Standard Product Data Sheet (3003 & 3105)

3003-3105 Aluminum is alloyed with 1.20% manganese, which increases the strength of 3003-3105 over commercially pure aluminum (1100 series). 3003-3105 has excellent workability, weldability, and good corrosion resistance. It is used for drawing, forming, spinning, fuel tanks, sheet metal works and other applications that require moderate strength for an aluminum with good weldability. H14 designates the temper, and means that 3003-3015 has been strain hardened and partially annealed. In this condition, 3003-3105 can be easily formed. Embossing 3003-3105 in this temper should not strain or crack the aluminum.

ANALYSIS

Manganese (Mn)	***Silicon (Si)*** *Max*	***Copper (Cu)*** *Max*	***Iron (Fe)***	***Zinc (Zn)***	***Aluminum (Al)***
1-1.5	0.6	0.2	0.7	0.15-0.35	Remainder

Conforms to ASTM BB209, QQ-A-250/2, AMS 4006, AMS 4008

MECHANICAL PROPERTIES

Tensile Strength (PSI)	***Yield Strength (PSI)***	***Elongation in 2"***
22,000	21,000	10

Min 90 degree cold bend radius (for .064" thick): 0 The above values are average and may be considered as representative

APPLICATIONS

3003-3105 is widely used for stampings, spun and drawn parts and products, cooking utensils, chemical equipment, builders hardware, storage tanks, truck and trailer components, mail boxes, cabinets, fan blades, awnings, siding, kitchen equipment, decorative trim, architectural uses, signage applications, etc. Where greater strength is required, consider 5052-H32.

HEAT TREATING

3003-3105 is not heat treatable.