

PROTOTYPING

Your competent partner for prototyping with metal and plastic.

Depending on the function of your end product and the associated process chain, we can help you select the optimum prototyping method for your needs.

YOUR ADVANTAGES AT A GLANCE

- » Shorter product development phase
 - » Qualitative optimization of the series production technology early on
 - » Fewer risks during product launch
 - » More flexibility and fast availability
- Transition from prototype phase to series production more quickly and easily.**

SAVE TIME & COSTS, ENSURE QUALITY!

You obtain samples and pre-series products produced from a single mold: product tests & certifications are performed prior to completion of the series mold.

The cost-intensive production of conventional prototypes can often be completely avoided: the prototypes have dimensional tolerances according to the method used and feature typical characteristics! With our process, you get high-quality prototypes within just a few weeks – with the same mold properties as in series production! In the case of assemblies produced using different production methods, we handle the harmonization for you. By adapting components with different material properties and tolerances on the mold, your development phase will be significantly shorter.

With our prototyping processes, you not only optimize your component design and assemblies for series production but also shorten the product development process, lower your development costs, and reduce risks during product launch!

Possible prototype processes, among others:

- » Injection Molding
- » Vacuum Casting
- » Polyamide Casting
- » Rapid Prototyping (RPV)
- » Rapid Tooling
- » GFRP



PROCESS CHARACTERISTICS

aluminum, zinc and plastic
1 - 100 (prototypes) 101 - 3.000 (pre-production)
after tool production: 20 calendar days
production is carried out according to general production tolerances
CNC machining, vibratory grinding
varnishing, powder coating, anodising and galvanic
treatments, metallization and EMC coating

« material
« number of pieces
« delivery time
« tolerances
« mechanical processing
« surface treatments



FAST – CUSTOMIZED – ECONOMICAL

Applications for prototypes include crash and EMC tests and molding optimizations. Prototypes exhibit production-like features, can be delivered quickly, are adaptable, and affordable.

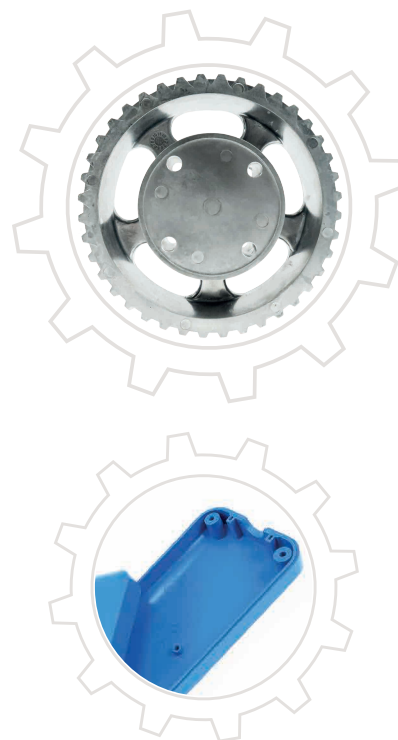
» Prototypes for presentations, test series
» Optimization of the planned series
» Less expensive than the competition

Which production process is best for your needs depends on the dimensional accuracy, the material, the intended use, the required time, the manufacturing costs, and the number of prototypes to be produced.

With our patented processes, adaptations or changes to the contour are possible depending on the design of the mold.

PRODUCTION-LIKE QUALITY & ADAPTABLE

We evaluate your molded parts for the future production process already during the prototype phase. Experiences and test results from the prototypes flow directly into the design of the subsequent series mold. Using this knowledge, you save time during mold creation and enables you to optimize the release process. In many cases, our prototype molds can be used for pre-series production.



Successful production solutions are the result of an efficient interaction between project experience, production know-how, and a professionally organized development department.

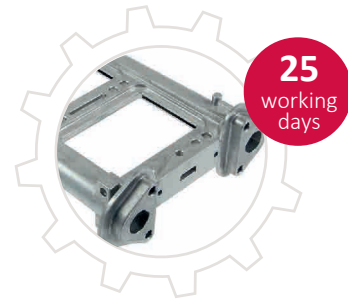
We are a system supplier. You decide which G.W.P. services you purchase.

PROJECT:

Base support for power electronics with continuous flow cooling

Adherence to tight functional tolerances

weight: 240 g, material: die casting alloy,
CNC milled, CNC drilled, deburred



25
working
days

PROJECT:

Connector housing for hybrid vehicle

size: 103 x 91 x 41 mm

weight: 174 g

material: die casting alloy



25
working
days

PROJECT:

Transmission housing for forklift truck

Precise fit in series production

size: 144 x 104 x 102 mm

weight: 325 g, material: die casting alloy



28
working
days

PROJECT:

Housing for a charging station in medical technology

High-quality visible surfaces

size: 132 x 104 x 64 mm

weight: 92 g, material: ABS with pad printing



10
working
days

PROJECT:

Housing for smoke detector

flame resistant plastic material

size: 140 x 140 mm

weight: 130 g, material: ABS



20
working
days

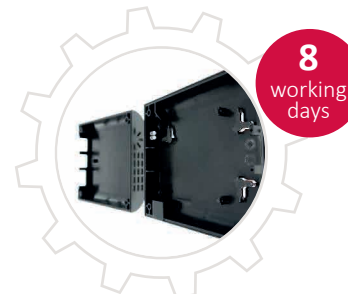
PROJECT:

Prototype as SLA component based on 3D data including surface finish

**Production quality prototype for assembly tests
as well as for trade-fair and customer presentations**

size: 85 x 98 x 30 mm

weight: 30 g, material: ABS



8
working
days