



Academy Training Courses

2020



vonRoll Institute
for High-Voltage Insulation

The insulation course focuses on insulation for high-voltage electrical rotating machines. It has become increasingly popular and is now open to everyone involved in insulation technology for rotating machines and wanting to remain up to date.

Basic High-Voltage Course



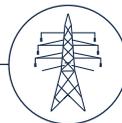
Meet our experts in person and take a look around our facilities in Switzerland.

Location:	Breitenbach, Switzerland
Dates:	every third Thursday of each month
Language:	English or German (alternating)
Fee:	CHF 299 excl. VAT

Course content

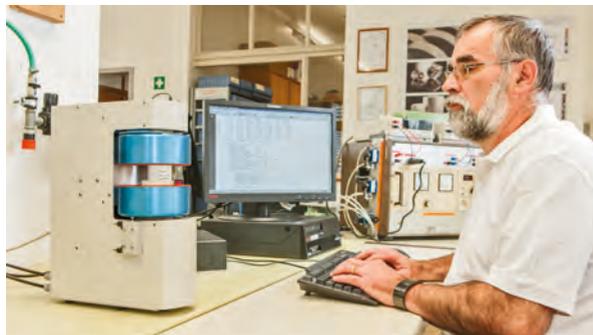
- » Introduction to operations at the Von Roll Institute
- » Basic training in high-voltage insulation materials
- » Current trends and fields of research
- » Laboratory visit
- » Practical demonstration of high-voltage tests

Advanced High-Voltage Course



Locations:	Breitenbach, Switzerland and Delle, France
Dates:	March 16–19, 2020 October 19–22, 2020
Language:	English
Fee:	CHF 3,500 excl. VAT including meals and accommodation

The target audience for this course is technicians, engineers, and managers who wish to gain deeper insight into and exchange ideas on insulation technology and materials. Participants benefit from a basic knowledge of electrical engineering, physics, and chemistry, although this is not required. The number of participants is limited to twelve to ensure the quality of interaction.



Course content

The Advanced High-Voltage Course includes the following topics:

1. General knowledge

- » Basics of motors and generators
- » Mica and mica paper
- » Insulation materials and their evaluation

2. Insulation technology

- » Resins and varnishes, impregnation techniques
- » Resin-rich and VPI technology, theory and practice
- » Suppression of partial discharge
- » Winding wires
- » Composite materials
- » Processing equipment and technology
- » Testing of sample coils

3. Insulation systems

- » High-voltage motors
- » Large power generators
- » Traction motors
- » Wind-turbine generators

4. Factory visits and application exercises

- » Flexible materials and liquids
- » Winding wires
- » Composite materials
- » Applications laboratory
- » High-voltage laboratory

Expert High-Voltage Course



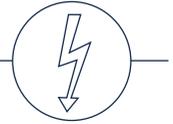
Location:	Breitenbach, Switzerland
Dates:	April 6–8, 2020 November 16–18, 2020
Language:	English
Fee:	CHF 4,500 excl. VAT including meals and accommodation

For those with an extensive knowledge of insulation technology, we offer a three-day advanced course with the possibility of excursions to other facilities. In this course, we focus even more on discussion and practical work. The number is limited to eight participants due to the interactive nature of the program. We ask you to inform us in advance about your questions and topics of interest, so that we can better prepare and ensure the appropriate experts will be available to you.

Course content

- » Different insulation technologies and an introduction to the latest developments in insulation tools
 - » Insulation systems in typical high-voltage uses such as hydro- and turbogenerators, industrial plants, electric cars, and drivetrains
 - » Run-through of different example case studies in workshops and practical tests
 - » Visit to the factory and laboratories in the region
-

Low-Voltage Course (incl. eDrive)



Location: Trofarello, Italy
Dates: June 8–10, 2020
Language: English
Fee: EUR 1,900 excl. VAT
including meals and accommodation

This training session provides a detailed view of insulating materials and systems for low-voltage rotating machines, including their selection, processing, and testing. The course includes three days of classroom learning and hands-on activities well suited for production and design engineers, R&D staff, repair specialists, end-users, and other technical staff who require more thorough knowledge of these insulation systems.

Course content

This course takes place at our center of excellence for liquids in Trofarello, in the region of Torino, Italy, and includes the following topics:

- » Introduction and fundamentals
- » Winding wires
- » Flexible insulation
- » Electrical adhesive materials
- » Banding tapes
- » Impregnation resins and varnishes
- » Potting and encapsulating compounds
- » Component and systems testing (UL focus)
- » Customer acceptance testing
- » Stresses in inverter-driven drives



Contact



Please contact us for further details and information.
The course organizers may be reached directly at: contact@vonroll.institute

Phone +41 (0)61 785 50 50

Von Roll Institute for High-Voltage Insulation
Passwangstrasse 20
4226 Breitenbach
Switzerland

Visit our website www.vonroll.institute