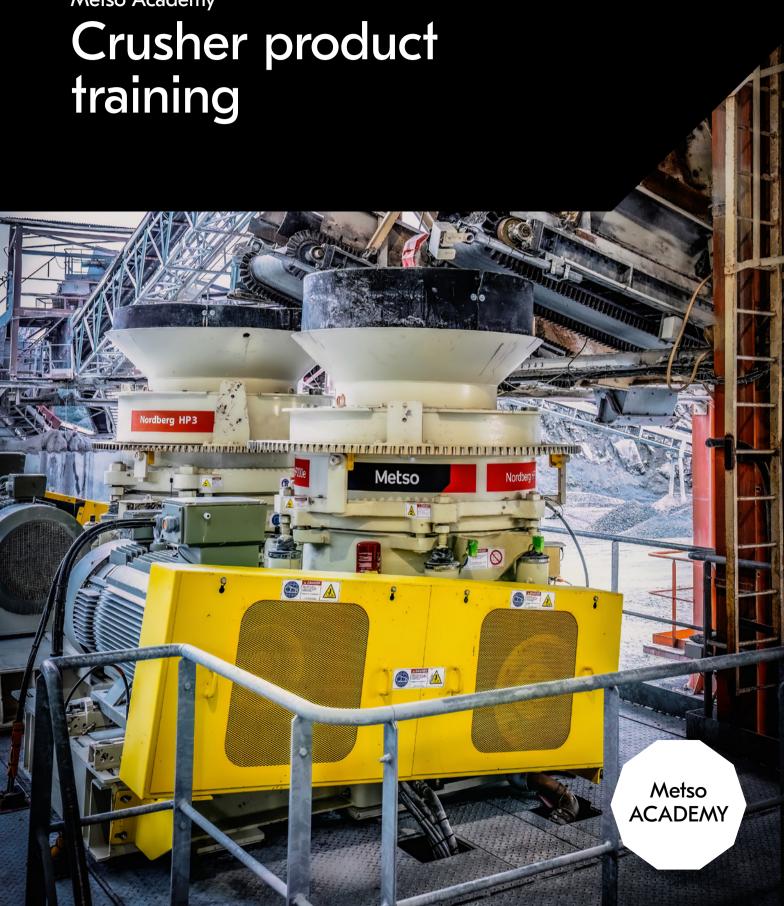
# Metso







Our crusher training equips participants with the knowledge and skills required for safe and efficient operation and maintenance of Metso crushers. Training is delivered by our experienced team of in-house certified experts, and covers both basic knowledge of crushers and crushing technology, as well as customized training courses on optimal operation, maintenance, automation, and troubleshooting.

#### Training overview

- Provides basic theoretical and practical knowledge of crushing principles and safe operation both for beginners and personnel requiring refresher training.
- Customized training for experienced personnel for more in-depth knowledge.
- Suitable for operators, supervisors, and maintenance and technical personnel.
- · Pre-defined modules allow for the tailoring of training content.
- · Training delivered at Metso facility or on-site.

Through carefully designed course modules, this training covers the following elements:

- 1. **Safety** guidelines on the safe use of crushing equipment and the relevant safety regulations.
- 2. **Technical overview** mechanical, instrumentation, electrification and automation, as well as hydraulic overview.
- 3. **Operational overview** crusher operation, parameter adjustment, and use of the operator interface unit.
- 4. Maintenance and after-sales support guidelines on services and performing maintenance in a safe and correct manner.

## Read more at metso.com/academy



#### **Benefits**

- Increased productivity
- · Improved product shape
- · Increased on-line availability
- Decreased maintenance repair costs

## Crusher product training

## Training course details

Crusher product training course is composed of four different modules.

Module	Typical content
Operation	Introduction, process and operational parameters, operating principles, lubrication operation, hydraulic power unit operation, log sheets, safety
Maintenance	Introduction, scheduled periodic maintenance, repair style maintenance, liner change maintenance, lubrication unit, hydraulic power unit, safety

#### Recommended training days per equipment type

Module	Gyratory	Cone	Jaw
Operation	1 day	1 day	½ day
Maintenance	1 day	1 day	½ day

#### Theory training

Classroom-based course which covers basic operation principles, operator interface, safe use of Metso crushers as well as after-sales support. This course is intended for operators, supervisors, maintenance personnel, and technical specialists, and can also be used as a refresher course for personnel who already possess a basic knowledge of crushing equipment.

#### Customized training courses

These courses are custom made to meet our customer's specific needs. They are designed to build up competence in Metso products and provide more in-depth information for designated equipment. Customized training courses provide thorough information on our equipment and technologies, process optimization insights as well as service procedures and tips to help customers move from reactive to proactive maintenance. These custom courses are normally a combination of classroom and practical training.

#### Your contact

Bronwen Hunt Regional Training Manager training\_australia@metso.com +61 411693409

Metso Training Academy Address 33 Radius Loop, Bayswater WA 6053



#### **Dress Code**

PPE not required, closed in shoes, smart casual, long pants.



#### Accessibility

Our premises are accessible to people with reduced mobility.



# Primary gyratory crusher training

### Content

#### Overview of the machine

- · Operating principle
- · Range of MK Series Crushers
- · Main machine components
- · Comparison of standard versus a super spider
- · Technical specifications

#### Wear parts

- · Installing concaves
- · Installing mantles
- · Installing bottom shell and arm liners

#### Operation

- · Safety rules to be respected
- Tools
- · Starting and stopping the machine
- · Starting loaded
- · Clearing an uncrushable
- Crusher volume and power limits
- · Keeping a crusher observation log

#### Periodic maintenance

· Checks to be carried out

#### Optimizing machine operation

- · Crusher feed rules
- · Adjusting the crusher parameters

## Training objectives

#### At the end of the training, you will be able to:

- · Identity and name parts precisely
- Understand the basic rules for operating the primary gyratory crusher
- · Planning maintenance operations
- · Operate machine to OEM specifications/design



Target audience
Operators
Supervisors

Technical specialists

Maintenance personnel

Two day course 1 day - Operation 1 day - Maintenance



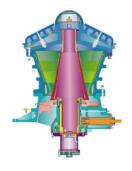
**Duration** 8am - 5pm 9h incl. breaks

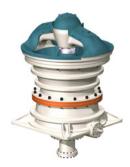
## Course pricing

\$1500.00 AUD excl GST per participant

#### Whats included

- · Morning, afternoon tea and lunch
- · Course material
- · Certificate of participation







# C Jaw crusher training

### Content

#### Overview of the machine

- · Operating principle
- C Jaw crusher range
- · Machine components and assembly
- · Mechanical and hydraulic control systems
- · Optional equipment
- · IC10C automation

#### Wear parts

- Different liner types
- · Choice of liner profile
- · Hardening and turning over of liners

#### Operating instructions and safety rules

- · Machine start-up and shut-down procedure
- · Safety rules to be respected
- · Influence of feed on crusher performance
- · Rules for filling the cavity module
- · Speed and power settings
- · Minimum setting indicated in user manual
- · Measuring and adjusting the setting

#### Periodic maintenance

- · Checks to be carried out
- · Bearing lubrication
- Replacement of liners

#### Optimizing machine operation

- · Influence of feed and adjustment on the product
- · Reacting to a problem:
  - · liners life too short
  - · crusher capacity too low.

## Training objectives

#### At the end of the training, you will be able to:

- Identity and name parts precisely
- Understand the basic rules for operating the C Jaw
- · Planning maintenance operations
- · Operate machine to OEM specifications/design



Target audience Operators **Supervisors** 

Maintenance personnel

One day course ½ day - Operation ½ day - Maintenance Technical specialists



Duration 8am - 5pm 9h incl. breaks

## Course pricing

\$825.00 AUD excl GST per participant

#### Whats included

- · Morning, afternoon tea and lunch
- · Course material
- · Certificate of participation





## Cone crusher training

MP, HP, GP and Symons

## Content

#### Overview of the machine

- · Operating principle
- · Machine components and assembly
- · Range of cone crushers
- Automation

#### Wear parts

- Different types of liners (profiles and materials)
- · Choose the correct crushing chamber
- · Running-in and work hardening liners

#### Operating instructions and safety rules

- · Machine start-up and shut-down procedure
- Safety rules to be respected
- · Crusher feed rules
- · Adjustment of the crusher
- · Ring bounce problem
- · When should liners be changed?

#### Periodic maintenance

- Checks to be carried out
- Replacement of liners

#### Disassembly/reassembly

- · Disassembly/reassembly procedure
- · Tightening rules
- Replacing wear parts
- · Checks to be carried out when replacing wear parts

#### Optimizing machine operation

· Influence of various parameters on crusher performance and finished product

#### Hydraulics - lubrication

- Lubrication circuit and components
- · Hydraulic circuit and components

## Training objectives

#### At the end of the training, you will be able to:

- Identity and name parts precisely
- Understand the basic rules for operating the cone crusher
- · Planning maintenance operations
- · Operate machine to OEM specifications/design



Target audience Operators **Supervisors** 

Maintenance personnel

Technical specialists



One day course

Duration 8am - 5pm



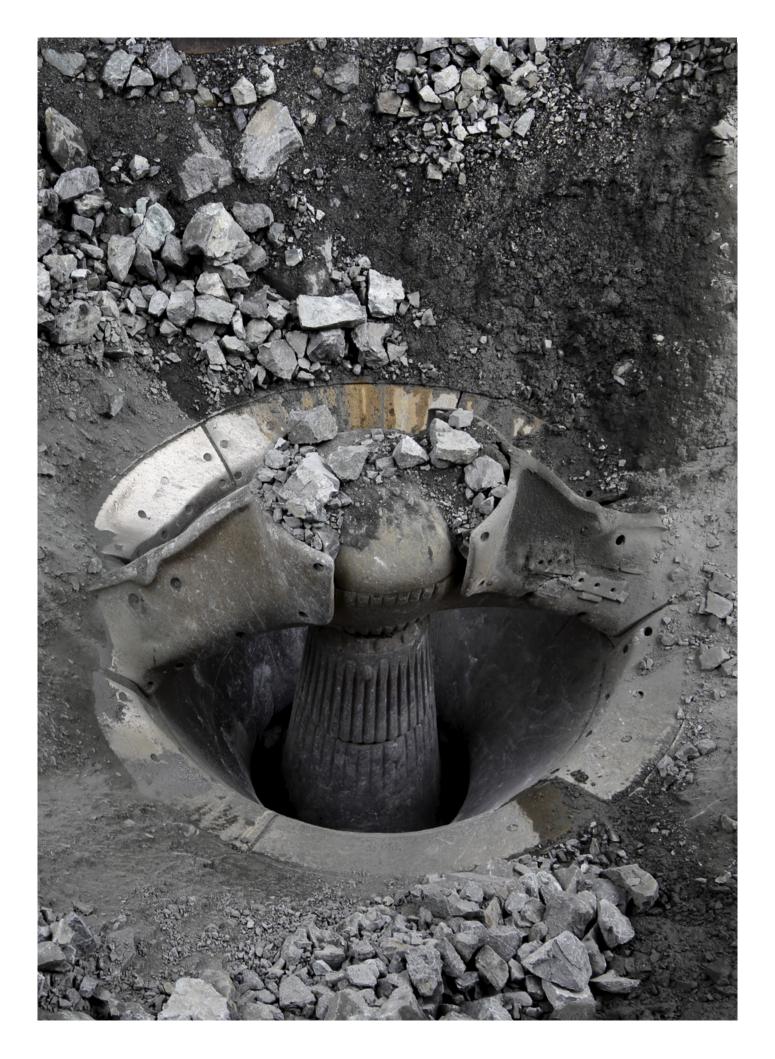
## Course pricing

\$1500.00 AUD excl GST per participant

#### Whats included

- · Morning, afternoon tea and lunch
- Course material
- · Certificate of participation





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