

Tool construction  
Precision Parts  
Electrical Discharge Machining

### **MACHINE LIST**

#### CNC-Wire Erosion:

Travel distances X-Y-Z: 500 x 350 x 300 mm  
Travel distances U-V: ± 75 mm  
max. component dimensions: 1050 x 800 x 300 mm; 1200kg  
Wire dimensions : Ø 0.1- Ø 0.3 mm  
Surface quality: Micro-finish eroding up to Ra 0.15µm

#### CNC ram electrical discharge machining:

Travel distances X-Y-Z : 350 x 250 x 250 mm  
C-axis : NC-controlled, with actual EROWA chuck and automatic electrode replacement  
max. component dimensions : 630 x 420 x 200 mm; 600kg

#### Wire eroding:

Travel distances X-Y-Z : 300 x 200 x 300 mm  
max. component dimensions : 800 x 500 mm; 450kg  
Drill diameter: Ø 0.3- Ø 3.0 mm

#### CNC milling:

Travel distances X-Y-Z: 700 x 500 x 600 mm  
max. component weight: 1000 kg  
Speed range: 0-18000 1/min  
autom. tool changer: 30-times

#### CNC-5-axis milling:

Travel distances X-Y-Z: 630 x 500 x 500  
Speed range: 0-18000 1/min  
Autom. Tool changer: 60-times  
Inner coolant supply (ICS): 40 bar

#### CNC surface and profile grinding:

Travel distances X-Y-Z: 1000 x 600 x 500 mm

#### Conventional surface grinding:

Travel distances X-Y-Z: 450 x 300 x 350 mm

#### Cylindrical grinding:

Centre height: 175 mm  
Distance between centres: 630 mm  
Max. grinding diameter: 350 mm

#### CNC lathing:

Centre height: 175 mm  
Distance between centres: 630 mm  
max. cutting diameter: 320 mm

#### Conventional lathing

Centre height: 200 mm  
Distance between centres: 800 mm  
max. lathing diameter: 500 mm

#### 3D-coordinate measuring machine (air-conditioned measuring range)

Measuring range X-Y-Z 500 x 500 x 400  
3D-open die surface measurement  
Rotary switch, pivot switch

#### Digital measuring microscope 2,5D (air-conditioned measuring room)

#### Microwaves:

2 blasting cubicles to clean and compact surfaces.

#### CAD / CAM:

Powerful 2 + 3D software to program CNC eroding, milling and lathing machines  
Interfaces: .STP-.STEP-.SAT-.VEC-.DXF -.DWG -.PRT -.IGES -.VDA  
Data transmission: E-Mail, ISDN data cable, CD-Rom  
3D- continuity; All machines linked to the DNC server