

# PRECISION MILLED PARTS FROM PRECISION MINDED ENGINEERS

## HSC PRECISION- THE NEW SERVICE BY LNP!

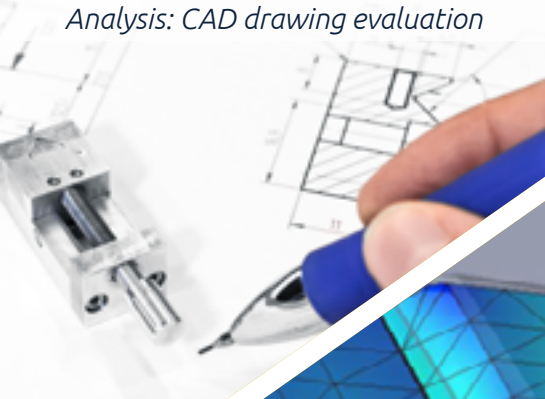
### Utilize our new HSC precision service and our experience in precision metrology

As a specialist in precision engineering and measurement technology with 35 years of experience, we are proud to be able to offer you our HSC milling technology.

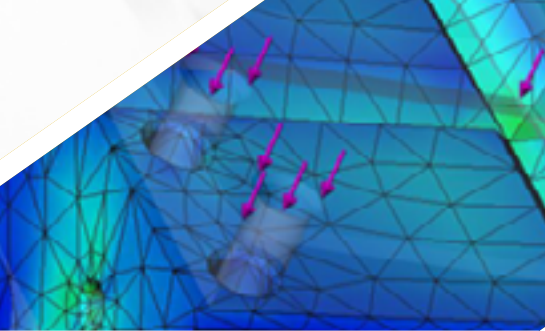
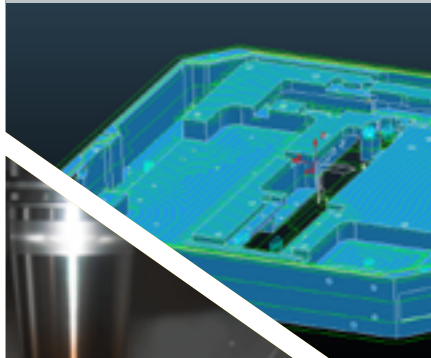
We are happy to produce even small series in our optimally air-conditioned production facility. With us, your project is not simply processed, but rather put on the best possible path. On request, our highly qualified staff will optimize your parts for production with prepended simulation verification.

You're in need of high-precision milled parts, and have high expectations for surface finish and quality ?  
You're not looking for an ordinary Contract manufacturer, but a cooperation partner who will support your product optimisation and quality assurance processes ?

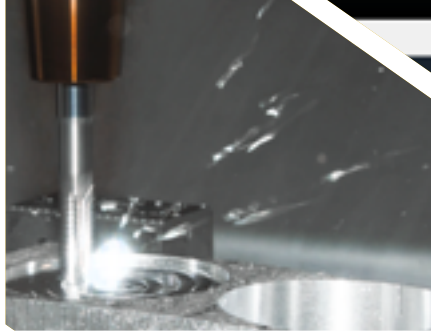
Analysis: CAD drawing evaluation



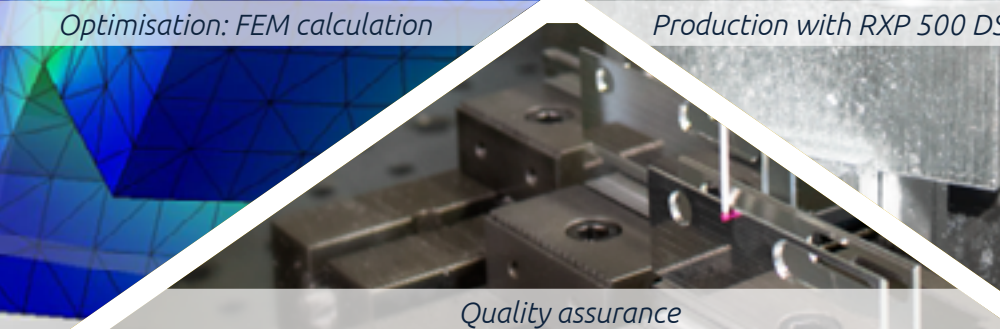
Analysis: Consultation



Optimisation: FEM calculation



Production with RXP 500 DS



Quality assurance

1

## Analysis

After viewing the drawing and checking the feasibility, we will advise you on your project. Of course, also on a confidential basis.

2

## Optimisation

CAD, FEA, FEM calculation and machining technology. Optimisation suitable for production with guaranteed functionality through simulation verification.

3

## Production

Powermill and CAM programming. Production on Roeders RXP 500 DS or RFM 760 S.

4

## Quality Assurance

We use in-house LNP measurement technology. For accuracies below 1 µm!

## Advantages of the HSC all-round service

Many components are not designed for their designated manufacturing technology. Unnecessarily many clampings result in an unnecessarily large number of work steps and thus in high cost and time expenditure. However, our HSC service helps to avoid such mistakes.

With powermill and up to date CAD Applications, we will gladly optimise your drawing for HSC!

- For components with filigree geometries
- highly precise Surfaces are required
- Components have to be manufactured at high speed

## We mill with the highest precision:

- High precision mechanical components
- Optical components
- Solid joints



## OUR HSC MACHINES

*Roeders RXP 500 DS*



*Milling precision components*



As a precision minded company, we also attach particular importance to manufacturing for maximum dynamics and accuracy. That is why we rely on the Roeders RXP 500 DS for 5-axis HSC milling.

3-axis milling is carried out on the RFM 760S. You can have many small parts at the same time or individual large and heavy Milling parts. The temperature stability is given by internal machine cooling.

*Roeders RFM 760S*



*Measuring the milling tool*



### ROEDERS RXP 500 DS

#### TECHNICAL DATA FOR YOUR FUTURE PARTS

<b>PARTS DIMENSIONS L×W×H:</b>	200 mm × 200 mm × 110 mm
<b>SWIVEL RANGE A-AXIS:</b>	+/- 92°
<b>ROTATION AREA C-AXIS:</b>	+/- n × 360°
<b>SPINDLE ROTATION SPEEDS:</b>	42.000 T/min
<b>PART WEIGHT:</b>	20 kg (Erowa), Max.60 kg,
<b>ROUND AXLE DRIVE:</b>	High dyn. torque motor (both axes with cooling)
<b>MATERIALS:</b>	Aluminum, gold, steel, plastics and more

### ROEDERS RFM 760S

#### TECHNICAL DATA FOR YOUR FUTURE PARTS

<b>WERKSTÜCKMAßE L×W×H</b>	750 mm × 550 mm × 350 mm
<b>B-SWIVEL AXIS FOR BALL MILLIN:</b>	+5° - 55°
<b>SPINDLE ROTATION SPEED:</b>	42.000 T/min
<b>PART WEIGHT:</b>	800 kg
<b>MATERIALS:</b>	Steel, aluminum, copper, plastics and more

# HSC-PRECISION WITH LNP

HSC milling is always suitable, if you want it all: The finest surfaces, the most complex and filigree parts at the highest speed with "gentle" precision.

The aerospace, optics, medical and automotive industries can no longer be imagined without HSC milling.

## HSC-Precision milling with LNP - In 4 steps to high precision parts

- CAD drawing evaluation
- HSC Optimisation
- Production
- Quality assurance

## We are specialised in:

- Precision components
- Optical components
- Filigree component geometry

## Your possibilities with LNP:

Hardness ranges from 10 to 70 HRC are possible with us, as well as an accuracy in the tolerance range of up to + 1 µm. We are also happy to provide special solutions outside of the norm. Our many years of experience in precision machine construction and precision measurement technology make us your cooperation partner for precision HSC milling.

**Do not hesitate!  
We can also advise  
you by phone!**