Crushing and Screening Equipment (CSE)

Training strengthens business

Training is an increasingly important element in strengthening business interaction and motivating personnel. The complete package Metso offers today includes equipment and sophisticated service. The package is completed by know-how that is expanded and distributed by trained individuals who are key to the success of any organization.

The Metso training package will expand your knowledge step by step, starting with comprehensive eLearning courses and leading to in-depth advanced training courses. After completing the prerequisite eLearning courses, you can choose from different training courses based on your needs.

With Product and Application training courses, you can get a better understanding of the products, applications, quality and safety issues, rock and ore characteristics and sustainability in operations.

Operation and Maintenance training courses will give you competency in equipment installation, basic maintenance, including preventive actions, and repairs and lifecycle issues.

Parts Product Support training courses concentrate on wear and spare parts and related services.

If in doubt about which training course is suitable for your requirements, just contact us and together we can build a training program to suit your needs.

Learning on the job is the most important way to enhance competency. Please take time between training courses to increase your knowledge level.

Our aim is to provide you with continuous training programs to keep you updated on all of Crushing and Screening Equipment products and services – now and in the future.

Customer contacts
- Please see www.metso.com – contact us – your nearest Metso representative.
- Please contact us to select the right training for your needs. We also offer tailor-made training based on, for example, the process at your site.

Extranet for Metso distributors
- General training information
- Training department contacts
- Training calendar & agendas
- Registration for training
- eLearning courses

Metso personnel
- Avenue – MAC training
- Lotus Notes – MM Training database

Product and Application
- General training information
- Training department contacts
- Link to Lotus Notes MM Training database

Operation and Maintenance
- Training calendar & agendas
- Registration for training
- eLearning courses

Parts Product Support
- Training calendar & agendas
- eLearning courses
Crushing and Screening Equipment Training Offering

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eLearning courses with self-paced training are prerequisites to the classroom training courses, and the Crushing and Screening 1 training course must be passed before you can register for further courses. After that, you can choose the desired courses from the offering of:

- Product and Application (green arrow)
- Operation and Maintenance (orange arrow)
- Parts Product Support (blue arrow)

For further details and the exact prerequisites, please refer to the course-specific pages. Terms and Conditions are on page 26.
Metso eLearning

The prerequisite eLearning

Metso eLearning
Metso eLearning complements our instructor-led training programmes, offering a range of web-based, on-demand courses designed to maximise your training investment.

Metso's eLearning programme is considered the foundation training that supports all learning and development opportunities on offer, and is a prerequisite for Metso's instructor-led training courses. The eLearning site currently offers the following two Crushing and Screening curricula:

- General Product Knowledge
- Parts Product Support

Metso's eLearning programmes provide more opportunities than ever before to learn about Metso equipment, whether you sell it, support it, or maintain it.

As a subscriber to Metso's eLearning programmes, your courses will be kept up to date with the latest product information. Additional courses will be added as they become available. You will be able to review past courses any time a refresher is needed.

Why Metso eLearning?
With Metso eLearning, courses are available whenever and wherever it is most convenient. Students can access video presentations for just-in-time training (right before an important meeting, for example) or to access product information or executive updates.

- 24/7 access to Metso eLearning curricula
- Save time and money on travel
- Review and retake courses at any time
- Access from work or home, learn on your schedule
- No need to leave the workplace to attend training

Ensure training success
We are committed to developing learning solutions that contribute to elevating job specific competencies, knowledge and skills of our products and equipment. We are committed to the highest quality and accuracy. Our online curriculum includes:

- Up-to-date product information
- Quizzes to reinforce the information presented
- Equipment cross-sections and parts identification
- Links and attachments, including product brochures, instruction manuals, posters, technical data sheets, and more
- Exams at the end of each course where student must pass with a score of 80% or higher
- Videos
General Product Knowledge eLearning

**Learning objectives**
Information about Metso’s crushing and screening equipment and business processes, which includes general information on health and safety.

**Content**
- An introduction to Metso’s Mining and Construction business.
- Plant safety.
- Different types of feed material, rock crushing methods and processes.
- Information on the product models including a brief history, the naming conventions, installation types, features and benefits, identification of key wear parts, general application and operational information.

**eLearning Courses**
- Introduction to Metso
- General Plant and Equipment Safety
- Aggregate Processing Basics Part 1
- Aggregate Processing Basics Part 2
- Aggregate Processing Basics Part 3
- Screening Theory
- Barmac VSI Crusher
- C Series Jaw Crusher
- NP Series Impact Crusher
- HP Series Cone Crusher
- HP New Generation Cone Crusher
- GP Series Cone Crusher
- Lokotrack Mobile Crushing Plants
- ST Mobile Screens
- Vibrating Screens and Feeders
- Protecting Metso’s Intellectual Property (for Metso personnel and distributors only)
- Metso Extranet – Overview (for Metso distributors only)
- Metso Extranet – My Machines and eParts (for Metso distributors only)

**Target group**
New personnel in the business, as well as personnel who wish to refresh their knowledge about crushing and screening.

**Prerequisites**
eLearning courses take place in a certain order.

Parts Product Support eLearning

**Learning objectives**
Detailed information about Metso’s crushing and screening products.

**Content**
Each product specific support course includes a detailed history of the product, main components by assembly, key equipment options and detailed wear parts information.

**eLearning Courses**
- Supporting the C Series Jaw Crusher
- Supporting the NP Series Impact Crusher
- Supporting the HP Series Cone Crusher
- Supporting the HP New Generation Series Cone Crusher
- Supporting the GP Series Cone Crusher
- Supporting the Barmac VSI Crusher
- Supporting the Lokotrack Mobile Crushing Plants
- Supporting the ST Mobile Screens
- Supporting the Vibrating Screens and Feeders

**Target group**
Parts support personnel responsible for wear and spare parts and related services. Service personnel, service managers and other personnel responsible for the operation and maintenance of products. Other employees looking to elevate their product knowledge.

**Prerequisites**
General Product Knowledge eLearning
Crushing and Screening 1 (recommended)
Learning objectives
Introduction to the crushing and screening business, and related products and processes.

Course content
- Review of e-learning courses.
- Metso Corporation.
- Construction and mining sectors as crushing and screening customers.
- Introduction to rock as raw material and aggregate as product.
- Crushing and screening process fundamentals.
- Metso product offering for crushing and screening.
- Service as part of a complete customer solution.
- Product knowledge sources, such as brochures.

Target group
New personnel and personnel who want to refresh their knowledge about crushing and screening.

Prerequisites
- eLearning: General Product Knowledge

Duration 2 days
(intended to be organized locally)
8-25 participants
See further information & contacts, p. 2
Please read Terms & conditions, p. 26
Learning objectives
Upon completing the training, the participant can discuss the most relevant process details and can document a crushing and screening process.

Course content
- Crushers, screens and other products as process components.
- Advantages of Metso products.
- Service as part of a complete solution.
- Different raw materials: rock, recycled material and ore. The most typical rocks. The most typical laboratory tests.
- Aggregate products. Product quality and where products are used.
- Selecting the right process equipment based on customer requirements and site conditions. Using brochure information to make the selection.
- The most important product and process parameters; for example, crusher setting and screen mesh size.
- Selecting crusher wear parts. Introduction to screen meshes.
- Use of Bruno process engineering software. Documenting a process using Bruno.
- Brief introduction to mobile solutions.
- Site exercise at a local crushing and screening plant.
- A factory visit when the training takes place at a Metso manufacturing location.

Target group
Sales, application and service personnel.

Prerequisites
- eLearning: General Product Knowledge
- Crushing and Screening 1 (recommended)
- A minimum of two months’ work experience in crushing and screening.

Duration 5 days
8-25 participants
See further information & contacts, p. 2
Please read Terms & conditions, p. 26
Product and Application Training

Mobile Crushing and Screening

Learning objectives
Upon completing the training, the participant is familiar with Metso’s premium mobile offering and can select and justify a suitable mobile solution.

Course content
• Metso’s mobile concept offering: Lokotrack (LT) in-depth and NW Series portable plant, Lokolink (LL) and modular plant in brief.
• Advantages of mobile crushing and screening solutions. Selecting the level of mobility: a stationary plant, a fully mobile plant or a combination thereof.
• Why choose Metso’s premium Lokotrack?
• Engineering a mobile plant and avoiding the pitfalls of mobile application design.
• Economy of mobile solutions, covering, for example, power usage, transport on-site and between sites and environmental aspects.
• Typical mobile applications, such as road aggregates manufacturing, gravel screening and recycled material processing.
• Visit to a local site to learn real-life mobile applications.
• A factory visit when the training takes place at a Metso manufacturing location.

Target group
Sales, application and service personnel.

Prerequisites
• eLearning: General Product Knowledge
• Crushing and Screening 1 (recommended)
• Crushing and Screening 2

Duration 3 days
8-25 participants

See further information & contacts, p. 2

Please read Terms & conditions, p. 26
Product and Application Training
Crushing and Screening 3

Learning objectives
Upon completing the training, the participant can professionally discuss process topics and can design and enhance a crushing and screening process.

Course content
- Advantages of Metso crushing and screening applications.
- Service as part of a complete solution.
- Basic geology and different rock and ore types. Different material laboratory tests used globally.
- The influence of product and process parameters on product quality.
- Engineering a crushing and screening process. Taking care of safety, sustainability and lifecycle cost aspects.
- Enhancing the process by professionally adjusting product and process parameters.
- Crushing theory, such as the influence of stroke on power consumption. Screening theory, such as acceleration generated by stroke and speed.
- Crusher wear parts design and metallurgy basics. Selecting the right screen meshes.
- A factory visit when the training takes place at a Metso manufacturing location.

Target group
Sales and application personnel.

Prerequisites
- eLearning: General Product Knowledge
- Crushing and Screening 1 (recommended)
- Crushing and Screening 2
- A minimum of two years’ work experience in the crushing and screening business after participating in the Crushing and Screening 2 training course.

Duration 5 days
8-25 participants
See further information & contacts, p. 2
Please read Terms & conditions, p. 26
Operation and Maintenance Training
C Jaw Crushers 1, 2 & 3

C Jaw Crushers 1
Learning objectives
Upon completing the training, the participant can carry out scheduled maintenance, change the crusher setting and wear parts and understands the hydraulic, electric and automation functions of the crusher.

Course content
• Safety
• Operation and maintenance and how to change the setting
• C jaw application
• Wear parts and how to change
• Basics of electrification and automation
• Basics of hydraulics
Mainly classroom training

Target group
Service personnel, service managers and other personnel responsible for the operation and maintenance of C jaw crushers.

Prerequisites
• eLearning: General Product Knowledge
• eLearning: Parts Product Support (recommended)
• Crushing and Screening 1 (recommended)

C Jaw Crushers 2
Learning objectives
Upon completing the training, the participant can carry out a C jaw crusher installation and commissioning, is able to inspect and troubleshoot a C jaw crusher and is familiar with the C jaw options.

Course content
• Safety
• Installation and commissioning
• Troubleshooting of components
• Electrification and automation
• Hydraulic Setting System
• Lubrication Device
• Intermediate plate
• Spacer
• C jaw inspection
Main focus is on hands-on training

Target group
Service personnel, service managers and other personnel responsible for the operation and maintenance of C jaw crushers.

Prerequisites
• C Jaw Crushers 2
• A minimum of 3 years’ field service experience

C Jaw Crushers 3
Learning objectives
Upon completing the training, the participant can carry out site repairs, use Active Setting Control (ASC), and perform a bearing change on C jaw crusher.

Course content
• Safety
• Site repairs for C jaw
• Active Setting Control (ASC)
• How to change the bearings of a C series jaw crusher
Hands-on training

Target group
Service personnel, service managers and other personnel responsible for the operation and maintenance of C jaw crushers.

Prerequisites
• C Jaw Crushers 2
• A minimum of 3 years’ field service experience

Duration - Course 1: 1 day, Course 2: 2 days, Course 3: 3 days.
6-12 participants

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Please read Terms & conditions, p. 26
Operation and Maintenance Training

NP Impact Crushers

Learning objectives
Upon completing the training, the participant can carry out scheduled maintenance and is able to troubleshoot and understand the repair of an NP impact crusher. The training provides good knowledge for commissioning an NP.

Course content
• Familiarization with the main components of an NP impact crusher during workshop visits.
• Machine installation, such as proper foundations, and feeding and discharge arrangement.
• Commissioning – a basic overview.
• Basic idea of application/processes closely related to the NP impact crusher; for example, crusher feed material, crushed material and typical problems caused by issues beyond the NP itself.
• Identifying problems and troubleshooting for components.
• NP impact crusher wear and spare parts.
• Scheduled maintenance and use of the service log book.
• Inspection procedure according to the inspection list and with using proper tools.

The training consists mainly of classroom training and includes workshop visits to see the actual components of an NP impact crusher. No full disassembly/assembly of an NP impact crusher is carried out.

Target group
Service personnel, service managers and other personnel responsible for the operation and maintenance of NP impact crushers.

Prerequisites
• eLearning: General Product Knowledge
• eLearning: Parts Product Support (recommended)
• Crushing and Screening 1 (recommended)
• Some field experience

Duration 1 day
6-12 participants
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Please read Terms & conditions, p. 26
Operation and Maintenance Training
HP Cone Crushers

Learning objectives
Upon completing the training, the participant can carry out scheduled maintenance and is able to troubleshoot and understand the repair of an HP cone crusher. The training provides good knowledge for commissioning an HP cone.

Course content
• Familiarization with the main components of an HP cone crusher.
• Indicative dimensions, such as bushing tolerances and clearances.
• Use of and basics of IC control and automation system.
• Machine installation, such as proper foundations, and feeding and discharge arrangement.
• Basic overview of HP cone commissioning.
• Basic idea of application/processes closely related to the HP cone; for example, crusher feed material, crushed material and typical problems caused by issues beyond the HP cone itself.
• Problem identification and troubleshooting for components.
• HP cone wear and spare parts.
• Scheduled maintenance and use of the service log book.
• Inspection procedure according to the inspection list and with using proper tools.

The training consists mainly of classroom training and includes workshop visits to see the actual components of HP cone crushers. No full disassembly/assembly of a HP cone crusher is carried out.

Target group
Service personnel, service managers and other personnel responsible for the operation and maintenance of an HP cone crusher.

Prerequisites
• eLearning: General Product Knowledge
• eLearning: Parts Product Support (recommended)
• Crushing and Screening 1 (recommended)
• Some field experience

Duration 3 days
6-12 participants
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Please read Terms & conditions, p. 26
Learning objectives
Upon completing the training, the participant can carry out scheduled maintenance and is able to troubleshoot and understand the repair of a GP cone crusher. The training provides good knowledge for commissioning a GP cone.

Course content
• Familiarization with the main components of a GP cone during disassembly and assembly.
• Back lash adjustment (gear/pinion), indicative dimensions, such as bushing tolerances and clearances. Wear limits of components and spare parts.
• Use of and basic troubleshooting for an IC control and automation system.
• Machine installation, such as proper foundations, and feeding and discharge arrangement.
• Basic overview of GP cone commissioning.
• Basic idea of application/processes closely related to the GP cone; for example, crusher feed material, crushed material and typical problems caused by issues beyond the GP cone itself.
• Problem identification and troubleshooting for components.
• GP cone wear and spare parts.
• Scheduled maintenance and use of the service log book.
• Possibly GP cone in mobile application during factory visit.
• Inspection procedure according to the inspection list and with using proper tools.

The training consists of hands-on training in a workshop and classroom training. The focus is on hands-on training; disassembly and assembly of a GP cone.

Target group
Service personnel, service managers and other personnel responsible for the operation and maintenance of a GP cone crusher.

Prerequisites
• eLearning: General Product Knowledge
• eLearning: Parts Product Support (recommended)
• Crushing and Screening 1 (recommended)
• Some field experience
Learning objectives
Upon completing the training, the participant can carry out scheduled maintenance and is able to troubleshoot and understand the repair of a Barmac vertical shaft impactor (VSI) crusher. The training also gives a basic overview of the installation and commissioning of a Barmac.

Course content
• Disassembly and assembly of the main components of a Barmac VSI.
• Use of the Barmac’s control and automation system.
• Machine installation – basic overview.
• Commissioning – basic overview.
• Basic idea of application/processes closely related to the Barmac; for example, crusher feed material, crushed material and typical problems caused by issues beyond the Barmac itself.
• Problem identification and troubleshooting for components.
• Barmac wear and spare parts.
• Scheduled maintenance and use of the service log book.
• The training consists of hands-on and classroom training.
• Inspection procedure according to the inspection list and with using proper tools.

The training consists of both classroom and hands-on workshop training. The focus is on hands-on training when applicable in order to put theory into practice.

Target group
Service personnel, service managers and other personnel responsible for the operation and maintenance of Barmac VSI crushers.

Prerequisites
• eLearning: General Product Knowledge
• eLearning: Parts Product Support (recommended)
• Crushing and Screening 1 (recommended)
• Some field experience

Duration 3 days
6-12 participants
See further information & contacts, p. 2
Please read Terms & conditions, p. 26
Operation and Maintenance Training

Screens

Learning objectives
Upon completing the training, the participant can carry out scheduled maintenance and is able to troubleshoot and understand the repair of a screen. The training provides good knowledge for commissioning a screen.

Course content
• Products covered in this training are screens in Metso’s offering. The focus is on CVB, TS and ES screens.
• Familiarization with the main components of a screen during workshop visits.
• Machine installation, such as proper foundations, and feeding and discharge arrangement.
• Commissioning – a basic overview.
• Adjusting important parameters of a screen.
• Basic idea of application closely related to screens; for example, the influence of difficult feed materials on screening efficiency.
• Identifying problems and troubleshooting for components.
• Screen meshes and spare parts.
• Scheduled maintenance and use of the service log book.
• Inspection procedure according to the inspection list and with using proper tools.

The training consists mainly of classroom training and includes workshop visits to see the actual components of screens.

Target group
Service personnel, service managers and other personnel responsible for the operation and maintenance of screens.

Prerequisites
• eLearning: General Product Knowledge
• eLearning: Parts Product Support (recommended)
• Crushing and Screening 1 (recommended)
• Some field experience
Operation and Maintenance Training

Air Classifier

Learning objectives
Upon completing the training, the participant will be fully aware of the air classification equipment, how to apply it and understands its value to customers.

Course content
- Air Classifier – main components and operating principles.
- Familiarization with main components and construction during workshop visits.
- Air classification theory and process.
- Commissioning overview. Understanding of feed suitability. Competitor review.
- Engineering sand production. Mining and mineral applications. Pozzolanic applications.
- Visit to the air classifier laboratory to see testwork being performed (when the training takes place in York, USA).
- Site visits to see operational air classifiers. Review of ancillary equipment. Service requirements.
- Inspection procedure according to the inspection list and with using proper tools.

Target group
Sales, application and service personnel.

Prerequisites
- eLearning: General Product Knowledge
- eLearning: Parts Product Support (recommended)
- Crushing and Screening 1 (recommended)

Duration 3 days
2-12 participants

See further information & contacts, p. 2

Please read Terms & conditions, p. 26
Learning objectives
Upon completing the training, the participant is familiar with Lokotrack main components and operation and can carry out scheduled maintenance.

Course content
- Products covered in the training are LT96, LT106, LT116, LT120, LT1213(S), LT200HP(S) and LT300HP(S).
- LT106 is used as the first example.
- Lokotrack main components and operating principles.
- The crusher and screen as LT components is covered only briefly, concentrating on specialties when on tracks. Participation in crusher operation and maintenance training is highly recommended to gain knowledge in these components.
- Basics of Lokotrack transportation, set-up and commissioning.
- Application/processes closely related to the Lokotrack; for example, problems caused by using the wrong oil, ambient conditions or challenging feed material.
- Scheduled maintenance and use of the service log book.
- Inspection procedure according to the inspection list and with using proper tools.

The training consists mainly of classroom training and includes workshop/machine visits to see the actual components of Lokotracks.

Target group
Service personnel, service managers and other personnel responsible for the operation and maintenance of Lokotracks with crusher.

Prerequisites
- eLearning: General Product Knowledge
- eLearning: Parts Product Support (recommended)
- Crushing and Screening 1 (recommended)
- Some field experience

Duration 3 days
6-12 participants
See further information & contacts, p. 2
Please read Terms & conditions, p. 26
Learning objectives
Upon completing the training, the participant is familiar with Lokotrack ST main components and operation and can carry out scheduled maintenance.

Course content
• Products covered in the training are Lokotrack mobile screens: ST2.4, ST3.5, ST3.8, ST4.8, ST272 and ST620.
• The main focus is on ST2.4 and ST4.8.
• Mobile screen main components and operating principles.
• Basics of mobile screen transportation, set-up and commissioning.
• Application/processes closely related to the Lokotrack mobile screen; for example, problems caused by using the wrong screen mesh combination or sticky feed material.
• Scheduled maintenance and use of the service log book.
• Inspection procedure according to the inspection list and with using proper tools.

The training consists mainly of classroom training and includes workshop/machine visits to see the actual components of Lokotrack mobile screen.

Target group
Service personnel, service managers and other personnel responsible for the operation and maintenance of Lokotrack STs

Prerequisites
• eLearning: General Product Knowledge
• eLearning: Parts Product Support (recommended)
• Crushing and Screening 1 (recommended)
• Some field experience

Duration 2 days
6-12 participants
See further information & contacts, p. 2
Please read Terms & conditions, p. 26
Operation and Maintenance Training
Lokotrack Mobile Plants 2

Learning objectives
Upon completing the training, the participant can carry out scheduled maintenance and is able to troubleshoot and understand the repair of Lokotrack. The training also gives a basic overview of the commissioning of Lokotrack.

Course content
- Products covered in the training are LT96, LT106, LT116, LT120, LT120E, LT1213, LT200HP, LT300HP, ST2.4 and ST4.8.
- The main focus is on LT120, LT120E and ST2.4.
- Upon request by the participants when they register for the training, other LTs in the standard offering can also be covered.
- Effective use of the IC mobile series automation system.
- Finding and understanding of data for process analysis, adjustment and troubleshooting.
- Understanding of Lokotrack electrical and hydraulic systems and diagrams.
- Mechanical, electrical and hydraulic problem identification and troubleshooting.
- Lokotrack spare parts, for example sensors, and wear parts, for example conveyor components.

The training consists of both classroom training and hands-on troubleshooting exercises.

Target group
Service personnel, service managers and other personnel responsible for the operation and maintenance of Lokotrack.

Prerequisites
- eLearning: General Product Knowledge
- eLearning: Parts Product Support (recommended)
- Crushing and Screening 1 (recommended)
- Lokotrack Crushing Plants 1 or Lokotrack Mobile Screens 1
- A minimum of one year field service experience in Lokotrack.

Duration 3 days
6-12 participants
See further information & contacts, p. 2
Please read Terms & conditions, p. 26
Learning objectives
Upon completing the training, the participant is able to professionally use and troubleshoot for an IC automation system.

Course content
IC1000 for C jaw, IC3000 for Barmac, IC5000 for GP cone, IC2000 for NP impact crushers and IC7000 for HP cone crushers. Please see more detailed course by course information online. Weight is given to the system(s) preferred by the participants.

- Components included in the automation system.
- Installation and start-up of the automation system.
- Wiring diagrams and electrical wiring on site.
- Connection to the upper level automation system.
- Troubleshooting for the IC automation system.
- Automation-related support documentation in Metso IT systems.

Useful additional base study is recommended: (A) general electrification, such as reading circuit and wiring diagrams, (B) Siemens HW-related documentation and principles, (C) MetsoDNA-related documentation and principles, (D) basic information about system components such as sensors, (E) basics of fieldbuses, for example Profibus, Ethernet and CANbus, (F) basics of communication protocols such as Modbus/TCP and Profibus/S7.

Target group
Service personnel, service managers and other personnel who require extensive knowledge of the IC automation system.

Prerequisites
- eLearning: General Product Knowledge
- eLearning: Parts Product Support (recommended)
- Crushing and Screening 1 (recommended)
- Operation and Maintenance training on the crusher of which automation system is covered in the training.
Learning objectives
Upon completing the training, the participant is familiar with the inspection service concept and can perform a proper inspection for selected products.

Course content
- Product-specific modules: C jaw, HP cone, GP cone, NP impactor, Barmac VSI, screens, Lokotrack.
- Metso Inspection Service concept.
- Metso Equipment Protection Plan (EPP) concept.
- Inspecting selected products according to the inspection list and by using proper tools.
- Participants who pass the pretest at the beginning and the inspection test at the end of the training will receive an inspection certificate and can perform official inspections on selected products.
- Additional part for Metso Regional Inspection Certification Officers: training of inspectors.
- The training consists of both classroom training and inspecting products in practice. The focus is on hands-on inspection.

Target group
Experienced service personnel and experienced service managers. The training is only for Metso personnel and distributors selected by Metso management.

Prerequisites
- eLearning: General Product Support
- eLearning: Parts Product Support (recommended)
- Operation and Maintenance training in the selected product (recommended)
- A minimum of 1 year field service experience in crushing and screening products.

NOTE: Inspection Service training is a package from which the participant always chooses the inspection concept module and a minimum of one product-specific module. The package is organized during the same week and consists of product-specific modules chosen by the participants.
Parts Product Support Training
Crusher Wears

Learning objectives
To understand the wear parts selection criteria and crusher specific wear parts. Learn to troubleshoot and meet the challenges of crusher wears. Provides justification for choosing OEM Metso parts.

Course content
- Studying the real crusher wear cases collected from the training course participants.
- Wear & economy of a crushing plant.
- Wearing theory and material selection.
- Why are OEM parts recommended?
- Metso wears portfolio by application (C, GP, HP, PG, MP, NP).
- Crusher wears case examples.
- Foundry Visit when the training takes place at a Metso foundry location.
- Design, metallurgy and installation.
- Troubleshooting and complaints.

Target group
Personnel who sell and support wear parts to their market and who want to improve their competence level to support the customers better.

Prerequisites
- eLearning: General Product Knowledge
- eLearning: Parts Product Support
- Crushing and Screening 1 (recommended)
- Crushing and Screening 2 (recommended)

Duration 3 days
8-25 participants
See further information & contacts, p. 2
Please read Terms & conditions, p. 26
Parts Product Support Training

Screening Media and Conveyor Solutions

Learning objectives
The three-day training will increase your awareness of Metso Screening and Conveyor Solutions products and application areas. You will be introduced to real cases and tools to support your daily work of finding an optimized solution for your customer.

Course content
- Basic screening process theory.
- Screening Media general selection guidelines.
- Screening Media Systems product range: modular, panel, tension system and wire media.
- Wear Lining Systems product range and application areas.
- Wear Lining systems general selection guidelines.
- Conveyor Accessories product range and application areas.
- Conveyor problems, reasons and solutions.

Target group
Sales, service or support personnel, or new employees working with conveyors, screening and wear lining applications.

Prerequisites
- eLearning: General Product Knowledge
- eLearning: Parts Product Support
- Crushing and Screening 1 (recommended)
- Some field experience

Duration 3 days
8-20 participants

See further information & contacts, p. 2

Please read Terms & conditions, p. 26
Parts Product Support Training

Spare Parts

Learning objectives
Upon completing the training, the participant has gained knowledge in how to better support customer needs and can guide the customer to have the right part in the right place at the right time.

Course content
• Spare parts of all current Crushing and Screening Equipment products are covered in this training.
• Metso’s spare part categorization and how pricing follows the same categorization.
• Introduction to the 2000h customer-oriented parts list (2000h usage RPL), how lists are created and how to read and utilize them.
• Critical items and spare part components of different products. What and why some assemblies are spare parts.
• Metso’s advanced spare part logistics process and parts distribution process.
• Tools user training through case examples. How to find prices, replacement info and availability.

Target group
Personnel who sell and provide support in spare parts and who wish to further improve their competence level to support customers.

Prerequisites
• eLearning: General Product Knowledge
• eLearning: Parts Product Support
• Crushing and Screening 1 (recommended)

Duration 2-3 days
8-25 participants
See further information & contacts, p. 2
Please read Terms & conditions, p. 26
Special Training Courses

Crushing and Screening Special

Are you in need of a special tailored training course?

Special crushing and screening topic might be for example:

- **Sales oriented** introduction to a new product.
- **Operation and Maintenance oriented** introduction to a new product.
- **Interactive** training course. For example, one participant at a time introduces an application topic, which is then dealt with in small groups, or a complicated maintenance task is carried out in a small group together with the instructor. Training course can be held as an online conference, video presentation, or other suitable way.

Please see the latest information about special training courses online!
**Cancellation by participant**

A cancellation made more than 21 days before the training is to begin will not incur a cancellation fee. A cancellation within 8 to 21 days before the training will incur a 50% cancellation fee and within 0 to 7 days a 100% cancellation fee. The cancellation fee is always calculated based on the customer price per person.

**Cancellation by organizer**

Training can be cancelled at the latest one week before the training if the minimum amount of registration places is not filled. Metso does not compensate any costs caused by a cancellation.

**Safety issues**

Proper safety equipment is required for all training courses that include a factory visit, site visit or hands-on training. The participants are responsible for bringing their own safety shoes, working clothes and other personal safety equipment. Standard helmets, high-visibility vests, standard safety glasses, gloves and ear protection will also be provided in the training courses by the organizer, when the training takes place at a Metso manufacturing location.

**Use of devices**

Photographing is not allowed in the factory area. The trainer can permit photographing when it supports learning.

Use of communication devices is prohibited during the lessons. If a laptop is needed as a learning tool, it is mentioned in the program and authorized by the trainer. Laptops and mobile phones can be used during breaks.

**Training material**

Training material is given to the participants at the end of the training session in electronic format and/or as paper copies during the training.

**Tests**

An evaluation of the knowledge gained is carried out at the end of the training course and may also be tested at the beginning of and during the training. The participants will be given their test results so that they can monitor their performance. Metso is entitled to save the results and share them with the participant's employer.

**Price**

**Metso customer price per person**

Please contact Metso for current pricelist.

Example, training at Metso factory in Europe:

<table>
<thead>
<tr>
<th>Days</th>
<th>Price (EUR)</th>
<th>Price (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>490</td>
<td>660</td>
</tr>
<tr>
<td>2</td>
<td>880</td>
<td>1190</td>
</tr>
<tr>
<td>3</td>
<td>1270</td>
<td>1720</td>
</tr>
<tr>
<td>4</td>
<td>1660</td>
<td>2250</td>
</tr>
<tr>
<td>5</td>
<td>2050</td>
<td>2780</td>
</tr>
</tbody>
</table>

**Metso distributor price per person**

General Product Knowledge eLearning

266 EUR, 350 USD

Product Support eLearning

112 EUR, 149 USD

The annual renewal rate is 76 EUR, 100 USD

The price of an instructor led training course can be paid with Training Points a Metso distributor might have – please contact Metso for details. Otherwise the customer price applies.

**Metso personnel price per person**

eLearning courses and scheduled training courses in the internal training calendar are free of charge. Otherwise the customer price applies.

**Price conditions for customer, Metso distributor and Metso personnel**

The training price includes participation in the training, training material, meals and refreshments as stated in the schedule. Possible trainer travel and other additional costs are invoiced separately. VAT can be added to the training price according to the law. Metso reserves the right to change the prices.
- your feedback is greatly appreciated
- we want to create an even better training offering to meet your needs
- do you have development proposals concerning a training course offered in this brochure?
- are you in need of tailored training for your special case or application?
- for contact details, please see page 2 of this brochure