

METAL DATA SHEET

Stainless Steel (SUS304)

SUS304 is a Japanese Industrial Standards (JIS) grade of stainless steel. SS304 stainless steel is widely used across various industries due to its corrosion resistance, durability, and versatility. SS304 is a cost-effective and reliable material for environments where corrosion resistance is essential.

Applications

- Piping & Tubing: Used in chemical plants, water treatment facilities, and oil refineries.
- Heat Exchangers: Ideal for transferring heat in industrial processes.
- Fasteners & Bolts: Provides strength and resistance to environmental conditions.
- Kitchen Equipment: Found in sinks, cookware, and food processing machinery.
- Medical Instruments: Used for surgical tools and sterilization trays due to its hygienic properties.
- Food Storage & Processing: Safe for direct contact with food and beverages.
- Appliances: Refrigerators, dishwashers, and washing machines.
- Cutlery & Utensils: Commonly used for spoons, forks, and knives.
- Architectural Features: Handrails, decorative panels, and cladding.

Chemical Composition

Designation: Stainless Steel (SUS304)

Element	Chromium (Cr)	Nickel (Ni)	Carbon (C)	Silicon (Si)	Manganese (Mn)
Composition (%)	18 - 20	8 - 10.5	Max 0.08	Max 1.0	Max 2.0

Phosphorus (P)	Sulfur (S)
Max 0.045	Max 0.03

Properties

Tensile Strength (Mpa)	520
Yield Strength (Mpa)	205
Density (g/cm ³)	7.93
Hardness (HRC) after tempering	90
Thermal Conductivity (W/m ² K) at 100°C	16.2
Melting Point (°C)	1400

The above figures are typical values, and are not guaranteed.