

Alloy 90 is a wrought nickel-chromium-cobalt base alloy strengthened by additions of titanium and aluminum. It has been developed as an age-hardenable creepresisting alloy for service at temperatures up to 920°C(1688°F).

The alloy is used for turbine blades, discs, forgings, ring sections and hot-working tools

Nimonic 90 Specifications

Grade	UNS	W.Nr
Nimonic 9	N07090	2.4632

Nimonic 90 Chemical Composition

Grade	%	Ni	Cr	Co	Ti	Al	C	Si	Cu	Fe	Mn	B	S	Zr	Pb
Nimonic 90	Min	Bal	18	15	2	1									
	Max		21	21	3	2	0.2	1	0.2	1.5	1	0.02	0.015	0.15	0.002

Nimonic 90 Mechanical properties: (Minimum value at 20°C)

Tensile Strength σ_b /MPa	Yield Strength $\sigma_{p0.2}$ /MPa	Elongation σ_5 /%
≥ 1080	≥ 695	≥ 20

Nimonic 90 Size Range

- Wire: Dia 0.08-12mm
- Bar: Dia1.0-300mm
- Strip(Coil): 0.2-20mm TCK x 10-300mm W
- Sheet: min.0.7mm TCK x 1200mm W max.
- Tube & Forging & Machine Parts: customized
- Welding wire: 0.8mm,1.0mm,1.2mm,2.0mm,2.4mm,3.2mm,3.8mm,4.0mm etc
- Welding Strip: 0.4-0.7mm TCK x 25-60mm W