



MINE MAPPING TOOL

NEXT GENERATION AUTOMATION SOLUTIONS



EXPLORE NEXT GENERATION AUTOMATION SOLUTIONS
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NEXT GENERATION SOLUTION

AutoMine® Mapping Solution is the first solution from the next generation program at Sandvik. It brings together two of the next generation technologies to make one state-of-the-art solution to enhance mining operations.

It is an innovative AutoMine® solution designed to maximize productivity and improve safety of autonomous vehicle navigation in underground mining operations by utilizing mapped data.

It enables a vehicle to map an automated underground environment with a 3D Mine Mapping Tool and then uses the information to generate 3D maps of the mine. The data can then be used by 2D underground equipment to operate safely during mining operations.

Productivity and efficiency is increased as a result of faster configuration and continuous operation of equipment in the mapped environment.



EASE-OF-USE MINING SOLUTION

Easy to set up with a simple user interface to enable quick recording which can record up to 400m at a time during the mapping process.

The solution provides a cost-effective and intelligent way of automating the development of mapped data that enables autonomous navigation in mining operations.

AutoMine® Mapping Solution is available for underground Loaders, Trucks and Drills.

BENEFITS

Key benefits of the mapping solution:

- Recording of 3D environment with a light vehicle
- Converts 3D maps to 2D maps for all underground equipment (Loaders, Trucks and Drills)
- Increased safety with no interaction of heavy machinery in the operating area
- Mapped routes can be used for all types of underground machine, eliminating the use of production machines to map the area, saving time and improving efficiency
- Increased production as a result of faster area configuration and continuous operation of equipment in the mapped area.



MAIN FEATURES

Main component	<p>AutoMine® Mapping Tool features:</p> <ul style="list-style-type: none"> • 3D Lidar • Mapping PC • Cable set to connect to LV power supply and ethernet to connect to tablet • Cable set to connect scanner to case
Dimensions	<ul style="list-style-type: none"> • Exterior (LxWxD)24.60 x 19.70 x 14.40cm • Interior (LxWxD)62.5 x 50 x 36.6
Housing	<ul style="list-style-type: none"> • Protector Case with four press & pull latches
Colour	<ul style="list-style-type: none"> • Black
Weight	<ul style="list-style-type: none"> • 20.8Kg
Operating temperature	<ul style="list-style-type: none"> • -20°C to 70°C
Power Supply	<ul style="list-style-type: none"> • Voltage: 12 - 24VDC
Mounting	<ul style="list-style-type: none"> • To be mounted on any light vehicle
Lidar	<ul style="list-style-type: none"> • Class 1 eye-safe per IEC EN 60825-1:2014 • Field of view 90° • Vertical Resolution 128 channels • IP68 • Rotation Frequency 20Hz
Mapping PC	<ul style="list-style-type: none"> • Software - Mine Area Tool • Ethernet Communication
Compatible Loader Models	<ul style="list-style-type: none"> • LH410, LH410 Rock Breaker, LH514, LH515i, LH517i, LH621i
Compatible Truck Models	<ul style="list-style-type: none"> • TH551i, TH663i
Compatible Drills Models	<ul style="list-style-type: none"> • DL421, DL422iE, DL432i

COMPLIANCE

- 2014/30/EU Electromagnetic Comptibility (EMC) Directive

For EU

- Laser Safety: IEC/EN 60825 - 1:2014 Class 1 eye safe
- Product safety: EN/IEC 62368-1

For US

Laser Safety:

- IEC/EN 60825 - 1:2014 Class 1 eye safe
- FDA US 21CFR 1040 Laser Notice 56

Product Safety:

- UL 62368-1
- CSA 22.2 No.62368-1-19

- EMC: FCC 47CFRPart



