
MIM-Material Specification and Applications

Composition

Material:

Martensitic stainless steel

Standards:

AISI 410, DIN X15Cr13, ~1.4024

Typical composition::

<i>Element</i>	<i>Content (%)</i>
C	0.10 – 0.20
Cr	11.5 – 13.5
Ni	-
Si	≤ 1.00
Mn	≤ 1.00
Mo	-
Fe	Balance
Other	-

Properties

	As sintered	Hardened
Density	≥ 7.40 g/cm ³	≥ 7.40 g/cm ³
Hardness	≥ 150 HV1	≥ 350 HV1
Yield strength R _{p0.2}	≥ 300 MPa	≥ 500 MPa
Tensile strength R _m	≥ 500 MPa	≥ 700 MPa
Elongation A	≥ 10 %	≥ 2 %
Surface quality R _a	≤ 3.2 μm	≤ 3.2 μm

Application / remarks

AISI 410 is applied for components which require moderate strength and corrosion resistance.