

KOMATSU TRAINING ACADEMY UNDERGROUND MINING COURSE GUIDE

















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Komatsu Training Academy Capability Statement



With Komatsu Training Academy's peoplepowered training & development services

Komatsu Training Academy is a Registered Training Organisation (RTO) specifically developed to assist our construction, quarry and mining customers by delivering nationally recognised and customised training where they need it — online, on-site or at our own dedicated training facilities. Our offerings include a mix of nationally recognised courses and modules, along with purpose-designed operator, technical and management training.

The Komatsu Training Academy provides Komatsu machine users with appropriate training in service and repair technology as an essential part of our product support capability designed to improve productivity and lower the cost of ownership. As an industry leader we strive to deliver safe and innovative solutions that best meet your needs and expectations.

Our team of specialist, industry-qualified trainers deliver a broad spectrum of competency and skill-based development programs customised to your business and targeted to meet your specific industry needs. These programs include leadership and management training, operator skill proficiency development and customised technical training.

Ensuring you are best equipped to handle the ever changing technical and technological challenges facing the industries we operate within now and into the future.

Who we are

Komatsu Australia is unique in being the only national distributor across the construction, quarrying and mining industries able to provide Nationally Recognised, customised, in-depth training tools for customers targeted to not only increase productivity, but also to improve efficiency and profitability.

In addition to our extensive range of training courses, we can also custom deliver productivity improvement initiatives for our construction, quarry and mining customers suitable for any size site or project.

Due to our extensive consultation and industry experience, we have assisted some of the industry's leading organisations to be able to solve complex issues, achieve measurably improved results and build leadership capabilities towards improvements in both productivity and in performance.

Komatsu Training Academy: Benefits to your Business

Komatsu Training Academy delivers the very best training from experts who not only know this industry intimately, but who are passionately committed to achieving the right outcomes for you and your workforce.

Komatsu has established a reputation for products that combine innovation and technological advances, with industry-leading levels of reliability, durability and productivity and is one of the largest training organisations of apprentice Diesel Fitters, Boiler Makers and Auto Electrical trades persons in Australia.

We choose to do this, by delivering people powered technology trained technicians to ensure our customers experience the best possible Komatsu ownership and are involved every step of the way.

In today's labour market, where a shortage of experienced service technicians and skilled operators is impacting on the industries in which we operate and serve, all too often training has become focused on churning out numbers of apprentices, aiming more at quantity rather than at quality outcomes.



At Komatsu Training Academy, we focus on what is really needed: up-skilling for production improvement, preventive maintenance and safety.

We believe that the difference between a key technician or operator who is merely competent compared with one who is truly proficient at their job — can translate into significant benefits to your bottom line as well as having a more engaged and committed loyal workforce. We understand the challenges of your specific operating environment, and how to work with you to get the very best from your equipment and your management, technical and operational teams.

At Komatsu Training Academy, we understand the difficulties faced by our customers across highly diverse industry sectors — so we adapt delivery of our training to ensure we achieve the best outcomes for your investment.

When you need expert training for your people, Komatsu Training Academy is right there with you.

Skills Packages

Operator and technician training courses available through Komatsu Training Academy cover a variety of mining machines including Development, Bolting, Haulage and Longwall, as well as Automation and Integration.

In addition, Komatsu Training Academy can develop and tailor any training program to suit customers' specific requirements. Contact us to discuss how we can customise your training to meet your specific business objectives.

Our Training HQ: Komatsu Technical Education Centre (KTEC)

KTEC has become Komatsu Australia's primary training centre for operators and technicians in Australia, New Zealand and New Caledonia.

It is one of the region's most advanced technical training facilities for mining equipment. Located on more than 3 hectares of land, it has more than 2600 sqm of dedicated training facilities, including seven classrooms, seven technical/electrical laboratories and a large machine workshop.

KTEC also incorporates a number of simulators, providing the ability for both novice and experienced Operators and Trades/Technicians. KTEC was originally designed to specifically increase the technical capability of our own service and support people to the benefit of our customers.

It has now evolved to become an important element within our total customer satisfaction experience by ensuring we offer the best trained OEM support in the industry. Our footprint extends to other regions such as Rutherford, Moss Vale and Rockhampton.

Underground

Longwall Equipment and Development Equipment Training



Product Technical Training is designed to lower mean time to repair (MTTR) and increase mean time to failure (MTTF) relating to Komatsu mining equipment. In conjunction with local legislation, site requirements and equipment availability, a customised Product Technical Training program can be designed according to audit results and site specifications.

All Komatsu Training Academy technical instructors have extensive experience and qualifications relevant to the course content and have the appropriate RII qualification and Certificate IV in Training and Assessing. Product training courses supplied by Komatsu Training Academy significantly enhance the knowledge and abilities of personnel across a broad range of skill sets.

Familiarisation

Operator Familiarisation Training is an introduction and familiarisation to the equipment. It allows learners to safely move the equipment in a non-production environment using the training handout as a reference. Learners will gain insight into the overall machine operation and learn required user maintenance areas. Initially a classroom presentation is conducted which is followed by an opportunity to operate the equipment. Techniques covered in the classroom can be practiced on a simulator where available.

Objective

At the end of this course candidates will be able to identify, recall and demonstrate basic safe operational and maintenance functions relating to Komatsu equipment.

Course Topics

- » Apply site safety systems and procedures, including isolation procedures, when operating Komatsu equipment
- » Identify components of the equipment and their function
- » Carry out pre-start, start-up, shutdown and isolation procedures in accordance with technical documentation

Operator Training

Operator Training is directed at the equipment in production. Practical and general operational application theories will be applied to give learners the skills needed to safely and productively operate the equipment in various working conditions.

Objective

At the end of this course candidates will be able to assess, identify and apply optimal operational requirements to operate and maintain the equipment safely according to conditions.

Course Topics

- » Apply site safety systems and procedures, including isolation procedures, when operating Komatsu Equipment
- » Identify optimal capability of the equipment and its limits
- » Identify equipment optimisation according to conditions
- » Operate the equipment in accordance with Komatsu technical documentation
- » Recognise and respond to hazardous and emergency situations in accordance with technical documentation

Electrical/Mechanical

Electrical/Mechanical training is an introduction and familiarisation to the Electrical/Mechanical section of the equipment. It allows candidates to identify and respond to faults in Electrical/Mechanical systems using the equipment schematics as a reference. Learners will gain insight into the overall machine Electrical/Mechanical section and learn required user maintenance areas. Initially a classroom presentation is conducted which is followed by an opportunity to identify Electrical/Mechanical components and their functions.

Objective

At the end of this course candidates will be able to identify and respond to faults and maintenance requirements in Electrical/Mechanical systems of the equipment.

Course Topics

- » Apply site safety systems and procedures, including isolation procedures, when working with Electrical/Mechanical systems
- » Identify components of Electrical/Mechanical systems and their functions
- » Introduction to User Interface navigation
- » Introduction to Maintenance and Fault finding

Diagnostics and Troubleshooting

Diagnostics and Troubleshooting training is directed at Indepth diagnostics, maintenance and root cause analysis. Practical application theories will be applied to give learners the skills needed to safely and productively diagnose, maintain and troubleshoot the Electrical/Mechanical section of the equipment.

Objective

At the end of this course candidates will be able to identify, diagnose and rectify the root cause of faults in the Electrical/Mechanical section of the equipment.

Course Topics

- » Apply site safety systems and procedures, including isolation procedures, when working with Electrical/Mechanical systems
- » Identify components of Electrical/Mechanical system and their functions
- » Carry out equipment inspections and maintenance in accordance with technical documentation and root cause analysis
- » In-depth User Interface Navigation to diagnose, identify and respond to Electrical/Mechanical system faults

NOTE: Diagnostics and Troubleshooting is only available with the use of True Component Diagnostics and fault finding Training tools. Please contact your service representative for availability and additional information.

If you would like to discuss your training options please call KTA on 1300 390 377.



Securing your future Practical Training



Optimal production is made possible by a skilled work force. Having trained and skilled employees ensures a decrease in Mean Time to Repair (MTTR) and increase in Mean Time to Failure (MTTF). Operators become more productive as they use equipment to its fullest potential.

Komatsu Training Academy's training offerings help to provide the skilled workforce needed for optimal production offering services including:

- » Operator training
- » Trades training inclusive of mechanical, electrical, control and automation
- » Equipment replica fault finding training panels and equipment specific diagrams
- » Basic skills such as diagram reading, use of test equipment and component identification
- » Diagnostic and fault finding procedures
- » Training based on RII competencies and done to RII standards

Operator Training

The Operate Equipment Training Program is designed to provide the knowledge and understanding required to give operators the skills needed to safely and productively operate the equipment in various conditions. The end result of the training will be less downtime, higher availability and more productivity from our customer's investment. Courses vary from Familiarisation, Introduction to Production and Reliability Focused Operator training. Courses are designed to up-skill relevant operators in the safe operation and to optimise production of the equipment.

Trade Training

With True Component Diagnostics and fault finding training panels, experience does not have to take years to build. This offering embeds basic skills to tackle more advanced problem solving such as diagram reading, component identification, circuit analysis and test instrument use for fault finding.

Komatsu Training Academy offers True Component Diagnostics and fault finding using state-of-the-art training simulators. Learners interact with actual equipment controls in a safe, realistic environment without impacting production.

Interactive training tools enhance the learning experience and increase knowledge retention to enable learners to apply what they have learned in the workplace.

Operator Simulators

- » Powered Roof Support (PRS)
- » BPX remote Familiarisation
- » Longwall Shearer (LWS)
- » Longwall Automation

Diagnostics and Troubleshooting

- » 7LS
- » RS20s
- » Faceboss II
- » HFX Bolter ICM2/ICM3

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