Tower Extrusions	Olney	9195
x76x9.5	102	76.2	9.53	9.53	0.25	-	-	4.4	4.32E-02	1622	0.801	14.2	22.2	25.6	19.8	1.66	23.9	32	43.3	32.7	51.9	2.96E-02	16.4	25.5	35.3	16	42.4	49.2	0.626	-0.547	14.7	26.3	Tower Extrusions	Olney	9540
x76x6.4	102	76.2	6.35	0.25	0.25	-	-	2.95	2.89E-02	1089	0.564	9.81	22.8	17.4	18.7	1.15	16.4	32.5	29.8	31.6	14.6	9.45E-03	16.5	27.1	36.1	16.8	42.6	50.9	0.608	-0.558	15.5	27.9	Tower Extrusions	Olney	2146
x64x6.4	102	63.5	6.35	6.35	0.38	-	-	2.76	2.71E-02	1017	0.335	6.85	18.2	12.2	14.6	1.09	16	32.7	28.6	33.8	14.3	8.18E-03	14	21.3	34.7	23.3	58.5	48.9	0.585	-0.392	11.3	29.4	Tower Extrusions	Olney	15383
x64x6.4	102	63.5	6.35	3.18	3.18	-	-	2.73	2.68E-02	1006	0.33	6.73	18.1	12.1	14.6	1.07	15.8	32.7	28.3	33.8	13.7	8.02E-03	13.9	21.4	34.7	23.5	58.5	49	0.581	-0.394	11.3	29.7	Tower Extrusions	Olney	7293
x64x4.8	102	63.5	4.78	4.78	0.25	-	-	2.09	2.05E-02	770	0.261	5.27	18.4	9.3	14.0	0.838	12.2	33	21.9	33.2	6.16	3.60E-03	14.1	21.8	35	23.7	58.6	49.6	0.579	-0.397	11.5	30	Tower Extrusions	Olney	4969
x51x6.4	102	50.8	6.35	0.38	0.38	-	-	2.52	2.47E-02	927	0.175	4.39	13.7	8	10.9	1.0	15.3	32.9	26.7	36.5	12.4	7.38E-03	11	15.9	33.9	29	70.3	48.6	0.537	-0.267	7.85	32.1	Tri City Extrusion Inc.	Bristol	946
x51x3.2	102	50.8	3.18	0.41	0.41	-	-	1.28	1.26E-02	474	0.095	2.32	14.2	4.04	9.67	0.527	7.92	33.3	13.8	35.3	1.62	9.89E-04	11.2	16.7	34.4	29.9	70.9	49.8	0.528	-0.275	8.13	33.3	Tower Extrusions	Wylie-M	17431
x38x4.8	102	38.1	4.78	4.78	0.25	-	-	1.76	1.73E-02	649	0.059	1.91	9.54	3.56	7.08	0.704	11.2	32.9	18.8	39.0	5.17	3.00E-03	7.93	10.4	33.4	33.4	79.2	49	0.49	-0.166	4.78	34.7	Tower Extrusions	Olney	4964
L 95																																		
x32x3.2	95.2	31.8	3.18	0.38	0.38	-	-	1.07	1.05E-02	393	0.024	0.905	7.81	1.66	5.27	0.377	6.46	30.9	10.7	37.0	1.34	7.43E-04	6.53	8.56	31.2	33.8	76.4	47.3	0.456	-0.142	3.74	34.6	Tower Extrusions	Olney	10790
L 86																																		
x35x9.5	85.7	34.9	9.53	0.41	4.78	-	-	2.84	2.79E-02	1049	0.073	2.78	8.34	5.85	8.75	0.757	14.6	26.9	24.8	34.2	30.9	1.14E-02	7.06	8.35	27.2	23.3	63.4	37.5	0.563	-0.172	4.29	24.4	Tower Extrusions	Wylie-M	2087
x35x9.5	85.7	34.9	9.53	0.51	4.78	4.78	4.78	2.8	2.75E-02	1034	0.069	2.63	8.19	5.67	8.75	0.734	14.2	26.6	24.3	34.2	30.5	1.10E-02	6.92	8.37	27	23.3	63.4	37.3	0.559	-0.17	4.35	24.4	Western Extrusions Corp.	Dallas	19052
L 83																																		
x57x6.4	82.6	57.2	6.35	6.35	6.35	-	-	2.28	2.24E-02	841	0.219	5.03	16.1	9.31	14.1	0.569	10.1	26	18.6	26.8	11.8	4.24E-03	12.1	18.6	28.1	15.9	40.5	39.2	0.61	-0.462	10.2	22.3	Pries Enterprises Inc.	Independence	4796
L 76																																		
x64x7.9	76.2	63.5	7.92	0.25	0.25	-	-	2.83	2.78E-02	1044	0.373	8.09	18.9	14.5	17.4	0.591	11.3	23.8	20.4	23.7	21.5	7.91E-03	13.3	21.8	27.3	8.46	21.8	38.3	0.628	-0.68	13.3	19.2	Tower Extrusions	Olney	7432
x51x6.4	76.2	50.8	6.35	0.38	0.38	-	-	2.08	2.04E-02	766	0.163	4.26	14.6	7.67	12.5	0.452	8.88	24.3	15.9	25.2	10.2	3.45E-03	11	17.2	26.1	15.8	39.7	36.8	0.595	-0.44	9.38	21.4	Tri City Extrusion Inc.	Bristol	732
x51x4.8	76.2	50.8	4.78	0.25	0.25	-	-	1.58	1.55E-02	584	0.128	3.29	14.8	5.86	12.0	0.351	6.81	24.5	12.3	24.7	4.45	1.54E-03	11.1	17.7	26.4	16.1	39.8	37.3	0.589	-0.446	9.58	21.9	Tower Extrusions	Olney	771
x51x4.8	76.2	50.8	4.78	0.38	0.41	-	-	1.58	1.55E-02	584	0.128	3.29	14.8	5.86	12.0	0.351	6.81	24.5	12.2	24.7	4.43	1.54E-03	11.1	17.7	26.4	16.1	39.8	37.3	0.589	-0.446	9.58	21.9	Tri City Extrusion Inc.	Bristol	50241
x51x4.8	76.2	50.8	4.78	0.51	0.51	-	-	1.58	1.55E-02	584	0.128	3.29	14.8	5.86	12.0	0.351	6.81	24.5	12.2	24.7	4.46	1.54E-03	11.1	17.7	26.4	16.1	39.8	37.3	0.589	-0.446	9.57	21.9	Pries Enterprises Inc.	Independence	7955
x51x3.2	76.2	50.8	3.18	0.41	0.41	-	-	1.07	1.05E-02	393	8.88E-02	2.25	15	3.96	11.4	0.241	4.62	24.8	8.33	24.1	1.34	4.72E-04	11.3	18.1	26.7	16.3	40.0	37.8	0.586	-0.451	9.77	22.3	Tower Extrusions	Wylie-M	810
x51x3.2	76.2	50.8	3.18	0.38	0.38	-	-	1.07	1.05E-02	393	8.88E-02	2.25	15	3.96	11.4	0.241	4.62	24.8	8.33	24.1	1.38	4.72E-04	11.3	18.1	26.7	16.3	40.0	37.8	0.586	-0.451	9.77	22.3	Tri City Extrusion Inc.	Bristol	50003
x38x6.4	76.2	38.1	6.35	0.38	0.38	-	-	1.86	1.82E-02	685	7.02E-02	2.39	10.1	4.47	8.78	0.408	8.44	24.4	14.7	27.8	9.1	2.95E-03	8.15	11.5	25.1	21.1	52.1	35.7	0.548	-0.261	5.76	23.3	Tower Extrusions	Olney	8443
x38x3.2	76.2	38.1	3.18	0.41	0.41	-	-	0.957	9.39E-03	353	3.90E-02	1.28	10.5	2.26	7.58	0.218	4.41	24.9	7.69	26.6	1.2	4.08E-04	8.35	12.3	25.7	22.2	52.7	37.1	0.53	-0.273	6.02	24.7	Tower Extrusions	Olney	3385
x29x4.8	76.2	28.6	4.78	0.38	0.38	-	-	1.3	1.28E-02	477	2.37E-02	1.04	7.05	2.01	5.80	0.287	6.15	24.5	10.3	29.6	3.61	1.22E-03	5.88	7.65	24.8	24.7	58.8	36.3	0.494	-0.163	3.58	25.6	Tower Extrusions	Olney	11717
x25x6.4	76.2	25.4	6.35	0.25	0.25	-	-	1.64	1.61E-02	605	2.09E-02	1.06	5.88	2.26	5.72	0.353	7.82	24.1	12.9	31.1	7.98	2.57E-03	5.05	5.91	24.3	23.4	60.1	34.6	0.515	-0.127	2.91	24	Tower Extrusions	Olney	3845

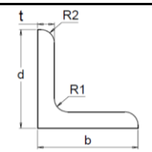
PROFILÉS EN L JAMBES INÉGALES COINS RONDS

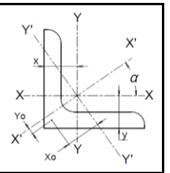




Identification de la section	Dimensions extérieures		Épaisseur (t)	Rayons				Masse	Charge morte	Aire	Axe X-X					Axe Y-Y					Constante de torsion	Constante de gauchissement	Axe X'-X'		Axe Y'-Y'		βw	r_0	Ω	tan α	y_s	x_s	Extrudeur	Emplacement	Identification de la section du fabricant
L b x d x t	Longueur (b)	Hauteur (d)		R1	R2	R3	R4				I_x	S_x	r_x	Z_x	y	I_y	S_y	r_y	Z_y	x	J	C_W	r'_x	y_0	r'_y	x_0								
mm x mm x mm	mm	mm	mm	mm	mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^3 mm⁴	10^9 mm⁶	mm	mm	mm	mm	mm	mm			mm	mm			
L 70																																		
x29x3.2	69.8	28.6	3.18	0.25	0.25	-	-	0.82	8.04E-03	302	1.66E-02	0.716	7.41	1.3	5.41	0.156	3.56	22.7	6.05	26.0	1.02	2.95E-04	6.06	8.36	23.1	22.7	52.7	34	0.495	-0.194	3.88	23.8	Tower Extrusions	Olney	6876
L 64																																		
x51x9.5	63.5	50.8	9.53	0.38	0.38	-	-	2.71	2.66E-02	998	2.14E-01	5.94	14.6	10.8	14.8	0.38	8.96	19.5	16.2	21.1	29.3	6.77E-03	10.7	16.4	21.9	7.95	21.4	30.5	0.641	-0.614	9.85	15.4	Tower Extrusions	Olney	10265
x51x6.4	63.5	50.8	6.35	0.25	0.25	-	-	1.86	1.82E-02	685	1.55E-01	4.17	15	7.5	13.6	0.272	6.25	19.9	11.3	20.0	9.09	2.27E-03	10.8	17.5	22.5	8.37	21.5	31.6	0.623	-0.626	10.4	16.4	Tower Extrusions	Olney	9497
x51x3.2	63.5	50.8	3.18	0.25	0.25	-	-	0.957	9.39E-03	353	8.45E-02	2.2	15.5	3.91	12.5	0.156	3.28	20.4	5.96	18.8	1.18	3.15E-04	11	18.4	23.1	8.62	21.5	32.6	0.614	-0.636	10.9	17.1	Tower Extrusions	Olney	4984
x38x6.4	63.5	38.1	6.35	0.41	0.41	-	-	1.64	1.61E-02	605	6.70E-02	2.35	10.5	4.32	9.53	0.246	5.96	20.2	10.6	22.2	7.98	1.79E-03	8.23	12.1	21.2	14.8	37.6	29.7	0.585	-0.357	6.44	18	Tower Extrusions	Wylie-H	8930
x38x4.8	63.5	38.1	4.78	4.78	0.25	-	-	1.27	1.25E-02	467	5.32E-02	1.82	10.7	3.3	8.95	0.193	4.6	20.3	8.2	21.6	3.74	8.02E-04	8.31	12.3	21.4	15	37.8	30	0.585	-0.361	6.47	18.2	Tower Extrusions	Olney	4965
x38x4.8	63.5	38.1	4.78	6.35	3.18	-	-	1.27	1.25E-02	467	5.14E-02	1.75	10.5	3.24	8.95	0.19	4.49	20.2	8.11	21.6	3.88	7.63E-04	8.19	11.9	21.2	14.7	37.8	29.5	0.592	-0.356	6.24	17.8	Pries Enterprises Inc.	Independence	1495
x38x3.2	63.5	38.1	3.18	0.25	0.25	-	-	0.847	8.31E-03	312	3.74E-02	1.26	10.9	2.22	8.35	0.133	3.13	20.6	5.58	21.0	1.06	2.52E-04	8.42	13	21.8	15.7	38.0	31	0.568	-0.371	6.78	19.2	Tower Extrusions	Olney	5906
x13x3.2	63.5	12.7	3.18	0.41	0.41	-	-	0.629	6.17E-03	232	1.45E-03	0.141	2.5	0.348	2.42	9.16E-02	2.57	19.9	4.04	27.8	0.777	1.87E-04	2.25	2.25	19.9	21.6	54.8	29.5	0.46	-0.056	1.05	21.7	Tower Extrusions	Wylie-M	107
L 60																																		
x41x6.4	60.2	40.6	6.35	0.25	0.25	-	-	1.63	1.60E-02	600	7.99E-02	2.65	11.5	4.83	10.5	2.17E-01	5.44	19	9.75	20.3	7.9	1.63E-03	8.77	13.4	20.4	12	30.7	28.6	0.604	-0.445	7.4	16.4	Tower Extrusions	Olney	9661
L 57																																		
x25x3.2	57.2	25.4	3.18	0.38	0.38	-	-	0.683	6.70E-03	252	1.12E-02	5.55	6.68	1.02	5.14	8.64E-02	2.39	18.5	4.1	21.0	0.847	1.61E-04	5.42	7.58	18.9	17.6	41.8	27.5	0.514	-0.22	3.63	18.8	Tower Extrusions	Olney	10789
L 56																																		
x30x4.8	55.6	30.2	4.78	0.76	0.51	-	-	1.05	1.03E-02	387	2.59E-02	1.13	8.19	2.08	7.13	1.22E-01	3.42	17.8	6	19.8	2.91	5.00E-04	6.5	9.38	18.5	14.5	36.0	26.1	0.563	-0.301	4.82	16.6	Pries Enterprises Inc.	Independence	4529
L 51																																		
x38x6.4	50.8	38.1	6.35	0.25	0.25	-	-	1.42	1.39E-02	524	6.30E-02	2.28	11	4.15	10.5	1.31E-01	3.87	15.8	6.98	16.9	6.89	1.02E-03	8.12	12.6	17.5	7.97	20.9	24.4	0.625	-0.542	7.29	13	Tower Extrusions	Olney	7923
x38x4.8	50.8	38.1	4.78	0.25	0.25	-	-	1.09	1.07E-02	402	5.00E-02	1.78	11.2	3.2	9.94	1.03E-01	2.99	16	5.42	16.3	3.02	4.69E-04	8.18	13.1	17.7	8.22	20.9	24.9	0.615	-0.55	7.52	13.5	Tower Extrusions	Olney	9824
x38x4.8	50.8	38.1	4.75	0.41	0.41	-	-	1.08	1.06E-02	400	4.98E-02	1.77	11.2	3.18	9.92	1.03E-01	2.98	16	5.39	16.3	2.96	4.61E-04	8.18	13.1	17.8	8.22	20.9	24.9	0.615	-0.55	7.52	13.5	Tower Extrusions	Wylie-M	943
x38x4.8	50.8	38.1	4.75	0.41	0.41	-	-	1.08	1.06E-02	400	4.98E-02	1.77	11.2	3.18	9.92	1.03E-01	2.98	16	5.39	16.3	2.96	4.61E-04	8.18	13.1	17.8	8.22	20.9	24.9	0.615	-0.55	7.52	13.5	Tower Extrusions	Wylie-H	8929
x38x3.6	50.8	38.1	3.56	3.3	0.41	-	-	0.829	8.13E-03	306	3.90E-02	1.36	11.3	2.43	9.49	8.00E-02	2.28	16.2	4.14	15.8	1.34	2.03E-04	8.26	13.2	17.9	8.27	21.0	25.2	0.615	-0.553	7.58	13.6	Pries Enterprises Inc.	Independence	3620
x38x3.2	50.8	38.1	3.18	0.38	0.38	-	-	0.738	7.24E-03	272	3.52E-02	1.23	11.4	2.18	9.35	7.20E-02	2.05	16.3	3.72	15.7	0.916	1.47E-04	8.27	13.6	18	8.4	21.0	25.5	0.608	-0.558	7.74	13.9	Tower Extrusions	Olney	1927
x38x3.2	50.8	38.1	3.18	0.38	0.38	-	-	0.738	7.24E-03	272	3.52E-02	1.23	11.4	2.18	9.35	7.20E-02	2.05	16.3	3.72	15.7	0.916	1.47E-04	8.27	13.6	18	8.4	21.0	25.5	0.608	-0.558	7.74	13.9	Tower Extrusions	Olney	14913
x38x3.2	50.8	38.1	3.18	0.41	0.41	-	-	0.738	7.24E-03	272	3.52E-02	1.22	11.4	2.18	9.35	7.20E-02	2.05	16.3	3.72	15.7	0.917	1.47E-04	8.27	13.6	18	8.4	21.0	25.5	0.608	-0.558	7.74	13.9	Tower Extrusions	Wylie-M	2299
x32x6.4	50.8	31.8	6.35	0.25	0.25	-	-	1.31	1.29E-02	484	3.68E-02	1.58	8.73	2.94	8.48	1.23E-01	3.75	15.9	6.66	18.0	6.33	8.77E-04	6.82	9.86	16.8	10.9	28.6	23.4	0.604	-0.377	5.37	13.7	Tower Extrusions	Olney	5475
x32x3.2	50.8	31.8	3.18	0.25	0.25	-	-	0.683	6.70E-03	252	2.09E-02	0.856	9.11	1.53	7.32	6.77E-02	1.99	16.4	3.56	16.8	0.836	1.28E-04	6.97	10.8	17.4	11.8	28.9	24.7	0.578	-0.396	5.73	15	Tower Extrusions	Olney	2150
x25x4.8	50.8	25.4	4.75	0.25	0.25	-	-	0.92	9.03E-03	339	1.52E-02	0.784	6.69	1.48	6.05	8.90E-02	2.78	16.2	4.82	18.7	2.51	3.55E-04	5.41	7.48	16.7	13.8	34.6	23.5	0.555	-0.258	3.8	15.2	Tower Extrusions	Olney	9364
x25x3.2	50.8	25.4	3.18	0.25	0.25	-	-	0.629	6.17E-03	232	1.10E-02	0.549	6.87	0.999	5.45	6.26E-02	1.92	16.4	3.34	18.2	0.777	1.15E-04	5.49	7.93	16.9	14.5	34.9	24.3	0.537	-0.267	3.92	16.1	Tower Extrusions	Wylie-H	1000
x25x3.2	50.8	25.4	3.18	0.38	0.38	-	-	0.629	6.17E-03	232	1.09E-02	0.549	6.87	0.999	5.45	6.25E-02	1.92	16.4	3.34	18.2	0.777	1.15E-04	5.49	7.93	16.9	14.5	34.9	24.3	0.537	-0.267	3.92	16	Tower Extrusions	Olney	3078
x25x3.2	50.8	25.4	3.18	0.41	0.41	-	-	0.629	6.17E-03	232	1.09E-02	0.548	6.87	0.999	5.45	6.25E-02	1.92	16.4	3.34	18.2	0.773	1.15E-04	5.49	7.93	16.9	14.5	34.9	24.3	0.537	-0.267	3.92	16	Tower Extrusions	Wylie-M	128
x19x3.2	50.8	19	3.18	0.25	0.25	-	-	0.574	5.63E-03	212	4.67E-03	0.308	4.7	0.595	3.85	5.65E-02	1.82	16.3	3.05	19.7	0.707	1.06E-04	3.92	5.1	16.5	16.4	39.2	24.2	0.494	-0.163	2.39	17.1	Tower Extrusions	Olney	7098
x16x6.4	50.8	15.9	6.35	0.41	0.41	-	-	1.04	1.02E-02	383	4.75E-03	0.415	3.52	0.974	4.43	9.47E+01	3.28	15.7	5.3	21.9	4.97	5.91E-04	3.17	2.9	15.8	11.8	39.9	20.2	0.638	-0.099	1.72	12	Tri City Extrusion Inc.	Bristol	981
L 48																																		
x38x3.2	47.6	38.1	3.18	0.38	0.38	-	-	0.711	6.97E-03	262	3.46E-02	1.22	11.5	2.17	9.65	6.02E-02	1.81	15.2	3.3	14.4	0.87	1.28E-04	8.16	13.6	17.2	6.42	16.1	24.2	0.616	-0.632	8.03	12.7	Tower Extrusions	Olney	13201
L 44																																		
x25x4.8	44.4	25.4	4.78	0.41	0.41	-	-	0.843	8.27E-03	311	1.47E-02	0.776	6.89	1.45	6.42	6.16E-02	2.16	14.1	3.8	15.9	2.32	2.48E-04	5.46	7.79	14.7	10.7	27.5	20.5	0.583	-0.324	4.11	12.6	Tower Extrusions	Wylie-M	187
L 38																																		
x51x4.8	38.1	50.8	4.78	4.78	3.18	-	-	1.09	1.07E-02	402	1.01E-01	2.91	15.8	5.33	16.3	4.84E-02	1.71	11	3.13	9.9	3.23	4.39E-04	17.5	14.8	8.07	0.088	20.9	24.3	0.629	0.544	13	7.16	Pries Enterprises Inc.	Independence	4367
x32x4.8	38.1	31.8	4.78	0.38	0.38	0.38	0.38	0.842	8.26E-03	311	2.71E-02	1.19	9.34	2.15	8.99	4.31E-02	1.66	11.8	3.01	12.1	2.32	2.05E-04	6.63	10.6	13.5	4.15	10.8	18.9	0.635	-0.675	6.49	9.39	Western Extrusions Corp.	Dallas	19085
x32x3.2	38.1	31.8	3.18	0.38	0.38	-	-	0.574	5.63E-03	212	1.93E-02	0.827	9.55	1.48	8.41	3.05E-02	1.15	12	2.09	11.6	0.708	6.64E-05	6.7	11.1	13.8	4.29	10.8	19.4	0.624	-0.683	6.76	9.81	Tower Extrusions	Olney	12141
x25x4.8	38.1	25.4	4.78	0.25	0.25	-	-	0.76	7.46E-03	280	1.41E-02	0.762	7.1	1.4	6.85	3.99E-01	1.6	11.9	2.87	13.2	2.08	1.65E-04	5.46	8.1	12.8	7.52	19.7	17.7	0.612	-0.428	4.49	10.1	Tower Extrusions	Olney	6144
x25x4.8	38.1	25.4	4.75	0.41	0.41	-	-	0.757	7.43E-03	279	1.41E-02	0.758	7.1	1.4	6.84	3.97E-02	1.6	11.9	2.85	13.2	2.05	1.62E-04	5.46	8.1	12.8	7.52	19.7	17.8	0.612	-0.428	4.49	10.1	Tower Extrusions	Wylie-M	942
x25x4.8	38.1	25.4	4.75	0.41	0.41	-	-	0.757	7.43E-03	279	1.41E-02	0.758	7.1	1.4	6.84	3.97E-02	1.6	11.9	2.85	13.2	2.05	1.62E-04	5.46	8.1	12.8	7.52	19.7	17.8	0.612	-0.428	4.49	10.1	Tower Extrusions	Wylie-H	8928
x25x3.2	38.1	25.4	3.18	0.25	0.25	-	-	0.519	5.09E-03	192	1.02E-02	0.532	7.29	0.959	6.27	2.83E-02	1.11	12.2	1.99	12.6	0.636	5.39E-05	5.52	8.61	13.1	7.92	19.9	18.4	0.595	-0.44	4.69	10.7	Tower Extrusions	Olney	2618
x25x3.2	38.1	25.4	3.18	0.41	0.41	-	-	0.519	5.09E-03	192	1.02E-02	0.532	7.29	0.959	6.27	2.83E-02	1.11	12.1	1.99	12.6	0.638	5.38E-05	5.52	8.6	13	7.91	19.9	18.4	0.595	-0.44	4.69	10.7	Tower Extrusions	Wylie-M	145
x19x3.2	38.1	19	3.18	0.25	0.25	-	-	0.465	4.56E-03	171	4.38E-03	0.299	5.06	0.559	4.38	2.55E-02	1.05	12.2	1.83	13.9	0.569	4.60E-05	4.07	5.72	12.6	10.5	26.1	17.8	0.548	-0.261	2.88	11.6	Tower Extrusions	Olney	1255
x19x3.2	38.1	19	3.18	0.41	0.41	-	-	0.465	4.56E-03	171	4.38E-03	0.299	5.06	0.559	4.38	2.55E-02	1.05	12.2	1.83	13.9	0.569	4.59E-05	4.07	5.72	12.6	10.5	26.1	17.8	0.549	-0.261	2.88	11.6	Tower Extrusions	Wylie-M	742
x13x3.2	38.1	12.7	3.18	0.38	0.38	-	-	0.41	4.02E-03	151	1.30E-03	0.132	2.94	0.282	2.86	2.20E-02	0.977	12.1	1.61	15.6	0.5	4.00E-05	2.52	2.95	12.2	11.7	30.0	17.3	0.515	-0.127	1.45	12	Tower Extrusions	Olney	15318
L 32																																		
x25x3.2	31.8	25.4	3.18	0.25	0.25	-	-	0.465	4.56E-03	171	9.68E-03	0.521	7.52	0.937	6.81	1.70E-02	0.781	9.96	1.42	10.0	0.568	3.54E-05	5.38	8.74	11.3	4.18	10.8	15.8	0.624	-0.626	5.19	8.18	Tower Extrusions	Olney	4482
x13x3.2	31.8	12.7	3.18	0.25	0.25	-	-	0.355	3.48E-03	131	1.25E-03	0.13	3.09	0.265	3.05	1.32E-02	0.69	10.1	1.16	12.6	0.431	2.32E-05	2.61	9.62	10.2	-0.47	23.8	14.3	0.544	8.27	1.62	9.49	Tower Extrusions	Olney	8222
x13x3.2	31.8	12.7	3.18	0.41	0.41	-	-	0.355	3.48E-03	131	1.25E-03	0.129	3.09	0.264	3.05	1.32E-02	0.69	10	1.16	12.6	0.431	2.31E-05	2.6	3.19	10.2	9.07	23.8	14.2	0.544	-0.171	1.62	9.48	Tower Extrusions	Wylie-H	7606
L 25																																		
x19x3.2	25.4	19	3.18	1.57	0.38	-	-	0.357	3.50E-03	132	3.94E-03	0.285	5.47	0.519	5.24	8.21E-03	0.483	7.9	0.872	8.44	0.444	1.58E-05	4.06	6.2	8.71	3.93	10.5	12.1	0.631	-0.541	3.59	6.41	Tower Extrusions	Olney	2392
x19x3.2	25.4	19	3.18	0.25	0.25	-	-	0.355	3.48E-03	131	3.94E-03	0.285	5.48	0.519	5.24	8.20E-03	0.483	7.91	0.872	8.44	0.43	1.60E-05	4.06	6.3	8.73	3.98	10.5	12.2	0.625	-0.542	3.64	6.5	Tower Extrusions	Olney	7099
x19x3.2	25.4	19	3.18	0.25	0.25	-	-	0.355	3.48E-03	131	3.94E-03	0.285	5.48	0.519	5.24	8.20E-03	0.483	7.91	0.872	8.44	0.43	1.60E-05	4.06	6.3	8.73	3.98	10.5	12.2	0.625	-0.542	3.64	6.5	Tower Extrusions	Wylie-H	1019
x19x3.2	25.4	19	3.18	0.64	0.64	-	-	0.355	3.48E-03	131	3.92E-03	0.284	5.47	0.518	5.24	8.18E-01	0.482	7.9	0.87	8.44	0.433	1.58E-05	4.05	6.27	8.72	3.97	10.5	12.1	0.627	-0.542	3.62	6.47	Tower Extrusions	Wylie-M	2714
x13x3.2	25.4	12.7	3.18	0.25	0.25	-	-	0.301	2.95E-03	111	1.18E-03	0.126	3.27	0.247	3.32	7.07E-03	0.45	7.99	0.776	9.67	0.362	1.19E-05	2.68	3.48	8.2	6.39	17.1	11.3	0.584	-0.247	1.84	7.04	Tower Extrusions	Olney	1305
x13x3.2	25.4	12.7	3.18	0.25	0.25	-	-	0.301	2.95E-03	111	1.18E-03	0.126	3.27	0.247	3.32	7.07E-03	0.45	7.99	0.776	9.67	0.362	1.19E-05	2.68	3.48	8.2	6.39	17.1	11.3	0.584	-0.247	1.84	7.04	Tower Extrusions	Wylie-H	4762

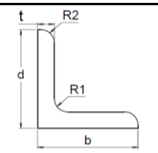
PROFILÉS STRUCTURAUX EN ANGLE JAMBES ÉGALES

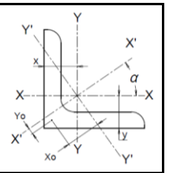




Identification de la section	Dimensions extérieures		Épaisseur (t)	Rayons			Masse	Charge morte	Aire	Axe X-X					Axe Y-Y					Constante de torsion	Constante de gauchissement	Axe X'-X'		Axe Y'-Y'		r_0	Ω	tan α	Extrudeur	Emplacement	Identification de la section du fabricant
L b x d x t	Longueur (b)	Hauteur (d)		R1	R2	R3				I_x	S_x	r_x	Z_x	y	I_y	S_y	r_y	Z_y	x	J	C_W	r'_x	y_0	r'_y	x_0						
mm x mm x mm	mm	mm	mm	mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^3 mm⁴	10^9 mm⁶	mm	mm	mm	mm	mm					
L 203X203																															
x25	203	203	25.4	-	-	-	26.2	2.57E-01	9677	37	259	61.9	467	60.1	37	259	61.9	467	60.06	2042	6.10E+00	77.9	0	39.7	65.7	109	0.64	1	Service Center Metals	Prince George	SA2151
x19	203	203	19	-	-	-	20	1.96E-01	7379	29	200	62.7	360	57.8	29	200	62.7	360	57.8	888	2.74E+00	79.2	0	40	67.5	111	0.633	1	Service Center Metals	Prince George	SA2150
x13	203	203	12.7	-	-	-	13.6	1.33E-01	5000	20.2	137	63.6	247	55.5	20.2	137	63.6	247	55.5	270	8.62E-01	80.4	0	40.4	69.2	114	0.628	1	Service Center Metals	Prince George	SA0770
L 152X152																															
x13	152	152	12.7	-	-	-	10.1	9.91E-02	3710	8.29	75.6	47.3	136	42.7	8.29	75.6	47.3	136	42.7	196	3.50E-01	59.7	0	30.1	51.1	84.1	0.631	1	Service Center Metals	Prince George	SA0224
x9.5	152	152	9.53	-	-	-	7.63	7.49E-02	2813	6.4	57.8	47.7	104	41.5	6.4	57.8	47.7	104	41.5	84.7	1.53E-01	60.3	0	30.3	51.9	85.1	0.628	1	Service Center Metals	Prince George	SA0223
x6.4	152	152	6.35	-	-	-	5.14	5.04E-02	1895	4.4	39.3	48.2	70.8	40.4	4.4	39.3	48.2	70.8	40.4	25.2	4.71E-02	60.9	0	30.5	52.6	86.1	0.627	1	Service Center Metals	Prince George	SA2119
L 127X127																															
x13	127	127	12.7	12.7	9.53	10.53	8.3	8.14E-02	3060	4.53	49.7	38.5	91	36.4	4.53	49.7	38.5	91	36.4	173	1.82E-01	48.5	0	24.7	40.2	67.6	0.647	1	Western Extrusions Corp.	Dallas	19074
x13	127	127	12.7	-	-	-	8.31	8.15E-02	3065	4.68	51.7	39.1	93.2	36.4	4.68	51.7	39.1	93.2	36.4	163	1.96E-01	49.3	0	25	42	69.4	0.634	1	Service Center Metals	Prince George	SA0222
x9.5	127	127	9.53	-	-	-	6.32	6.20E-02	2329	3.64	39.7	39.5	71.5	35.3	3.64	39.7	39.5	71.5	35.3	69.5	8.68E-02	49.9	0	25.1	42.8	70.4	0.63	1	Service Center Metals	Prince George	SA0221
x6.4	127	127	6.35	-	-	-	4.26	4.18E-02	1573	2.52	27.1	40	48.8	34.1	2.52	27.1	40	48.8	34.1	21.4	2.69E-02	50.6	0	25.4	43.6	71.4	0.627	1	Service Center Metals	Prince George	SA1052
L 102X102																															
x13	102	102	12.7	-	-	-	6.56	6.44E-02	2419	2.31	32.4	30.9	58.3	30.2	2.31	32.4	30.9	58.3	30.2	128	9.53E-02	39	0	19.9	32.8	54.7	0.64	1	Service Center Metals	Prince George	SA0220
x9.5	102	102	9.53	9.53	7.14	7.14	5	4.91E-02	1842	1.76	24	30.9	44	29.0	1.76	24	30.9	44	29.0	58.5	4.00E-02	39	0	19.8	32.5	54.4	0.644	1	Western Extrusions Corp.	Dallas	19189
x9.5	102	102	9.53	9.53	6.35	6.35	5.01	4.91E-02	1847	1.77	24.2	31	44.2	29.0	1.77	24.2	31	44.2	29.0	58.8	4.05E-02	39.1	0	19.8	32.6	54.6	0.644	1	Tower Extrusions	Olney	16894
x9.5	102	102	9.53	-	-	-	5	4.91E-02	1845	1.81	25	31.4	45	29.0	1.81	25	31.4	45	29.0	55.4	4.29E-02	39.6	0	20	33.8	55.7	0.633	1	Service Center Metals	Prince George	SA0219
x6.4	102	102	6.35	9.53	6.35	6.35	3.4	3.34E-02	1252	1.22	16.4	31.2	30.1	27.9	1.22	16.4	31.2	30.1	27.9	18.3	1.26E-02	39.4	0	20	33.2	55.2	0.639	1	Western Extrusions Corp.	Dallas	19075
x6.4	102	102	6.35	9.53	6.35	6.35	3.4	3.34E-02	1252	1.22	16.4	31.2	30.1	27.9	1.22	16.4	31.2	30.1	27.9	18.3	1.26E-02	39.4	0	20	33.2	55.2	0.639	1	Tower Extrusions	Olney	16895
x6.4	102	102	6.35	9.53	6.35	6.35	3.4	3.34E-02	1252	1.22	16.4	31.2	30.1	27.9	1.22	16.4	31.2	30.1	27.9	18.3	1.26E-02	39.4	0	20	33.2	55.2	0.639	1	Tower Extrusions	Wylie-H	1002
x6.4	102	102	6.35	-	-	-	3.39	3.33E-02	1250	1.27	17.1	31.8	30.8	27.9	1.27	17.1	31.8	30.8	27.9	16.9	1.35E-02	40.2	0	20.2	34.6	56.8	0.628	1	Service Center Metals	Prince George	SA0218
L 89X89																															
x13	88.9	88.9	12.7	9.53	6.35	6.35	5.69	5.58E-02	2099	1.48	23.8	26.6	43.4	26.9	1.48	23.8	26.6	43.4	26.9	117	5.77E-02	33.4	0	17.2	27	46.3	0.659	1	Tower Extrusions	Olney	4794
x13	88.9	88.9	12.7	-	-	-	5.69	5.58E-02	2097	1.51	24.4	26.9	44	26.9	1.51	24.4	26.9	44	26.9	110	6.14E-02	33.8	0	17.3	28.2	47.3	0.644	1	Service Center Metals	Prince George	SA0382
x9.5	88.9	88.9	9.53	-	-	-	4.35	4.27E-02	1603	1.19	18.9	27.3	34	25.7	1.19	18.9	27.3	34	25.7	47.7	2.80E-02	34.4	0	17.4	29.2	48.4	0.636	1	Service Center Metals	Prince George	SA0217
x6.4	88.9	88.9	6.35	9.53	6.35	6.35	2.96	2.90E-02	1091	0.804	12.4	27.1	22.8	24.6	0.804	12.4	27.1	22.8	24.6	16.1	8.23E-03	34.2	0	17.4	28.6	47.9	0.643	1	Western Extrusions Corp.	Dallas	19234
x6.4	88.9	88.9	6.35	9.53	6.35	6.35	2.96	2.90E-02	1091	0.804	12.4	27.1	22.8	24.6	0.804	12.4	27.1	22.8	24.6	16.1	8.23E-03	34.2	0	17.4	28.6	47.9	0.643	1	Tower Extrusions	Olney	3543
x6.4	88.9	88.9	6.35	9.53	6.35	6.35	2.96	2.90E-02	1091	0.804	12.4	27.1	22.8	24.6	0.804	12.4	27.1	22.8	24.6	16.1	8.23E-03	34.2	0	17.4	28.6	47.9	0.643	1	Tower Extrusions	Olney	4793
x6.4	88.9	88.9	6.35	-	-	-	2.95	2.89E-02	1089	0.837	13	27.7	23.4	24.6	0.837	13	27.7	23.4	24.6	14.6	8.87E-03	35	0	17.6	30.1	49.4	0.63	1	Service Center Metals	Prince George	SA0216
L 83X83																															
x6.4	82.6	82.6	6.35	9.53	6.35	6.35	2.74	2.69E-02	1010	0.636	10.6	25.1	19.5	23.0	0.636	10.6	25.1	19.5	23.0	14.9	6.47E-03	31.6	0	16.1	26.3	44.2	0.646	1	Tower Extrusions	Olney	18155
L 76X76																															
x13	76.2	76.2	12.7	-	-	-	4.81	4.72E-02	1774	0.923	17.6	22.8	31.7	23.7	0.923	17.6	22.8	31.7	23.7	92.6	3.66E-02	28.6	0	14.8	23.6	39.9	0.652	1	Service Center Metals	Prince George	SA0215
x9.5	76.2	76.2	9.53	7.92	6.35	6.35	3.68	3.61E-02	1357	0.708	13.1	22.8	24.1	22.5	0.708	13.1	22.8	24.1	22.5	42.7	1.56E-02	28.8	0	14.7	23.5	39.9	0.654	1	Western Extrusions Corp.	Dallas	19667
x9.5	76.2	76.2	9.53	7.92	6.35	6.35	3.68	3.61E-02	1357	0.708	13.1	22.8	24.1	22.5	0.708	13.1	22.8	24.1	22.5	42.7	1.56E-02	28.8	0	14.7	23.5	39.9	0.654	1	Tower Extrusions	Olney	4795
x9.5	76.2	76.2	9.53	9.53	4.78	4.78	3.72	3.65E-02	1371	0.72	13.3	22.9	24.3	22.5	0.72	13.3	22.9	24.3	22.5	44.1	1.60E-02	28.9	0	14.8	23.5	40	0.656	1	Tower Extrusions	Wylie-M	2094
x9.5	76.2	76.2	9.53	-	-	-	3.69	3.62E-02	1361	0.732	13.6	23.2	24.6	22.5	0.732	13.6	23.2	24.6	22.5	40.4	1.70E-02	29.2	0	14.9	24.6	41	0.64	1	Service Center Metals	Prince George	SA0214
x8.0	76.2	76.2	7.95	7.92	6.35	6.35	3.1	3.04E-02	1145	0.605	11.1	23	20.3	22.0	0.605	11.1	23	20.3	22.0	25.5	9.45E-03	29	0	14.7	23.9	40.3	0.649	1	Western Extrusions Corp.	Dallas	19076
x7.9	76.2	76.2	7.92	6.35	6.35	6.35	3.08	3.02E-02	1136	0.602	11	23	20.3	22.0	0.602	11	23	20.3	22.0	24.5	9.38E-03	29	0	14.7	24.1	40.5	0.646	1	Tower Extrusions	Olney	13917
x7.9	76.2	76.2	7.92	-	-	-	3.11	3.05E-02	1145	0.628	11.6	23.4	20.9	22.0	0.628	11.6	23.4	20.9	22.0	23.6	1.02E-02	29.5	0	15	25.1	41.6	0.635	1	Service Center Metals	Prince George	SA0381
x6.4	76.2	76.2	6.35	7.92	6.35	6.35	2.5	2.45E-02	924	0.493	8.91	23.1	16.4	21.4	0.493	8.91	23.1	16.4	21.4	13.3	4.99E-03	29.1	0	14.8	24.2	40.7	0.645	1	Western Extrusions Corp.	Dallas	19739
x6.4	76.2	76.2	6.35	6.35	3.18	3.18	2.53	2.48E-02	932	0.513	9.32	23.5	16.9	21.4	0.513	9.32	23.5	16.9	21.4	13.2	5.29E-03	29.6	0	15	24.9	41.5	0.639	1	Tower Extrusions	Wylie-M	2007
x6.4	76.2	76.2	6.35	7.92	6.35	6.35	2.5	2.45E-02	924	0.493	8.91	23.1	16.4	21.4	0.493	8.91	23.1	16.4	21.4	13.3	4.99E-03	29.1	0	14.8	24.2	40.7	0.645	1	Tower Extrusions	Olney	3542
x6.4	76.2	76.2	6.35	7.95	6.35	6.35	2.5	2.45E-02	924	0.493	8.91	23.1	16.4	21.4	0.493	8.91	23.1	16.4	21.4	13.3	4.99E-03	29.1	0	14.8	24.2	40.7	0.645	1	Tower Extrusions	Wylie-H	8406
x6.4	76.2	76.2	6.35	-	-	-	2.52	2.47E-02	927	0.518	9.45	23.6	17	21.4	0.518	9.45	23.6	17	21.4	12.4	5.47E-03	29.8	0	15	25.5	42.1	0.631	1	Service Center Metals	Prince George	SA0213
x4.8	76.2	76.2	4.78	7.92	4.78	4.78	1.92	1.88E-02	709	0.388	6.94	23.4	12.7	20.8	0.388	6.94	23.4	12.7	20.8	5.99	2.27E-03	29.5	0	15	24.8	41.3	0.641	1	Tower Extrusions	Olney	1016
x4.8	76.2	76.2	4.78	-	-	-	1.91	1.87E-02	705	0.401	7.25	23.9	13	20.8	0.401	7.25	23.9	13	20.8	5.41	2.41E-03	30.2	0	15.1	25.9	42.6	0.629	1	Service Center Metals	Prince George	SA0212
L 64X64																															
x9.5	63.5	63.5	9.53	-	-	-	3.03	2.97E-02	1119	0.41	9.28	19.1	16.7	19.4	0.41	9.28	19.1	16.7	19.4	33	9.29E-03	24.1	0	12.4	20	33.6	0.647	1	Service Center Metals	Prince George	SA0211
x8.0	63.5	63.5	7.95	-	-	-	2.57	2.52E-02	946	0.354	7.91	19.3	14.3	18.8	0.354	7.91	19.3	14.3	18.8	19.6	5.71E-03	24.4	0	12.4	20.5	34.2	0.64	1	Service Center Metals	Prince George	SA1153
x6.4	63.5	63.5	6.35	6.35	3.18	3.18	2.09	2.05E-02	770	0.289	6.35	19.4	11.5	18.2	0.289	6.35	19.4	11.5	18.2	10.9	2.94E-03	24.4	0	12.4	20.3	34.1	0.645	1	Western Extrusions Corp.	Dallas	19668
x6.4	63.5	63.5	6.35	6.35	3.18	3.18	2.09	2.05E-02	770	0.289	6.35	19.4	11.5	18.2	0.289	6.35	19.4	11.5	18.2	10.9	2.94E-03	24.4	0	12.4	20.3	34.1	0.645	1	Tower Extrusions	Olney	3541
x6.4	63.5	63.5	6.35	-	-	-	2.08	2.04E-02	766	0.293	6.46	19.5	11.6	18.2	0.293	6.46	19.5	11.6	18.2	10.2	3.06E-03	24.7	0	12.5	21	34.7	0.634	1	Service Center Metals	Prince George	SA0210
x4.8	63.5	63.5	4.78	6.35	3.18	3.18	1.59	1.56E-02	588	0.224	4.86	19.5	8.84	17.6	0.224	4.86	19.5	8.84	17.6	4.83	1.31E-03	24.6	0	12.5	20.7	34.5	0.641	1	Western Extrusions Corp.	Dallas	19664
x4.8	63.5	63.5	4.78	-	-	-	1.58	1.55E-02	584	0.228	4.97	19.8	8.96	17.6	0.228	4.97	19.8	8.96	17.6	4.45	1.37E-03	25	0	12.6	21.4	35.2	0.63	1	Service Center Metals	Prince George	SA0209
x3.2	63.5	63.5	3.18	-	-	-	1.07	1.05E-02	393	0.157	3.39	20	6.1	17.1	0.157	3.39	20	6.1	17.1	1.34	4.20E-04	25.3	0	12.7	21.8	35.7	0.627	1	Service Center Metals	Prince George	SA0540

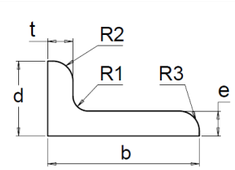
PROFILÉS STRUCTURAUX EN ANGLE JAMBES ÉGALES

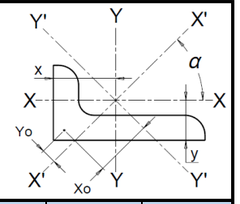




Identification de la section	Dimensions extérieures		Épaisseur (t)	Rayons			Masse	Charge morte	Aire	Axe X-X					Axe Y-Y					Constante de torsion	Constante de gauchissement	Axe X'-X'		Axe Y'-Y'		r_0	Ω	tan α	Extrudeur	Emplacement	Identification de la section du fabricant
L b x d x t	Longueur (b)	Hauteur (d)		R1	R2	R3				I_x	S_x	r_x	Z_x	y	I_y	S_y	r_y	Z_y	x	J	C_W	r'_x	y_0	r'_y	x_0						
mm x mm x mm	mm	mm	mm	mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^3 mm⁴	10^9 mm⁶	mm	mm	mm	mm	mm					
L 51X51																															
x9.5	50.8	50.8	9.53	6.35	3.18	3.18	2.39	2.34E-02	881	0.197	5.67	15	10.3	16.2	0.197	5.67	15	10.3	16.2	27.4	4.12E-03	18.7	0	9.8	14.6	25.7	0.679	1	Western Extrusions Corp.	Dallas	19662
x9.5	50.8	50.8	9.53	6.35	3.18	3.18	2.39	2.34E-02	881	0.197	5.67	15	10.3	16.2	0.197	5.67	15	10.3	16.2	27.4	4.12E-03	18.7	0	9.8	14.6	25.7	0.679	1	Tower Extrusions	Olney	15530
x9.5	50.8	50.8	9.53	6.35	6.35	6.35	2.36	2.32E-02	868	0.189	5.42	14.8	10	16.2	0.189	5.42	14.8	10	16.2	27	3.78E-03	18.5	0	9.63	14.1	25.2	0.686	1	Tower Extrusions	Wylie-M	376
x9.5	50.8	50.8	9.53	6.35	6.35	6.35	2.36	2.32E-02	868	0.189	5.42	14.8	10	16.2	0.189	5.42	14.8	10	16.2	27	3.78E-03	18.5	0	9.63	14.1	25.2	0.686	1	Tower Extrusions	Wylie-H	11441
x9.5	50.8	50.8	9.53	-	-	-	2.38	2.33E-02	877	0.199	5.75	15.1	10.4	16.2	0.199	5.75	15.1	10.4	16.2	25.6	4.35E-03	18.9	0	9.89	15.3	26.3	0.66	1	Service Center Metals	Prince George	SA0208
x7.9	50.8	50.8	7.92	-	-	-	2.01	1.97E-02	742	0.173	4.91	15.3	8.86	15.6	0.173	4.91	15.3	8.86	15.6	15.1	2.70E-03	19.2	0	9.9	15.9	26.8	0.648	1	Service Center Metals	Prince George	SA0566
x6.4	50.8	50.8	6.35	6.35	3.18	3.18	1.65	1.62E-02	609	0.142	3.96	15.3	7.21	15.0	0.142	3.96	15.3	7.21	15.0	8.73	1.41E-03	19.2	0	9.85	15.6	26.7	0.656	1	Western Extrusions Corp.	Dallas	19855
x6.4	50.8	50.8	6.35	6.35	3.18	3.18	1.65	1.62E-02	609	0.142	3.96	15.3	7.21	15.0	0.142	3.96	15.3	7.21	15.0	8.73	1.41E-03	19.2	0	9.85	15.6	26.7	0.656	1	Tower Extrusions	Olney	4797
x6.4	50.8	50.8	6.35	6.35	3.18	3.18	1.65	1.62E-02	609	0.142	3.96	15.3	7.21	15.0	0.142	3.96	15.3	7.21	15.0	8.73	1.41E-03	19.2	0	9.85	15.6	26.7	0.656	1	Tower Extrusions	Wylie-M	1172
x6.4	50.8	50.8	6.35	-	-	-	1.64	1.61E-02	605	0.145	4.04	15.5	7.29	15.0	0.145	4.04	15.5	7.29	15.0	8	1.49E-03	19.5	0	9.93	16.4	27.3	0.64	1	Service Center Metals	Prince George	SA0207
x4.8	50.8	50.8	4.78	6.35	3.18	3.18	1.27	1.25E-02	467	0.111	3.04	15.4	5.55	14.5	0.111	3.04	15.4	5.55	14.5	3.88	6.37E-04	19.4	0	9.93	16.1	27.1	0.649	1	Western Extrusions Corp.	Dallas	19677
x4.8	50.8	50.8	4.78	4.78	3.18	3.18	1.26	1.24E-02	463	0.111	3.04	15.5	5.54	14.5	0.111	3.04	15.5	5.54	14.5	3.68	6.38E-04	19.5	0	9.92	16.3	27.3	0.644	1	Tower Extrusions	Olney	15617
x4.8	50.8	50.8	4.78	-	-	-	1.25	1.23E-02	462	0.114	3.13	15.7	5.63	14.5	0.114	3.13	15.7	5.63	14.5	3.5	6.75E-04	19.8	0	10	16.9	27.9	0.633	1	Service Center Metals	Prince George	SA0206
x4.8	50.8	50.8	4.75	6.35	3.18	3.18	1.26	1.24E-02	464	0.111	3.02	15.4	5.52	14.5	0.111	3.02	15.4	5.52	14.5	3.83	6.27E-04	19.4	0	9.93	16.1	27.1	0.649	1	Tower Extrusions	Olney	353
x3.2	50.8	50.8	3.18	6.35	3.18	3.18	0.863	8.47E-03	318	7.74E-02	2.07	15.6	3.79	13.9	7.74E-02	2.07	15.6	3.79	13.9	1.23	2.02E-04	10.1	0	19.7	16.4	27.5	0.643	1	Western Extrusions Corp.	Dallas	19990
x3.2	50.8	50.8	3.18	6.35	3.18	3.18	0.859	8.43E-03	317	7.66E-02	2.05	15.6	3.77	13.9	7.66E-02	2.05	15.6	3.77	13.9	1.23	1.98E-04	19.6	0	10	16.3	27.4	0.645	1	Tower Extrusions	Olney	13301
x3.2	50.8	50.8	3.18	-	-	-	0.848	8.32E-03	313	7.91E-02	2.14	15.9	3.86	13.9	7.91E-02	2.14	15.9	3.86	13.9	1.06	2.10E-04	20.1	0	10.1	17.3	28.4	0.628	1	Service Center Metals	Prince George	SA0205
L 44X44																															
x6.4	44.4	44.4	6.35	-	-	-	1.42	1.39E-02	524	9.46E-02	3.05	13.4	5.5	13.4	9.46E-02	3.05	13.4	5.5	13.4	6.88	9.60E-04	16.9	0	8.67	14.1	23.7	0.644	1	Service Center Metals	Prince George	SA0204
x4.8	44.4	44.4	4.78	4.78	3.18	3.18	1.09	1.07E-02	402	7.27E-02	2.29	13.4	4.18	12.9	7.27E-02	2.29	13.4	4.18	12.9	3.24	4.11E-04	16.9	0	8.63	14	23.6	0.65	1	Tower Extrusions	Olney	4796
x4.8	44.4	44.4	4.78	-	-	-	1.09	1.07E-02	402	7.47E-02	2.37	13.6	4.26	12.9	7.47E-02	2.37	13.6	4.26	12.9	3.02	4.40E-04	17.2	0	8.72	14.6	24.2	0.636	1	Service Center Metals	Prince George	SA0380
x3.2	44.4	44.4	3.18	4.78	3.18	3.18	0.74	7.26E-03	273	5.02E-02	1.55	13.6	2.84	12.3	5.02E-02	1.55	13.6	2.84	12.3	1.02	1.29E-04	17.1	0	8.71	14.3	23.9	0.643	1	Tower Extrusions	Olney	13300
x3.2	44.4	44.4	3.18	-	-	-	0.738	7.24E-03	272	5.23E-02	1.63	13.9	2.93	12.3	5.23E-02	1.63	13.9	2.93	12.3	0.927	1.39E-04	17.5	0	8.81	15	24.7	0.63	1	Service Center Metals	Prince George	SA0464
L 38X38																															
x6.4	38.1	38.1	6.35	4.78	3.18	3.18	1.2	1.18E-02	444	5.62E-02	2.13	11.3	3.9	11.8	5.62E-02	2.13	11.3	3.9	11.8	6.2	5.28E-04	14.1	0	7.31	11.1	19.4	0.672	1	Tower Extrusions	Olney	4798
x6.4	38.1	38.1	6.35	4.78	3.18	3.18	1.2	1.18E-02	444	5.62E-02	2.13	11.3	3.9	11.8	5.62E-02	2.13	11.3	3.9	11.8	6.2	5.28E-04	14.1	0	7.31	11.1	19.4	0.672	1	Tower Extrusions	Wylie-M	788
x6.4	38.1	38.1	6.35	-	-	-	1.2	1.18E-02	444	5.77E-02	2.2	11.4	3.96	11.8	5.77E-02	2.2	11.4	3.96	11.8	5.79	5.72E-04	14.3	0	7.42	11.8	20	0.652	1	Service Center Metals	Prince George	SA0203
x4.8	38.1	38.1	4.78	4.78	3.18	3.18	0.927	9.09E-03	342	4.44E-02	1.64	11.4	3.02	11.3	4.44E-02	1.64	11.4	3.02	11.3	2.75	2.46E-04	14.4	0	7.34	11.6	19.9	0.658	1	Tower Extrusions	Olney	15613
x4.8	38.1	38.1	4.78	4.78	3.18	3.18	0.927	9.09E-03	342	4.44E-02	1.64	11.4	3.02	11.3	4.44E-02	1.64	11.4	3.02	11.3	2.75	2.46E-04	14.4	0	7.34	11.6	19.9	0.658	1	Tower Extrusions	Wylie-M	763
x4.8	38.1	38.1	4.78	-	-	-	0.925	9.07E-03	341	4.59E-02	1.71	11.6	3.08	11.3	4.59E-02	1.71	11.6	3.08	11.3	2.54	2.67E-04	14.6	0	7.45	12.3	20.5	0.64	1	Service Center Metals	Prince George	SA0202
x4.8	38.1	38.1	4.75	4.75	3.18	3.18	0.922	9.04E-03	340	4.42E-02	1.64	11.4	3	11.3	4.42E-02	1.64	11.4	3	11.3	2.72	2.42E-04	14.4	0	7.34	11.6	19.9	0.658	1	Western Extrusions Corp.	Dallas	19995
x4.8	38.1	38.1	4.75	3.18	4.75	4.75	0.9	8.83E-03	332	4.22E-02	1.56	11.3	2.91	11.3	4.22E-02	1.56	11.3	2.91	11.3	2.55	2.27E-04	14.2	0	7.22	11.6	19.7	0.655	1	Tower Extrusions	Olney	7889
x4.8	38.1	38.1	4.75	4.75	4.75	4.75	0.907	8.90E-03	335	4.23E-02	1.56	11.2	2.91	11.3	4.23E-02	1.56	11.2	2.91	11.3	2.67	2.26E-04	14.2	0	7.22	11.4	19.5	0.662	1	Tower Extrusions	Olney	4786
x3.2	38.1	38.1	3.18	4.78	3.18	3.18	0.63	6.18E-03	232	3.09E-02	1.11	11.5	2.06	10.7	3.09E-02	1.11	11.5	2.06	10.7	0.853	7.79E-05	14.5	0	7.41	12	20.2	0.649	1	Western Extrusions Corp.	Dallas	19671
x3.2	38.1	38.1	3.18	4.78	3.18	3.18	0.63	6.18E-03	232	3.09E-02	1.11	11.5	2.06	10.7	3.09E-02	1.11	11.5	2.06	10.7	0.853	7.79E-05	14.5	0	7.41	12	20.2	0.649	1	Tower Extrusions	Olney	13299
x3.2	38.1	38.1	3.18	-	-	-	0.629	6.17E-03	232	3.24E-02	1.18	11.8	2.13	10.7	3.24E-02	1.18	11.8	2.13	10.7	0.783	8.54E-05	14.9	0	7.52	12.8	21	0.631	1	Service Center Metals	Prince George	SA0201
L 32X32																															
x6.4	31.8	31.8	6.35	-	-	-	0.984	9.65E-03	363	3.19E-02	1.48	9.38	2.68	10.2	3.19E-02	1.48	9.38	2.68	10.2	4.69	3.04E-04	11.7	0	6.18	9.41	16.3	0.665	1	Service Center Metals	Prince George	SA0200
x4.8	31.8	31.8	4.78	3.18	0	0	0.766	7.51E-03	283	2.57E-02	1.16	9.53	2.1	9.69	2.57E-02	1.16	9.53	2.1	9.69	2.2	1.45E-04	12	0	6.19	9.75	16.6	0.657	1	Western Extrusions Corp.	Dallas	19461
x4.8	31.8	31.8	4.75	4.75	3.18	3.18	0.758	7.44E-03	280	2.45E-02	1.1	9.37	2.03	9.68	2.45E-02	1.1	9.37	2.03	9.68	2.26	1.29E-04	11.8	0	6.06	9.25	16.2	0.672	1	Tower Extrusions	Olney	13577
x4.8	31.8	31.8	4.75	3.18	2.39	2.39	0.756	7.42E-03	279	2.50E-02	1.13	9.46	2.05	9.68	2.50E-02	1.13	9.46	2.05	9.68	2.15	1.35E-04	11.9	0	6.12	9.59	16.5	0.661	1	Tower Extrusions	Wylie-M	2596
x3.2	31.8	31.8	3.18	4.78	3.18	3.18	0.521	5.11E-03	192	1.73E-02	0.752	9.48	1.4	9.12	1.73E-02	0.752	9.48	1.4	9.12	0.725	4.26E-05	11.9	0	6.1	9.66	16.5	0.658	1	Tower Extrusions	Olney	1754
L 25X25																															
x3.2	25.4	25.4	3.18	3.18	2.36	2.36	0.409	4.01E-03	151	8.68E-03	0.481	7.58	0.886	7.52	8.68E-03	0.481	7.58	0.886	7.52	0.539	2.11E-05	9.55	0	4.88	7.71	13.2	0.659	1	Western Extrusions Corp.	Dallas	19890
x3.2	25.4	25.4	3.18	3.18	2.39	2.39	0.409	4.01E-03	151	8.67E+00	0.481	7.58	0.886	7.52	8.67E+00	0.481	7.58	0.886	7.52	0.538	2.11E-05	9.54	0	4.88	7.71	13.2	0.659	1	Tower Extrusions	Olney	7177
x3.2	25.4	25.4	3.18	4.78	3.18	3.18	0.412	4.04E-03	152	8.39E-03	0.462	7.43	0.869	7.52	8.39E-03	0.462	7.43	0.869	7.52	0.588	1.98E-05	9.36	0	4.8	7.29	12.8	0.675	1	Tower Extrusions	Wylie-H	1021
L 19X19																															
x3.2	19	19	3.18	3.18	2.36	2.36	0.3	2.94E-03	111	3.41E-03	0.257	5.55	0.478	5.91	3.41E-03	0.257	5.55	0.478	5.91	0.402	7.68E-06	6.97	0	3.6	5.31	9.48	0.686	1	Tower Extrusions	Olney	4465
x3.2	19	19	3.18	2.39	3.18	3.18	0.292	2.86E-03	108	3.24E-03	0.243	5.49	0.461	5.91	3.24E-03	0.243	5.49	0.461	5.91	0.374	7.15E-06	6.9	0	3.54	5.28	9.38	0.683	1	Tower Extrusions	Olney	16692

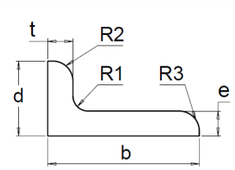
PROFILÉS STRUCTURAUX EN ANGLE JAMBES INÉGALES

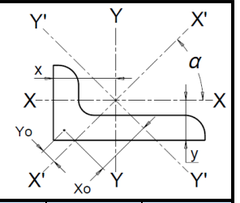




Identification de la section	Dimensions extérieures		Épaisseur (e)	Épaisseur (t)	Rayons			Masse	Charge morte	Aire	Axe X-X					Axe Y-Y					Constante de torsion	Constante de gauchissement	Axe X'-X'		Axe Y'-Y'		βw	r_0	Ω	tan α	y_s	x_s	Extrudeur	Emplacement	Identification de la section du fabricant
L b x d x t	Longueur (b)	Hauteur (d)			R1	R2	R3				I_x	S_x	r_x	Z_x	y	I_y	S_y	r_y	Z_y	x	J	C_W	r'_x	y_0	r'_y	x_0									
mm x mm x mm	mm	mm	mm	mm	mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^3 mm⁴	10^9 mm⁶	mm	mm	mm	mm	mm	mm			mm	mm			
L 254																																			
x83x7.9	254	82.6	7.92	9.52	12.7	0.254	0.254	7.48	7.34E-02	2758	1.24	18.2	21.2	33	13.3	18.9	118	82.8	201	99.0	70.2	2.21E-01	17.6	23.2	83.6	84.2	-	122	0.489	-0.15	10.8	86.7	Tower Extrusions	Olney	10205
L 203																																			
x102x11.1	203	102	11.1	12.7	6.35	6.35	0.8128	9.25	9.07E-02	3410	2.72	34.4	28.3	62.3	21.3	14.7	110	65.7	195	71.8	158	3.33E-01	22.3	32.9	67.9	54.5	-	95.7	0.558	-0.28	17	61.3	Tower Extrusions	Olney	11676
x76x8	203	76.2	7.95	7.95	12.7	0.38	0.38	5.95	5.84E-02	2193	0.809	12.9	19.2	23.7	13.6	9.58	75.3	66.1	128	77.0	50	1.13E-01	16	20.9	67	66.9		98.2	0.491	-0.17	9.58	69.4	Tower Extrusions	Olney	12745
L 152																																			
x203x19	152	203	19	19	-	-	-	17.4	1.71E-01	6411	26.4	191	64.2	346	65.1	12.8	113	44.7	204	39.6	767	1.91E+00	71	61.9	32.7	0.284	84.0	99.7	0.614	0.549	54.1	30.1	Service Center Metals	Prince George	SUA0771
x203x12.7	152	203	12.7	12.7	-	-	-	11.8	1.16E-01	4355	18.4	131	65.1	238	62.8	9.02	78.5	45.5	140	37.3	232	6.05E-01	72.2	63.8	33.1	-0.097	84.2	102	0.607	0.559	55.8	31	Service Center Metals	Prince George	SUA0854
x89x9.5	152	88.9	9.53	9.53	3.18	7.14	7.14	5.93	5.82E-02	2188	1.34	19.3	24.7	35.2	20.0	5.23	51.8	48.9	92.8	51.6	66.5	8.60E-02	19.2	29	51.3	38.1	93.1	72.7	0.567	-0.35	14.9	45.5	Tower Extrusions	Olney	7770
L 127																																			
x89x9.5	127	88.9	9.53	9.53	11.13	7.92	7.92	5.33	5.23E-02	1965	1.27	18.8	25.4	34.4	21.9	3.15	36.2	40	66.5	40.9	63.3	5.32E-02	19	29.3	43.4	23.7	61.0	60.5	0.613	-0.48	16.2	34	Western Extrusions Corp.	Dallas	19230
x89x7.9	127	88.9	7.92	7.92	11.13	7.92	7.92	4.47	4.39E-02	1648	1.07	15.7	25.5	28.7	21.3	2.65	30.3	40.1	55.9	40.3	37.3	3.13E-02	19.1	29.5	43.5	23.9	61.1	60.9	0.61	-0.48	16.4	34.3	Tower Extrusions	Olney	3359
x76x9.5	127	76.2	9.53	9.53	9.53	7.95	7.95	4.98	4.89E-02	1837	0.804	13.7	20.9	25.4	17.9	2.98	35.3	40.3	63.9	43.3	58.2	4.77E-02	16.3	23.9	42.4	29.7	75.7	59.3	0.586	-0.36	12.5	36	Tower Extrusions	Wylie-H	8522
x76x9.5	127	76.2	9.53	9.53	7.95	9.53	9.53	4.93	4.84E-02	1819	0.785	13.3	20.8	25	17.9	2.93	34.6	40.1	63.1	43.3	56.7	4.68E-02	16.1	23.8	42.2	29.8	75.7	59.1	0.584	-0.36	12.4	36.1	Tower Extrusions	Olney	20087
x76x7.9	127	76.2	7.92	7.92	6.35	6.35	6.35	4.17	4.09E-02	1539	0.697	11.8	21.3	21.5	17.3	2.54	30	40.6	54.1	42.7	33.1	2.89E-02	16.5	24.8	42.8	30.5	75.9	60.4	0.576	-0.36	12.9	37.1	Tower Extrusions	Olney	13916
x76x4.8	127	76.2	4.75	4.75	4.75	4.75	4.75	2.54	2.49E-02	938	0.444	7.34	21.7	13.1	16.1	1.59	18.5	41.1	33.3	41.5	7.5	6.64E-03	16.8	25.8	43.4	31.3	76.2	61.7	0.569	-0.37	13.4	38.2	Tower Extrusions	Wylie-M	2444
L 102																																			
x152x12.7	102	152	12.7	12.7	-	-	-	8.31	8.15E-02	3065	7.24	71	48.6	128	50.2	2.61	34.1	29.2	61.4	25.2	164	2.21E-01	52.2	46.8	22.1	-0.096	78.4	73.5	0.595	0.441	42.9	18.8	Service Center Metals	Prince George	SUA0238
x152x9.5	102	152	9.53	9.53	-	-	-	6.32	6.20E-02	2329	5.61	54.4	49.1	97.8	49.1	2.04	26.3	29.6	46.7	24.1	69.8	9.78E-02	52.8	47.9	22.3	-0.339	78.7	74.7	0.589	0.445	43.8	19.2	Service Center Metals	Prince George	SUA0237
x76x9.5	102	76.2	9.53	9.53	9.53	6.35	6.35	4.35	4.27E-02	1605	0.773	13.6	21.9	25	19.8	1.61	23.2	31.7	42.5	32.7	51.3	2.79E-02	16.1	25	35	15.9	42.4	48.6	0.629	-0.54	14.3	25.9	Western Extrusions Corp.	Dallas	19231
x76x6.4	102	76.2	6.35	6.35	9.53	6.35	6.35	2.91	2.85E-02	1074	0.537	9.28	22.4	16.9	18.7	1.11	15.7	32.1	29	31.6	14.5	8.85E-03	16.3	26.4	35.6	16.7	42.6	50.1	0.61	-0.55	15.1	27.4	Western Extrusions Corp.	Dallas	19771
x64x6.4	102	63.5	6.35	6.35	9.53	6.35	6.35	2.74	2.69E-02	1010	0.315	6.39	17.7	11.8	14.6	1.05	15.3	32.2	27.9	33.8	14.9	7.59E-03	13.6	20.2	34.1	22.7	58.5	47.7	0.594	-0.38	10.7	28.5	Tower Extrusions	Wylie-M	2595
x64x6.4	102	63.5	6.35	6.35	3.18	3.18	3.18	2.73	2.68E-02	1006	0.33	6.73	18.1	12.1	14.6	1.07	15.8	32.7	28.3	33.8	13.7	8.02E-03	13.9	21.4	34.7	23.5	58.5	49	0.581	-0.39	11.3	29.7	Tower Extrusions	Olney	7293
L 89																																			
x152x12.7	88.9	152	12.7	12.7	-	-	-	7.87	7.72E-02	2903	6.91	69.4	48.8	123	52.7	1.77	26.1	24.7	47.6	21.2	154	2.03E-01	51.1	47.2	19.3	-0.365	92.7	72.2	0.573	0.344	44.8	15	Service Center Metals	Prince George	SUA0546
x127x12.7	88.9	127	12.7	12.7	-	-	-	7	6.87E-02	2581	4.16	48.9	40.1	88.1	42.1	1.68	25.6	25.6	46.3	23.0	137	1.28E-01	43.5	38.3	19.2	0.183	60.8	61	0.607	0.479	34.4	16.7	Service Center Metals	Prince George	SUA1734
L 76																																			
x152x9.5	76.2	152	9.53	9.53	-	-	-	5.66	5.55E-02	2087	5.07	51.8	49.3	90.1	54.3	0.888	14.8	20.6	27	16.4	62.9	8.41E-02	50.8	49.6	16.5	-1.04	104.4	72.9	0.537	0.268	48.2	11.8	Service Center Metals	Prince George	SUA0511
x152x6.4	76.2	152	6.35	6.35	-	-	-	3.83	3.76E-02	1411	3.5	35.3	49.8	61.5	53.1	0.625	10.2	21	18.1	15.2	19.2	2.61E-02	51.4	50.8	16.7	-1.37	104.9	74.2	0.53	0.273	49.4	12.1	Service Center Metals	Prince George	SUA2121
x127x12.7	76.2	127	12.7	12.7	-	-	-	6.56	6.44E-02	2419	3.93	47.7	40.3	84.5	44.5	1.07	18.8	21.1	34.6	19.1	128	1.14E-01	42.4	38.3	16.5	0.005	75.3	59.5	0.585	0.356	36.1	12.9	Service Center Metals	Prince George	SUA0505
x127x9.5	76.2	127	9.53	9.53	-	-	-	5	4.91E-02	1845	3.07	36.6	40.8	65.1	43.3	0.849	14.6	21.5	26.3	17.9	55.4	5.14E-02	43	39.7	16.6	-0.373	75.7	60.8	0.574	0.364	37.4	13.2	Service Center Metals	Prince George	SUA0236
x127x6.4	76.2	127	6.35	6.35	-	-	-	3.39	3.33E-02	1250	2.13	25	41.2	44.6	42.1	0.598	10.1	21.9	17.8	16.7	16.9	1.61E-02	43.6	40.7	16.8	-0.646	76.0	62	0.568	0.372	38.4	13.6	Service Center Metals	Prince George	SUA1304
x102x12.7	76.2	102	12.7	12.7	-	-	-	5.69	5.58E-02	2097	2.1	30.9	31.7	55.8	33.9	1.01	18.3	21.9	33.2	21.0	110	6.55E-02	34.9	29.8	16.2	0.404	42.3	48.7	0.625	0.543	26	14.6	Service Center Metals	Prince George	SUA0462
x102x9.5	76.2	102	9.53	9.53	-	-	-	4.35	4.27E-02	1603	1.65	23.9	32.1	43.2	32.7	0.799	14.2	22.3	25.5	19.8	47.9	2.98E-02	35.5	31	16.4	0.142	42.4	49.9	0.614	0.549	27.1	15.1	Service Center Metals	Prince George	SUA0235
x102x6.4	76.2	102	6.35	6.35	-	-	-	2.95	2.89E-02	1089	1.15	16.4	32.5	29.8	31.6	0.564	9.81	22.8	17.4	18.7	14.6	9.45E-03	36.1	31.9	16.5	-0.048	42.6	50.9	0.608	0.559	27.9	15.5	Service Center Metals	Prince George	SUA0234
x51x9.5	76.2	50.8	9.53	9.53	7.92	4.78	4.78	3.04	2.98E-02	1123	0.219	5.89	14	11	13.7	0.627	12.5	23.6	22.6	26.4	35.6	9.78E-03	10.8	15.3	25.3	14.4	39.4	34.6	0.632	-0.42	8.45	19.2	Western Extrusions Corp.	Dallas	19476
x51x6.4	76.2	50.8	6.35	6.35	4.78	0.38	0.38	2.09	2.05E-02	771	0.163	4.26	14.5	7.69	12.5	0.454	8.89	24.3	16	25.2	10.7	3.43E-03	11	16.9	26	15.6	39.7	36.5	0.601	-0.44	9.25	21.1	Tower Extrusions	Olney	16396
x51x6.4	76.2	50.8	6.35	6.35	7.95	4.78	4.78	2.09	2.05E-02	770	0.156	4.06	14.2	7.49	12.5	0.442	8.59	24	15.7	25.2	11.2	3.21E-03	10.9	16.2	25.7	15.2	39.7	35.6	0.613	-0.43	8.81	20.3	Tower Extrusions	Wylie-M	1129
x51x6.4	76.2	50.8	6.35	6.35	7.92	4.78	4.78	2.09	2.05E-02	770	0.156	4.06	14.2	7.49	12.5	0.442	8.59	24	15.7	25.2	11.3	3.21E-03	10.9	16.2	25.7	15.2	39.7	35.6	0.612	-0.43	8.81	20.4	Western Extrusions Corp.	Dallas	19236
x51x6.4	76.2	50.8	6.35	6.35	7.92	4.78	4.78	2.09	2.05E-02	770	0.156	4.06	14.2	7.49	12.5	0.442	8.59	24	15.7	25.2	11.3	3.21E-03	10.9	16.2	25.7	15.2	39.7	35.6	0.612	-0.43	8.81	20.4	Tower Extrusions	Wylie-H	1007
x51x4.8	76.2	50.8	4.78	4.78	7.92	4.78	4.78	1.58	1.55E-02	581	0.122	3.11	14.5	5.67	12.0	0.34	6.53	24.2	12	24.7	4.69	1.44E-03	11	16.9	26	15.8	39.8	36.4	0.598	-0.44	9.13	21.2	Western Extrusions Corp.	Dallas	19201
x51x4.8	76.2	50.8	4.78	4.78	6.35	4.78	4.78	1.57	1.54E-02	580	0.122	3.11	14.5	5.67	12.0	0.339	6.53	24.2	12	24.7	4.64	1.44E-03	11	16.9	26	15.8	39.8	36.5	0.597	-0.44	9.15	21.3	Western Extrusions Corp.	Dallas	19395
x51x4.8	76.2	50.8	4.75	4.75	7.92	4.75	4.75	1.59	1.56E-02	584	0.12	3.07	14.4	5.64	11.9	0.339	6.5	24.1	12	24.6	4.91	1.40E-03	10.9	16.4	25.8	15.5	39.8	36	0.607	-0.43	8.94	20.7	Tower Extrusions	Olney	3712

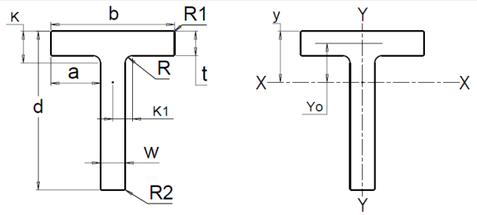
PROFILÉS STRUCTURAUX EN ANGLE JAMBES INÉGALES





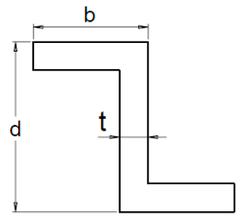
Identification de la section	Dimensions extérieures		Épaisseur (e)	Épaisseur (t)	Rayons			Masse	Charge morte	Aire	Axe X-X					Axe Y-Y					Constante de torsion	Constante de gauchissement	Axe X'-X'		Axe Y'-Y'		βw	r_0	Ω	tan α	y_s	x_s	Extrudeur	Emplacement	Identification de la section du fabricant
L b x d x t	Longueur (b)	Hauteur (d)			R1	R2	R3				I_x	S_x	r_x	Z_x	y	I_y	S_y	r_y	Z_y	x	J	C_W	r'_x	y_0	r'_y	x_0								
mm x mm x mm	mm	mm	mm	mm	mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^6 mm⁴	10^3 mm³	mm	10^3 mm³	mm	10^3 mm⁴	10^9 mm⁶	mm	mm	mm	mm	mm	mm			mm	mm			
L 64																																			
x89x9.5	63.5	88.9	9.53	9.53	-	-	-	3.69	3.62E-02	1361	1.07	17.9	28	32.3	29.5	0.454	9.71	18.3	17.6	16.8	40.4	1.85E-02	30.5	26.6	13.6	0.2	40.9	42.7	0.613	0.496	23.7	12	Service Center Metals	Prince George	SUA0385
x89x6.4	63.5	88.9	6.35	6.35	-	-	-	2.52	2.47E-02	927	0.749	12.4	28.4	22.3	28.3	0.323	6.75	18.7	12	15.6	12.4	5.95E-03	31.1	27.6	13.8	-0.053	41.1	43.8	0.602	0.505	24.7	12.4	Service Center Metals	Prince George	SUA0233
x76x9.5	63.5	76.2	9.53	9.53	-	-	-	3.36	3.30E-02	1240	0.69	13.3	23.6	24	24.3	0.434	9.52	18.7	17.2	17.9	36.7	1.31E-02	27	22.9	13.3	0.245	21.7	37.8	0.634	0.677	18.8	13	Service Center Metals	Prince George	SUA0569
x76x6.4	63.5	76.2	6.35	6.35	-	-	-	2.3	2.26E-02	847	0.488	9.2	24	16.7	23.1	0.309	6.62	19.1	11.9	16.8	11.3	4.26E-03	27.6	23.9	13.4	0.087	21.8	38.9	0.623	0.684	19.6	13.5	Service Center Metals	Prince George	SUA0384
x51x6.4	63.5	50.8	6.35	6.35	6.35	3.18	3.18	1.87	1.83E-02	690	0.152	4.08	14.9	7.42	13.6	0.269	6.14	19.7	11.2	20.0	9.8	2.17E-03	10.7	16.8	22.3	8.13	21.5	31	0.637	-0.62	9.97	15.8	Tower Extrusions	Olney	15619
x51x6.4	63.5	50.8	6.35	6.35	3.18	6.35	6.35	1.82	1.79E-02	670	0.143	3.81	19.5	7.11	13.6	0.255	5.8	19.5	10.8	20.0	9.04	2.01E-03	10.5	16.6	22	8.2	21.5	30.6	0.633	-0.62	9.83	15.7	Tower Extrusions	Olney	7888
x51x4.8	63.5	50.8	4.78	4.78	6.35	3.18	3.18	1.43	1.40E-02	527	0.119	3.13	15	5.67	13.1	0.209	4.71	19.9	8.63	19.4	4.35	9.70E-04	10.8	17.2	22.5	8.28	21.5	31.4	0.631	-0.62	10.2	16.1	Western Extrusions Corp.	Dallas	19705
x51x4.8	63.5	50.8	4.78	4.78	6.35	3.18	3.18	1.43	1.40E-02	527	0.119	3.13	15	5.67	13.1	0.209	4.71	19.9	8.63	19.4	4.35	9.70E-04	10.8	17.2	22.5	8.28	21.5	31.4	0.631	-0.62	10.2	16.1	Tower Extrusions	Olney	10107
x51x4.8	63.5	50.8	4.78	4.78	6.35	3.18	3.18	1.43	1.40E-02	527	0.119	3.13	15	5.67	13.1	0.209	4.71	19.9	8.63	19.4	4.35	9.70E-04	10.8	17.2	22.5	8.28	21.5	31.4	0.631	-0.62	10.2	16.1	Tower Extrusions	Olney	10247
x38x6.4	63.5	38.1	6.35	6.35	6.35	3.18	3.18	1.65	1.62E-02	609	0.065	2.28	10.4	4.27	9.53	0.244	5.86	20	10.5	22.2	8.73	1.69E-03	8.12	11.5	21	14.2	37.6	29	0.604	-0.35	6.1	17.2	Tower Extrusions	Olney	13406
x38x4.8	63.5	38.1	4.78	4.78	6.35	3.18	3.18	1.27	1.25E-02	467	0.051	1.75	10.5	3.24	8.95	0.19	4.49	20.2	8.11	21.6	3.88	7.63E-04	8.19	11.9	21.2	14.7	37.8	29.5	0.592	-0.36	6.24	17.8	Tower Extrusions	Olney	8322
L 51																																			
x102x6.4	50.8	102	6.35	6.35	-	-	-	2.52	2.47E-02	927	1	15.3	32.9	26.7	36.5	0.175	4.39	13.7	8	10.9	12.5	7.38E-03	33.9	33.1	11	-0.697	70.3	48.6	0.537	0.268	32.1	7.85	Service Center Metals	Prince George	SUA2096
x76x9.5	50.8	76.2	9.53	9.53	-	-	-	3.03	2.97E-02	1119	0.638	12.8	23.9	22.9	26.4	0.226	6.08	14.2	11.2	13.7	33	1.05E-02	25.5	22.1	10.9	0.304	39.4	35.5	0.612	0.428	20.2	8.98	Service Center Metals	Prince George	SUA0232
x76x6.4	50.8	76.2	6.35	6.35	-	-	-	2.09	2.05E-02	766	0.453	8.88	24.3	15.9	25.2	0.163	4.26	14.6	7.68	12.5	10.2	3.46E-03	26.1	23.4	11	-0.046	39.7	36.8	0.595	0.441	21.4	9.39	Service Center Metals	Prince George	SUA0231
x76x4.8	50.8	76.2	4.78	4.78	-	-	-	1.58	1.55E-02	584	0.351	6.81	24.5	12.3	24.7	0.128	3.29	14.8	5.86	12.0	4.45	1.54E-03	26.4	23.9	11.1	-0.171	39.8	37.3	0.589	0.445	21.9	9.58	Service Center Metals	Prince George	SUA0230
x64x6.4	50.8	63.5	6.35	6.35	-	-	-	1.86	1.82E-02	685	0.272	6.25	19.9	11.3	20.0	0.155	4.17	15	7.5	13.6	9.09	2.27E-03	22.5	19.4	10.8	0.125	21.5	31.6	0.623	0.624	16.4	10.4	Service Center Metals	Prince George	SUA0229
x64x4.8	50.8	63.5	4.78	4.78	-	-	-	1.42	1.39E-02	523	0.212	4.81	20.1	8.74	19.4	0.122	3.22	15.2	5.75	13.1	3.97	1.02E-03	22.8	19.9	10.9	0.043	21.5	32.1	0.618	0.632	16.8	10.6	Service Center Metals	Prince George	SUA0228
x38x6.4	50.8	38.1	6.35	6.35	6.35	3.18	3.18	1.43	1.40E-02	529	6.15E-02	2.22	10.8	4.1	10.5	0.129	3.78	15.6	6.9	16.9	7.61	9.56E-04	8.01	11.8	17.2	7.56	20.9	23.6	0.647	-0.54	6.83	12.3	Tower Extrusions	Olney	15618
x38x6.4	50.8	38.1	6.35	6.35	4.78	3.18	3.18	1.42	1.39E-02	525	6.15E-02	2.22	10.8	4.09	10.5	0.129	3.78	15.7	6.89	16.9	7.31	9.61E-04	8.02	12	17.3	7.69	20.9	23.8	0.64	-0.54	6.94	12.5	Tower Extrusions	Olney	14958
x38x6.4	50.8	38.1	6.35	6.35	4.78	3.18	3.18	1.42	1.39E-02	525	6.15E-02	2.22	10.8	4.09	10.5	0.129	3.78	15.7	6.89	16.9	7.31	9.61E-04	8.02	12	17.3	7.69	20.9	23.8	0.64	-0.54	6.94	12.5	Tower Extrusions	Olney	14227
x38x4.8	50.8	38.1	4.75	4.75	3.18	4.75	4.75	1.06	1.04E-02	392	4.61E-02	1.62	10.8	3.02	9.92	9.69E-02	2.78	15.7	5.17	16.3	3	4.12E-04	7.95	12.4	17.4	8.03	20.9	24.1	0.625	-0.54	7.08	13	Tower Extrusions	Olney	7891
x38x3.2	50.8	38.1	3.18	3.18	4.78	3.18	3.18	0.746	7.32E-03	275	3.45E-02	1.19	11.2	2.15	9.35	7.11E-02	2.01	16.1	3.68	15.7	1.01	1.42E-04	8.23	13	17.8	8.16	21.0	24.9	0.62	-0.55	7.44	13.4	Western Extrusions Corp.	Dallas	19692
L 44																																			
x32x4.8	44.4	31.8	4.78	4.78	4.78	3.18	3.18	0.927	9.09E-03	342	2.73E-02	1.16	8.94	2.15	8.41	6.50E-02	2.17	13.8	3.97	14.7	2.76	2.68E-04	6.7	9.98	15	7.61	20.3	20.7	0.632	-0.49	5.62	11.2	Western Extrusions Corp.	Dallas	19121
L 38																																			
x64x6.4	38.1	63.5	6.35	6.35	-	-	-	1.64	1.61E-02	605	2.46E-01	5.96	20.2	10.6	22.2	6.71E-02	2.35	10.5	4.32	9.53	7.99	1.79E-03	21.2	19.2	8.23	0.003	37.6	29.7	0.585	0.356	18	6.44	Service Center Metals	Prince George	SUA0565
x64x4.8	38.1	63.5	4.78	4.78	-	-	-	1.25	1.23E-02	462	1.92E-01	4.59	20.4	8.16	21.6	5.32E-02	1.82	10.7	3.29	8.95	3.49	8.09E-04	21.5	19.8	8.31	-0.185	37.8	30.4	0.574	0.364	18.7	6.61	Service Center Metals	Prince George	SUA0513
x51x6.4	38.1	50.8	6.35	6.35	-	-	-	1.42	1.39E-02	524	1.31E-01	3.87	15.8	6.98	16.9	6.30E-02	2.28	11	4.15	10.5	6.88	1.02E-03	17.5	14.9	8.12	0.202	20.9	24.4	0.625	0.543	13	7.29	Service Center Metals	Prince George	SUA0227
x51x4.8	38.1	50.8	4.78	4.78	-	-	-	1.09	1.07E-02	402	1.03E-01	2.99	16	5.42	16.3	5.01E-02	1.78	11.2	3.2	9.94	3.02	4.69E-04	17.8	15.5	8.18	0.072	20.9	24.9	0.615	0.549	13.5	7.53	Service Center Metals	Prince George	SUA0226
x32x4.8	38.1	31.8	4.78	4.78	4.78	3.18	3.18	0.844	8.28E-03	311	2.61E-02	1.14	9.16	2.1	8.99	4.18E-02	1.6	11.6	2.94	12.1	2.53	1.87E-04	6.51	9.93	14.8	3.95	10.8	18.2	0.656	-0.67	6.05	8.81	Tower Extrusions	Olney	13496
x25x6.4	38.1	25.4	6.35	6.35	3.3	3.3	3.3	0.978	9.59E-03	361	1.68E-02	0.927	6.82	1.78	7.41	4.86E-02	1.99	11.6	3.58	13.8	4.89	3.12E-04	5.33	7.04	12.4	6.66	19.5	16.6	0.659	-0.41	3.97	8.84	Tower Extrusions	Olney	18702
L 32																																			
x44x4.8	31.8	44.4	4.78	4.78	-	-	-	0.925	9.07E-03	341	6.67E-02	2.25	14	4.05	14.7	2.84E-02	1.22	9.13	2.2	8.41	2.55	2.91E-04	15.2	13.3	6.82	0.101	20.3	21.3	0.613	0.496	11.9	5.99	Service Center Metals	Prince George	SUA1032
x38x4.8	31.8	38.1	4.78	4.78	-	-	-	0.843	8.27E-03	311	4.32E-02	1.66	11.8	3.01	12.1	2.72E-02	1.19	9.35	2.15	8.99	2.31	2.06E-04	13.5	11.4	6.63	0.124	10.8	18.9	0.634	0.677	9.4	6.5	Service Center Metals	Prince George	SUA0451
L 25																																			
x51x3.2	25.4	50.8	3.18	3.18	-	-	-	0.629	6.17E-03	232	6.26E-02	1.92	16.4	3.34	18.2	1.10E-02	0.549	6.87	1	5.45	0.777	1.15E-04	16.9	16.5	5.49	-0.348	34.9	24.3	0.537	0.268	16.1	3.93	Service Center Metals	Prince George	SUA1397
x38x6.4	25.4	38.1	6.35	6.35	-	-	-	0.984	9.65E-03	363	5.00E-02	2.05	11.7	3.65	13.8	1.75E-02	0.971	6.94	1.82	7.41	4.69	3.43E-04	12.5	10.3	5.44	0.377	19.5	17.1	0.638	0.414	9.33	4.27	Service Center Metals	Prince George	SUA1040
x16x3.2	25.4	15.9	3.18	3.18	2.36	1.57	1.57	0.328	3.22E-03	121	2.23E-03	0.191	4.3	0.362	4.24	7.56E-03	0.458	7.9	0.823	8.99	0.422	1.28E-05	3.36	4.66	8.34	5.23	14.3	11.4	0.622	-0.37	2.53	6.53	Tower Extrusions	Olney	14036

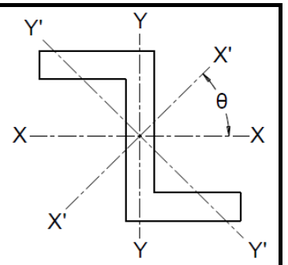
PROFILÉS EN T



Identification de la section	Dimensions extérieures		Épaisseur		Distance (a)			Rayon			Masse (m)	Charge morte	Aire	Axe X-X				Axe Y-Y			Constante de torsion	Constante de gauchissement	r_0	y_0	Ω	Extrudeur	Emplacement	Identification de la section du fabricant
T d x b x m	Hauteur de section (d)	Largeur de l'aile (b)	Âme (w)	Ailes (t)	a	k	k1	R	R1	R2				I_x	S_x	r_x	y	I_y	S_y	r_y	J	C_W						
mm x mm x (kg/m)	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg/m	kN/m	mm²	10^6 mm⁴	10^3 mm³	mm	mm	10^6 mm⁴	10^3 mm³	mm	10^3 mm⁴	10^9 mm⁶	mm	mm				
T 191																												
x127x10	191	127	9.53	15.9	58.7	27.8	16.7	11.9	-	0.38	10.1	9.95E-02	3741	12.6	90	58	50.5	2.73	42.9	27	244	1.96E-01	76.0	40.9	0.710	Tower Extrusions	Olney	14424
T 173																												
x152x7.6	173	152	7.95	9.53	72.2	19.1	13.5	9.53	0.38	0.38	7.57	7.42E-02	2791	8.09	63.2	53.8	45.1	2.82	37	31.8	80.6	8.65E-02	74.0	39.5	0.714	Tower Extrusions	Olney	17057
T 152																												
x127x7.0	152	127	9.53	9.53	58.7	15.9	11.1	6.35	0.25	0.25	7.02	6.89E-02	2588	6.06	56.4	48.4	44.9	1.64	25.8	25.1	83	8.76E-02	67.1	39.0	0.662	Tower Extrusions	Olney	2412
x51x3.4	152	50.8	6.35	6.35	22.2	6.7	3.6	0.38	0.38	0.38	3.39	3.33E-02	1250	3.04	32.8	49.3	59.8	0.072	2.85	7.61	17.1	2.29E-02	72.8	53.0	0.470	Tower Extrusions	Olney	17401
T 146																												
x70x3.2	146	69.9	5.33	6.35	32.3	9.5	5.8	3.18	0.25	0.25	3.24	3.17E-02	1193	2.7	27.8	47.6	48.9	0.182	5.21	12.4	13.7	1.27E-02	66.4	44.6	0.549	Tower Extrusions	Olney	9972
T 127																												
x178x7.6	127	178	9.53	9.53	84.1	9.9	5.1	0.38	0.38	0.38	7.63	7.48E-02	2812	4.02	41.4	37.8	30	4.47	50.3	39.9	86.4	7.65E-02	60.3	24.9	0.829	Tower Extrusions	Olney	15078
x83x5.2	127	82.6	9.53	9.53	36.5	9.9	5.1	0.38	0.38	0.38	5.17	5.07E-02	1905	3.15	37.1	40.7	42.2	0.455	11	15.4	58.2	4.56E-02	56.3	35.7	0.598	Tower Extrusions	Olney	15082
x51x4.3	127	50.8	9.53	9.53	20.6	9.9	5.1	0.38	0.38	0.38	4.35	4.26E-02	1603	2.65	34	40.7	49	0.112	4.43	8.38	48.8	4.09E-02	56.9	38.9	0.532	Tower Extrusions	Olney	17623
x51x3.0	127	50.8	6.35	6.35	22.2			0.38	0.38	0.38	2.95	2.90E-02	1089	1.85	23.3	41.2	47.9	0.072	2.83	8.12	14.9	1.32E-02	59.4	42.1	0.498	Tower Extrusions	Olney	16893
T 102																												
x102x5.4	102	101.6	10.3	10.3	45.6	16.7	11.5	6.35	0.38	0.38	5.44	5.34E-02	2006	1.95	26.8	31.2	29.1	0.91	17.9	21.3	76.7	3.37E-02	44.0	22.6	0.737	Tower Extrusions	Olney	2136
x102x5.0	102	101.6	9.53	9.53	46.0	-	-	-	-	-	5.00	4.91E-02	1845	1.81	25	31.4	28.9	0.839	16.5	21.3	56.4	2.72E-02	44.6	23.4	0.724	Service Center Metals	Prince George	T0568
x51x2.5	102	50.8	6.35	6.35	22.2	6.7	3.6	0.38	0.38	0.38	2.51	2.47E-02	927	1	15.3	32.9	36.2	0.071	2.81	8.77	12.6	6.75E-03	46.3	31.4	0.540	Tower Extrusions	Olney	16892
T 76																												
x127x3.4	76.2	127	6.35	6.35	60.3	-	-	-	-	-	3.39	3.33E-02	1250	0.598	10.1	21.9	16.6	1.09	17.1	29.5	17.1	6.33E-03	39.1	13.3	0.883	Service Center Metals	Prince George	T1091
x102x4.3	76.2	101.6	9.53	9.53	46.0	-	-	-	-	-	4.35	4.26E-02	1603	0.799	14.2	22.3	20	0.837	16.5	22.9	49	1.45E-02	35.1	14.5	0.829	Service Center Metals	Prince George	T1077

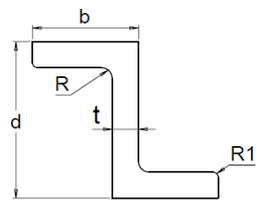
PROFILÉS EN Z, COINS CARRÉS D'ÉPAISSEUR CONSTANTE

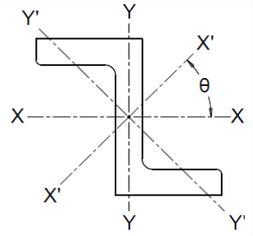




Identification de la section	Dimensions			Masse	Aire	Axe X-X				Axe Y-Y				Constante de torsion	Constante de gauchissement	Axe X'-X'		Axe Y'-Y'		θ	Extrudeur	Emplacement	Identification de la section du fabricant
Z d x b x t	Hauteur (d)	Largeur de l'aile (b)	Épaisseur (t)			I_x	S_x	r_x	Z_x	I_y	S_y	r_y	Z_y	J	C_W	$I_{x'}$	$r_{x'}$	$I_{y'}$	$r_{y'}$				
mm x mm x mm	mm	mm	mm	kg/m	mm^2	$10^6\ mm^4$	$10^3\ mm^3$	mm	$10^3\ mm^3$	$10^6\ mm^4$	$10^3\ mm^3$	mm	$10^3\ mm^3$	$10^3\ mm^4$	$10^9\ mm^6$	$10^6\ mm^4$	mm	$10^6\ mm^4$	mm	degré			
Z 191																							
x51x4.8	191	50.8	4.78	3.7	1349	6.54	68.7	69.6	84.1	0.363	75.0	16.4	12.3	10.8	2.32	6.76	70.7	0.194	12.0	9.27	Western Extrusions Corp.	Dallas	19083
Z 105																							
x81x9.5	105	81.0	9.53	6.4	2359	4.01	76.6	41.2	91.0	2.82	37.0	34.6	57.5	71.3	3.44	6.11	50.9	0.723	17.5	38.6	Service Center Metals	Prince George	Z1197
Z 102																							
x78x6.4	102	77.8	6.35	4.2	1552	2.62	51.5	41.0	59.6	1.76	23.6	33.7	36.3	21.2	2.16	3.92	50.3	0.454	17.1	37.9	Service Center Metals	Prince George	Z0581
Z 76																							
x68x9.5	76.2	68.3	9.53	5.0	1845	1.60	42.1	29.5	51.1	1.63	25.7	29.7	39.9	56.0	0.925	2.89	39.6	0.344	13.7	44.7	Service Center Metals	Prince George	Z1014
x70x6.4	76.2	69.9	6.35	3.5	1290	1.22	32.0	30.8	37.4	1.26	18.8	31.2	28.9	17.6	0.779	2.22	41.5	0.255	14.1	44.5	Service Center Metals	Prince George	Z1105
x68x6.4	76.2	68.3	6.35	3.4	1270	1.20	31.4	30.7	36.7	1.17	18.0	30.3	27.6	17.3	0.731	2.12	40.9	0.245	13.9	44.6	Service Center Metals	Prince George	Z0543

PROFILÉS EN Z, COINS RONDS D'ÉPAISSEUR CONSTANTE





Identification de la section	Dimensions					Masse	Aire	Axe X-X				Axe Y-Y				Constante de torsion	Constante de gauchissement	Axe X'-X'		Axe Y'-Y'		θ	Extrudeur	Emplacement	Identification de la section du fabricant
Z d x b x t	Hauteur (d)	Largeur de l'aile (b)	Épaisseur (t)	Rayon interne (R)	Rayon externe (R1)			I_x	S_x	r_x	Z_x	I_y	S_y	r_y	Z_y	J	C_W	$I_{x'}$	$r_{x'}$	$I_{y'}$	$r_{y'}$				
mm x mm x mm	mm	mm	mm	mm	mm	kg/m	mm2	10^6 mm^4	10^3 mm^3	mm	10^3 mm^3	10^6 mm^4	10^3 mm^3	mm	10^3 mm^3	10^3 mm^4	10^9 mm^6	10^6 mm^4	mm	10^6 mm^4	mm	degré			
Z 191																									
x44x4.8	191	44.5	4.78	4.78	4.78	3.49	1289	6.01	63.1	68.3	78.5	0.239	5.67	13.6	9.53	10.6	1.55	6.16	69.0	0.128	9.94	7.62	Tower Extrusions	Olney	12966
Z 127																									
x83x7.9	127	82.6	7.92	7.92	6.35	6.45	2377	5.76	90.7	49.2	108	2.40	30.8	31.7	49.5	65.2	5.09	7.26	57.5	0.785	18.9	29.4	Western Extrusions Corp.	Dallas	19171
Z 102																									
x78x6.4	102	77.8	6.35	7.92	6.35	4.33	1562	2.63	51.7	41.0	59.9	1.67	22.3	32.7	35.2	23.2	2.03	3.87	49.7	0.453	17.0	36.8	Western Extrusions Corp.	Dallas	19102
Z 76																									
x68x9.5	76.2	68.3	9.53	7.92	6.35	5.03	1854	1.61	42.2	29.4	51.3	1.56	24.6	29.0	39.0	61.1	0.859	2.84	39.1	0.341	13.5	44.5	Western Extrusions Corp.	Dallas	19155
x68x9.5	76.2	68.3	9.53	9.53	9.53	5.00	1845	1.58	41.5	29.3	50.7	1.63	25.7	29.7	40.1	61.3	0.868	2.75	38.6	0.332	13.4	44.4	Tower Extrusions	Olney	1825
x68x6.4	76.2	68.3	6.35	7.92	6.35	3.47	1280	1.20	31.5	30.6	36.9	1.10	16.9	29.3	26.6	19.4	0.677	2.06	40.1	0.244	13.8	43.4	Western Extrusions Corp.	Dallas	19345
x68x6.4	76.2	68.3	6.35	7.95	6.35	3.41	1257	1.17	31.4	30.6	36.1	1.12	17.1	29.8	26.8	17.9	0.685	2.06	40.1	0.244	13.8	44.1	Tower Extrusions	Olney	17127
x68x6.4	76.2	68.3	6.35	7.92	6.35	3.41	1257	1.17	30.2	30.6	36.1	1.11	17.1	29.8	26.8	17.9	0.685	2.06	40.1	0.244	13.8	44.1	Tower Extrusions	Olney	6207

PARTENAIRES FINANCIERS

Développement économique Canada pour les régions du Québec
Canada Economic Development for Quebec Regions
Québec
Communauté métropolitaine de Montréal
Association de l'aluminium du Canada
RioTinto
Alcoa
ALOUETTE
ALBECOUR
FONDS de solidarité FTQ
RECYC-QUÉBEC Québec
NESPRESSO
EDC Exportation et développement Canada

aluquebec.com

625, AVENUE DU PRÉSIDENT-KENNEDY, BUREAU 505
MONTRÉAL (QUÉBEC) H3A 1K2
514 905-4839
INFO@ALUQUEBEC.COM