

Carbon or Stainless



Marmon/Keystone



Carbon



Alloy

>TUBING >PIPE >BAR



Stainless Steel



Aluminum

>TUBING >PIPE >FITTINGS >FLANGES >BAR



Specialty Steels



We have you covered



Marmon/Keystone

Looking for Carbon tubing, pipe or bar? Marmon/Keystone has you covered!



From coast to coast **Marmon/Keystone** carries a fully stocked inventory to meet our customers needs, ready to **ship to you within 24 hours** of receiving your order. Make sure you ask one of our experienced sales staff about this service.

We are constantly expanding our Canadian inventories of **Hot Rolled Seamless and Alloy grades**. In addition we carry the widest selection of **Drawn Over Mandrel tubing** sizes available from a Canadian source that we consider to be second to none.

If you are looking for carbon tube and pipe, contact your local Marmon/Keystone branch.

- We ARE the Tubing and Pipe people!

TUBING PIPE BAR



Corporate Office

BURLINGTON, Ontario
1220 Heritage Road L7L 4X9
Telephone: (905) 319-4646
Fax: (905) 319-4248

Warehouse Locations

BOUCHERVILLE, Quebec
Telephone: (514) 527-9153
Toll Free: 1-800-361-8142
Fax: (450) 641-4357

WINNIPEG, Manitoba
Telephone: (204) 694-6008
Toll Free: 1-800-665-0126
Fax: (204) 694-5591

LANGLEY, British Columbia
Telephone: (604) 607-4654
Toll Free: 1-855-604-4646
Fax: (604) 857-9860

BURLINGTON, Ontario
Telephone: (905) 335-8827
Toll Free: 1-800-263-6262
Fax: (905) 335-7059

SASKATOON, Saskatchewan
Telephone: (204) 694-6008
Toll Free: 1-800-665-0126
Fax: (204) 694-5591

ATLANTIC CANADA (Sales Office)
Telephone: (902) 468-8530
Toll Free: 1-800-565-1637
Fax: (902) 468-7881

LEDUC, Alberta
Telephone: (780) 986-2600
Toll Free: 1-800-222-6504
Fax: (780) 986-9868



A Marmon Distribution Services/Berkshire Hathaway Company





Carbon

Mechanical Tubing	Specification	O.D.	Wall Size
Cold Drawn Seamless	ASTM A519	1" - 11"	3/8" - 1"
Drawn over Mandrel	ASTM A513-5	1/4" - 12"	22 GA - 5/8"
Electric Welded	ASTM A513-1 & 2	1/2" - 16"	20 GA - 3/16"
Hot Rolled Seamless	ASTM A519	3" - 24"	1/2" - 3"
Cylinder Tubing	Specification	O.D.	Wall Size
Finished Honed I.D.	ASTM A513-5, GR520	1-1/2" - 11-1/2"	3/16" - 5/8"
Chromed I.D. Air Cylinder	ASTM A513-5	2-1/4" - 12"	.125" - .225"
Hydraulic Line Tubing	Specification	O.D.	Wall Size
Seamless	SAE J-524	6mm - 38mm	1mm - 4mm
Seamless	SAE J-524	1/16" - 1-1/2"	.035" - .120"
Welded	SAE J-525	3/16" - 4"	.035" - .120"
Pipe	Specification	O.D.	Wall Size
Seamless	ASTM A-106, A333-6, ASME SA106	1/8" - 24" IPS	Sch 30-XXH
Welded	ASTM A-53, API 5L	2" - 24" IPS	Sch 20-XH
Boiler Tubing	Specification	O.D.	Wall Size
Welded Boiler	A178	3/8" - 3-1/2"	.049" - .148"
Seamless Boiler	A179	5/8" - 1-1/2"	.049" - .134"
Welded Condenser/ Heat Exchanger	A214	3/4" - 1"	.065" - .109"
Structural Tubing	Specification	O.D.	Wall Size
Rounds	CSA G40.21, ASTM A500C	To 64" periphery	.100" - 5/8"
Square	CSA G40.21, ASTM A500C	To 64" periphery	.100" - 5/8"
Rectangular	CSA G40.21, ASTM A500C	To 64" periphery	.100 - 5/8"
Alloy Tubing	Specification	O.D.	Wall Size
Hot Finished Mechanical Cold Drawn Mechanical	4130/4140/4142 A519	3" - 16"	1/2" - 2-1/2"
Air Frame (Chrome Moly)	4130 MILT 6736B (normalized)	1/4" - 1-3/4"	.028" - .120"
Chrome Bar	Specification	O.D.	Chrome Thickness
Precision Shafting	ASTM A311	1/2" - 5"	.0005
Induction Shafting	ASTM A311	1" - 5"	.0010



Specialty Steels

Specialty Steels is your reliable source for Stainless Steel!



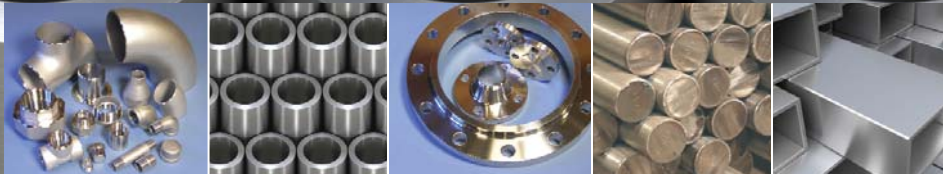
Specialty Steels, a division of Marmon/Keystone, carries a comprehensive line of stainless products from coast to coast to meet your needs. Our standard ship from stock service means we can **ship to you within 24 hours or less**. Be sure to ask one of our dedicated team of specialists about this service.

Our extensive Canadian inventories of stainless products are constantly being enhanced to provide you **more sizes, specifications and grades** to meet evolving market requirements.

If you are looking for a dependable source for stainless steel tube, pipe, fittings, flanges and bar, contact your local Specialty Steels branch.

- We are your reliable source for stainless!

TUBING PIPE FITTINGS FLANGES BAR



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A Marmon Distribution Services/Berkshire Hathaway Company





Stainless Steel

304 - 304L - 316 - 316L			
Pipe	Welded	1/8" thru 24"	A312/SA312
	Seamless	1/4" thru 10"	A312/SA312
Tube	Welded	3/16" thru 8"	A269, SA249
	Seamless	1/8" thru 2"	A269, SA213 (A.W.)
	Sanitary	1/2" thru 4"	A270 3A
Ornamental	Round	1/2" thru 3"	A554
	Square	1/2" thru 4"	A554
	Rectangle	1/2" thru 4"	A554
Fittings	150 lbs.	1/8" thru 4"	ISO & MSS
	3000 lbs.	1/4" thru 3"	A182, SA182
	Buttweld	1/2" thru 24"	A403, SA403
Flanges	150 lbs.	1/2" thru 24"	A182, SA182
	300 lbs.	1/2" thru 12"	A182, SA182
303 - 304 - 304L - 316 - 316L			
Bar	Round	1/8" thru 11"	A276
	Square	1/8" thru 1-1/2"	A276
	Hexagon	1/2" thru 2-1/16"	A276
	Flat	1/8" thru 1" (thick)	A276, A240
	Angle	1/8" thru 3/8" (thick)	A276
304 - 316			
Hollow Bar	1.000" thru 9.840"	Outside Diameter	A511
	.188" thru 1.690"	Walls	



Aluminum

6061 - 6063			
Pipe	Seamless	1/8" thru 12"	SB241
	Structural	1/2" thru 6"	B429
Seamless	Pressure Tube	1/2" thru 4"	B210 Drawn
	Hollow Bar	1" thru 12-3/4" O.D.	B241 Extruded
Structural	Round	1" thru 4"	B429
	Square	3/4" thru 6"	B429
	Rectangle	3/4" thru 6"	B429



Technical Data

WEIGHTS AND DIMENSIONS OF A.S.A. PIPE SCHEDULES

Pipe Size	Outside Diameter (Inches)	5S	5	10S	10	20	30	40S & Standard	40	60	80S & Extra Heavy	80	100	120	140	160	Double Extra Heavy
1/8	.405		.035 .138	.049 .186	.049 .186			.068 .244	.068 .244		.095 .314	.095 .314					
1/4	.540		.049 .257	.065 .329	.065 .329			.088 .424	.088 .424		.119 .535	.119 .535					
3/8	.675		.049 .327	.065 .423	.065 .423			.091 .567	.091 .567		.126 .738	.126 .738					
1/2	.840	.065 .538	.065 .538	.083 .671	.083 .671			.109 .851	.109 .851		.147 1.088	.147 1.088				.187 1.304	.294 1.714
3/4	1.050	.065 .683	.065 .683	.083 .857	.083 .857			.113 1.131	.113 1.131		.154 1.474	.154 1.474				.218 1.937	.308 2.441
1	1.315	.065 .867	.065 .867	.109 1.404	.109 1.404			.133 1.679	.133 1.679		.179 2.172	.179 2.172				.250 2.844	.385 3.659
1-1/4	1.660	.065 1.107	.065 1.107	.109 1.806	.109 1.806			.140 2.273	.140 2.273		.191 2.997	.191 2.997				.250 3.765	.382 5.214
1-1/2	1.900	.065 1.247	.065 1.247	.109 2.085	.109 2.085			.145 2.718	.145 2.718		.200 3.631	.200 3.631				.281 4.859	.400 6.408
2	2.375	.065 1.604	.065 1.604	.109 2.638	.109 2.638			.154 3.653	.154 3.653		.218 5.022	.218 5.022				.343 7.444	.436 9.029
2-1/2	2.875	.083 2.475	.083 2.475	.120 3.531	.120 3.531			.203 5.793	.203 5.793		.276 7.661	.276 7.661				.375 10.01	.552 13.70
3	3.500	.083 3.029	.083 3.029	.120 4.332	.120 4.332			.216 7.576	.216 7.576		.300 10.25	.300 10.25				.437 14.32	.600 18.58
3-1/2	4.000	.083 3.472	.083 3.472	.120 4.973	.120 4.973			.226 9.109	.226 9.109		.318 12.51	.318 12.51					.636 22.85
4	4.500	.083 3.915	.083 3.915	.120 5.613	.120 5.613			.237 10.79	.237 10.79	.281 12.66	.337 14.98	.337 14.98	.438 19.00			.531 22.51	.674 27.54
4-1/2	5.000							.247 12.53			.355 17.61						.710 32.53
5	5.563	.109 6.349	.109 6.349	.134 7.770	.134 7.770			.258 14.62	.258 14.62		.375 20.78	.375 20.78	.500 27.04			.625 32.96	.750 38.55
6	6.625	.109 7.585	.109 7.585	.134 9.290	.134 9.290			.280 18.97	.280 18.97		.432 28.57	.432 28.57	.562 36.39			.718 45.30	.864 53.16
7	7.625							.301 23.57			.500 38.05						.875 63.08
8	8.625	.109 9.914	.109 9.914	.148 13.40	.148 13.40	.250 22.36	.277 24.70	.322 28.55	.322 28.55	.406 35.64	.500 43.39	.500 43.39	.594 50.95	.719 60.71	.812 67.76	.906 74.69	.875 72.42
9	9.625							.342 33.90			.500 48.72						
10	10.750	.134 15.19	.134 15.19	.165 18.70	.165 18.70	.250 28.04	.307 34.24	.365 40.48	.365 40.48	.500 54.74	.500 54.74	.593 64.33	.719 77.03	.844 89.29	1.000 104.13	1.125 115.7	
11	11.750							.375 45.55			.500 60.07						
12	12.750	.156 21.07	.165 22.18	.180 24.20	.180 24.20	.250 33.38	.330 43.77	.375 49.56	.406 53.53	.562 73.16	.500 65.42	.687 88.51	.844 107.32	1.000 125.49	1.125 139.67	1.312 160.3	
14	14.000	.156 23.07		.188 27.73	.250 36.71	.312 45.68	.375 54.57	.375 54.57	.437 63.37	.593 84.91	.500 72.09	.750 106.1	.938 130.85	1.094 150.79	1.250 170.21	1.406 189.1	
16	16.000	.165 27.90		.188 31.75	.250 42.05	.312 52.36	.375 62.58	.375 62.58	.500 82.77	.656 107.5	.500 82.77	.843 136.5	1.031 164.82	1.219 192.43	1.438 223.64	1.593 245.1	
18	18.000	.165 31.43		.188 35.76	.250 47.39	.312 59.03	.438 82.15	.375 70.59	.562 104.8	.750 138.20	.500 93.45	.937 170.8	1.156 207.96	1.375 244.14	1.562 274.22	1.781 308.5	
20	20.000	.188 39.78		.218 46.05	.250 52.73	.375 78.60	.500 104.13	.375 78.60	.593 122.9	.812 166.4	.500 104.1	1.031 208.9	1.281 256.10	1.500 296.37	1.750 341.09	1.968 379.0	
24	24.000	.218 55.37		.250 63.41	.250 63.41	.375 94.62	.562 140.68	.375 94.62	.687 171.2	.968 238.1	.500 125.5	1.218 296.4	1.531 367.39	1.812 429.39	2.062 483.12	2.343 541.9	

Shaded schedules indicate those commonly applied to stainless steel pipe

TUBING WEIGHT PER FOOT										
BWG		25	22	20	18	16	14	13	12	11
O.D.		.020"	.028"	.035"	.049"	WALL .065"	.083"	.095"	.109"	.120"
0.125	1/8"	.0224	.0290	.0336	.0398					
0.188	3/16"	.0358	.0478	.0570	.0725	.0850				
0.250	1/4"	.0491	.0664	.0804	.1052	.1284	.1480			
0.313	5/16"	.0625	.0851	.1037	.1379	.1718	.2034			
0.375	3/8"	.0758	.1038	.1271	.1706	.2152	.2588	.2841	.3097	.3268
0.438	7/16"	.0892	.1225	.1504	.2033	.2586	.3142	.3475	.3824	.4069
0.500	1/2"	.1025	.1411	.1738	.2360	.3020	.3696	.4109	.4552	.4870
0.563	9/16"	.1159	.1598	.1972	.2687	.3454	.4250	.4743	.5279	.5671
0.625	5/8"	.1292	.1785	.2205	.3014	.3888	.4804	.5377	.6007	.6472
0.750	3/4"	.1559	.2159	.2673	.3668	.4755	.5912	.6646	.7462	.8074
0.875	7/8"	.1826	.2533	.3140	.4323	.5623	.7021	.7914	.8917	.9676
1.000	1"	.2907	.3607	.4977	.6491	.8129	.9182	1.0372	1.1278	
1.125	1-1/8"	.3280	.4074	.5631	.7358	.9237	1.0450	1.1827	1.2880	
1.250	1-1/4"	.3654	.4542	.6285	.8226	1.0345	1.1719	1.3283	1.4482	
1.375	1-3/8"	.4028	.5009	.6939	.9094	1.1453	1.2987	1.4738	1.6084	
1.500	1-1/2"	.4402	.5476	.7593	.9962	1.2561	1.4255	1.6193	1.7686	
1.625	1-5/8"	.4776	.5943	.8248	1.0830	1.3669	1.5523	1.7648	1.9288	
1.750	1-3/4"	.5149	.6411	.8902	1.1697	1.4777	1.6792	1.9103	2.0890	
2.000	2"	.5897	.7345	1.0210	1.3433	1.6993	1.9328	2.2014	2.4094	
2.250	2-1/4"	.6645	.8280	1.1518	1.5168	1.9209	2.1865	2.4924	2.7298	
2.500	2-1/2"	.7392	.9214	1.2826	1.6904	2.1425	2.4401	2.7834	3.0502	
3.000	3"	.8887	1.1083	1.5443	2.0375	2.5857	2.9474	3.3655	3.6910	
3.500	3-1/2"				2.4070	3.0570	3.4500	3.9840	4.3720	
4.000	4"				2.7570	3.5050	3.9620	4.5720	5.0190	
5.000	5"				3.4260	4.3590	4.9770	5.7720	6.2540	
6.000	6"				4.1200	5.2450	5.9910	6.9200	7.5400	
8.000	8"				5.5100	7.0200	8.0200	9.1900	10.1000	

BIRMINGHAM WIRE GAUGE CHART					
B.W.G	Decimal Equivalent	B.W.G	Decimal Equivalent	B.W.G	Decimal Equivalent
1	0.300"	13	0.095"	25	0.020"
2	0.284"	14	0.083"	26	0.018"
3	0.259"	15	0.072"	27	0.016"
4	0.238"	16	0.065"	28	0.014"
5	0.220"	17	0.058"	29	0.013"
6	0.203"	18	0.049"	30	0.012"
7	0.180"	19	0.042"	31	0.010"
8	0.165"	20	0.035"	32	0.009"
9	0.148"	21	0.032"	33	0.008"
10	0.134"	22	0.028"	34	0.007"
11	0.120"	23	0.025"	35	0.005"
12	0.109"	24	0.022"	36	0.004"

DECIMAL CONVERSION CHART			
Fraction	Decimal	Fraction	Decimal
1/64	.015625	33/64	.515625
1/32	.03125	17/32	.53125
3/64	.046875	35/64	.546875
1/16	.0625	9/16	.5625
5/64	.078125	37/64	.578125
3/32	.09375	19/32	.59375
7/64	.109375	39/64	.609375
1/8	.125	5/8	.625
9/64	.140625	41/64	.640625
5/32	.15625	21/32	.65625
11/64	.171875	43/64	.671875
3/16	.1875	11/16	.6875
13/64	.203125	45/64	.703125
7/32	.21875	23/32	.71875
15/64	.234375	47/64	.734375
1/4	.25	3/4	.75
17/64	.265625	49/64	.765625
9/32	.28125	25/32	.78125
19/64	.296875	51/64	.796875
5/16	.3125	13/16	.8125
21/64	.328125	53/64	.828125
11/32	.34375	27/32	.84375
23/64	.359375	55/64	.859375
3/8	.375	7/8	.875
25/64	.390625	57/64	.890625
13/32	.40625	29/32	.90625
27/64	.421875	59/64	.921875
7/16	.4375	15/16	.9375
29/64	.453125	61/64	.953125
15/32	.46875	31/32	.96875
31/64	.484375	63/64	.984375
1/2	.50	1	1.00



Value Added Services

Flexible solutions for your business needs.



Reduce your manufacturing costs and capital expenditures; improve your inventory control and productivity by letting **Maron/Keystone** or **Specialty Steels** handle **manufactured parts** for you. From anodizing to fabrication, laser cutting to welding, our Canadian facilities can get the job done efficiently, cost effectively and on time.

Contact one of our experienced staff to review your requirements and provide you that **Value Added Solution**.

We believe in **partnering with our customers** in providing **Value Added Services**. These partnerships are mutually beneficial AND help forge strong working relationships.

CUTTING MACHINING FABRICATION



VALUE ADDED BENEFITS

- Completely manufactured parts
- Single source
- One purchase order
- Inventory cost control
- Semi finished parts
- Reduce your floor space
- Cost's are reduced
- Elimination of process "Bottle Necks"

TYPICAL SERVICES OFFERED

- | | |
|---------------------|---------------------------------|
| ANODIZING | HEAT TREATING |
| BAR CODING | HONING |
| BENDING | LASER CUTTING |
| BEVELING | MACHINING |
| BORING | PRODUCTION CUTTING |
| CENTERLESS GRINDING | MITRE CUTTING |
| CHAMFERING | SHOT BLASTING |
| DEBURRING | WATER JET CUTTING |
| DRILLING | |
| FABRICATION | OTHER SERVICES AVAILABLE |
| GROOVE (ID & OD) | |