Scooptram ST14 S

Underground loader with 14-tonne capacity

Epiroc

Superior underground mucking

The Scooptram ST14 S is equipped with features that makes it powerful and yet fuel efficient. The thorough improvements in safety, comfort, sustainability, and serviceability bring new levels of productivity to your mining operations.

The comfortable and spacious cabin is ISO FOPS and ROPS certified and it features a footbox to maximize leg room.

Scooptram ST14 S has a smart control system featuring traction control. speed limiter, over speed protection and automatic ride control.

The bucket of the Scooptram ST14 S can be equipped with Wearpact. This high-quality, bolt-on GET delivers exceptional reliability, cost of ownership, and productivity results.

Main benefits

Safety at its core – Scooptram ST14 S has been designed with safety in focus, with many standard features to secure your operation.

Maximum productivity – thanks to the powerful engine, efficient drivetrain, heavy-duty axles and transmission which allows for smooth gear shifting, leading to a seamless operation.

Operator's choice – Scooptram ST14 S offers operators optimal working conditions, with ergonomically positioned controls and instruments, as well as an upgraded air conditioning system.

Part of the Smart series

Our Scooptram ST14 S underground loaders are part of the Smart series (S). Equipped with Rig Control System (RCS) and ready for smart functionality such as automation and remote control.

A well-balanced and productive underground loader

Scooptram ST14 S offers your operation significant productivity levels without compromising on safety. By integrating a well-balanced design with an efficient drivetrain and numerous smart features, it ensures both efficiency and safety.

+ Built for high-productivity operations

The efficient drivetrain on the Scooptram ST14 S is shaped by the heavy-duty axles as well as the powerful engine. The high-power engine delivers exceptional breakout force and facilitates easy bucket filling, resulting in a smooth and balanced machine with an excellent power-to-weight ratio. At the same time, the transmission allows for smooth gear shifting for a seamless operation.

+ Enjoy a smart operation

Scooptram ST14 S is equipped with smart features optimizing load cycles for maximum efficiency. You can benefit from automation and digital tools like myEpiroc, thanks to Epiroc's Rig Control System (RCS), taking your underground operations to the next level.

+ Automate your Scooptram ST14 S

Stoping and caving operations can benefit from Epiroc's 14-tonne loaders combined with Deep Automation solutions. Epiroc's integration capabilities and system interoperability empowers you to scale up the use of Scooptram ST14 S loaders in a mixed fleet of battery-electric loaders, conventional loaders, and utility vehicles.

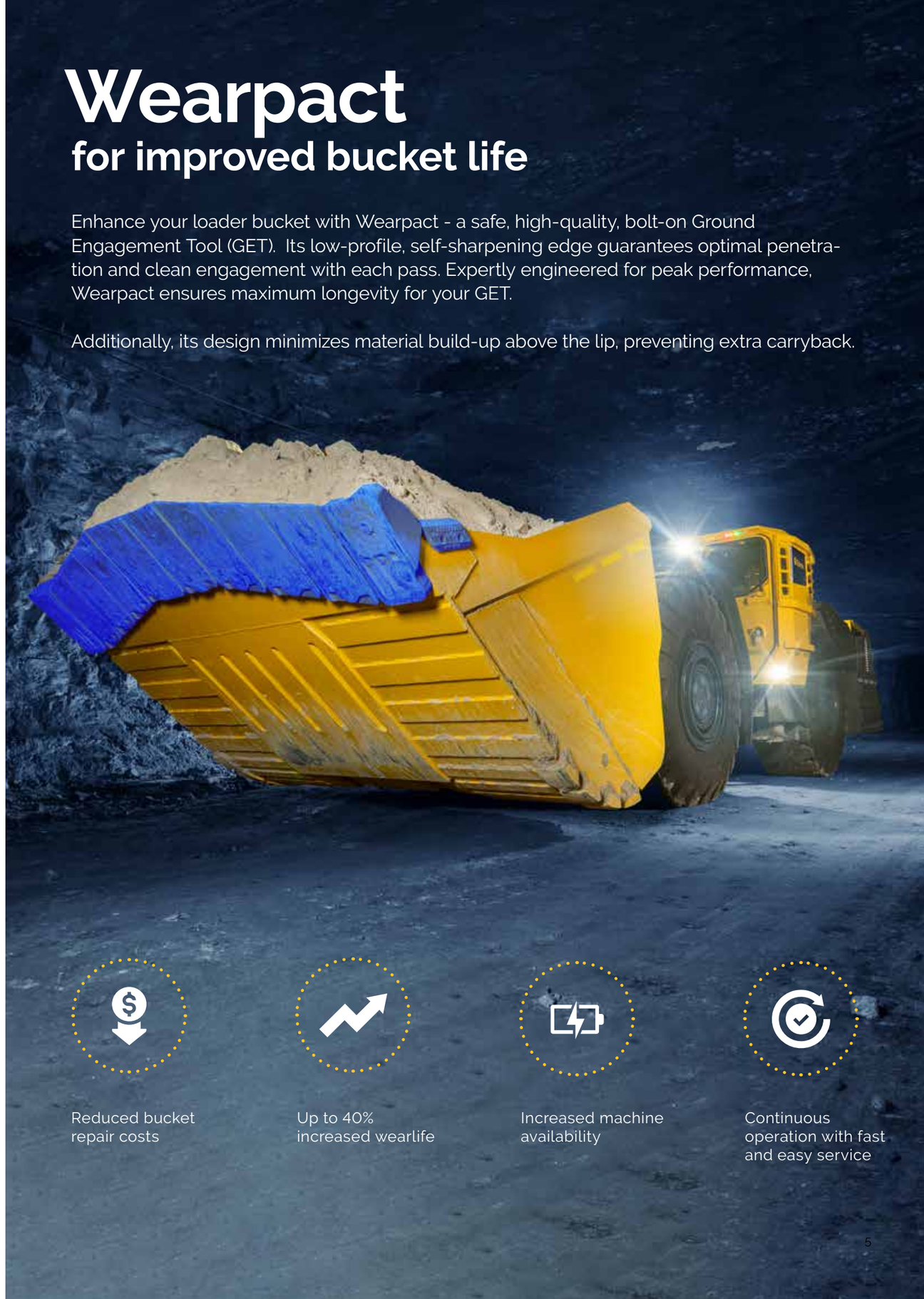
A comprehensive service offering

Even the best equipment needs to be serviced regularly to make sure it sustains peak performance. An Epiroc service solution offers peace of mind, maximizing availability and performance throughout the lifetime of your equipment. We focus on safety, productivity and reliability. By combining genuine parts and an Epiroc service from our certified technicians, we safeguard your productivity – wherever you are.

Wearpact
for improved bucket life

Enhance your loader bucket with Wearpact - a safe, high-quality, bolt-on Ground Engagement Tool (GET). Its low-profile, self-sharpening edge guarantees optimal penetration and clean engagement with each pass. Expertly engineered for peak performance, Wearpact ensures maximum longevity for your GET.

Additionally, its design minimizes material build-up above the lip, preventing extra carryback.



Reduced bucket repair costs

Up to 40% increased wearlife

Increased machine availability

Continuous operation with fast and easy service

Technical specifications

Features

The Scooptram ST14 S provides high safety standards, thanks to, among others, its ISO ROPS and FOPS-certified cabin, dedicated dual cameras, speed limiter, safe disconnector logic, and readiness for integration with a collision avoidance system (CAS) Level 9. With its robust construction, this underground loader is engineered to thrive in demanding mining environments, prioritizing the safety of both operators and operations.

At the same time, operators benefit from a comfortable cabin thanks to a spacious leg-room with the Epiroc footbox, air suspended seat as well as steering soft stop.

Moreover, the smart features and digital tools, such as ride control or Epiroc's fleet monitoring system, offer your operation new levels of productivity.

Keeping up a productive operation requires a high utilization rate of the machine. That is why, we have made the service of the Scooptram ST14 S as safe, fast and accesible as possible.

All of these and more come with a machine that is made for a sustainable business, industry and society, contributing to a better working environement underground.

Specifications

Capacities	
Tramming capacity*	14 000 kg
Breakout force, hydraulic	22 300 kg
Breakout force, mechanical	22 300 kg
Standard bucket	6.4 m^3
*Tramming capacity with EOD bucket 12 000 kg	
Motion times	
Boom raising	7.6 sec
Boom lowering	4.0 sec
Dumping	3.0 sec
Weights (standard empty machine)	
Approximate weight	39 100 kg
Axle load, front	18 900 kg
Axle load, rear	20 200 kg

Sound and vibration

Closed cabin	
A-weighted sound pressure level, LpA according to ISO 6396:2008	82 +/-6 Db
Weighted whole body vibration level, A(8)w according to ISO 2631-1	0.8 +/-0.4 m/s^2
External	
A-weighted sound power level, LwA according to ISO 6395:2008	126 +/-6 dB

Requirements and compliances

- Machinery directive - 2006/42/EC
- Low voltage directive - 2014/35/EC
- Electromagnetic compatibility directive - 2014/30/EC

Engine

Brand, Model	Cummins/QSM11
Emmissions standard	EPA Tier 3 / EU Stage IIIA
Power rating	250 kW @ 2 100 rpm
Maximum torque	1 674 Nm @ 1 400 rpm
Cooling	Liquid cooled, pump controlled fan
Ventialtion rate	CANMET 736 m^3/min (26 000 CFM) MSHA 326 m^3/min (11 500 CFM)
Particulate index	MSHA 354 m^3/min (12 500 CFM)

Tier III/EU Stage IIIA: Dry type air filter, catalytic purifier and silencer, exhaust heat protection, cooling package with tube type radiator, remote engine oil and cooling fuel drain.

Axles

Brand/model	Kessler/ D106
Front and rear differential	Limited slip
Oscillation	16° (+/-8°)

Fuel

Fuel tank capacity	390 liters
Fuel filtration, primary, including water trap	7 µm
Fuel filtration, secondary	3 µm

Epiroc Scooptram loaders are compatible with HVO100

Transmission

Brand/model	Dana / TE32
Type	Automatic power shift with fully modulated 4 speed shifting, automatic lock-up and de-clutch functions

Tires

Front and rear size	26.5 R25 (slicks/treaded)

As applications and conditions vary, Epiroc recommends that the user consults with tire suppliers to obtain the optimum tire selection.

Operator's compartment

Cabin
Closed cabin
Door interlock to apply brake and prohibit hydraulics
Isolated sound barriers
Sealed door and windows
Emergency exit in large window, all windows possible to open from outside and inside
Heating, Ventilation and Air Conditioning (HVAC)
Ergonomic adjustable joysticks
Safe, three point access into and out of cabin
Oilfree environment
5V USB outlet
Diagnostic outlets
Physical dimensions of operators and minimum operator space envelope - ISO 3411:2007
Zones of comfort and reach for controls - ISO 6682:1986
Operator's control - ISO 10968:2020
Falling-object protective structures (FOPS) - ISO 3449:2005
Roll-over protective structures (ROPS) - ISO 3471:2008
Operator's seat
Air suspended
Adjustable height, depth, lumbar support
Soft padded with water resistant material
Two point safety belt
Side seated for bi-directional control
Epiroc footbox

Technical specifications

Control system

Epiroc rig control system, RCS
Operator display with intuitive interface
Logging of production- and machine data
Fleet+ telematics hardware for wifi and LTE
Automatic brake test
Traction control
Bucket float
Joystick controls for dump/hoist and steering
Forward-Neutral-Reverse toggle switch
Machine status indicator light mounted on canopy
Wiper and washer control in joystick
Machine warmup function
Audio-visual reverse alarm

Electrical system

Batteries	2 x 12V, 235 Ah (2S configuration)
System voltages	24V
Front working lights	1 400 lumen
Rear working lights	1 400 lumen
Emergency stops, 3 positions	
Position and brake lights	

Hydraulic system

System pressure	29.6 Mpa
Main valve	Open circuit, LS controlled
Steering pump	Piston type, LS controlled
Boom- and bucket pump	Piston type, LS controlled
Hydraulic tank capacity	218 litres
Filtration, return line	12 µm
Lift cylinders	2x 200 mm
Tilt cylinder	1x 230 mm
Steer cylinder	2x 105 mm
Steering cylinder soft stop	
Automatic Brake Activation, ABA	
Steering requirements - ISO 5010:2019	

Brakes

Type	Fully enclosed, force-cooled, multiple wet discs at each wheel end
Service / park / emergency brakes	SAHR
Performance requirements and test procedures for brake systems - ISO 3450:2011	

Buckets

Type	Volume (m^3)	Material density (t/m^3)		Width (mm)
		Straight blade	Wearpact (GET)*	
Straight blade and Wearpact (GET)*	7.8	1.8	1.7	3 040
	7.0	2.0	1.9	3 040
	6.4	2.2	2.1	3 040
	5.8	2.4	2.3	3 040
	5.4	2.6	2.5	3 040
	5.0	2.8	2.7	3 040
	4.7	3.0	2.9	3 040
EOD straight blade	6.0	2.0	-	2 850

* Wearpact (GET) is optional

Main frame

Center hinge and boom lockup pins
Central manual lubrication system
Manual hydraulic fill pump
Battery jumpstart receptacle
Lockable machine disconnector

Documentation

Safety-, operator-, service- and spare parts manual in english and other languages

Read more about environmental product information here:

Options

Automation

Radio Remote Control (RRC)
Video assist
Tele Remote Control
Automation solutions

Engine

Brand/Model	Cummins/X12
Emmissions standard	EPA Tier 4 Final / EU Stage V
Power rating	250 kW @ 2 100 rpm
Maximum torque	1 695 Nm @ 1 400 rpm
Cooling	Liquid cooled, pump controlled fan
Ventialtion rate (Ultra low sulphur fuel, Adblue)	CANMET 397 m^3/min (14 000 CFM) MSHA 368 m^3/min (13 000 CFM)
Particulate index (Ultra low sulphur fuel, Adblue)	MSHA 14 m^3/min (500 CFM)

Tier 4 final/EU Stage V: Different engine, coolers, different after-treatment systems (dry type air filter with cyclone functionality, SCR, DPF, Diesel emission fluid system with separate tank/fill point including dosing pump and hoses/cables).

Please note! Requires ultra-low sulfur diesel and low ash engine oil.

Operator's compartment

Camera monitoring, front and rear with dedicated displays
Media player

Control system

Machine protection
Speed limiter
Collison Avoidance System Interface (CAS)
Tire pressure monitoring system, TPMS
Engine pre-start warning
Delayed engine off, turbo cool down
Load weighing system

Electrical system

Detachable service light (CE requirement)
Always on strobe

Hydraulic system

Automatic boom suspension system, ride control
Arctic oils
Secondary steering (CE requirement)
Redundant steering (CE requirement)

Brake

Neutral brake apply, NBA (Park brake on neutral)
Hydraulic brake release tow hook

Main frame

Ansul Foray (powder) fire suppression manual release
Ansul Foray (powder) with Checkfire 210 fire suppression automatic release
Forrex (liquid) fire suppression system with automatic release
Handheld fire extinguisher
Central automatic lubrication system
Electric pump for hydraulic tank fill, 24V
Wheel chocks and brackets
Ground engagement tools, GET
Wiggins fast fill for fuel
Wiggins fast fill for engine oil, transmission, hydraulic and radiator
EOD ejector bucket
Corrosion resistance radiator
Knock down construction
Guard rails

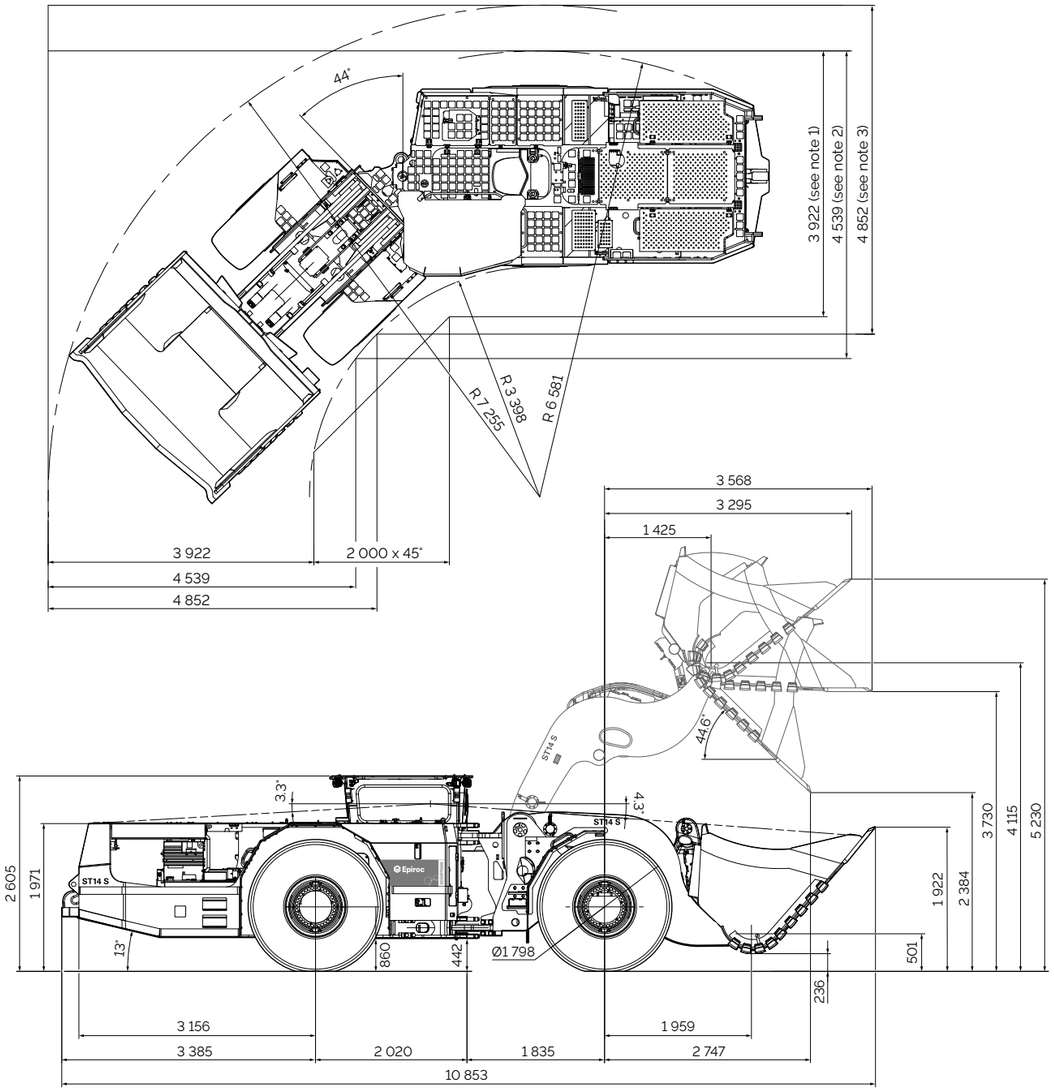
Parts and services

Preventive maintenance kits
Repair and rebuild kits
Upgrade kits
Face mechanics tool set
Shop mechanics tool set
Service tool box for RCS
Operators training in simulator

Digital products

Fleet monitoring with Fleet• on My Epiroc
Machine and fleet data via APIs

Turning radius and dimensions (2.2 t/m^3 bucket)



All dimensions are shown in millimeters (mm). Dimensions and calculations shown are based on standard vehicle configuration with 27 mm tire deflection, unloaded.

Grade performance

Grade %	0	2	4	6	8	10	12.5	14.3	16	18	20
Grade	-	1:50	1:25	1:16.7	1:12.5	1:10	1:8	1:7	1:6.3	1:5.6	1:5
Standard configuration, empty bucket (km/h)											
1st gear	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
2nd gear	11.1	11.1	11.1	11.1	11.1	11.1	10.8	9.6	8.8	8.0	7.4
3rd gear	18.5	18.5	18.5	18.5	15.2	12.8	10.8	9.6	8.9	8.0	7.4
4th gear	33.2	33.2	23.7	18.5	15.2	12.8	–	–	–	–	–
Standard configuration, loaded bucket (km/h)											
1st gear	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
2nd gear	10.9	10.9	10.9	10.9	10.9	9.6	8.1	7.2	6.6	6.0	5.5
3rd gear	17.8	17.8	17.8	13.9	11.4	9.6	8.1	7.2	–	–	–
4th gear	31.1	24.9	17.8	13.9	–	–	–	–	–	–	–

3% rolling resistance assumed. Actual performance may vary depending on the application, lock up engaged. Continuous operation is recommended on maximum 1:7 grade.

Automate your operation

Your Scooptram loader can be provided with well proven teleremote and automation capabilites, matching the needs of your operation – from small stoping to large block caving.

+ Increased safety

By operating the machine from a control room located in a safe environment, the operator will not be exposed to hazardous areas within the mine.

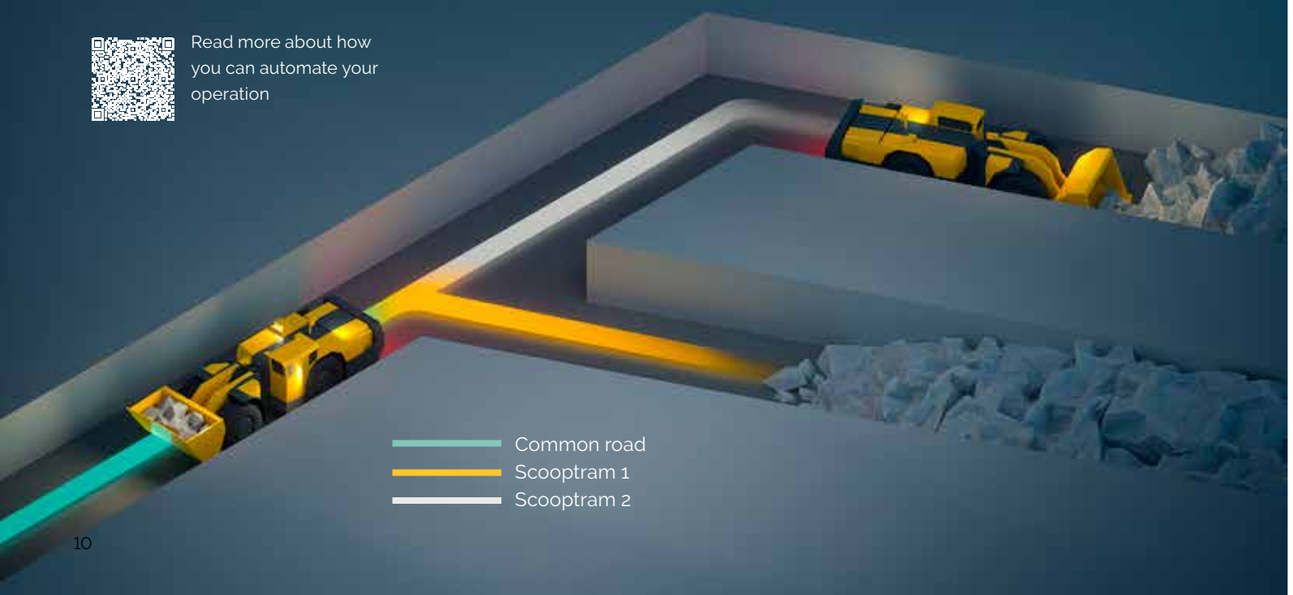
+ Boost productivity

Automation enables you to utilize your loader even when people are not allowed in the mine due to blasting and shift changes, which increases uptime and produced tonnes. Thanks to hauling on repeatable routes, your machine will have fewer wall hits and spend less time in the repair shop.

+ Optimization

Adding automation to your fleet means reaching the full potential of your operation by controlling production assignments, fleet traffic, and work area access. This eliminates the risk of collisions in common drifts and enables a continuous operation.

Read more about how you can automate your operation



Superior underground haulage

The Minetruck MT42 S is a high speed, 42-metric tonne articulated underground truck, featuring state-of-the-art levels of safety, serviceability and operator comfort which results in unmatched performance in underground mining and construction operations.

Specifications

Capacities	
Tramming capacity	42 000 kg
Standard box volume (SAE heaped)	19.0 m^3
Motion times	
Dumping	13 sec
Weights (standard equipped vehicle, empty weight)	
Approximate weight	34 500 kg
Front axle load	25 740 kg
Rear axle load	8 760 kg

Engine

Brand/model: Cummins X15	Tier 3/EU Stage IIIA	EPA Tier 4 final /EU Stage V
Power rating at 2 100 rpm	399 kW/535hp	399 kW/535hp
Maximum torque at 1 400 rpm	2 644 Nm	2 644 Nm
MSHA Part 7 ventilation rate	509,7 m^3 /min	538 m^3/min
MSHA Part 7 particulate index	396,4 m^3/min	14 m^3/min

Tier 3/EU Stage IIIA: Dry type air filter, catalytic purifier and silencer, exhaust heat protection, cooling package with tube type radiator, remote engine oil and cooling fuel drain.
EPA Tier 4 final /EU Stage V: Different engine, coolers, different after treatment system (dry type air filter, SCR, DPF, Diesel emission fluid system with separate tank/fill point including dosing pump and hoses/cables).
Please note! Requires ultra low Sulphur diesel and low ash engine oil.

United in performance. Inspired by innovation.

Performance unites us, innovation inspires us, and commitment drives us to keep moving forward. Count on Epiroc to deliver the solutions you need to succeed today and the technology to lead tomorrow.

epiroc.com