



# SEMINARS 2021

Metal Industries

Premium grinding tools since 1919  
[www.tyrolit.com](http://www.tyrolit.com)



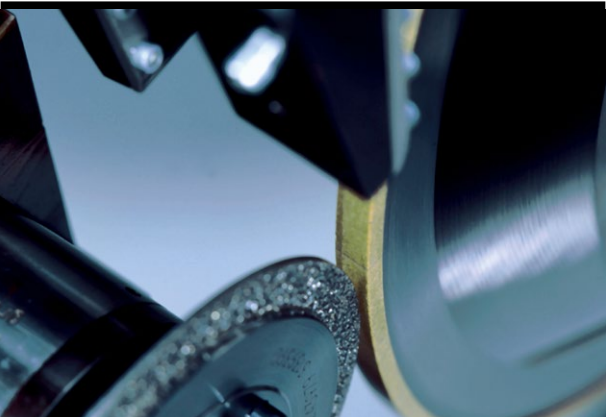
## Basics of Grinding

- Introduction to grinding processes
- Chip formation and influence of process parameters
- Design and manufacturing of grinding tools
- Basics of dressing
- Cooling lubricant
- Grinding wheel setup and safety in grinding
- Practical tests – Grinding demonstrations
- Plant tour

Learn about the fundamentals of grinding technology. Our TYROLIT experts will guide you through the grinding basics of surface and external cylindrical grinding step by step.

### Dates

Month	02	04	09	11
German	16.–18.		14.–16.	
English		20.–22.		23.–25.



## Grinding process optimization

- Stock removal process and influencing parameters
- Correct choice of the grinding wheel specification
- Conditioning (dressing) of grinding wheels
- Influence of the process parameters on the grinding result
- Efficient coolant supply
- Grinding wheel setup; balancing of grinding wheels
- Troubleshooting in grinding
- Practical demonstrations on a cylindrical and a surface grinding machine
- Plant tour

Develop new approaches to solve challenges in grinding together with the TYROLIT experts in our state-of-the art Testcenter. Basic grinding knowledge would be an advantage.

### Dates

Month	03	06	10
German	02.-04.		19.-21.
English		08.-10.	



## Tool Grinding Grinding strategies and solutions

- Manufacturing and quality-relevant features of round tools
- Grinding tool selection
- Grinding wheel setup
- Conditioning, dressing and sharpening
- Influence of the process parameters
- Coolant lubricant application
- Grinding strategies and cost calculations
- Application examples and troubleshooting
- Practical demonstrations on five axes grinding machine
- Plant tour

Gain valuable insight into the features of grinding processes when manufacturing shank tools. The course addresses beginners and advanced users especially in the tooling industry. Basic grinding knowledge would be an advantage.

### Dates

Month	05	11/12
German	04.-06.	
English		30.11-02.12



## External Cylindrical Grinding

- Process kinematics cylindrical grinding processes
- Basic Materials
- Influence of process parameters during external cylindrical grinding
- Grinding tool for external cylindrical grinding
- Conditioning and dressing strategies
- Grinding wheel setup; balancing of grinding wheels
- Application examples and troubleshooting
- Practical demonstration on an cylindrical grinding machine
- Plant Tour

Experience a deep insight into the versatile technology of external cylindrical grinding. The technological grinding details are covered with conventional and super abrasive grinding tools. Application examples from our experts complete the seminar. Basic grinding knowledge is an advantage.

### Dates

Month	10
German	05.-07.
English	

# Dates | Registration 2021

Location Schwaz



## Grinding Basics

Duration: 2.5 days, theory and practical training

Costs: € 1,100,- excl. VAT

## Grinding process optimization

Duration: 2.5 days, theory and practical training

Costs: € 1,500,- excl. VAT

*The number of participants for each seminar  
is limited to 10 attendees.*

### **TYROLIT SCHLEIFMITTELWERKE SWAROVSKI K.G.**

Swarovskistraße 33 | 6130 Schwaz | Austria

Tel. +43 5242 606-2499 | Fax +43 5242 606-12499

training.schwaz@tyrolit.com | [www.seminare.tyrolit.at](http://www.seminare.tyrolit.at)



### **Tool Grinding – Grinding strategies and solutions:**

Duration: 2.5 days, theory and practical training

Costs: € 1,500,- excl. VAT

### **External Cylindrical Grinding**

Duration: 2.5 days, theory and practical training

Costs: € 1.500,- excl. VAT

*The number of participants is limited to 10 for External Cylindrical grinding and 8 for Tool Grinding.*



## Seminars for hard fine machining in the transmission industry

### Gear honing

- Basics of gearing
- Process kinematics gear honing
- Influence of process parameters
- Abrasive tools and specifications
- Dressing of honing rings
- Examples and troubleshooting
- Practical exercise on a gear honing machine
- Plant tour

Our experts in the field of hard fine machining of gears will bring you closer to the special features of gear honing, also known as power honing. In presentations, practical exercises and discussions, the basics for a deeper understanding of the process and optimization possibilities will be demonstrated.

### Dates

Month	04	11
German	13.–14.	
English		16.–17.





## Workshops for

- Bevel gear grinding**
- Profile grinding**
- Generating grinding**

- Fundamentals of gear grinding
- Influence of process parameters
- Grinding tools and specifications
- Dressing
- Process specifics and troubleshooting
- Plant tour

### Dates

Dates for the workshops on request. For details please contact our office in Neurenrade.

# Dates | Registration 2021

Location Neuenrade



## **Gear honing**

Duration: 2 days, theory and practical training

Costs: € 1.200,- excl. VAT.

## **Bevel gear grinding**

### **Profile grinding**

### **Generating grinding**

Duration: 0.5 days, theory

Costs: € 300,- excl. VAT

*The number of participants for each seminar is limited to 12 attendees.*

### **TYROLIT GMBH & CO. KG.**

Osemundstraße 1 | 58809 Neuenrade | Germany

Tel. +49 2392 9290 15 | Fax +49 2392 9290 99

training.neuenrade@tyrolit.com | [www.seminare.tyrolit.at](http://www.seminare.tyrolit.at)

## Additional information

The price includes comprehensive seminar material, all lunches, dinner for one evening (except for workshops) and light refreshments. Travel and hotel costs are not included in the seminar price and must be organised independently. Upon registration you will receive a hotel recommendation from us. Companies sending more than two attendees to any one seminar will receive a 20% discount. Cancellation fees: 50% for cancellations made within 7–28 days prior to the seminar date. 100% for cancellations made less than 7 days prior to the seminar date.

If you are interested in the option of on-site grinding seminars or need individual seminar content, please contact us directly for an individual quote.

Our privacy policy can be found at

[www.tyrolit.com/privacy](http://www.tyrolit.com/privacy)

**TYROLIT SCHLEIFMITTELWERKE SWAROVSKI K.G.**

Swarovskistraße 33 | 6130 Schwaz | Austria

Tel +43 5242 606-0 | Fax +43 5242 63398

Our **worldwide subsidiary companies** can be found  
on our website at **[www.tyrolit.com](http://www.tyrolit.com)**



Find us on social media  
**TYROLITgroup**