# Lets build something togheter

30 years of experience



## Mechanik Moduls background

Exporting to China Europe USA

1990   2001	2005   2008	2009   2013	2014   2015	2017   2023
Founding D.Thoma	Trumpf premium supplier	SIEMENS best supplier award	Environmental certification ISO 14001- 2009	Full digitalization of the systems
Building new factory hall	ISO 9001-2008 certification quality Extension of the factory	Supplier of the year nominee R&D supplier Overall best supplier nominee Nominee best overall supplier	New CNC machines / Milling 3D measure machine New milling machine 4/5 axes	New Automatized Milling machine First Automatized CNC Turning machine First 3D printing machines 3 New Robots New building extension

## Quality first









3D ZEISS Measure machine Capacity 500x500x500 mm	ISO 9001.2015	ISO 14001.2015	UMWELTPAKT Bayern
We make sure that our pieces pass through exhaustive quality control	Highest market standards	Our company responds to the most important certification on the market and is always aware on the latest technology	We care about environmental standards

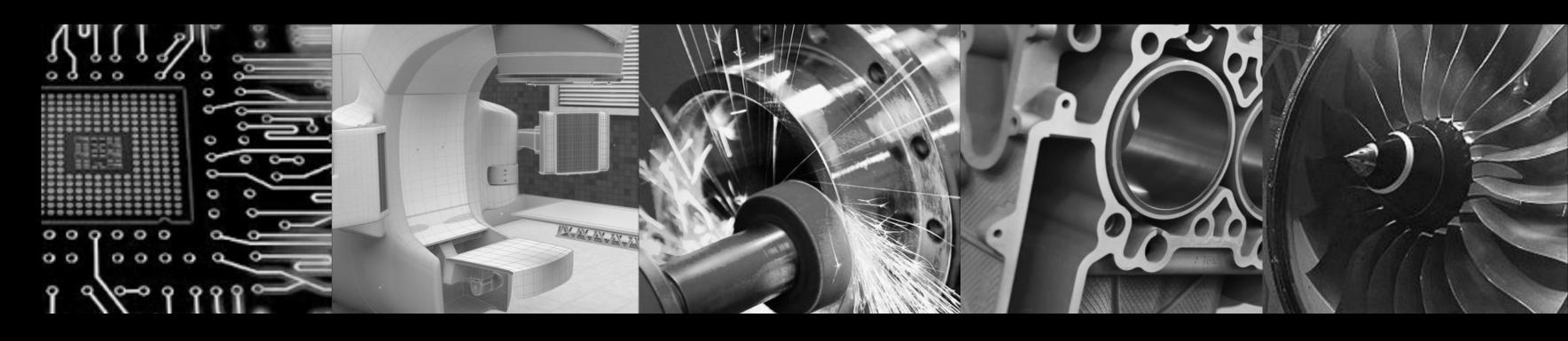
## Industry Areas

Our precise quality and the necessary know-how give us the trust of companies from various areas

**Serial Production** 

**Small Batch Production** 

Single Parts



PRINTING
SEMICONDUCTOR
ENGINEERING

MEDICAL ELECTRICAL ENGINEERING MECHANICAL ENGINEERING

MOTORSPORT ENGINEERING

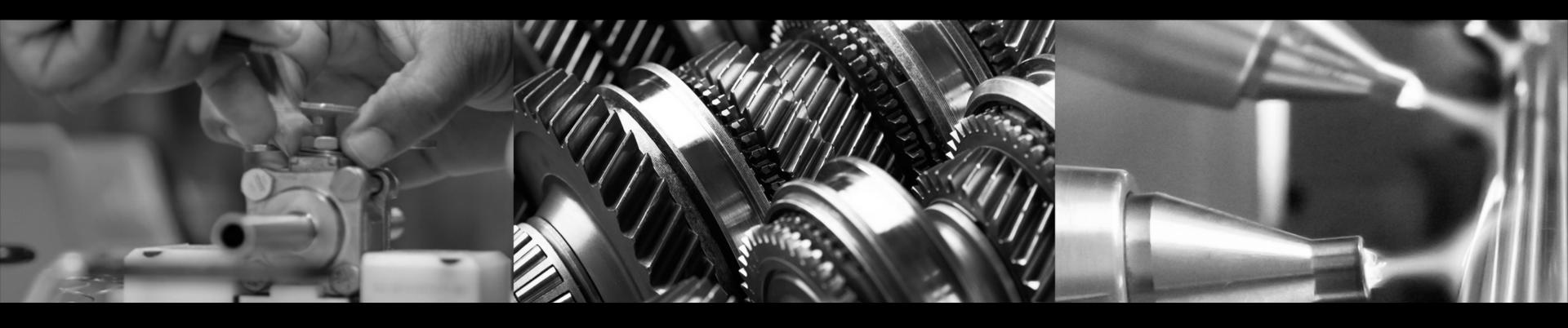
AEROSPACE ENGINEERING

## Services

**Mechanical Production** 

Merchandise

**Surface Coating** 



Turned/milled parts
3D Print
Adviced assembly

Standard parts
Roller bearing
Semi finished products

Anodized

Surtec

Zinc

Nickel

Powder coating

Grinding

Sand blasting

## Machine Inventory

### Milling Machine





## DMG MORI DMU 50 incl. Automation ROBO2GO

5-Axis, X-Axis 650, Y-Axis 520, Z-Axis 475mm

### **DMG MORI Milltap 700**

5-Axis X-Axis 700, Y-Axis 420, Z-Axis 380mm

## DMG MORI Milltap 700 WH3 incl. Automation

5-Axis, X-Axis 700, Y-Axis 420, Z-Axis 380mm

### **DMG MORI CMX**

5-Axis X-Axis 500, Y-Axis 450, Z-Axis 400

### Spinner VC750

X-Axis 760, Y-Axis 460, Z-Axis 460 mm, adaptive 4/5 Axis up to Ø 150 mm

### Spinner VC1200

X-Axis 1200, Y-Axis 700, Z-Axis 600 mm

## Maschine Inventar

### Milling



Milling

X-Axis 1000, Y-Axis 500, Z-Axis 450 mm

X-Axis 750, Y-Axis 450, Z-Axis 500 mm

### **Hurco Milling**

X-Axis 1200, Y-Axis 450, Z-Axis 400 mm

### **Hurco Milling**

X-Axis 1200, Y-Axis 500, Z-Axis 450 mm

### **Hurco Milling**

X-Axis750, Y-Axis 450, Z-Axis 500 mm adaptiv 4/5 Axis up to Ø 240 mm

### **Hurco 5 Axis Milling**

X-Axis 600, Y-Axis 600, Z-Axis 500 mm with rotary table Ø 600 mm (Z-Axis 250 mm), 180° swivel head

## Constant New Machine Investment

Turning Machine



#### DMG CTX210

Turning machines max. Turn- Ø 160 mm, max. Turn length 250mm, Bar capacity 42 mm, driven tools

### Spinner TC600

Turning machines with counter spindle, Turn- $\emptyset$  - 250mm, max. Turn length - 650mm, Bar capacity 65mm, additional Y-Axis +50/Z-40

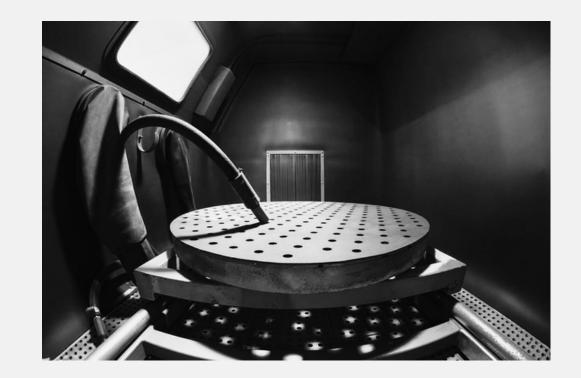
### Turning machine conventional

max.Turn- Ø 300 mm, Turn length 800 mm

### DMG MORI Sprint 32|8

CNC-Automatized turning machine, Bar capacity 32mm

## Constant New Machine Investment



Saw	Other	
Bandsaw	Slide Grinding machine	
Ø 350 mm		
3D Printing	Sand blasting machine	
	800 x 550 x 650 mm	

STEEL

STAINLESS STEAL

**ALUMINIUM** 

**BRASS** 

COPPER

**PMMA** 

POM

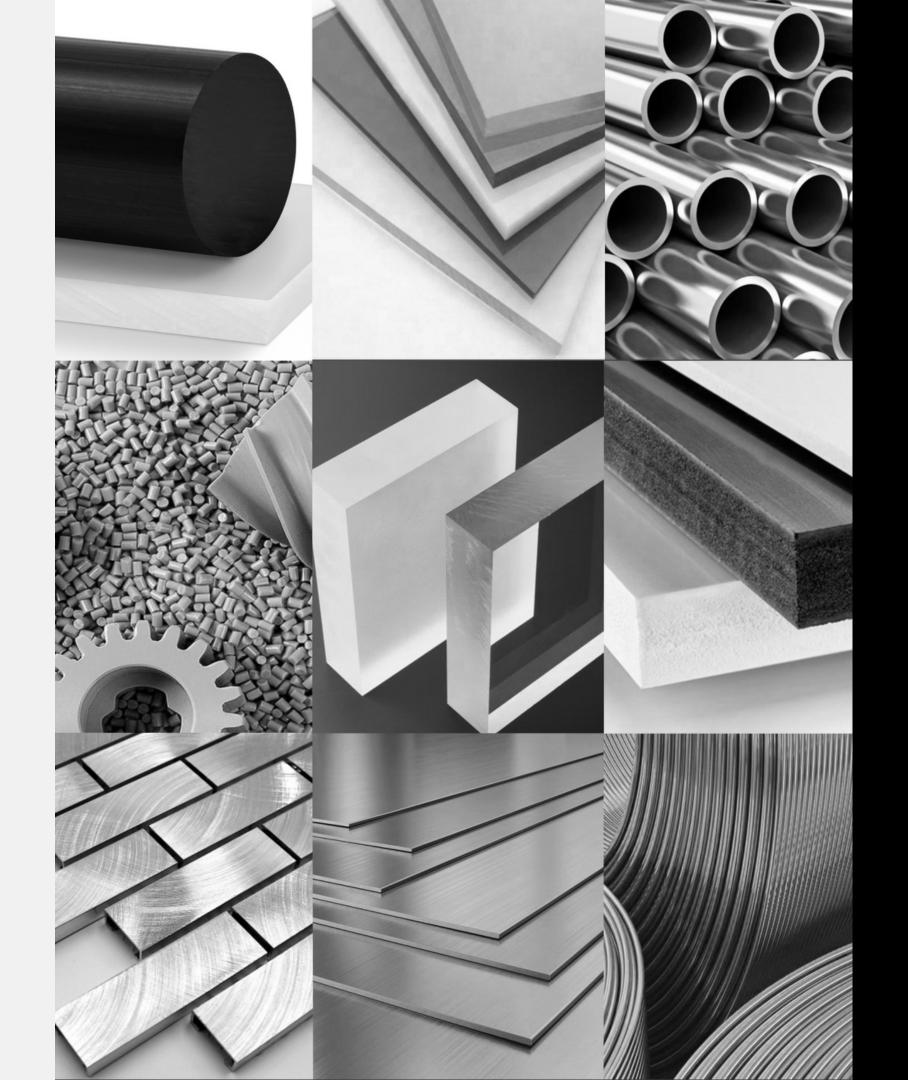
PC

PVC

PEEK

Others on request

## Materials



## 3D Printing

Truly Rapid SLS 3D Printing

Prototype and Serial production

### Build Volume (W $\times$ D $\times$ H)

16.5 x 16.5 x 30 cm 6.5 x 6.5 x 11.8 in

### Layer Thickness (Axis Resolution)

110 microns0.004 in

### **Hopper Capacity**

14.5 Liters

### **Material**

SLS Powders



## Material SLS Powders

#### **Industrial Grade Materials**

Unlock high-performance SLS 3D printing with industry-standard materials thanks to fine-tuned settings, compatibility with SLS's most in-demand powders, and an inert gas print option

#### Zero Waste, High ROI

By optimizing packing density and powder recyclability, we've reached a major milestone: zero waste printing, enabling lower cost per part

### Nylon 12 Powder

Tensile strength 50 MPa | Elongation at break 11%

### Nylon 11 CF Powder

Tensile strength 69 MPa | Modulus 5300 MPa

### Nylon 12 GF Powder

Tensile modulus 2800 MPa | Heat deflection 113 c

### Nylon 11 Powder

Tensile strength 49 MPa | Elongation at break 40%

### **TPU 90A Powder**

Tear strength 66 kNm | Elongation at break 310%

## 3D FDM Printer

### Build Volume (W $\times$ D $\times$ H)

300x300x605mm

### Layer Thickness (Axis Resolution)

0.01-0.25 mm

### Material

PLA/ ABS/ HIPS/ PC/ TPU/ TPE/ PETG/ ASA/ PP/ PVA/ Nylon/ Glass Fiber Infused/ Carbon Fiber Infused/ Metal Fill/ Wood Fill



# Thank you for your time

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