

PLYMOUTH TUBE CO USA[®]

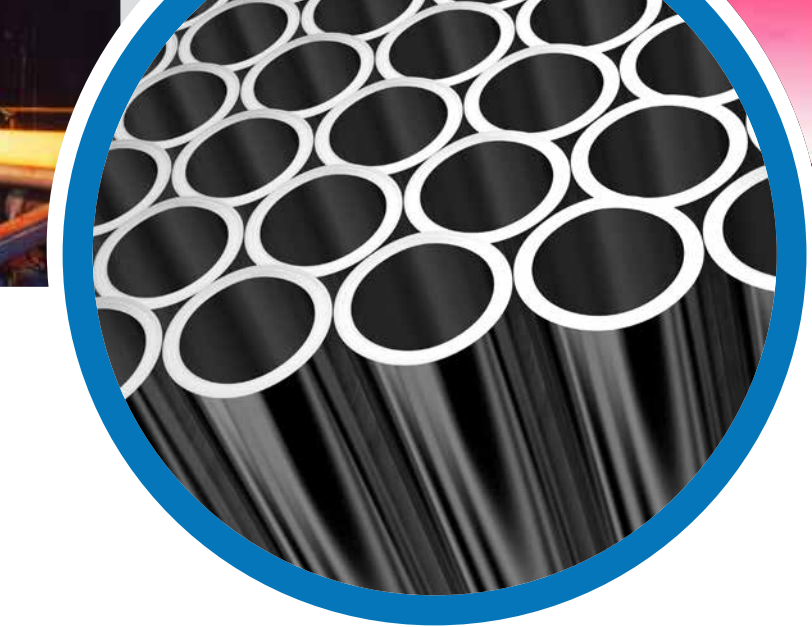


Carbon & Alloy Steel Tubing

ASTM A and ASME SA Specifications		Grades	OD Range		Wall Range AW=Average Wall / MW=Minimum Wall		Max Length	
			inches	mm	inches	mm	ft	m
BOILER AND PRESSURE TUBING								
-106	Seamless Carbon Steel Tubing for High Pressure Service	A B C	CD: 1.250 TO 6.000 HF: 1.900 TO 5.000	CD: 31.75 TO 152.40 HF: 48.26 TO 127.00	CD: .105 TO 1.000 MW HF: .180 TO .570 MW	CD: 3.78 TO 25.40 MW HF: 4.57 TO 14.48 MW	75 65	26 20
-179	Seamless Low Carbon Steel Heat Exchanger & Condenser Tubing	A B C	CD: 1.250 TO 6.000 HF: 1.900 TO 5.000	CD: 31.75 TO 152.40 HF: 48.26 TO 127.00	CD: .105 TO 1.000 MW HF: .180 TO .570 MW	CD: 3.78 TO 25.40 MW HF: 4.57 TO 14.48 MW	75 65	26 20
-192	Seamless Carbon Steel Tubing for High Pressure Service		CD: 1.250 TO 6.000 HF: 1.900 TO 5.000	CD: 31.75 TO 152.40 HF: 48.26 TO 127.00	CD: .105 TO 1.000 MW HF: .180 TO .570 MW	CD: 3.78 TO 25.40 MW HF: 4.57 TO 14.48 MW	75 65	26 20
-209 -210 -213	Seamless Alloy Steel Boiler & Superheater Tubing	T-1, T-1B, T-1A, A-1 C, T-2, T-12, T-5 T-22, T-11	CD: 1.250 TO 6.000 HF: 1.900 TO 5.000	CD: 31.75 TO 152.40 HF: 48.26 TO 127.00	CD: .105 TO 1.000 MW HF: .180 TO .570 MW	CD: 3.78 TO 25.40 MW HF: 4.57 TO 14.48 MW	75 65	26 20
MECHANICAL TUBING (Special Shape OD/ID Combinations Available in Cold Drawn Seamless)								
-513	Electric Resistance Welded Carbon Steel Tubing (DOM Type 5 & 6) Other grades available upon request.	CARBON: 1010 TO 1020	.250 TO 1.750	6.35 TO 44.45	.020 TO .120 AW	.710 TO 3.05 AW	26	8
-519	Seamless Carbon & Alloy Steel Tubing Other grades available upon request.	CARBON: 1008 TO 1045 ALLOY: 1518, 4130, 4140	CD: .125 TO 6.000 HF: 1.875 TO 5.000	CD: 3.75 TO 152.40 HF: 47.63 TO 27.00	CD: .028 TO 1.000 AW HF: .200 TO 1.009 AW	CD: .711 TO 25.40 AW HF: 5.08 TO 24.13 AW	75 65	26 20
MIL/AMS-T-6736B								
	Seamless Aircraft Quality 4130 Tubing 6736B (Condition A or N) & AMS 6360, 6371, 6381	4130	CD: 1.750 TO 6.000	CD: 44.45 TO 152.40	CD: .095 TO 1.000 AW	CD: 2.413 TO 25.40 AW	75	26
	ProMoly® Seamless Tubing Made to AMS -T-6736B, MIL-T-6736B and AMS 6360	4130	CD: .125 TO 2.000	CD: 3.175 TO 50.80	CD: .028 TO .188	CD: .711 TO 4.77	50	15
HYDRAULIC FLUID LINE TUBING								
SAE-J525	Electric Resistance Welded Low Carbon Hydraulic Tubing HYDRABRITE® Bright annealed suitable for bending, flaring and other special applications.	1010	CD: .250 TO 1.750	CD: 6.35 TO 44.45	CD: .020 TO .120 AW	CD: .071 TO 3.05 AW	26	6
SAE-J2467	Electric Resistance Welded Low Carbon Hydraulic Tubing Bright annealed suitable for high pressure applications. Available upon request pending raw material availability.	1021	CD: .250 TO 1.750	CD: 6.35 TO 44.45	CD: .020 TO .120 AW	CD: .071 TO 3.05 AW	26	8
SAE-J2614	HS-50 High Pressure Hydraulic™ Tubing Electric Resistance Welded, HSLA, Sub-Critical Annealed for Bending and Flaring		.375 TO 1.250	9.53 TO 31.75	.035 TO .120	.89 TO 3.05	26	8
SAE-J2833	HS-90 High Pressure Hydraulic™ Tubing Electric Resistance Welded, HSLA, Stress Relieve Annealed for Bending and Flaring		.375 TO 1.250	9.53 TO 31.75	.035 TO .120	.89 TO 3.05	26	8
SPECIAL SHAPE TUBING								
	Shapes include: rounds, squares, rectangles, triangles, hexagons, teardrops, streamline, symmetrical, non-symmetrical, and custom OD/ID shape combinations. Inquire about exceptions.	UP TO 40% CARBON STEEL, CHROME-MOLY & HEAT TREATABLE ALLOYS	.250 TO 6.000	6.35 TO 152.40	.035 TO 1.000	.088 TO 25.40	75	22

CD: Cold Drawn HF: Hot Finished

Value added capabilities: cutting and end finishing available upon request.



Austenitic, Ferritic & Duplex Stainless Steel Tubing

ASTM A/B and ASME SA/SB Specifications	Grades	OD Range		Wall Range AW=Average Wall / MW=Minimum Wall		Max Length	
		inches	mm	inches	mm	ft	m
PRESSURE TUBING							
-213 Seamless Austenitic Alloy Steel Boiler, Superheater and Heat Exchanger Tubing <i>U-Bending Available</i>	304/L, 316/L, 317/L 321, 347, others	.375 to 1.500	9.5 to 38.10	.028 AW to .134 AW	.71 AW to 3.40 AW	130	39
-249 Welded Austenitic Steel Boiler Superheater and Heat Exchanger Tubing <i>U-Bending Available</i>	304/L, 316/L, 317/L 321, 347, others Also available in H and N grades.	.375 to 4.000	9.53 to 101.60	.028 AW to .218 AW	.71 AW to 5.54 AW	130	39
-268 Seamless and Welded Ferritic and Martensitic Stainless Steel Tubing for General Service <i>U-Bending Available</i>	S44660, 430Ti, 439 S44735, S44627, SEA-CURE® AL29-4C®, E-BRITE®	.5000 to 2.000	12.70 to 50.80	.020 AW to .083 AW	.51 AW to 2.1 AW	130	39
-269 Seamless and Welded Austenitic Stainless Steel General Service Tubing <i>U-Bending Available</i>	304/L/N, 316/L, 317/L 321, 347	S: .125 to 1.500 W: .188 to 4.000	S: 3.18 to 38.10 W: 4.78 to 101.60	S: .016 AW to .120 AW W: .020 AW to .218 AW	S: .41 AW to 3.05 AW W: .51 AW to 5.54 AW	130	39
-270 Seamless and Welded Austenitic Stainless Steel Tubing	304/L, 316/L, AL6XN®	S: .125 to 1.250 W: .500 to 4.000	S: 3.18 to 31.75 W: 12.70 to 101.6	S: .016 AW to .120 AW W: .065 AW to .131 AW	S: .41 AW to 3.05 AW W: 1.66 AW to 3.33 AW	130	39
-632 Seamless Austenitic Stainless Steel Tubing for General Service (Small Diameter)	304/L/N, 316/L/N 321, 347	.125 to 0.500	3.18 to 12.70	.015 AW to .065 AW	.38 AW to 1.65 AW	130	39
-789 Seamless and Welded Ferritic/Austenitic Stainless Steel Tubing for General Service	2003, 2205, 2507	S: .375 to 1.500 W: .375 to 2.000	S: 9.53 to 38.10 W: 9.53 to 101.6	S: .028 AW to .134 AW W: .028 AW to .134 AW	S: .71 AW to 3.40 AW W: .71 AW to 3.40 AW	130	39
various Seamless Nickel and Alloy Condenser and Heat Exchanger Tubing	400, 600, 625 800, 825, C276	.375 to 1.500	9.50 to 38.10	.016 AW to .120 AW	.41 AW to 3.05 AW	130	39
-676 UNS N08367 Welded Tubing	AL6XN	.250 to 4.000	6.35 to 101.6	.020 AW to .120 AW	.51 AW to 3.05 AW	130	39
FEEDWATER HEATER TUBING							
-688 XtraLowStress® Welded Stainless Steel Feedwater Heater Tubing <i>U-Bending Available</i>	304/L/N, 316/L/N 800, AL6XN®	.625 to 1.000	15.88 to 25.40	.026 AW to .134 AW	.66 AW to 3.40 AW	130	39
-803 Welded Ferritic Stainless Steel Feedwater Heater Tubing <i>U-Bending Available</i>	439, SEA-CURE®, S44660	.625 to 1.000	15.88 to 25.40	.028 AW to .134 AW	.71 AW to 3.40 AW	130	39
COMMERCIAL INSTRUMENTATION TUBING							
-213 Seamless Austenitic Alloy Steel Boiler, Superheater and Heat Exchanger Tubing	304/L, 316/L	.125 to 1.500	3.18 to 38.10	.016 AW to .120 AW	.41 AW to 3.05 AW	140	42
-269 Seamless Austenitic Stainless Steel General Service Tubing	304/L, 316/L	.125 to 1.000	3.18 to 25.40	.016 AW to .109 AW	.41 AW to 2.77 AW	140	42
NUCLEAR INSTRUMENTATION TUBING							
-213 ASME section III - Class 1, 2 & 3 See ASTM SB 163 and 167 for alloy 600	304/L, 316/L	.125 to 1.500	3.18 to 38.10	.016 AW to .120 AW	.41 AW to 3.05 AW	140	42
MECHANICAL TUBING							
-511 Seamless Stainless Steel	304/L, 316/L	.125 to 1.500	3.18 to 38.10	.016 AW to .120 AW	.41 AW to 3.05 AW	130	39
-554 Welded Stainless Steel Mechanical Tubing	304/L, 316L	.500 to 4.000	12.70 to 101.6	.020 AW to .218 AW	.51 AW to 5.54 AW	130	39

S: Seamless W: Welded

AL29-4C®, AL6XN®, E-BRITE® and SEA-CURE® are alloys produced by ATI Tech.

Other sizes, grades and specifications available upon request. OD/Wall combinations and max length may vary based on producing mill.



Aerospace Stainless Steel & Nickel Alloy Tubing

Grades	OD Range		Wall Range AW=Average Wall / MW=Minimum Wall		Max Length	
	inches	mm	inches	mm	ft	m

AIRCRAFT SPECIFICATIONS

SEAMLESS Stainless Steel Aerospace Tubing

AMS 5564, AMS 5565, AMS 5567, AMS 5569, AMS 5695 (Canceled & non-current specs include AMS-T-6845, Mil-T-6845, AMS-T-8504, Mil-T-8504, AMS-T-8506, Mil-T-8506)	304/L	.125 TO 1.00	.40 TO 3.04	.016 TO .120	.40 TO 3.04	40	12
AMS 5557, AMS 5570, AMS 5896, AMS 5897 (Canceled & non-current specs include MIL-T-8606, MIL-T-8808, MIL-T-8973)	321	.125 TO 1.00	.40 TO 3.04	.016 TO .120	.40 TO 3.04	40	12
AMS 5557, AMS 5897 (Canceled & non-current specs include MIL-T-8808, MIL-T-8973)	347	.125 TO 1.00	.40 TO 3.04	.016 TO .120	.40 TO 3.04	40	12
AMS 5581	625	.125 TO 1.00	.40 TO 3.04	.016 TO .120	.40 TO 3.04	40	12

WELDED & DRAWN Stainless Steel Aerospace Tubing

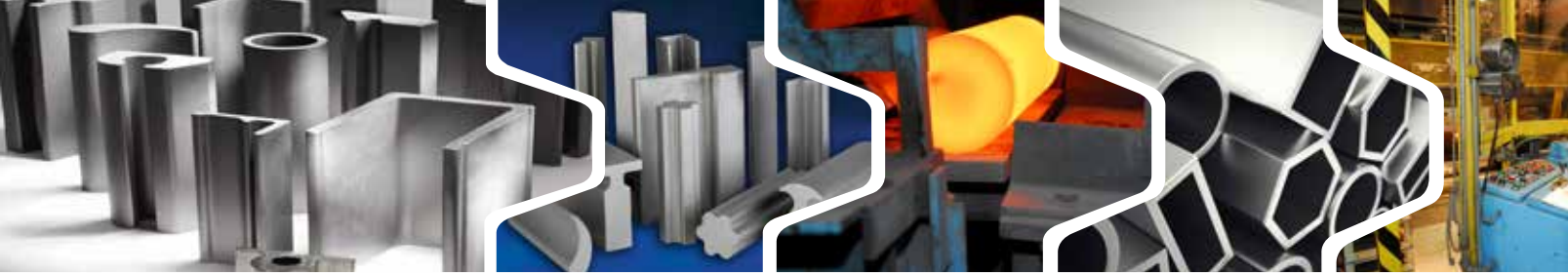
AMS 5564, AMS 5565, AMS 5566, AMS 5567, AMS 5569 (Canceled & non-current specs include AMS-T-6845, Mil-T-6845, AMS-T-8504, Mil-T-8504, AMS-T-8506, Mil-T-8506)	304/L	.188 TO 3.80	4.78 TO 96.52	.016 TO .218	.40 TO 5.53	36	10
AMS 5557, AMS 5576 (Canceled & non-current specs include AMS-T-8606, MIL-T-6737, MIL-T-8606, MIL-T-8808)	321	.188 TO 3.80	4.78 TO 96.52	.016 TO .218	.40 TO 5.53	36	10
AMS 5556, AMS 5575 (Canceled & non-current specs include MIL-T-6737, MIL-T-8606, MIL-T-8808)	347	.188 TO 3.80	4.78 TO 96.52	.016 TO .218	.40 TO 5.53	36	10
AMS 5581	625	.188 TO 3.50	4.78 TO 96.52	.016 TO .141	.40 TO 3.58	36	10
PWA 1065	718	.188 TO 2.75	4.78 TO 69.85	.016 TO .136	.40 TO 3.45	36	10
TP-718	718	.188 TO 2.75	4.78 TO 69.85	.016 TO .136	.40 TO 3.45	36	10
AMS 5561, BMS 7-185	21-6-9	.188 TO 3.00	4.78 TO 76.20	.016 TO .110	.40 TO 2.79	36	10
AMS 5568	17-7PH [®]	.188 TO 3.75	4.78 TO 95.25	.016 TO .136	.40 TO 3.45	36	10
AMS 5578	Custom 455 [®]	.188 TO 2.375	4.78 TO 60.33	.016 TO .110	.40 TO 2.76	36	10

17-7 PH[®] is an alloy produced by AK Steel. Custom 455[®] is an alloy produced by Carpenter Specialty Alloys.

Stainless Steel Coil Slitting & Edging

EDGING			
Capabilities	.313 - 3.00" WIDTH	.024 - .187" GAUGE	
Oscillate Wind	6.5 - 9.0" FACE	1400 LB. MAX COIL	
Pancake Wind	60" MAX OD		
#1 Round, Square	.024 - .187" THICKNESS	.313 - 3.00" WIDTH	
#4, #5 DeBurr	.024 - .187" THICKNESS	.313 - 10.00" WIDTH	
Custom Shapes	PER CUSTOMER SPECIFICATIONS		
Grades	304, 316, 347 301 ANNEALED 301 TEMPERED	410 420 430	2205 725CDA A600

SLITTING			
Capabilities	.187 - 48.00"	.024 - .135" GAUGE	
ID	16 -20"		
Max Coil Weight	22500 LBS		
PIW Max	1000		
Oscillate Wind	6.5 - 9.0" FACE	1400 LB. MAX COIL	
Pancake Wind	60" MAX OD		
Grades	201 310, 304, 316 410, 420, 430, 439	446, 458 AL6XN 600, 800	625 2205 725CDA



Extruded Engineered Shapes

CARBON & ALLOY STEEL GRADES					Specifications Where Applicable				Outside Dimensions
1018	1045	12L14	6150	A36	AMS S6758 AMS 6415 AMS S5000	ASTM A 36 ASTM A 105 ASTM A 322	ASTM A 576 ASTM A 588 ASTM A 690	AMS-S-6758A AMS 6382	Shape cross-section must fit within 6-inch (152.4 mm) diameter.
1029	1050	4130	8620	A588					
1030	1060	4140	8630	A690					
1035	10L18	4150	8640	GRADE 50					
1040	1215	4340	9310						
STAINLESS STEEL GRADES					Specifications Where Applicable				Outside Dimensions
303	400 SERIES	13-8 MO			AMS 5610 AMS 5613 AMS 5616 AMS 5621 AMS 5627	AMS 5629 AMS 5639 AMS 5640 AMS 5643 AMS 5645	AMS 5646 AMS 5648 AMS 5651 AMS 5659 AMS QQS 763	ASTM A276 ASTM A511	Shape cross-section must fit within 5.5-inch (139.7 mm) diameter.
304 SERIES	418	15-5 PH							
310	422	17-4 PH							
316 SERIES									
NICKEL ALLOY GRADES					Specifications Where Applicable				Outside Dimensions
ALLOY 400	Bi-Metals				AMS 5665 AMS 5732	ASTM A 164 ASTM B766	ASTM B456 QQ-N-281		Shape cross-section must fit within 5.5-inch (139.7 mm) diameter.
ALLOY 600									
A-286									
TITANIUM GRADES*					Specifications Where Applicable				Outside Dimensions
6AL-4V					AMS 4935 AMS 4975	DMS 1650 AMS-T-81556A	AMS 4921 MMS 1202	AIMS 03-18-011	Shape cross-section must fit within 7.75-inch (196.8 mm) diameter. *Shape cross-section must fit within 6-inch (152.4 mm) diameter.
6AL-6V-2SN									
6AL-2SN-4ZR-2MO*									

Cold Drawn Shapes

Carbon and Alloys	US Grades in Series 1000, 4000, 6000, 8000, 9000
Stainless Steels in Complex Geometries	Series 300 & 400 Stainless Steel
PH grades in Rounds, Hexes or Octagons	17-4, 17-7, 15-5, 13-8
Exotic Alloys	Monel 400, Inconel, Hastelloy, etc.
Solid, Round	0.25" - 3.75" OD
Hexagons and Octagons, Across Flats	0.3125" - 3.625"
Rectangles and Squares	0.625" per side min, 5.000" max
Unique Shapes	Greater than 0.625"
	Profile must fit within 6.500" Diameter Circle
Dimensional Tolerance, Standard*	+/- 0.005"
Fillet and Radii Tolerance, Standard*	0.015" in Carbon, 0.030" in Stainless
Ratio of Height vs. Width	1 : 1.16 (Max)
Cross Sectional Area	0.125 SQ. IN. (Min)

* Tighter Tolerances may be available depending on geometry, size, and material.

Extruded Engineered Shapes - A process where a round billet is pre-heated and, after leaving the furnace, is pushed through a forming die into a profile. Extrusions can even be used to make complex profile shapes from metals which are difficult to form.

Cold Drawn Shapes - A process by which a bar or tube is reduced in size or changed in shape by pulling it through a series of dies or mandrels.

NOTE: Grades listed are current working grades. Other grades are subject to review. Grades, specifications, quantities, capabilities and tolerances can be discussed at time of inquiry. All specifications are to the latest revision.





Need Custom Solutions?

Contact Us, We're your Total Solution Provider.

In 1924, Plymouth Tube began to produce cold drawn tubing at a small, single location in Michigan. Today we provide a wide range of specialty tubing and extruded shapes to global customers from a large network of metal-working facilities with over 1.6 million square feet of manufacturing and office space.

We believe our company is much more than just facilities - it is the sum of the efforts of many people, their abilities, expectations and how they interact with customers, suppliers and each other. We are organized for agility - decentralized enough to be easy to do business with, yet big enough to be a single source supplier. Our well-trained people are working to provide innovative, cost effective and timely manufacturing solutions to help our customers improve their competitiveness.

Our mission is to meet or exceed our customer's expectations. We encourage you to accept our invitation to personally visit our Mills and sales offices, meet the people and observe firsthand the high quality that goes into every product we manufacture for you. Come see us in action!

The PLYMOUTH ADVANTAGE®

Delivery Promise of the Day of Your Choice

At Plymouth, On-Time Delivery Performance is not only judged by how closely we achieve a promised date, but also by how convenient that date is for you. Our flexible production schedules will allow us to ship any day of the week, helping you to optimize your material flow.

We Make It Right

We will ensure that the product you receive from Plymouth is absolutely correct in every way. In the unlikely event you are not satisfied with Plymouth products or services, a Plymouth Mill Representative will be at your facility within 72 hours, or at your earliest convenience, to resolve the satisfaction issues while minimizing any impact on your organization.

Extraordinary Service Value

To meet special customer service needs, we offer value-added services such as Set-Aside Programs, Blocked Footage, Joint Sales Calls, Product Training and Mill Visits. This provides you with a depth of technical service and support that is unmatched in the industry, ultimately leading to the quickest turn-around possible and overall customer satisfaction. Plymouth gains more product and market intelligence in the process, allowing us to offer our customers more value-added benefits.



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