

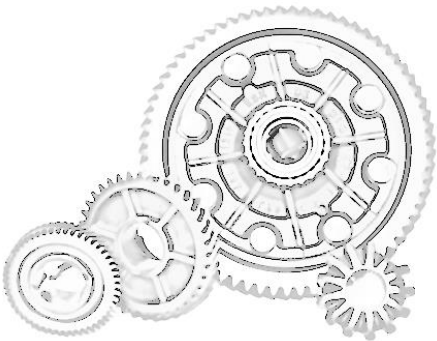


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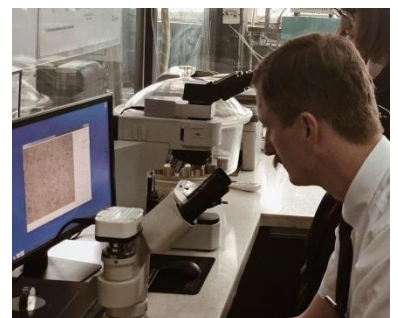
# Online Seminar Winter 2021

- Development of bearing suppliers and quality control during purchasing
- Basics of Bearing Technology
- Failure Analysis



# Basics of Bearing Technology

- Session I (free): Introduction  
19<sup>th</sup> of January 2021, 15:00 Central European Time
- Bearing types
  - Cages
  - Bearing arrangements
  - Interfaces (design requirements)
- Session II: Properties I  
26<sup>th</sup> of January 2021, 15:00 Central European Time
- Tolerances (clearance, precision, etc.)
  - Lubrication (grease and oil)
  - Materials
- Session III: Properties II  
2<sup>nd</sup> of February 2021, 15:00 Central European Time
- Internal geometry (profiling, osculation)
  - Life calculation acc. to ISO 281
  - Sample inspection (including quick testing)
- Session IV: Preventive Maintenance  
9<sup>th</sup> of February 2021, 15:00 Central European Time
- Oil sample analysis
  - Regular inspection and endoscopy
  - Condition monitoring by vibration measurement





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# Development of bearing suppliers and quality control during purchasing

- Session I (free): Introduction  
16<sup>th</sup> of February 2021, 15:00 Central European Time
- Motivation
  - Definition of quality levels
- Session II: Quality Specification  
23<sup>rd</sup> of February 2021, 15:00 Central European Time
- Quality characteristics
  - Technical description
- Session III: Production  
2<sup>nd</sup> of March 2021, 15:00 Central European Time
- Approach during factory visits and audits
  - Requirements for the documentation of production
- Session IV: Quality Control  
9<sup>th</sup> of March 2021, 15:00 Central European Time
- Methods for sample inspection and incoming control
  - Approach for initial approval
  - Concepts for quality control





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# Failure Analysis

## Session I (free):

### Introduction

16<sup>th</sup> of March 2021, 15:00 Central European Time

- Methods for inspection
- Examples of failures related to poor lubrication
- Premature failure due to contamination

## Session II:

### Faulty Bearings

23<sup>rd</sup> of March 2021, 15:00 Central European Time

- Typical failure patterns of faulty bearings related to:
  - Crowning
  - Cracks
  - Poor material
  - Undercuts

## Session III:

### Electricity

30<sup>th</sup> of March 2021, 15:00 Central European Time

- Electric erosion
- White etching cracks

## Session IV:

### Additional causes for failure

6<sup>th</sup> of April 2021, 15:00 Central European Time

- Premature failure due to faulty installation
- Improper fits
- Shape errors of surrounding parts
- Cage fracture



# Registration Form



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Elgeti Engineering GmbH

Ms. Ecem Is  
Liebigstraße 15  
52070 Aachen

I hereby register for the following online seminars:  
(Please indicate in the first column)

Enroll yes/no	Date/Time	Title	Price per pers. €	Lang.
Single webinars:				
	01/19	Basics of bearing technology Session I: Introduction	FREE	English
	01/26	Session II: Properties I	175.00	English
	02/02	Session III: Properties II	175.00	English
	02/09	Session IV: Preventive Maintenance	175.00	English
	02/16	Bearing supplier development, Session I: Introduction	FREE	English
	02/23	Session II: Quality specification	175.00	English
	03/02	Session III: Production	175.00	English
	03/09	Session IV: Quality control	175.00	English
	03/16	Failure analysis Session I: Introduction	FREE	English
	03/23	Session II: Faulty bearings	175.00	English
	03/30	Session III: Electricity	175.00	English
	04/06	Session IV: Additional causes for failure	175.00	English
Packages:				
		Complete Package: Basics of bearing technology, session I to IV	345.00	English
		Complete Package: Bearing supplier development, session I to IV	345.00	English
		Complete Package: Failure analysis, session I to IV	345.00	English
Name of participant				
Company				
Address				
Billing address (optional)				
PO No. (optional)				
Phone and e-mail				
VAT ID No. (people from EU)				
Signature				

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www.elgeti-engineering.com

Prices do not include VAT.  
The participation fee is due before start of the webinar and is non-refundable.

Each registration is for one person only.  
By subscription, the participant agrees to share their name and company name to the other attendees.

Each session ca. 90 min, starting 15:00  
Central European Time

**Location:**

Web meeting on the following platform:  
• Zoom

(Link will be shared by email after registration.)