Parmaco Metal Injection Molding AG
Fischingerstrasse 75
CH-8376 Fischingen
www.parmaco.com

Parmaco
Metal Injection Molding AG

MIM-Material Specification and Applications

Composition

Material: **Low alloyed tool steel**

Standards: **SAE 52100, DIN 100Cr6, 1.3505**

Typical composition::

Element	*Content (%)*
C	0.80 – 1.05
Cr	1.30 – 1.60
Ni	-
Si	≤ 1.00
Mn	≤ 1.00
Mo	-
Fe	Balance
Other	-

Properties

	As sintered	**Hardened**
Density	≥ 7.30 g/cm^3	≥ 7.30 g/cm^3
Hardness	≥ 200 HV1	≥ 600 HV1
Yield strength $R_{p0.2}$	≥ 400 MPa	≥ 1100 MPa
Tensile strength R_m	≥ 900 MPa	≥ 1500 MPa
Elongation A	≥ 5%	≤ 3 %
Surface quality R_a	≤ 3.2 µm	≤ 3.2 µm

Application / remarks

Low alloy cold work tool steel for applications with highest stresses, Lathe centres, drills, threading dies, milling cutters, reamers etc.