

# **Our technical capacities**

## Our basic approach: across-the-method manufacturing from metal and plastic

Our focus: Small and medium-length manufacturing series, labour-intensive products with high tool costs

#### Our services:

- evaluation of the product drawings and technical data
- technology consulting
- suggestions for design changes for optimizing the production process
- documentation of the project (schedules, QA-reports)
- mold production within 30-40 business days, initial samples 14 days after that
- fast mold change service
- delivery of die casting parts including processing
- assembly and subassembly
- packaging according to your own requirements
- custom clearance and transport (sea and air freight) on demand
- temporary storage on demand
- door- to- door delivery on demand

## The production methods offered by us

## **1. Plastic injection**

Capacities for mold production and plastic injection:

- CNC machining centers (max. 1,300 x 500 x 560 mm)
- -Wire- cut EDM / eroding machines (max. 1,700 x 1,000 x 500 mm)
- turning and milling centers
- drilling machines
- plastic injection machines from 60 to 1,300 tons clamping force
- CAD center for all common data formats: iges, dwg, step, iges 3D, sat, dxf, catia

Processing: machining, glueing, ultrasonic welding, assembly

Surface treatments: Painting, silk printing, pad printing and chrome plating (for ABS)

## 2. Die casting (aluminium, zinc, magnesium)

#### Capacities:

- experiences and know-how for weights of 4 to 4,500 g
- max. 500 tons clamping force
- hot and cold chamber machines
- processing according to DIN1688 GTA 13

Processing / Machining: Grinding, lathing, milling, drilling, conventional and CNC processing

**Surface treatments:** Powder painting, painting, silk printing, pad printing, sandblasting, chrome plating, vibratory grinding, brushing, polishing



# 3. Lathing, milling, grinding, drilling

## **Capacities:**

Lathing, milling, grinding of formed parts made from brass, steel, aluminium, plastic or special materials on demand for:

- prototypes
- mass production

processing according to DIN ISO 2768

CNC lathing: Lathing:	max. diameter= 450 mm max. diameter= 500 mm	length = 1,000 mm length = 1,500 mm	
CNC milling	max. x=850 mm	max. y=650 mm	max. z=400 mm
Milling:	max x=1,500 mm	max. y=500 mm	max. z=400 mm
Steel bar material:	max. diameter= 70 mm		
Grinding:	max. diameter= 25 mm	max. length = 300 mm	
Circular grinding:	max. diameter= 250 mm	max. length = 1,000 mm	l
Face grinding:	max. 400 x 400 x 200 mm		

**Surface treatments:** Powder painting, painting, silk printing, pad printing, sand blasting, chrome plating, browning, anodizing, hardening, nickel plating

## 4. Aluminium profiles

We offer customer-specific aluminium profiles including all necessary processing steps such as pre-cutting, deburring, drilling, milling according to the technical drawing, anodizing, powder painting, painting, silk printing, pad printing.

We need your technical data as data file.

The minimum order quantity depends on the type of profile required and on the necessary machines. Normally it should be approx. 500 kg per profile.

## **Capacities and materials:**

machines with a propelling force of 550 to 2,500 tons

available materials according to "Alloy Aluminium International":

- 6063 (similar to AlMgSi0.5 / 3.3206)
- Composition: Mg 0.45–0.9%; Si 0.2–0.6; Fe <0.35; Cu <0.1; Mn<0.1; Cr<0.1; Zn<0.1; Ti <0.1 Normally used for decorative parts.
- 6061 (similar to AlMgSi1 / 3.2315)
  Composition: Mg 0.8–1.2%; Si 0.4–0.8; Fe <0.7; Cu 0.15–0.4; Mn<0.15; Cr 0.04–0.35; Zn<0.25; Ti<0.15</li>
  Normally used for construction parts.

Processing: Grinding, lathing, milling, drilling (regular and CNC)

Surface treatments: Powder painting, silk printing, pad printing, sand blasting, anodizing, polishing



## 5. Sheet metal forming

for the most common forming technologies and manufacturing methods:

- cut of parts up to a length of 500 mm
- jet cutting
- punching and bending up to a metal sheet thickness of 3 mm
- bevelling
- drilling
- thread cutting

- deep drawing
- thread spinning
- deburring
- spot welding
- riveting
- mold construction
- assembly

Surface treatments: Silk printing, pad printing, powder coating, anodizing, sandblasting, brushing

## 6. Assembly service

We offer subassemblies as well as finished products. We also offer/produce special packages.

## Our services are:

- pre-assembly of subassemblies
- adjusting and optimizing of parts made with different manufacturing methods
- construction of special assembly devices
- procurement of standard parts for assembly
- packaging of subassemblies

# 7. Prototyping

- Stereolithography for: high precision in dimensions and details, as well as high surface quality for a spot check of the construction and for industrial housings
- Laser-sinter-technology for: Products with high mechanical and thermal characteristics.
- Silicone molding for: Molds made from silicone for small size sample series of up to 20 pieces.

# 8. Mold construction

## Our capacities:

- CNC machining centres (max. 1300 x 500 x 560 mm)
- (wire) eroding machines (max. 1700 x 1000 x 500 mm)
- Lathing and milling machines
- Drilling machines
- Spark-erosion machines
- CAD-centre for all common data formats
- Production and processing according to samples as well as technical data

We continuously work on expanding our range of production methods and business activities. Please do not hesitate to contact us for more information.