TG Steels

TFM 420

3D PRINTING POWDER FOR INJECTION MOLDS

TFM420 mold steel is a high-strength, high-wear-resistance stainless mold steel suitable for high-polish finishes.

It corresponds to S136, the European grade WNr. 1.2083, and the American grade AISI420J2.

This steel exhibits excellent corrosion resistance, superior polishability, excellent wear resistance, good machinability, and dimensional stability after heat treatment. BLS-4 is recommended for all molds, especially suitable for the following requirements:

- Corrosive injection molding materials such as PVC and acetates;
- Injection molding materials with high abrasion or containing additives *(including thermosetting injection molds).*

Range of chemical composition

C	Cr	Ni	Mo	Mn	Si
0.35	12.0	0.60	0.50	0.80	1.00

Physical properties

Granularity range	15 -53 μm
Hardness	215.6+-20.7 HV
Hallflow rate	≤18s / 50 g
Loose packing density	4.0 g/cm^3
Heat conductivity	19 W/m·K
Impact energy (490°C x 2)	19 J
Ensile strength (490°C x 2)	1830 MPa