

MIM-Material Specification and Applications

Composition

Material:

Austenitic stainless steel

Standards:

AISI HK30, ~DIN X15CrNiSi2520, ~1.4841

Typical composition::

<i>Element</i>	<i>Content (%)</i>
C	0.20 – 0.50
Cr	24.0 – 27.0
Ni	19.0 – 22.0
Si	0.75 – 1.30
Mn	≤ 1.50
Mo	0.20 – 0.30
Fe	Balance
Other	Nb: 1.00 – 1.75

Properties

	As sintered (N2)	As sintered (Ar)
Density	≥ 7.50 g/cm ³	≥ 7.50 g/cm ³
Hardness	≥ 220 HV1	≥ 150 HV1
Yield strength R _{p0.2}	350 - 450 MPa	200 - 300 MPa
Tensile strength R _m	700 - 850 MPa	500 - 650 MPa
Elongation A	35 - 45%	35 - 45%
Surface quality R _a	≤ 3.2 μm	≤ 3.2 μm

Application / remarks

HK30 is a heat resistant austenitic stainless steel which is applied for components which work at high temperatures such as engine components and turbo charger components.

The data given are based on our experience to date. However, no liability can be assumed.