

Aluminum Forging Alloys

Commercial Designation	Nominal Composition %	Mechanical Properties*				Physical Properties					Specifications	
		Tensile Strength psi	Yield Strength psi (2% offset)	Elongation in 2" (%)	Hardness Brinell 500Kg 10mm ball	Density lb./cu. In. at 68°F	Melting Point (Solidus) °F	Coeff. Thermal Exp. Per °F x 10 ⁻⁷	Thermal Cond. BTU / Ft.Hr. °F	Elec. Cond. (Vol)	Federal	ASTM
2014-T6	Cu 3.90-5.00 Mn 0.40-1.20 Si 0.50-1.20 Mg 0.20-0.80 Al Bal.	65,000 Up to 2" thick	56,000	6	125	0.101	945	128	89	40	QQ-A-367h	B-247
2024-T6	Cu 3.80-4.90 Mn 0.30-0.90 Mg 1.20-1.80 Al Bal.	69,000	57,000	10	125	0.1	935	127	88	38	N/A	N/A
6061-T6	Cu 0.15-0.40 Cr 0.04-0.35 Si 0.40-0.80 Mg 0.20-0.80 Al Bal.	38,000	35,000	7	80	0.098	1080	131	96.5	40	QQ-A-367h	B-247
6151-T6	Cu 0.60-1.20 Si 0.30-0.90 Mg 1.20-1.80 Al Bal.	44,000	37,000	10	90	0.098	1090	131	89	40	QQ-A-367h	B-247
7075-T6	Cu 1.20-2.00 Mg 2.10-2.90 Cr 0.18-0.28 Zn 5.10-6.10 Al Bal.	75000 Up to 1"thick	64,000	7	135	0.101	990	130	75	33	QQ-A-367h	B-247

Notes:

T6 - Solution heat treated and aged. Other heat treat options are available.

Information on other alloys is available through Sales.

* Mechanical properties of any forging are influenced by shape and size. Unless otherwise specified, in the purchase order or on the Cerro Fabricated Products drawing sent to you for approval, acceptance of forgings will not be determined by tensile or hardness testing. The data in this table does not imply any warranty and are given for information only.