



3D Printing

*Get your metal and plastic parts printed.
From single parts up to serial production.*

Why 3D Printing?

Save Time:

Get your parts within a few days
Fast iterations

Save Money:

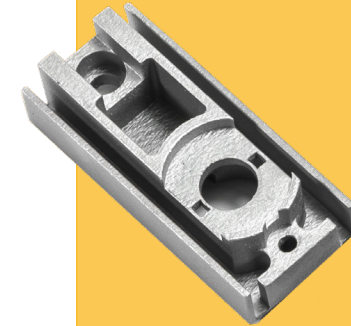
Production on demand
Complicated design features without extra costs
Single parts to serial production at a competitive price

Get Design Freedom:

Complex shapes made possible
Save weight by combining parts

CFL cabinet lock replacement
CFL (National Association of Luxembourg Railways) wanted to replace the broken cabinet locks of their locomotives.

These locks were not in production anymore. We managed to redesign and produce a small series of the cabinet lock in Aluminium AlSi10Mg (SLM).



Custom air intake manifold
Modified car engines often require custom made air intake manifolds. 3D Printing allows to manufacture those complex and custom parts with an optimized design.

Based on the 3D File of the client, the air intake is being printed in Nylon (PA12) using Multi Jet Fusion (MJF).



Stainless Steel Jet Nozzle
Our team produced a series of Jet Nozzles for the EEW company (Energy from Waste). These jet nozzles are being installed into a waste incinerator to clear the dust from hydraulic cylinders.

Due to the extreme temperature in which the jet nozzle must operate, the final limited series is produced in high-quality Stainless Steel 1.4404 (SLM).





3D Scan

Digitalize and inspect your parts.

Why 3D Scanning?

3D Scanning is the most precise and cost-effective way to digitalize your objects. Our service can be performed at any location with our certified 3D scanner.

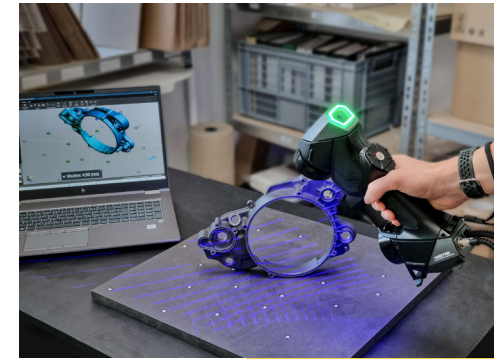
Applications:

- Reverse Engineering (3D scan to CAD)
- Quality control and quality assurance (ISO 17025 certified)
- 3D deviation comparison (3D Scan and CAD file)
- Reproductions (1:1, mirrored, scaled, repaired)
- 3D File visualization

Creaform HandySCAN BLACK Elite Technical Specifications:

- Accuracy: 0,025 mm
- Volumetric accuracy: 0,020 mm + 0,040 mm/m
- Mesh resolution: 0,100 mm

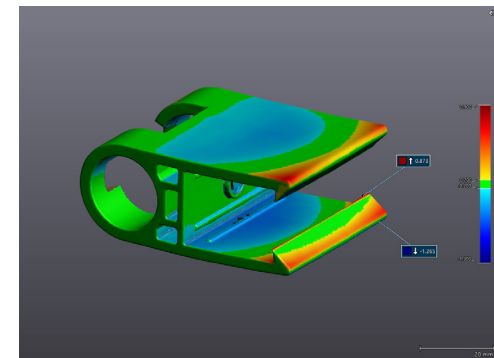
3D Scan of Mechanical parts



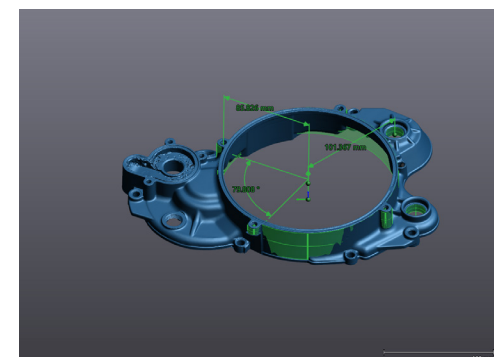
3D Scan of large parts (on site)



3D deviation comparison
(3D Scan and CAD file)



Quality control and quality assurance
(ISO 17025 certified)





CAD Design & Engineering

Parts designed according to your needs.

Design for Additive Manufacturing:

We design your 3D File based on your sketch, drawing, existing part or requirements.

Optimization:

We optimize your 3D file or part to improve the print and reduce the costs.

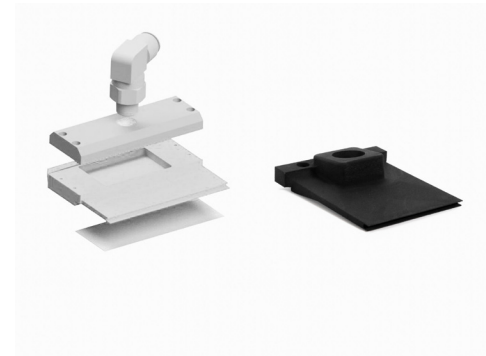
Industrialization:

We ensure the quality and repeatability for larger series.

Workshops and Design guidelines:

Sharing our knowhow with you.

Merging parts and reducing costs



Switching from CNC milling to 3D printing



From 3D printing to injection molding & adapting for serial production



Identification of suitable components for additive manufacturing





Product Development

Turn your idea into a product within a few weeks.

Flexible approach:

Regardless how advanced your idea is, due to our flexible approach our team will guide you through the product development process.

Prototyping:

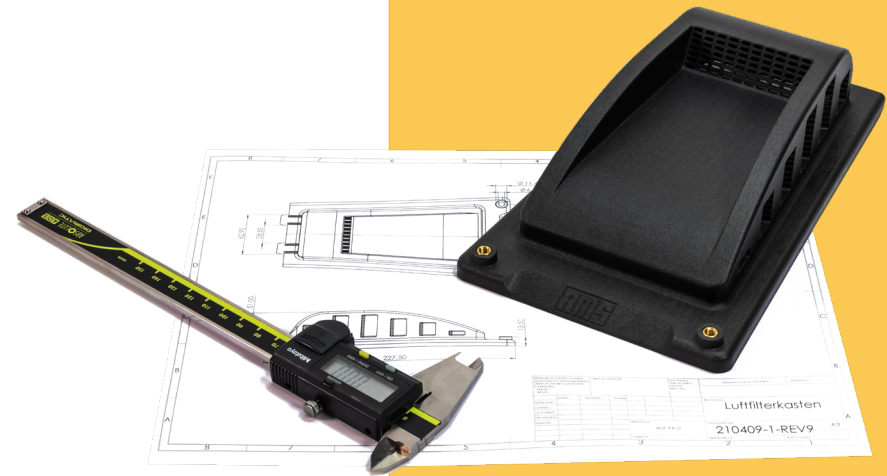
Using additive manufacturing, our development process is accelerated, due to faster prototypes, faster design iterations, faster results.

Production:

A prove of concept? A functional prototype? Small series production or ready for mass production? You decide the needed outcome.

Product Design:

With our engineering and design service we ensure not only functionality but also aesthetics of your product. Our product designers will take care of ergonomics, product semantics and appearance.



Quality Control

High quality standards for every part

Preprocessing:

Every file is being analysed manually beforehand to ensure the manufacturing feasibility, minimizing the risk of misprints.

Monitoring:

During the print, the processes are constantly monitored and potential print defects are being reported

Visual Control:

Every part is visually inspected without exception before shipping

Production:

Samples of every batch are checked to ensure constant material properties and tolerances

Quality Assurance:

If requested a detailed measurement protocol is performed to verify all critical dimensions are in conformance with the 3D model