

Digital Driller™

Learn anywhere, anytime

Operator training simulator for
DD422i/iE/Dual Controls, DD322i, DT922i, DT923i,
DL432i, DL421, DS422i, DS412i/iE



Excellence in learning

Safely develop and refresh operators' skills on Sandvik drill rigs with our new underground drills simulation equipment.

The drill start-up period is shortened as the transition to the real equipment is quicker, improving efficiency and productivity. Operators can be trained before the drill rig arrives on site or re-assess later during rig maintenance or repair.

Digital Driller™ has been developed for underground hard rock applications. It simulates operation of a real rig, using authentic controls combined with the same control system software and connectivity solution (Knowledge Box™) installed onboard Sandvik rigs.

It provides a comprehensive technical training of our control system and allows operators to learn using Sandvik DrillConnect application for drill plan transfer, data and reports management. Through simulation, operators develop skills fully from basic boom movements and manual drilling to full automated drilling operations using various training scenarios.



Rather than conducting training with the actual equipment, operators learn with a realistic simulator, optimizing the transition to the real rig.

Thanks to its compact size and its wheeled transportation case, the simulator can easily be carried anywhere by one person.

Get up and running fast

Digital Driller™ performs all boom and feed movements as well as the entire drilling cycle.

Depending on the application, Digital Driller™ simulators are compatible with iSURE® software, tunnel and drill plan management tool for accurate drilling, charging and blasting.

Thanks to the training course management tool, the trainer can customize the training and use multiple preplanned training scenarios to build tailor-made learning sessions.



The trainee progressively learns to:

Use all functions and set up parameters of the control system
Accurately control the boom and feed in a pre-defined drill plan
Mark and set angles and drilling start points within defined parameters
Drill hole collaring in varying start positions
Navigate the rig to match the drill plan using the navigation tools
Drill in varying rock conditions
Use different cable bolting process like cement mixing, grouting and cable installation
Safely conduct daily maintenance checks
Use Sandvik DrillConnect application for enhanced maintenance, drill/bolting plan transfer, data and reports management

The exercise results are measured against time, accuracy and various parameters like optimal feed / rotation pressure, percussion and flushing. The exercises can be repeated when needed. Self-learning is possible.

The progress reporting tool creates evaluation reports on criteria measuring trainees' performances to effectively assess the skills.

Learn Anywhere Anytime

100% Availability

training can easily be conducted even when rig is not available

Up to 5%* Increase

in annual productivity thanks to increased rig availability

Up to 35%* Reduction

in training cost through less energy, rock tools usage and reduced rig damages

Learn anywhere
anytime

Production
performance

Reduced cost
Improved EHS

Using Digital Driller™, speed up your productivity by:

- Shortening the training period on the real rig : training can start before the rig arrival
- Developing operators' knowledge and ability to use rig features and connectivity capabilities
- Teaching maintenance teams on basic drilling operations
- Learning to understand and use the advanced diagnostics and reports
- Avoiding risk of rig damage while using virtual environment
- Limiting the environmental impact : no rock tools or fuel consumed
- Reducing training costs : training sessions are easy to implement with multiple operators in a safe classroom



Specifications



General information

Simulator: 20 kg
 Protection case: 25 kg
 Total weight with simulation laptop and accessories: 50 kg

Available languages:

English, Spanish, Russian, German, Finnish, Portuguese, Swedish, Norwegian, others on request

Power supply:

Simulator power supply: 100..240 VAC, 200 W
 Delivered with European (SCHUKO) power cables
 Other plugs available on request

Recommended optimal setting:

Adjustable table for the console to enable best ergonomic height:
 Distance to the TV screen: 1 meter for 50", 2 meters for 65" (ideal)

Not included:

A large display or TV screen and tablet

OPERATOR'S SKILLS

	MINING JUMBOS	BOLTING DRILLS
Drill Master	<ul style="list-style-type: none">• Mastering drill planning and entire cycle Mentor, coach	<ul style="list-style-type: none">• Mastering ground consolidation Mentor, coach
Professional	<ul style="list-style-type: none">• Coping with varying drilling conditions Proficiency	<ul style="list-style-type: none">• Understanding ground consolidation Proficiency
Beginner	<ul style="list-style-type: none">• Basic face drilling operator skills Autonomous	<ul style="list-style-type: none">• Basic drilling and bolting operator skills Autonomous

MATRIX

LONGHOLE DRILLS

- Mastering drill planning and very long holes
Mentor, coach



- Coping with varying drilling conditions
Proficiency



- Basic longhole drilling operator skills
Autonomous



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