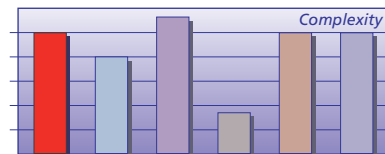
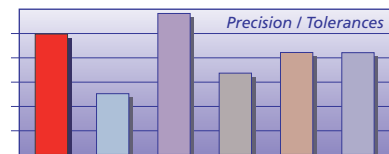
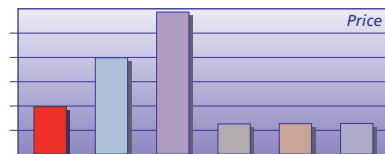
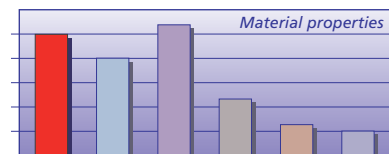


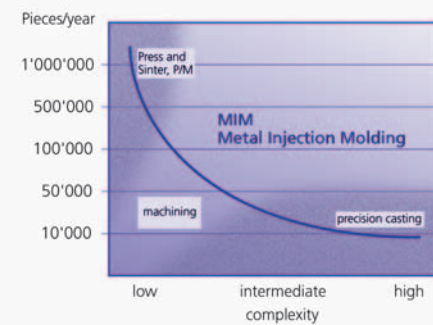
MIM-Materials: You've got the choice.

Denomination	AISI	DIN W-Nr.	composition	Density g/cm ³	condition
<i>Low alloy steels</i>					
Parmaco 2NiFe			2% Ni, Rest Fe	7.80	sintered / case hardened
Parmaco 7NiFe			7% Ni, Rest Fe	7.80	sintered / case hardened
Parmaco 4340	4340	1.6565	40NiCrMo6	7.40	sintered / Q+T
<i>Stainless steels</i>					
Parmaco 316L	316L	1.4435, 1.4404	X2CrNiMo17 13 2	7.60	sintered
Parmaco 17/4 PH	17/4 PH	1.4542, 1.4548	X5CrNiCuNb17 4	7.60	sintered
<i>Soft magnetic alloys</i>					
Parmaco Fe			Reineisen	7.80	sintered
Parmaco 3SiFe			3%Si, Rest Fe	7.80	sintered
Parmaco 2NiFe			2%Ni, Rest Fe	7.80	sintered
Parmaco 46NiFe			46%Ni, Rest Fe	8.00	sintered
<i>High speed steels</i>					
Parmaco M2	M2	1.3343	S 6-5-2, WMoCrV	8.00	sintered / Q+T
<i>Expansion controlled alloys</i>					
Parmaco 36NiFe		1.3912	36%Ni, Rest Fe	7.80	sintered
Parmaco 42NiFe		1.3917	42%Ni, Rest Fe	7.80	sintered
Parmaco F15			31%Ni, 15%Co, Rest Fe	7.90	sintered

further materials on demand

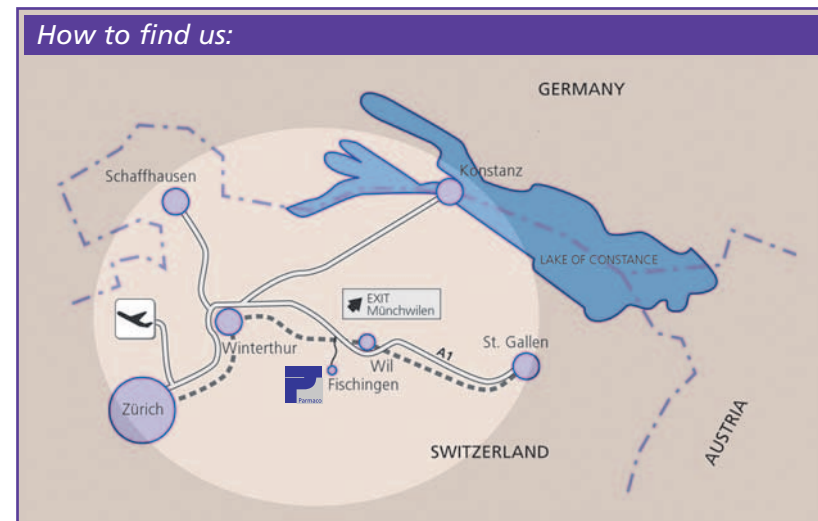


Metal Injection Molding in comparison with other processes



Parmaco
Metal Injection Molding Ltd.

COMPLEX Components



Parmaco
Metal Injection Molding AG

Fischingerstrasse 75
CH - 8376 Fischingen

Phone: +41 (0)71 978 78 78
Fax: +41 (0)71 978 78 79

E-mail: info@parmaco.com
Internet: www.parmaco.com

SMALL STEEL PARTS

IN HIGH VOLUMES

WITH COMPLEX SHAPE

COST EFFECTIVELY MANUFACTURED

Prerequisites for MIM parts

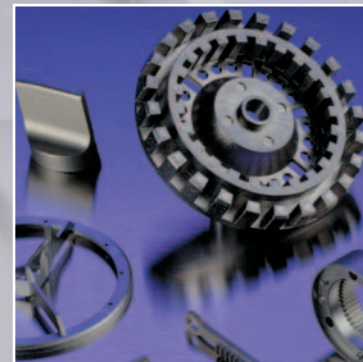
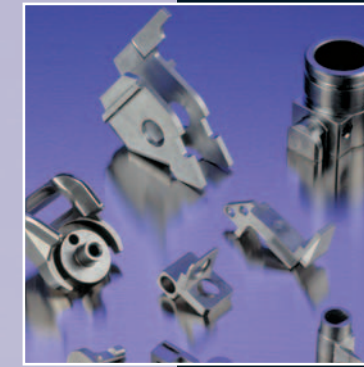
- Weight 0-100 g (ideally ~20g)
- Material: Steel or other alloys
- Volume per year from 10'000 to millions
- Complex part geometry
- Designed for injection molding
- Tolerances without rework +/-0.3% of blueprint dimensions
- Surface without polishing better than Ra 3.2
- Density between 96 and 100% of theoretical density (gas tight)

Advantages of Parmaco's MIM process

- Higher material density
- Better microstructure
- More precise reproduction of structural details
- Inhouse feedstock preparation and development
- Better shape retention and precision
- More attention to detail

Why you should choose Parmaco

- Experience
Parmaco Metal Injection Molding Ltd. was founded in 1992 and thus is among the first companies that have introduced MIM to the European market on an industrial level. Over the years Parmaco has established a solid know-how-base. Many very demanding projects have helped us to continuously improve our capabilities. Today our superior expertise is well known in the industry.
- Service
Parmaco stands for excellent customer service. Our team of specialists is proud to deliver added value to its customers. Parmaco works with you from the very important design phase to the continuing delivery with serial parts.
- Quality
Parmaco Metal Injection Molding Ltd. is ISO 9001 certified since 1998. The process oriented quality management system according to ISO 9001:2000 is the basis of our high quality standard.



The applications for MIM are without limits ...

Let's team up:

Please contact us at an early stage of your project – the best time is when you are putting together the requirements and specifications for your components. Already in this project stage we support you with our know how. In dialog with you we help you to find technically and economically sound solutions. Take advantage of our experience.

Application Examples:

*Power Tools
Armament
Automobiles
Locking Systems
Telecommunication
Precision Engineering
Medical Equipment*

The MIM process in 4 stages

