

INCONEL 718 (UNS N07718)

INCONEL 718 (UNS N07718) is a high-strength, corrosion-resistant nickel chromium material used at -423° to 1300°F The age-hardenable alloy can be readily fabricated, even into complex parts. Its welding characteristics, especially its resistance to postweld cracking, are outstanding

INCONEL 718

UNS N07718

2.4668

| Cr | Mn | Cu | Si | C | P | S | Fe | Ni | Mo | Ti | Al | Nb + Ta | Co | B |
|--------------|-------------|-------------|-------------|-------------|--------------|--------------|------|--------------|------------|--------------|------------|-------------|-------------|--------------|
| 17,0 21,0 | max 0,35 | Max. 0,3 | max 0,35 | Max 0,08 | max 0,015 | max 0,015 | Bal. | 50,0 55,0 | 2,8 3,3 | 0,65 1,15 | 0,2 0,8 | 4,75 5,5 | Max. 1,0 | Max 0,006 |

density (kg/dm³) 8,19

thermal expansion (K⁻¹)

20 – 100 °C: 12,8 x 10⁻⁶

20 – 200 °C: 13.5 x 10⁻⁶

20 – 300 °C: 13,9 x 10⁻⁶

20 – 400 °C: 14,2 x 10⁻⁶

| | Yield Strength (Mpa) (20 C) | Tensile Strength (Mpa) (20 C) | Elongation A5 (%) | Hardness |
|-----------------------------------|-----------------------------|-------------------------------|-------------------|-------------|
| Solution Annealed and Aged | 827 - 965 | 1034 | 24 | 30 - 40 HRC |