

Standards

| Material No. | EN Designation | AISI/SAE | UNS |
|--------------|----------------|----------|--------|
| 1.4307 | X2CrNi18-9 | 304 L | S30403 |

Description

1.4307 / AISI 304 L is an austenitic chromium-nickel stainless steel with a low carbon content.

Special properties

1.4307 / AISI 304 L can replace the quality 1.4541 / AISI 321 and is equal resistant to intercrystalline corrosion. Better machinable due to the absence of titanium

Chemical Composition

| C % | Si ≤ % | Mn ≤ % | P ≤ % | S ≤ % |
|-----------|-----------|--------|-------|-------|
| ≤ 0.030 | 1.00 | 2.00 | 0.045 | 0.015 |
| Cr % | Ni % | N % | | |
| 17.5-19.5 | 8.00-10.5 | ≤ 0.11 | | |

Mechanical Properties 20°C

| Hardness HB 30 ≤ HB | 0.2% Yield strength R _p ≥ N/mm ² | Tensile strength R _m N/mm ² | Elongation A ₅ ≥ % | Modulus of elasticity kN/mm ² |
|---------------------|--|---|-------------------------------|--|
| 215 | 175 | 500-700 | 45/35 | 200 |

Physical Properties 20°C

| Density g/cm ³ | Specific heat capacity J/kg K | Thermal conductivity W/m K | Electrical resistivity Ω mm ² /m |
|---------------------------|-------------------------------|----------------------------|---|
| 7.9 | 500 | 15 | 0.73 |








Suitable welding filler materials

1.4307; 1.4316; 1.4551

Application

Foodstuff, chemical and pulp paper equipment, vessels

Available forms for 1.4307 / AISI 304 L

| Sheets/Plates | Bars | Wire | Tubes/Pipes | Fittings | Forged / cast parts | Finished part (drawing) |
|---|---|---|--|---|---|---|
|  |  |  |  |  |  |  |