

## CONTACT:

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**O RING  
PRÜFLABOR  
RICHTER**

## THE O-RING PRÜFLABOR RICHTER:

The O-Ring Prüflabor Richter specializes in services designed to ensure a safe use of elastomer seals and technical moldings and has been accredited according to DIN EN ISO/IEC 17025 since 2002. In addition to numerous services, we also offer the performance of failure analyses, which we have carried out on more than 2000 cases to date.

Our gained experience is shared in seminars, in-house seminars and consultations. Since the laboratory was founded in 1996, more than 2000 companies have already taken advantage of these services.

## INSTRUCTOR DIPL-ING. BERNHARD RICHTER:

After he graduated with a degree in mechanical engineering from the University of Stuttgart, Bernhard Richter was employed by one of the world's leading sealing manufacturers for more than ten years, seven of which were spent as Head of Applications Engineering of the European O-Ring Division. Soon after, he founded the O-Ring Prüflabor Richter in 1996 and ever since has passed on his knowledge in seminars throughout the year.

His ability to comprehensively understand complex correlations is particularly appreciated. Furthermore, he is not afraid to provide the user with clear decision criteria. He has been an expert in the ISO Working Group on O-Ring Standardization (ISO 3601) for more than ten years and is well known for his numerous publications.

## IN-HOUSE SEMINARS:

We also offer individual designed seminars in English according to the needs of our customers. For more information feel free to contact us at [info@o-ring-prueflabor.de](mailto:info@o-ring-prueflabor.de).

## Seminar

# TESTING OF ELASTOMER SEALS



## ABOUT THIS SEMINAR

This seminar introduces the most important test procedures for incoming goods and qualification tests. In addition, there will be an opportunity to get to know the application of the test procedures in an accredited test laboratory.

## REGISTRATION AND LOCATION:

Please contact us for further information. We offer seminars at our facility and at customer's preferred locations.

Email: [info@o-ring-prueflabor.de](mailto:info@o-ring-prueflabor.de)

## DAY 1 – PROGRAM

### 09:30 AM INTRODUCTION

### 09:45 AM COMPARISON OF SEALING MATERIALS (B.RICHTER)

- Test criteria for sealing materials
- Compound related differences
- Advantage of finished part testing

### 11:30 AM DIMENSIONAL AND VISUAL INSPECTIONS (B.RICHTER)

- Shape and surface deviations
- Non-contact measurement methods
- Measuring mandrels and circumferential measurers
- Practical exercises

### 12:30 AM LUNCH BREAK

### 02:00 PM TYPICAL GOODS RECEIPT TESTS (B.RICHTER)

- Shore A and IRHD hardness
- Spec. weight
- Compression set/tensile set
- Practical exercises

### 03:30 PM COFFEE BREAK

### 03:45 PM PHYSICAL MATERIAL TESTS (B.RICHTER)

- Tensile test on shoulder bars and finished parts
- Tear propagation resistance
- National and international standards
- Practical exercises

### 05:00 PM DISCUSSIONS

### 19:00 EXCHANGE OF EXPERIENCES IN A CASUAL SETTING

## DAY 2 – PROGRAM

### 08:30 AM RESISTANCE TESTS AND ARTIFICIAL AGING (B.RICHTER)

- Definition of resistance
- Important influencing factors on reproducibility, presentation of the various test standards
- Evaluation and interpretation of results
- Artificial aging

### 09:30 AM COFFEE BREAK

### 09:45 AM ADVANCED MATERIAL TESTING (B.RICHTER)

- Cold test methods (TR10, DSC, DVR, DMA)
- Ozone test
- Analytical test methods (TGA, FTIR, pyrolysis GC-MS)
- Compressive stress relaxation

### 11:30 AM REQUIREMENTS FOR A TEST LABORATORY ACCORDING TO DIN EN ISO/IEC 17025 (G.REINER)

- Competence requirements
- Quality management system
- Practical experience in implementation

### 12:15 AM LUNCH BREAK

### 13:30 PM REQUIREMENTS FOR AN ORDER SPECIFICATION (B.RICHTER)

- Definition of compound constancy
- Interpretation of data sheets
- Sample proposal for an order specification

### 03:15 PM FINAL DISCUSSION (end approx. 03:30 PM)