

K701

# Rotating electrical machines theory, operation and maintenance for chemical, oil and gas industry

COURSE DESCRIPTION

# Course goal

This course is a combination of two courses: K700 Rotating electrical machines theory, operation and maintenance and K280 Seminar for motors and generators in hazardous areas. In addition to course K700, this course provides detailed training on important factors relating to the operation of motors and generators in hazardous areas. Topics include directives, service and maintenance requirements, etc.

### Participant profile

This course is mainly targeted at service and maintenance engineers, as well as service managers who want to improve their knowledge of Ex issues and of the relevant aspects of maintenance, overhaul and repair for EX products.

# **BU Motors and Generators training**

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### **Topics**

The course agenda is the same as for K700, with an additional day for K280 covering the following topics (additional to K700 agenda):

- General Introduction
- Hazardous areas and area classification
- Standards in hazardous areas and key regulations
- Main concepts of Ex protection classes
  - Flameproof enclosure
  - Pressurized enclosure
  - Increased safety protection
  - Non-sparking protection
  - Dust ignition proof enclosure
  - Service requirements for Ex equipment
     Selection and erection IEC 60079-14
    - Inspection IEC 60079-17
    - Repair and overhaul IEC 60079-19
  - Replacement
- ABB approach
  - Service network and authorization process for motors and generators
  - Motors and generators for hazardous areas
- Conclusions and summary

## Course type and methods

This is an instructor led seminar with practical exercises. Participants min. 10 to max. 30.

Dates and venue are subject to agreement.

There is an end-of course assessment and course participants receive a certificate.

# Course duration

The duration of the course is 4 days.