

Haynes 230

Haynes 230 is a nickel-chromium-tungsten-molybdenum alloy that combines excellent high-temperature strength, outstanding resistance to oxidizing environments up to 1150°C for prolonged exposures, premier resistance to nitriding environments, and excellent long-term thermal stability.

Chemical Composition, %

element	Ni	Cr	W	Mo	Co	Fe	Al	B	La	C	Mn	Si	P	S
min.	bal.	20.0	13.0	1.0					0.005	0.05	0.3	0.25		
max.		24.0	15.0	3.0	5.0	3.0	0.5	0.015	0.050	0.15	1.0	0.75	0.03	0.015

chemical Composition according to ASTM. Some compositional limits of other specifications may vary slightly.

Designation and standards

National Standards	Material designation	Chemical composition	Forgings	Rod and bar	Plate and sheet	Wire	Seamless tube
ASTM ASME SAE	UNS N06230		B564 SB564 AMS 5891	B572 SB572 AMS 5891	B435 SB435 AMS 5878	AMS 5839	B622 SB622
DIN		2.4733 Ni22W14Mo	DIN 17744				

Density 9.14g/cm³

Corrosion resistance

- good resistance to oxidation up to 1150°C
- good resistance to nitriding environments

Applications

Typical applications are:

- a variety of fabricated component applications in aerospace and power industry
- combustion cans, transition ducts, flameholders, thermocouple sheaths in commercial gas turbine engines