Stainless steel 304/304L | 1.4301/1.4307 | X5CrNi18-10/X2CrNi18-9

Stainless Steel 304/304L offers excellent corrosion resistance and weldability.

Mechanical properties

Ultimate tensile strength	520-600 MPa
Yield strength	210-250 MPa
Young's modulus (modulus of elasticity)	191 - 205 GPa
Elongation at break	43-45 %

Physical properties

Corrosion resistance	Good
Magnetism	No
UV resistance	Excellent
Weldability	Excellent

Thermal properties

Maximum service temperature	750 - 925 °C
Thermal expansion coefficent	10.3 - 12 10^-6/ºC
Thermal conductivity	29.3 - 31.7 W/(m·°C)

Electrical properties

Electrical resistivity	65 - 70 µΩ*cm

Post treatments

Post-Processing	Annealing & Cold working
Anodizing compatibility	Not suitable

Common applications

Architectural panelling	
Sanitary ware and troughs	
Tubing	
Food processing	
Food handling and precessing equipment	

Stainless Steel 304/304L CNC Machining Applications & Parts

Stainless Steel 304/304L is the most common austenitic stainless steel, prized for its excellent corrosion resistance, formability, and weldability. Our precision machining transforms this versatile material into reliable components for countless applications.

Typical Parts We Machine from Stainless Steel 304/304L:

- **Food & Pharmaceutical Processing:** Tanks, pipes, valves, fittings, processing equipment
- **Architectural & Design:** Hardware, fittings, panels, decorative trim
- **Chemical & Petrochemical:** Vessels, tubing, flanges, manifolds

Our Machining Advantage:

We expertly manage the gummy chip formation of 304/304L through optimized tool geometry and coolant application, ensuring efficient material removal and superb part quality.

Get an Instant Quote your custom Stainless steel 304/304L | 1.4301/1.4307 | X5CrNi18-10/X2CrNi18-9 parts today.