**Denomination** | **AlSi** | **DIN W-Nr.** | **composition** | **Density g/cm³** | **condition**
--- | --- | --- | --- | --- | ---
**Low alloy steels**
Parmaco 2NiFe | 4340 | 2% Ni, Rest Fe | 7.80 | sintered / case hardened
Parmaco 5NiFe | 4340 | 7% Ni, Rest Fe | 7.80 | sintered / case hardened
Parmaco 4340 | 4340 | 40NiCrMo8 | 7.40 | sintered / Q+T

**Stainless steels**
Parmaco 316L | 316L | 1.4435, 1.4404 | X2CrNiMo17 12 2 | 7.60 | sintered
Parmaco 17/4 PH | 17/4 PH | 1.4542, 1.4548 | X5CrNiCuNb17 4 | 7.60 | sintered

**Soft magnetic alloys**
Parmaco Fe | Reineisen | 7.80 | sintered
Parmaco 3NiFe | 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

**High speed steels**
Parmaco M2 | M2 | 1.3343 | 5 6-5-2, WMoCrV | 8.00 | sintered / Q+T

**Expansion controlled alloys**
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**

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**How to find us:**

**Metal Injection Molding in comparison with other processes**

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**Parmaco**
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E-mail: info@parmaco.com
Internet: www.parmaco.com
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 MIM process in 4 stages

Feedstock Preparation

Injection Molding

Binder Extraction

Sinter Process

Application Examples:

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

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.