

INCONEL 625 (UNS N06625)

INCONEL 625 (UNS N06625/W.Nr. 2.4856) is used for its high strength, excellent fabricability (including joining), and outstanding corrosion resistance. Strength of INCONEL alloy 625 is derived from the stiffening effect of molybdenum and niobium on its nickel-chromium matrix; thus precipitation hardening treatments are not required.

INCONEL 625
UNS N06625
2.4856

Cr	Mn	Si	C	P	S	Fe	Ni	Mo	Ti	Al	Nb + Ta	Co
20,0 23,0	max 0,50	max 0,50	Max 0,10	max 0,015	max 0,015	Max 5,0	Min 58,0	8,0 10,0	Max 0,4	Max 0,4	3,15 4,15	Max. 1,0

density (kg/dm³) 8,44

thermal expansion (K⁻¹)

20 – 100 °C: 12,8 x 10⁻⁶

20 – 200 °C: 13.1 x 10⁻⁶

20 – 300 °C: 13,3 x 10⁻⁶

20 – 400 °C: 13,7 x 10⁻⁶

	Yield Strength (Mpa) (20 C)	Tensile Strength (Mpa) (20 C)	Elongation A5 (%)	Hardness
Rolled	414 - 758	827 - 1103	30 - 60	175 – 240 HRB
Annealed	414 - 655	827 - 1134	30 - 60	145 – 220 HRB
Solution Treated	290 - 414	724 - 896	40 - 60	116 – 194 HRB