

# Minetruck MT54 S

Underground mine truck with 54-tonne load capacity



# Efficient haulage

Minetruck MT54 S is a high-capacity underground truck, engineered with smart features to ensure productivity, safety, and reliability in larger underground mining and construction operations. Combining high ramp speeds with improved energy efficiency, this mining truck leads to dramatically increased productivity, reducing overall running costs and fuel consumption by up to 27 000 liters/year compared to other OEMs.

## + Main benefits

**Productivity** - Having an increased speed, thanks to the optimized drivetrain, and a 54-tonne haulage capacity, Minetruck MT54 S offers high productivity, while lowering fuel consumption

**Safety** - Minetruck MT54 S is the benchmark in safety for underground mining trucks. Engineered with safety in mind, it includes smart features such as automatic brake test, open-door brake-apply function, and neutral brake apply

**Reliability** - thanks to extended life of the main components, a completely new electrical system and a more protected component location. Additionally, as a result of the newly developed software, the operator is able to utilize the machine's full potential



An additional load weighing display is available as option. Thanks to the additional display, the loader operator is enabled to optimize the fill factor of the dump box. This also minimizes the risk of overloading.



The robust dump box has a load capacity of 54 metric tonnes and the load-weighting system monitors the loading process.



Minetruck MT54 S is ready for automation. When automated, this mine truck increases productivity by consistent and predictable tramming cycles. These can be extended into the time between the shifts.

Right hand side camera

Grill door opens wide for easier cleaning

Cabin electrics, air filters, jump start connector and batteries easy to reach

Deep Automation capabilities can be provided\*

Comfortable ROPS and FOPS certified operator's cabin with low noise level and status light

Integrated load weighing system\*



Tilttable cabin for easy service

Front axle suspension

SAHR brakes at all wheel ends

\* Optional equipment

## Minetruck MT54 S is designed to ramp up productivity

Minetruck MT54 S is designed for fast productive haulage in large mining and construction operations. With a smart system and robust components, the Minetruck MT54 S ensures productivity, reliability, operator safety, and comfort along with ease of maintenance.



### + Comfortable in the long run

Minetruck MT54 S is comfortable and easy to operate. Thanks to the great steering feel, front-axle suspension, ergonomic operator environment with low noise levels, this truck is pleasant to operate for long periods.



### + Haul deeper

Unlock valuable machine working time with a direct impact on production output by combining Epiroc Deep Automation with the Minetruck MT54 S. This enables fleets of underground mine trucks to continuously operate on autonomous hauling loops, even when blasting and while venting out blast fumes. Operators control these from a safe control center without being exposed to hazardous environments.



### + Increased speed

Minetruck MT54 S comes with an increased speed of up to 6.5% going up the ramp, depending on your application. This is a result of the updated, transmission, and optimized gear selection, making sure the gear shifting will take place at the right time, both during upshifting and downshifting.



## 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.

# Automate your operation

Minetruck MT54 S can be provided with industry leading automation capabilities. Unlocking value when taking your material handling to the next level.



### + Limit exposure to challenges at depths

By operating the machine autonomously from a control room, operator exposure to high temperatures, radon and silica dust are limited.

### + Turn idle time into working time

Don't park your Minetruck while blasting and waiting for blast fumes to vent. Automation allows your Minetruck to keep working relentlessly. Adding valuable hours of work every day.

### + Autonomous haulage at large scale

Deep Automation can seamlessly orchestrate up to 35 autonomous machines within a single system instance. It ensures safe access control, efficient dispatch of haulage assignments, and precise traffic coordination for your material handling operations.

Designed for 24/7 haulage, it excels on dedicated ramps, haulage levels, or loops connecting ore sites with critical infrastructure.



Read more about how you can automate your operation

## Technical specifications

### Features

Minetruck MT54 S is the benchmark in safety for underground mine trucks. It is equipped with many smart features, such as automatic brake test, neutral break apply, and hill decent assist that provides increased safety to the operation and operator.

Without compromising on safety, Minetruck MT54 S has the highest payload in its segment, increasing productivity, while lowering fuel consumption. Thanks to the updated drivetrain, the machine enjoys new speeds going up the ramp as well down hill, increasing the number of cycles per shift. At the same time, through Epiroc's telematics solutions offering you live data and the machine's smart control system, known as Epiroc's Rig Control System (RCS), you will be able to utilize the machine's full potential at all times.



### Specifications

Capacities	
Payload capacity	54 000 kg
Motion times	
Dumping	13 sec
Weights (standard equipped vehicle empty weight)	
Approximate weight	46 300 kg
Axle load, front end	33 600 kg
Axle load, rear end	12 700 kg

\*Weights are approximate and given with filled fluids and standard configured vehicle (e.g. standard equipment, 2.2 t/m<sup>3</sup> dump box etc.)

### Axles

Brand/model	Kessler D111
Differentials: front	Open
Differentials: rear	Open

### Transmission

Brand/model	Allison 6625
Planetary, automatic 6 speeds forward/2 speeds reverse with integral single stage converter with automatic lock up	
Upbox, power transmitted through a gear box	
Dropbox, power transmitted through a gear box	

### Requirements and compliances

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

Besides, Minetruck MT54 S is built with the operator's comfort in mind. Having a spacious ergonomically designed cabin, and a front axle suspension system for superior operator comfort, the machine supports minimizing operator fatigue, making it easy and enjoyable to work underground.

What is more, the tiltable cabin for easy access to the engine, together with the new color setting in the engine compartment, filter monitoring system, and onboard diagnostics continuously showing the operator key data and machine status, provide an easy and safe service of the Minetruck MT54 S.

### Engine

Brand / model	Cummins QSK19	
Emission regulation	Tier 2	Tier 4 F / Stage V
Power rating	567 kW/760 hp @ 2 100 rpm	567 kW/760 hp @ 2 000 rpm
Maximum torque	3 084 Nm @ 1 500 rpm	3 084 Nm @ 1 500 rpm
MSHA Part 7 ventilation rate	1 359 m <sup>3</sup> /min	708 m <sup>3</sup> /min
MSHA Part 7 particulate index	467 m <sup>3</sup> /min	85 m <sup>3</sup> /min

Dry type air cleaner, catalytic exhaust purifier and silencer, remote engine oil and cooling fluid drain, cooling package with tube type radiator.

**Tier 4 F / Stage V:** Different after treatment system (dry type air filter, SCR, Diesel emission fluid system with separate tank/filling point including dosing pump and hoses/cables.)

\* Please note! Require ultra low sulphur diesel and low ash engine oil

\*MSHA - Mine Safety and Health Administration, USA. Ventilation rate - quantity of additional ventilation air required to dilute raw exhaust emission to a respective level per engine.

\*\*Particulate Index - Calculated air flow for minimum diesel particulate matter (DPM) dilution to a safe level per engine.

### Fuel

Fuel tank capacity	843 liters
Fuel filtration, primary, including water trap	7 µm
Anti-siphon fuel supply	3 µm

Epiroc underground trucks are compatible with HVO100 fuel

## Technical specifications

### Control system

Operator display with intuitive interface
Logging of production data, number of dump boxes, fuel consumption and distance, engine and transmission diagnostics etc
Automatic brake test function with logging
Save machine logged data on USB memory stick
Right hand side camera
Rear camera and monitor
Audio-visual reverse alarm
Filter supervision
Gear lockout with tray up
Upbox/dropbox oil contamination supervision
Hill decent assist
Machine speed limit
Steer-by-wire, brake-by-wire
Neutral brake apply
One Pedal Drive
Hill Decent Assist

### Main frame

Lock or support stand on articulation, raised dump box and tilted cabin
Central manual lubrication system
Lifting lugs
Towing points
Removable belly guards
Engine oil pre lube
Front-axle oscillating suspension solution with hydraulic suspension cylinders and accumulator cushioning, Maximum travel, 140 mm
Steering soft stop

### Brakes

Separate brake cooling tank, capacity	85 liters
Service/parking/emergency brakes	SAHR
Fully enclosed, force-cooled, multiple wet discs at each wheel end	
Parking brake apply if movement is detected in neutral	
Electric brake release pump	
Retarder, hydraulic retarder, with separate pedal	
Automatic brake flushing	

### Tires

Tire size front and rear	35/65R33
Tubeless tires design for underground mine service*	
*As applications and conditions vary, Epiroc recommends that the user consults with tire suppliers to obtain the optimum tire selection.	

### Hydraulic system

System pressure	23 MPa
Hydraulic tank capacity	292 liters
Filtration, return line	12 µm
Electric pump for hydraulic tank fill	24 V
Heavy duty load sensing piston pumps	

### Electrical system

System voltage: start and accessories	24 V
Mine duty high output alternator	140 Amps
Converter	24/12 V
Driving lights LED	9x40 W, 2x80 W
Isolation switch lockout	
Main switch isolator	
Tail and brake lights	
Load lights, mounted on back of cabin/canopy	
Side light - opposite operator	
Front and rear turn signals	
Front and rear position lights	
Machine status indicator light mounted on cabin	
3x emergency stop buttons with fuel shut off valve	
Start up alarm	

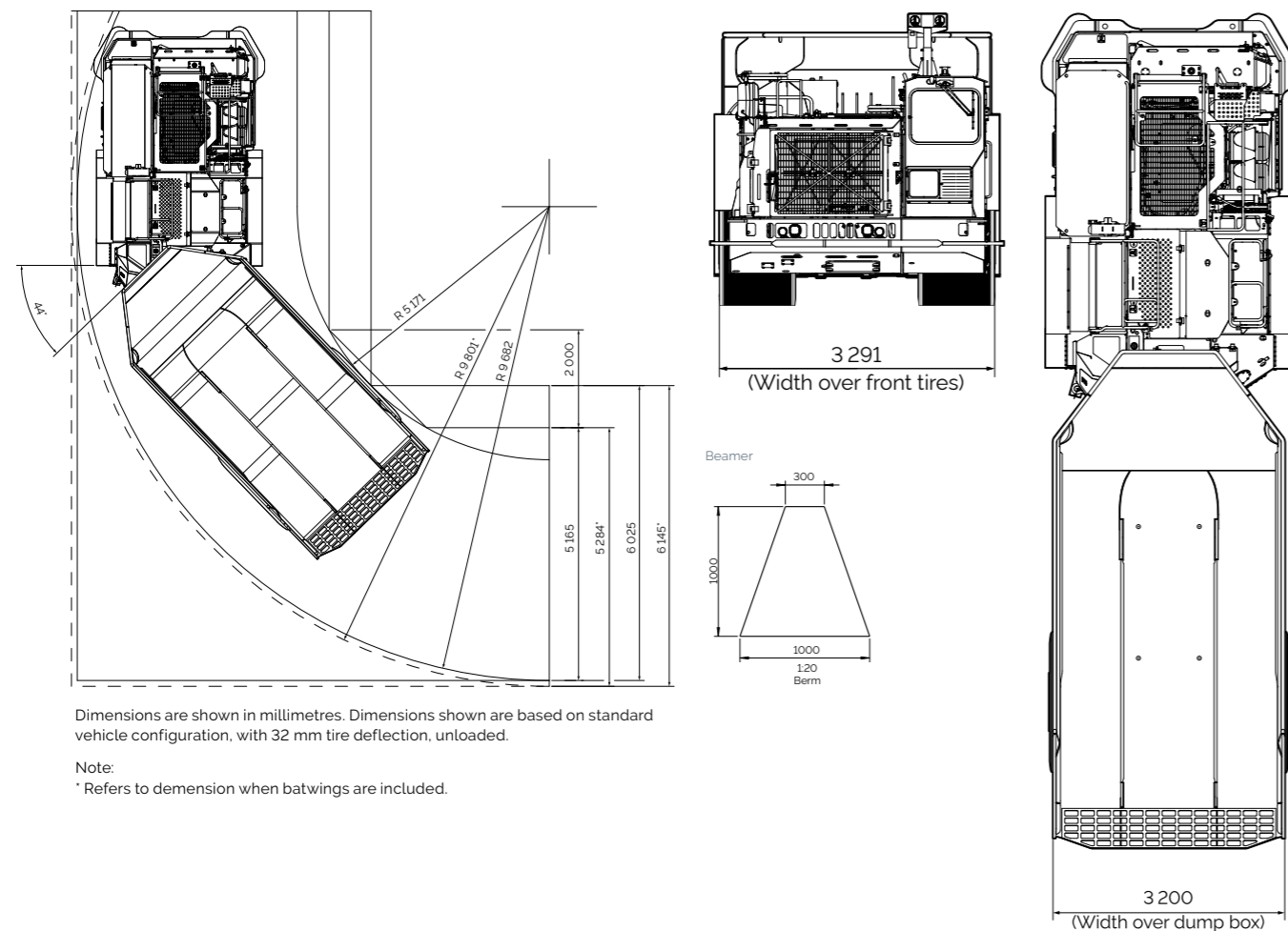
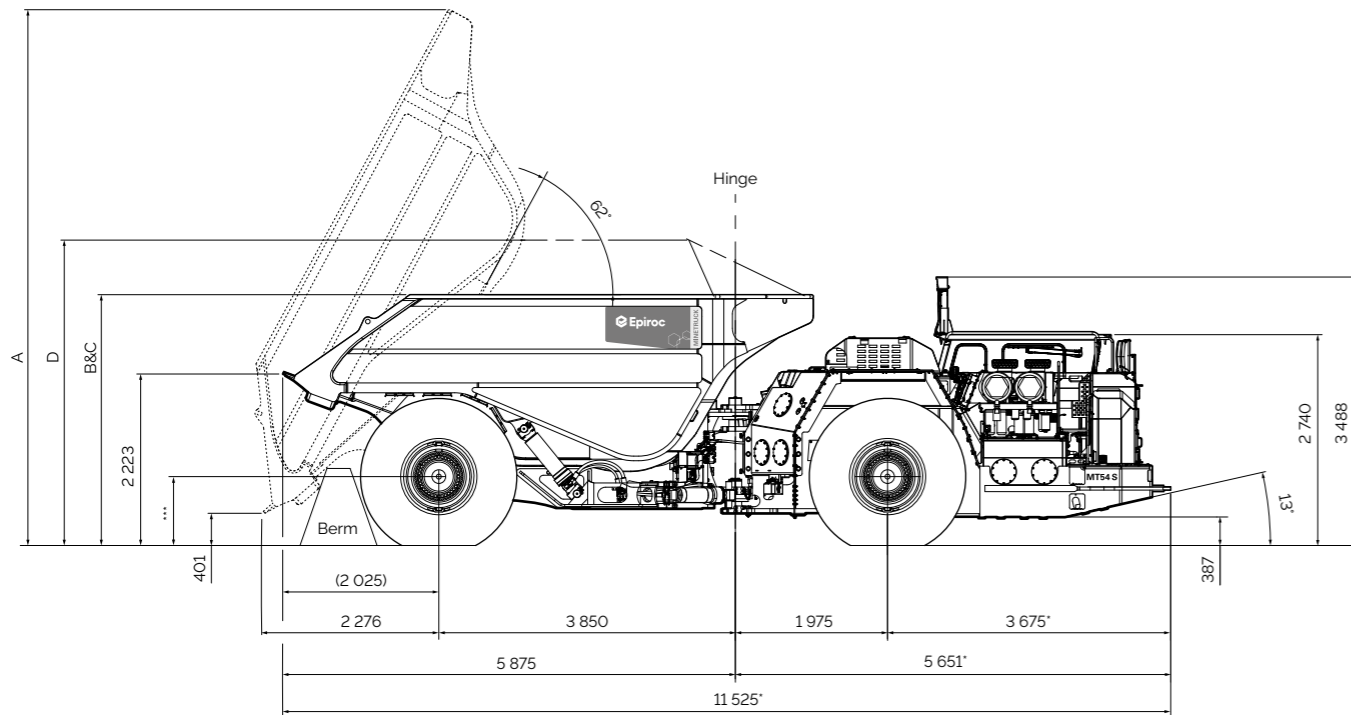
### Operator's compartment

Forward seated cabin with steering wheel (ISO ROPS and FOPS)
Trainer seat with seat belt
Door open brake apply (at low speeds)
Parking Brake Steering Interlock
Open door retainer
Air suspended seat with 3-point retractable seat belt
Emergency exit (and rescue mission)
Window wipers on front and right hand window
Sliding window on door
Horn
Tilt/telescopic steering wheel
Heated rear view mirrors
External sound level according to ISO 6395 LwA 117 dB(A)
Sound level in cabin according to ISO 6396 LpA 80 dB(A)
Whole body vibration value according to EN 14253 A(8)w maximum 0.65 +/- 0.2m/s <sup>2</sup>



# Technical specifications

## 1. Measurements



Dimensions are shown in millimetres. Dimensions shown are based on standard vehicle configuration, with 32 mm tire deflection, unloaded.

Note:  
\* Refers to demension when batwings are included.

# Technical specifications



## Grade performance\*

Standard configuration, box empty												
%	Grade	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0
Ratio	Grade	-	-	-	-	112	110	18	17	-	-	15
Km/h	1st gear	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.3	5.3	5.3	5.3
	2nd gear	8.1	8.0	8.0	8.0	8.0	8.0	7.9	7.9	7.9	7.9	7.9
	3rd gear	10.7	10.7	10.7	10.6	10.6	10.6	10.5	10.5	10.5	10.4	10.4
	4th gear	15.9	15.9	15.8	15.7	15.7	15.6	15.5	15.4	15.4	15.3	15.2
	5th gear	21.4	21.3	21.2	21.1	20.9	20.8	20.7	20.6	19.2	16.7	-
	6th gear	31.7	31.6	31.3	31.0	30.7	27.9	-	-	-	-	-

Standard configuration, box loaded												
%	Grade	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0
Ratio	Grade	-	-	-	-	112	110	18	17	-	-	15
Km/h	1st gear	5.4	5.4	5.4	5.3	5.3	5.3	5.3	5.3	5.2	5.2	5.2
	2nd gear	8.0	8.0	7.9	7.9	7.9	7.8	7.8	7.7	7.7	7.7	7.4
	3rd gear	10.7	10.6	10.5	10.5	10.4	10.3	10.3	9.9	8.8	-	-
	4th gear	15.8	15.7	15.5	15.3	15.1	12.1	-	-	-	-	-
	5th gear	21.2	20.9	20.7	18.5	-	-	-	-	-	-	-
	6th gear	31.2	30.7	-	-	-	-	-	-	-	-	-

\*These are theoretical calculations and should be seen as a reference only. 3% rolling resistance assumed. Actual performance may vary depending on the application. Continuous operation is recommended on maximum 1.7 grade.

## Dump boxes

				STD	Ejector style dump box
Volume, SAE heaped (m <sup>3</sup> )		34	30	24.5	30.5
Volume, semi-heaped (m <sup>3</sup> )		31	27	21.5	27.5
Volume, SAE struck (m <sup>3</sup> )		28	24.5	18	24.5
Maximum material density (t/m <sup>3</sup> )		16	18	2.2	1.6
Dump height (mm)	A	7 048	6 682	6 472	N/A
Front spill guard height (mm)	B	3 343	3 133	2 995	3 344
Load height (mm)	C	3 343	3 133	2 955	3 344
Height heaped load (mm)	D	4 037	3 827	3 480	4 028
Width over dump box (mm)		3 200	3 200	3 200	3 200
Width within dump box (mm)		3 006	3 006	3 006	3 000

\*Ejector box has a different functionality, reduced capacity, different dimensions affecting turning radius etc., more sizes can be available, please consult Epiroc for more information



## Options

### Automation features

- Simulations to virtually evaluate the productivity levels that can be achieved
- Single-level autonomous haulage loops underground
- Multi-level autonomous haulage, including spiral ramp in 3D
- Multi-level autonomous and transition to surface haulage
- Two way autonomous traffic, meet and pass at wide meeting points
- Tele-remote operation for recording autonomous routes or other situations
- Driver Assist for tele-remote, to avoid wall collisions

### Main frame

- Optional box sizes
- Heavy duty dump box linear wear plates
- Wheel chocks and brackets
- Central automatic lubrication system (with low level warning)
- Guard rails
- Corrosion resistant radiator
- Ansul manually activated fire suppression system with engine shut down
- Ansul checkfire automatically activated fire suppression system
- Hand held fire extinguishes
- Cold weather package 120 V or 240 V: Block heater, battery charger, fuel heater, hydraulic oil heater, transmission oil heater, arctic oil
- Wiggins fast fuel fill
- Wiggins fast fill for engine oil, transmission, hydraulic and radiator
- Onboard jacks
- Hydraulic lifting of box support

### Electrical system

- Engine starter isolator
- Detachable service light (required for CE approved vehicles)
- Battery jump start receptacle
- Amber strobe light - power on

### Digital products

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

### Control system

- Load camera and load lights
- Collision avoidance system (CAS) interface
- Emergency steering
- Load weighing
- Tire monitoring system
- Machine protection system (engine, transmission, hydraulic, lubrication)\*
- Overspeed protection system\*
- Machine warm up
- Turbo timer

### Operator's compartment

- Air suspended seat with 4-point retractable seat belt
- Seat cover
- Media player
- Sun visor

### Hydraulic system

- Arctic oil

### Fuel

- Diesel filter with heater element

### Parts and Service solutions

- Preventive maintenance kits
- Parts & Repair kits
- Upgrade kits
- Midlife kits
- Service agreements
- Reman components
- RigScan audits

Combining strength and agility, the Scooptram ST18 S is built for high productivity in large-size underground mines. It offers unbeatable safety features to secure your operation. At the same time, thanks to the integrated converter lock-up, load sensing hydraulic, traction control and the intelligent Epiroc Rig Control System (RCS), you will enjoy new levels of productivity. With the Scooptram ST18 S the operator can count on a spacious cabin, ergonomic controls, dual ride control and soft stop for steering and boom movements.



## Engine

Brand / model	Cummins X15 turbo charged diesel engine	
	EPA Tier 3/ EU Stage IIIA	EPA Tier 4 Final/ EU Stage 5
Emmissions standard	EPA Tier 3/ EU Stage IIIA	EPA Tier 4 Final/ EU Stage 5
Power rating at 2 000 rpm	336 kW/450 hp	352 kW/472 hp
Maximum torque at 1 000-1 400 rpm	2 100 Nm	2 350 Nm
MSHA Part 7 ventilation rate	495 m <sup>3</sup> /min	481 m <sup>3</sup> /min
MSHA Part 7 particulate index	481 m <sup>3</sup> /min	14 m <sup>3</sup> /min

**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.

**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.

## Specifications

Capacities	
Tramming	17 500 kg
Breakout force, hydraulic	28 500 kg
Breakout force, mechanical	26 000 kg
Weights (Standard empty vehicle)	
Approximate weight	51 500 kg
Axle load, front end	25 000 kg
Axle load, rear end	26 500 kg
Motion times	
Boom raising	7.2 sec
Boom lowering	4.0 sec
Dumping	2.2 sec



9869.0224.01.c. 2026-06 Örebro, Sweden. Legal Notice © Copyright, 2021, Epiroc Rock Drills AB, Örebro, Sweden. Any unauthorized use or copying of the contents or any part thereof is prohibited. Illustrations and photos may show equipment, with optional extras. No warranty is made regarding specifications or otherwise. Specifications and equipment are subject to change without notice. Consult your Epiroc Customer Center for specific information.