

# Braking fundamentals

## DESCRIPTION

This training includes an introduction to the braking technology of rail vehicles. The participants will be given an overview of the technology of brakes on mainline railways - as they are referred to in the relevant UIC leaflets. First day we will start with the introduction and explanation of the essential basics and terms of braking technology as well as a physical outline will be given before the main assemblies of the braking equipment of mainline railways. In this context are also covered the operational aspects, such as train lengths and mass restrictions, as well as the associated brake calculations and the correct execution of brake tests.

On the second day, the components of the braking systems will be dealt with in terms of their specific areas of application. Both the classical friction brakes and the modern rail brakes as well as the dynamic brakes will be explained.

The discussion round will offer the opportunity for a debate on current topics and interfaces with braking technology, such as the mode of sanding action and anti-slip devices.

Of course, specific customer requests regarding braking technology for mainline railways can also be taken into account on request. A separate seminar can be offered for Light Rail Vehicles (LRV) also on request.

## SEMINAR CONTENTS

### DAY 1 09.30-17.00

- Legal Fundamentals
- Origin and operating principle of today's Railway air brake
- Components of the Railway air brake
- Braking operation

### DAY 2 09.00-17.00

- Additional braking systems on rolling stock
  - Dynamic brake designs on traction units
  - Braking system magnetic Railway air brake
  - Eddy current brake system
  - Digital brake controls of modern Railway air brake
- Round of discussions

## Seminar-No. 03.02



Online-Seminar\*

### DATES & COSTS

02.-03.03.2022  
22.-23.11.2022

Nuremberg  
Nuremberg

Length:

2 Days

Fee:

**1.400,00 €**

incl. lunch and certificate of participation  
plus VAT  
\* On-demand

### TARGET GROUP

- Persons involved in the development, manufacture, commissioning and operation of railway vehicles

### LANGUAGES

