COURSE DESCRIPTION

CHH625 – Gearless Mill Drive
Ring Motor Knowledge

Course goal
The goal of this course is to understand all aspects of a ring motor. Participants will learn about the installation, maintenance and manufacturing of a ring motor within the gearless mill drive (GMD) system. The course contributes effectively to the participants’ knowledge regarding the ring motor in general, maintenance preparation, availability of spare parts and handling of emergency cases.

Main learning objectives
The participants will be able to:
— Name the main parts of a ring motor
— Understand how the ring motor is manufactured
— Recognize the different types of ring motors
— Understand the installation steps of a ring motor
— Prepare maintenance inspections for planned shutdown inspection on the ring motor
— Handle spare parts and store them correctly
— Proceed correctly in emergency cases such as unexpected shutdown of the ring motor

Participant profile
This training is targeted to skilled mechanical maintenance personnel and service engineers.

Prerequisites
Participants should have knowledge of the GMD system and the ring motor. Basic knowledge or experience in mechanical or electrical work is a plus.

Topics
— Ring motor overview
— Ring motor manufacturing
— New installation of a ring motor
— Preparation of the workplace for maintenance of a ring motor
— Knowing all required spare parts, tools and consumables related to operation, maintenance or emergency case of the ring motor

Course type and methods
This is an instructor-led course with presentations and interactive classroom discussions. Besides that, a walk through the factory with practical and technical explanations will take place during the training.

Duration
The duration is 5 days.

Remarks
Note: This course does not certify, approve, authorize, accredit or validate any engineer to perform any repair work. Any repairs must be performed by ABB or supervised by ABB. This course can only be delivered at ABB training facilities in Bilbao, Spain.
### Course map

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<th>DAY 4</th>
<th>DAY 5</th>
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<td>Welcome, personnel introduction</td>
<td>Review day 1</td>
<td>Review day 2</td>
<td>Review day 3</td>
<td>Review day 4</td>
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<tr>
<td>Course introduction</td>
<td>Installation steps of a ring motor</td>
<td>Maintenance of a ring motor with its different strategies</td>
<td>Spare parts, tools and consumables</td>
<td>Emergency cases</td>
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<tr>
<td>Manufacturing of the ring motor</td>
<td>Walk through factory</td>
<td>Practical explanations in the factory</td>
<td>Walk through factory</td>
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<tr>
<td>Main parts of a ring motor</td>
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<td>Summary</td>
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<td>Different types of ring motors</td>
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<td>Questions and answers</td>
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<td>Evaluation</td>
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<td>Course close</td>
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#### Topics

- **Topics**
  - Welcome, personnel introduction
  - Course introduction
  - Manufacturing of the ring motor
  - Main parts of a ring motor
  - Different types of ring motors

#### Time

<table>
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<tbody>
<tr>
<td>9:00 am – 5:00 pm</td>
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Typical course layout (time or sequence may change)