

WELDED AND DRAWN STAINLESS STEEL AEROSPACE TUBING



Welded and Drawn Stainless Steel Aerospace Tubing is produced by Plymouth Tube's **Trent Mill**.

SIZE RANGE:

OD: .188" - 4.00" (4.78mm - 101.6mm)
 Wall: .016" - .218" (.406mm - 5.53mm)

304/L

Specifications	AMS 5565 (AMS-T-8506 canceled, supersedes MIL-T-8506) AMS 5567 (supersedes MIL-T-8504)
Material Type & UNS#	304, 304L / S30400, S30403
Modulus of Elasticity 10 ⁶ psi (GPa)	29 (200)
Tensile Strength 1000 psi (MPa)	100 (689) max
Yield Strength 0.2% offset 1000 psi (MPa)	30 (207) min
Elongation %	35% min
Hardness Rockwell B	90 max
Condition	Annealed

304/L

Specifications	AMS 5564, AMS 5566, AMS 5569 (AMS-T-6845 noncurrent, MIL-T-6845D canceled)
Material Type & UNS#	304, 304L / S30400, S30403
Modulus of Elasticity 10 ⁶ psi (GPa)	29 (200)
Tensile Strength 1000 psi (MPa)	105 -140 (724 - 965)
Yield Strength 0.2% offset 1000 psi (MPa)	75 - 110 (517 - 758) (207)
Elongation %	20% min
Condition	As Cold Drawn (typically referred to as 1/8 th hard)

321

Specifications	AMS 5567 (supersedes MIL-T-8508, MIL-T-8606 & AMS-T-8606 inactive) AMS 5576 (MIL-T-6737 canceled)
Material Type & UNS#	321, S32100
Modulus of Elasticity 10 ⁶ psi (GPa)	29 (200)
Tensile Strength 1000 psi (MPa)	75 -105 (517 - 724)
Yield Strength 0.2% offset 1000 psi (MPa)	30 (207) min
Elongation %	35% min
Hardness Rockwell B	90 max
Condition	Annealed

347

Specifications	AMS 5556 (supersedes MIL-T-8808, MIL-T-8606 inactive) AMS 5575 (MIL-T-6737 canceled)
Material Type & UNS#	347 / S34700
Modulus of Elasticity 10 ⁶ psi (GPa)	29 (200)
Tensile Strength 1000 psi (MPa)	85 (585)
Yield Strength 0.2% offset 1000 psi (MPa)	35 (240)
Elongation %	40%
Hardness Rockwell B	90 max
Condition	Annealed

AEROSPACE TUBING

625

Specifications	AMS 5581
Material Type & UNS#	625 / N06625
Modulus of Elasticity 10 ⁶ psi (GPa)	30 (205)
Tensile Strength 1000psi (MPa)	125 (860)
Yield Strength 0.2% offset 1000psi (MPa)	65 (450)
Elongation %	45%
Condition	Annealed

718

Specifications	PWA 1065, TP-718	
Material Type & UNS#	718 / N07718	
Modulus of Elasticity 10 ⁶ psi (GPa)	29 (200)	
Tensile Strength 1000psi (MPa)	128 (880)	180 min
Yield Strength 0.2% offset 1000psi (MPa)	72 (495)	150 min
Elongation %	45%	12 min
Hardness Rockwell B		HRC 36 min
Condition	Annealed	Precipitation HT

21-6-9

Specifications	AMS 5561, BMS 7-185	
Material Type & UNS#	21-6-9 / S21904	
Modulus of Elasticity 10 ⁶ psi (GPa)	28.5 (195)	
Tensile Strength 1000psi (MPa)	142 -162 (980 - 1115)	
Yield Strength 0.2% offset 1000psi (MPa)	120 (825) min	
Elongation %	20% min	
Condition	As Cold Drawn	

17-7PH is a stainless steel produced by AK Steel.

17-7PH

Specifications	AMS 5568	
Material Type & UNS#	S17700	
Modulus of Elasticity 10 ⁶ psi (GPa)	29 (200)	
Tensile Strength 1000psi (MPa)	130 (895)	195 (1345)
Yield Strength 0.2% offset 1000psi (MPa)	50 (345)	175 (1205)
Elongation %	30	8
Hardness Rockwell B	80	HRC 42
Condition	Annealed	Aged (HT1050)

Canceled or inactive MIL-T and AMS-T specifications are referenced for replacement purposes and should not be specified for new designs. Properties are a function of tubing diameter and wall thickness, refer to specification details.



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