STAINLESS STEEL

304 - 1.4301 / 304L - 1.4307



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304 and 304L are both grades of austenitic stainless steel, which is the most widely used type of stainless steel. These grades are very similar, known for their versatility and corrosion resistance, with the main difference being the carbon content. The use of 304L is often preferred in situations where welding is a significant consideration due to its improved weldability and reduced susceptibility to sensitivity.

KEY FEATURES

- Corrosion resistance
- Forming and welding characteristics
- Oxidation resistance

CHEMICAL PROPERTIES											
	Chromium (Cr)	Nickel (Ni)	Manganese (Mn)	Silicone (Si)	Nitrogen (N)	Carbon (C)	Phosphorus (P)	Sulphur (S)			
304	18-20%	8-11%	2%	1%	0.1%	0.08%	0.045%	0.03%			
304L	18-20%	8-11%	2%	1%	0.1%	0.035%	0.045%	0.03%			

MECHANICAL PROPERTIES						
	304	304L				
Tensile strength (N/mm²)	500-700	500-700				
Yield strength (N/mm²)	170-220	170-220				
Elongation (% in 4D)	40	40				
Hardness - Rockwell (HRB) max	92	92				
Hardness - Brinell (HB) max	201	201				

PHYSICAL P	ROPERTIES	
Density (kg/m³)	8000	
Modulus of elasticity (Gp	oa)	193
	0-100°C (µm/m/°C)	17.2
Mean coefficient of	0-350°C (µm/m/°C)	17.8
thermal expansion	0-538°C (µm/m/°C)	18.4
Thermal	at 100°C (W/m.K)	16.2
conductivity	at 500°C (W/m.K)	21.5
Specific Heat 0-100°C (J	500	
Electrical resistivity (nΩ.	720	
Melting point (°C)	1450	

MARKET SECTORS



Food & Beverage Industry



Chemical Processing

Tanks, pipes, conveyor systems

Storage tanks, vessels for chemicals, piping systems



Handrails, architectural trim, structural components



Equipment

Kitchen

Countertops, sinks, ovens refrigerators, dishwashers



Pharmaceutical Industry

Surgical instruments, processing equipment, storage



Engineered Components

Fasteners, bolts, valves, fittings



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