



# MIM METAL INJECTION MOULDING

## Process Technology

MIM technology  
Elastomer technology  
Plastic injection molding

THE KNOW-HOW FACTORY

**ZIMMER**  
group

# YOUR ADVANTAGES AT ONE GLANCE

## Cost savings

Of approx. 25-65% with respect to other production technologies

## Geometrical freedom

Complex metallic components with great freedom in design can be developed for your high quantity series components (Part weight up to 100 g)

## Material variety

Low alloy steels, stainless steels, tool steels, soft magnetic materials, heavy alloys, titanium alloys and special alloys can be processed

## Integration

Of inner and outer threads

## Tight tolerances

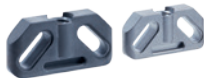
Without post-processing possible

## Excellence surface quality

Peak-to-valley height of Ra <0,2

## Post-processing

Analog to the full material



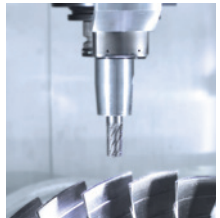
# MIM-TECHNOLOGY

## INNOVATIVE PROCESS FOR THE MANUFACTURING OF COMPLEX METALLIC SERIES COMPONENTS

**Metal Injection Moulding** – MIM – combines two known manufacturing technologies (injection moulding and sinter technology)



Automotive



Mechanical Engineering



Tooling



Automation

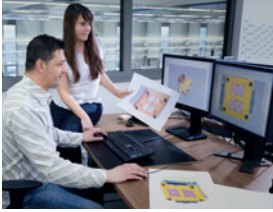


Consumer Goods



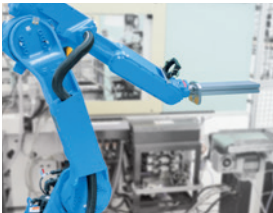
Precision Engineering

## 1. TOOL MANUFACTURING



Complex geometry? No problem!  
Our tooling unit offers a fast and flexible realisation of your series components.

## 2. INJECTION MOULDING



One of our key competences is the automation of production processes.  
Your complex series components are manufactured fully automated.

## 3. DEBINDING AND SINTERING



The debinding and sintering process is going to be adapted for your specific component and the respective material. Thus an optimal part quality with mechanical properties analog to the full material is realised.

## 4. SURFACE TREATMENT



If you need your part with a surface treatment, hardened or coated, we produce and refine your series component to a fully finished condition.  
-Just contact us!-

## 5. QUALITY ASSURANCE

We are ISO certified 9001:2008

# PROCESS CYCLE



**METAL POWDER AND BINDER**  
**- FEEDSTOCK -**



**INJECTION MOULDING**  
**- GREEN PART -**



**DEBINDING**  
**- BROWN PART -**



**SINTERING**  
**- METAL PART -**

## CONTACT

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