

ALUMINIUM

1050S - H14/H24



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Aluminium 1050 is a commercially pure wrought aluminium alloy. It is often chosen for its combination of good electrical conductivity, workability, and corrosion resistance. It's a versatile material used across various industries, especially where moderate strength and high formability are desired. The terms H14 and H24 refer to the temper or hardness of the aluminium alloy.

KEY FEATURES

- Excellent formability
- Good machinability
- Excellent corrosion resistance
- Good weldability using various methods
- High thermal conductivity

CHEMICAL PROPERTIES

Aluminium (Al)	Iron (Fe)	Zinc (Zn)	Silicone (Si)	Magnesium (Mg)	Manganese (Mn)	Titanium (Ti)	Copper (Cu)
99.5%	0.4%	0.3%	0.25%	0.05%	0.05%	0.05%	0.05%

MECHANICAL PROPERTIES

Tensile strength (N/mm ²)	60-95
Yield strength (N/mm ²)	20-45
Elongation (% at break)	25-35
Shear strength (N/mm ²)	70
Hardness - Brinell (HB) max	22-32

PHYSICAL PROPERTIES

Density (kg/m ³)	271	
Modulus of elasticity (Gpa)	69	
Mean coefficient of thermal expansion	0-100°C (µm/m/°C)	23.5
	0-350°C (µm/m/°C)	24.7
	0-538°C (µm/m/°C)	25.9
Thermal conductivity	at 100°C (W/m.K)	229
	at 500°C (W/m.K)	235
Specific Heat 0-100°C (J/kg.K)	90	
Electrical conductivity (IACS %)	59	
Melting point (°C)	650	

MARKET SECTORS



Food & Beverage Industry

Packaging, foil, containers



Electrical Industry

Busbars, wiring, electrical components, capacitors



Parts & Components

Machine parts, fasteners, fixings



Automotive Industry

Radiator cores, engine components, trim parts



Construction & Architecture

Roofing sheets, building facades



Kitchen Equipment

Kitchen utensils, cookware, appliances