

3003 Aluminum Material Grade

Principal Design Features: AL 3003 is an alloy with very good corrosion resistance and moderate strength. It is not heat treatable and develops strengthening from cold working only.

Partial List of Applications: Commonly used in chemical equipment, ductwork, and in general sheet metal work. 3003 is also used in the manufacture of cooking utensils, pressure vessels, builder's hardware, eyelet stock, ice cube trays, garage doors, awning slats, refrigerator panels, gas lines, gasoline tanks, heat exchangers, drawn and spun parts, and storage tanks.

Machinability: The AL 3003 alloy is readily machined and is considered as having good machinability for the aluminum alloys..

Forming: This alloy is readily formed by either conventional cold working or hot working.

Welding: Welding is readily accomplished by means of conventional welding methods. Filler rod is generally AL 1100 alloy. When welding AL 3003 to other aluminum alloys, such as 5052, 6061 or 6062 the filler rod should be AL 4043.

Aluminum 3003 Chemistry Data

Auminum	Balance
Copper	0.05 – 0.2
Iron	0.7 max
Manganese	1 – 1.5
Remainder Each	0.05 max
Remainder Total	0.15 max
Silicon	0.6 max
Zinc	0.1 max

Aluminum 3003 Physical Data

Density (lb / cu. in.)	0.099
Specific Gravity	2.73
Melting Point (Deg F)	1190
Modulus of Elasticity Tension	11.4
Modulus of Elasticity Torsion	3

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