

SEAMLESS STAINLESS STEEL & NICKEL ALLOY AEROSPACE TUBING



SIZE RANGE:

OD: 0.125 - 3.000" (3.175mm - 76.2mm)

Wall: 0.016" - 0.218" (0.406mm - 5.537mm)

AMS 5564 (AMS-T-6845 noncurrent);
AMS 5565 (AMS-T-8506 canceled, supersedes MIL-T-8506);
AMS 5567 (supersedes MIL-T-8504); **MIL-T-5695** (AMS 5695 canceled)

304/L

Material Type & UNS#	304, 304L / S30400, S30403
Modulus of Elasticity 1,000,000 psi (MPa)	29 (200)
Tensile Strength 1,000 psi (MPa)	100 (689) max
Yield Strength 0.2% offset 1,000 psi (MPa)	30 (207) min
Elongation %	35% min
Hardness Rockwell B	90 max
Condition	Annealed

AMS 5573;
AMS 5584 (1/8 hard)

316/L

Material Type & UNS#	316, 316L / S31600
Modulus of Elasticity 1,000,000 psi (MPa)	29 (200)
Tensile Strength 1,000 psi (MPa)	140 (965) max
Yield Strength 0.2% offset 1,000 psi (MPa)	25 (172) min
Elongation %	40% min
Hardness Rockwell B	95 max
Condition	AMS 5573 annealed; AMS 5584 (1/8 hard) as-drawn

AMS 5557 (supersedes MIL-T-8808, MIL-T-8606 inactive);
AMS 5570; AMS 5896

321

Material Type & UNS#	321 / S32100
Modulus of Elasticity 1,000,000 psi (MPa)	29 (200)
Tensile Strength 1,000 psi (MPa)	75-105 (517-724)
Yield Strength 0.2% offset 1,000 psi (MPa)	30 (207) min
Elongation %	35% min
Hardness Rockwell B	90 max
Condition	Annealed

AMS 5557
 (supersedes MIL-T-8808, MIL-T-8606 inactive)

347

Material Type & UNS#	625 / N06625
Modulus of Elasticity 1,000,000 psi (MPa)	30 (205)
Tensile Strength 1,000 psi (MPa)	125 (860)
Yield Strength 0.2% offset 1,000 psi (MPa)	65 (450) min
Elongation %	45% min
Hardness Rockwell B	
Condition	Annealed



AMS 5581

625

Material Type & UNS#	625 / N06625
Modulus of Elasticity 1,000,000 psi (MPa)	30 (205)
Tensile Strength 1,000 psi (MPa)	125 (860)
Yield Strength 0.2% offset 1,000 psi (MPa)	65 (450) min
Elongation %	45% min
Hardness Rockwell B	
Condition	Annealed

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AEROSPACE TUBING

WELDED & DRAWN STAINLESS STEEL & NICKEL ALLOY AEROSPACE TUBING

SIZE RANGE: OD: 0.188 - 4.000" (4.775mm - 101.6mm); Wall: 0.016" - 0.218" (0.406mm - 5.537mm)

304/L

AMS 5565 (AMS-T-8506 canceled, supersedes MIL-T-8506);
AMS 5567 (supersedes MIL-T-8504)

AMS 5564, AMS 5566, AMS 5569
(AMS-T-6845 noncurrent, MIL-T-6845D canceled)

Material Type & UNS#	304, 304L / S30400, S30403	304, 304L / S30400, S30403
Modulus of Elasticity 1,000,000 psi (MPa)	29 (200)	29 (200)
Tensile Strength 1,000 psi (MPa)	100 (689) max	105 -140 (724 - 965)
Yield Strength 0.2% offset 1,000 psi (MPa)	30 (207) min	75 - 110 (517 - 758) (207)
Elongation %	35% min	20% min
Hardness Rockwell B	90 max	
Condition	Annealed	As Cold Drawn; 1/8" hard)

321

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 1,000,000 psi (MPa)	29 (200)
Tensile Strength 1,000 psi (MPa)	75 -105 (517 - 724)
Yield Strength 0.2% offset 1,000 psi (MPa)	30 (207) min
Elongation %	35% min
Hardness Rockwell B	90 max
Condition	Annealed

347

AMS 5556 (supersedes MIL-T-8808, MIL-T-8606 inactive);
AMS 5575 (MIL-T-6737 canceled)

Material Type & UNS#	347 / S34700
Modulus of Elasticity 1,000,000 psi (MPa)	29 (200)
Tensile Strength 1,000 psi (MPa)	85 (585)
Yield Strength 0.2% offset 1,000 psi (MPa)	35 (240)
Elongation %	40%
Hardness Rockwell B	90 max
Condition	Annealed

625

AMS 5581

Material Type & UNS#	625 / N06625
Modulus of Elasticity 1,000,000 psi (MPa)	30 (205)
Tensile Strength 1,000 psi (MPa)	125 (860)
Yield Strength 0.2% offset 1,000 psi (MPa)	65 (450)
Elongation %	45%
Condition	Annealed

718

PWA 1065, TP-718

Material Type & UNS#	718 / N07718
Modulus of Elasticity 1,000,000 psi (MPa)	29 (200)
Tensile Strength 1,000 psi (MPa)	128 (880) 180 min
Yield Strength 0.2% offset 1,000 psi (MPa)	72 (495) 150 min
Elongation %	45% 12 min
Hardness Rockwell C	36 min
Condition	Annealed Precip HT

21-6-9

AMS 5561, BMS 7-185, BMS 7-378

Material Type & UNS#	21-6-9 / S21904
Modulus of Elasticity 1,000,000 psi (MPa)	28.5 (195)
Tensile Strength 1,000 psi (MPa)	142 -162 (980 - 1115)
Yield Strength 0.2% offset 1,000 psi (MPa)	120 (825) min
Elongation %	20% min
Condition	As Cold Drawn

17-7PH

AMS 5568

Material Type & UNS#	S17700
Modulus of Elasticity 1,000,000 psi (MPa)	29 (200)
Tensile Strength 1,000 psi (MPa)	130 195 (895) (1345)
Yield Strength 0.2% offset 1,000 psi (MPa)	50 (345) 175 (1205)
Elongation %	30 8
Hardness Rockwell B	80 HRC 42
Condition	Annealed Aged HT 1050



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Canceled and inactive MIL-T and AMS 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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