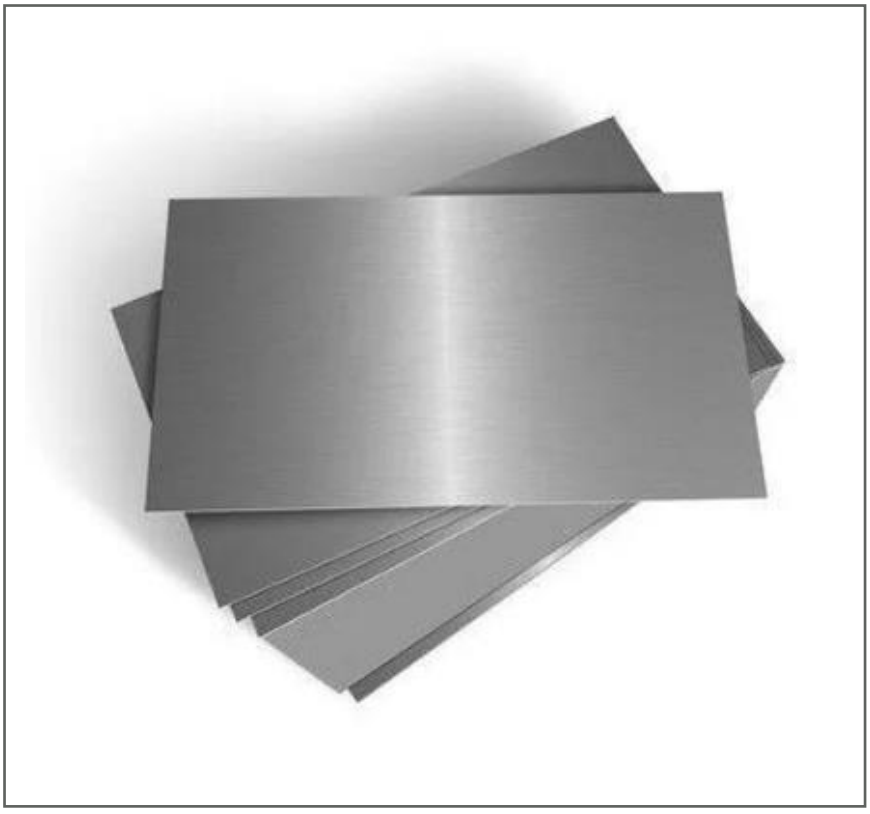
Metal Sheets

Features

- Aluminium 2014 is one of the strongest commercially available, with high ultimate tensile strength and proof stress, making it ideal for robust components.
- Excellent Machinability: In its heat-treated condition, it machines very well, producing good chip formation and allowing for tight tolerances in manufacturing complex parts.
- High Strength-to-Weight Ratio: The alloy's density is approximately 2.82 g/cm³, providing significant structural performance while remaining relatively lightweight.
- A key limitation is its low resistance to atmospheric and marine corrosion. The material must be protected with anodising, painting, or cladding if used in exposed environments.

RS PRO 2014 Aluminium Sheet, L:500MM X W:300MM X T:76.2MM

RS Stock No: 0783235



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

Metal Sheets

Product Description

RS PRO 2014 Aluminium Sheet

The RS PRO 2014 Aluminium Sheet is a very high strength, copper-based alloy typically used for demanding structural and aerospace applications.

Key Features:

- *Limited Weldability: Fusion welding is generally not recommended as the material is prone to cracking. However, resistance welding methods like spot and beam welding are considered excellent.*
- *Hard Anodising: While its natural corrosion resistance is poor, it has a good capability for hard anodising. This creates a thick, wear-resistant surface layer, making it suitable for high-friction parts like hydraulic components or aerospace fittings.*
- *Surface Plating: It is easily plated (e.g., with chrome or nickel), allowing engineers to enhance its surface properties for specific decorative or functional needs.*
- *Brazing & Soldering: These joining methods are not recommended for 2014 aluminium due to its sensitivity to heat, which can compromise its tempered strength.*

Applications:

- *Aerospace Industry: Widely used for aircraft structures, fittings, and wheels.*
- *Military and Defence: Components for military vehicles and weapons manufacture.*
- *Heavy Industry: Used in bridges, truck frames, and hydraulic machinery components.*

General Specifications

Material	Aluminium 2014
Form	Sheet
Length	500MM
Width	300MM
Thickness	76.2MM

Metal Sheets

Mechanical Specifications

Density	2.82 g
Modulus of Elasticity	71 GPa
Tensile Yield Strength	400 MPa (min)
Brinell Hardness (HB)	138 HB
Thermal Conductivity	138 W/m·K

Similar Products

RS Code	Grade	Thickness
0783229	2014	38.1MM
0783230	2014	25.4MM
0783231	2014	63.5MM
0783232	2014	44.4MM
0783233	2014	50.8MM
0783234	2014	12.7MM
0783236	2014	101.6MM
0783237	2014	31.75MM