
MIM-Material Specification and Applications

Composition

Material: Austenitic stainless steel

Standards: Parmaco Nitronic 60

Typical composition:	<i>Element</i>	<i>Content (%)</i>
	C	≤ 0.10
	Cr	16.0 – 18.0
	Ni	8.00 – 9.00
	Mn	7.00 – 9.00
	Si	3.50 – 4.50
	N	0.08 – 0.18
	Fe	Balance
	Other	-

Properties

As sintered

Density	≥ 7.20 g/cm ³
Hardness	≥ 180 HV1
Yield strength R _{p0.2}	≥ 280 MPa
Tensile strength R _m	≥ 550 MPa
Elongation A	≥ 35 %
Surface quality R _a	≤ 1.6 μm

Application / remarks

This austenitic steel with high wear resistance thanks to the addition of silicon and manganese offers outstanding properties for abrasive wear, cold welding, galling and contact corrosion. It is also characterised by high resistance to chloride pitting corrosion and oxidation. It is used to reduce friction and wear, especially when lubricants cannot be used. Areas of application include surgical instruments, components for production plants, sanitary facilities and components of hydroelectric power stations.

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