

# Seminars 2024 Metal Industries

English





### **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
  - Safety in grinding

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.

Month	01	03	10	11
German	23 25.		08 10.	
English		05 07.		26 28.



### **Grinding process optimisation**

- 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
- Safety in grinding

Develop new approaches to solving grinding challenges together with the Tyrolit experts in our state-of-the art test centre. Basic grinding knowledge would be an advantage.

Month	02	04	10
German	06 08.		22 24.
English	09 11.		



# 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
  - Safety in grinding

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.

Month	04	11
German	23 25.	
English		05 07.



### **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
  - Safety in grinding

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.

Month	09	
German	17 19.	
English		

# Dates | Registration 2024

#### **Location Schwaz**



#### **Grinding Basics**

Duration: 2.5 days, theory and practical training

Costs: € 1,200,- excl. VAT

#### **Grinding process optimization**

Duration: 2.5 days, theory and practical training

Costs: € 1,600,- excl. VAT

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

#### Tyrolit Schleifmittelwerke Swarovski AG & Co K.G.

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

Duration: 2.5 days, theory and practical training

Costs: € 1,600,- excl. VAT

## **External Cylindrical Grinding**

Duration: 2.5 days, theory and practical training

Costs: € 1,600,- excl. VAT



Just scan the QR code and view our seminar programme online



# Seminars for hard fine machining in the transmission industry

#### **Gear honing**

- Basics of gear geometry
  - 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
    - Safety in grinding

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 optimisation possibilities will be demonstrated.

Month	05	09
German	14 15.	
English		10 11.



# 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
  - Safety in grinding

#### **Dates**

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

# Dates | Registration 2024

#### **Location Neuenrade**



#### **Gear Honing**

Duration: 2 days, theory and practical training

Costs: € 1,300,- 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

# 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 the minimum number of 6 participants per seminar is not reached, we reserve the right to cancel the seminar three weeks before the date. There will be no costs for you.

As it is compulsory to wear safety shoes on the factory premises, we recommend that you bring your own shoes.

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



Just scan the QR code and view our seminar programme online

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Our worldwide subsidiary companies can be found on our website at www.tyrolit.com









