MINETRUCK MT42

MT42

Underground truck with 42-tonne load capacity

MINETRUCK





MINETRUCK MT42 SUPERIOR UNDERGROUND HAULAGE

THE MINETRUCK MT42 IS A HIGH SPEED, 42-TONNE ARTICULATED UNDERGROUND TRUCK, FEATURING STATE-OF-THE-ART LEVELS OF SAFETY, SERVICEABILITY AND OPERATOR COMFORT. THE RESULT: UNMATCHED PERFORMANCE IN UNDERGROUND MINING AND CONSTRUCTION OPERATIONS.

🕂 MAIN BENEFITS

Highest safety level thanks to features such as FOPS/ROPS certified operator's cabin, SAHR brakes, engine brake, safety interlocks, machine stop, automatic brake test, 3-point access system for machine entry and exit, fire suppression system and multi-color status light.

Maximum productivity thanks to high capacity in a small envelope, front axle suspension and Atlas Copco's Rig Control System, RCS.

First-class working environment thanks to the ergonomic design of the operator's cabin combined with the front axle suspension system.

Tiltable cabin for easy access for great visibility

Front axle suspension for superior comfort and increased productivity

Articulated steering for maximum maneuverability



Available engine alternative is the EPA Tier 4 final and EU Stage 4 approved Cummins QSX15 (for markets with Ultra Low Sulphur Diesel and low ash engine oil).



The smart, hydraulically operated tailgate works as a spill guard and supports the filling process with one extra side in the box.



In applications with a high degree of downhill tramming with loads such as waste rock fill, cut-and-fill and fill applications, the retarder, which is integrated in the control system, provides wear-free braking and retardation via electro-magnetic induction.



FEATURES

Safety

- Spring Applied, Hydraulically Released Brakes (SAHR)
- Automatic brake-test logging
- Excellent visibility with low hood design
- Rear-view camera
- Heated rear view mirrors
- Oil-free operator's cabin

Comfort

- Front axle suspension system
- Sound level in cab, below 80 dB(A)
- A durable, air suspension seat with 3-point seat belt
- Simple, clear, multi-functional display
- Instructor's seat

Productivity

- A high speed, 42-tonne articulated truck with front axle suspension
- Torque converter with automatic lock up
- Box design with high strength steel, optimized geometry and smart tailgate

Durability

- Proven powertrain components
- On board diagnostics give the operator a clear indication of machine status
- Machine protection system

Serviceability

- · Easy access to service points, filters and valve blocks
- The well-proven Atlas Copco Control system (RCS) provides service information and diagnostics logged and displayed in clear text on screen
- Cab tilt for easy access to engine compartments
- Filter sensors with data collection for air, hydraulic and transmission filters
- Automatic lubrication system with low level warning and lube fault detection for all daily lube points.



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		
	Standard	Alternative *
Brand/model: Cummins QSX15	EPA Tier 3 / EU Stage IIIA	EPA Tier 4 final / EU Stage IV
Power rating at 2 100 rpm	388 kW / 520 hp	399 kW / 535hp
Maximum torque at 1 400 rpm	2 365 Nm	2 644 Nm
MSHA Part 7 ventilation rate	538 m³/min	TBA m³/min
MSHA Part 7 particulate index	595 m/min	TBA m³/min

Standard: Dry type air filter, catalytic purifier and silencer, exhaust heat protection, coolingpackage with tube type radiator, remote engine oil and cooling fuel drain.

Alternative: Different engine, coolers, different aftertreatment 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.

TRANSMISSION & TORQUE CONVERTER	
Dana: 8822H with 8 forward and 2 reverse gears	
Dana: CL8000 with automatic lock-up	

AXLES	
Kessler: Model 102	•
Degree of oscillation: 16° (+/-8° on each side)	٠

BRAKES

2	
Fully enclosed, force-cooled, multiple wet discs at each wheel end	٠
Service/parking/emergency: SAHR	٠

ENCLOSED OPERATOR'S CABIN	
ISO ROPS/FOPS approved	
Be-Ge 7150 seat with 3 point retractable seat belt	
Air suspension seat	
Interactive display module	
Automatic Climate Control (Air conditioner, heater and pressurizer)	
External sound level according to ISO 6393 LwA 118 dB(A)	
Sound level in cabin according to ISO 6394 LpA 80 dB(A)	
Whole body vibration value below EN 14253 A(8)w maximum 0.55+/-0.2m/s ²	
Audio media player	•

ELECTRICAL SYSTEM	
Voltage, system start and accessories: 24 V	
Mine duty high output alternator: 140 Amps	•
Control system: Atlas Copco RCS	
Isolation switch lockout	
Audiovisual back-up alarm	•
3 x machine stop buttons with fuel shut-off valve	
Tail and brake lights	
Side lights	٠

ELECTRICAL SYSTEM

Front & rear turn signals	
Hydraulic warning system, low level	•
Rear-view camera	•
Detacheable service light	
Machine status indicator lights	
Amber strobe light - Power on	
Neutral brake apply	
Low ambient temperature package	0
Loading camera and load lights	0
Driving lights LED	
Rear lights: 4 x 40w	•
Front lights: 6 x 40w	•
Cab light: 1 x 40 w	•
Drift light: 1 x 40w	•
Working lights (fender): 2 x 40w	•

HYDRAULIC SYSTEM	
System pressure: 21.5 MPa	
Hydraulic tank capacity: 220 liters	
Filtration, return line: 12 µm	
Heavy duty gear pumps	•
Electric hydraulic oil fill pump	
Automatic lubrication system with timer (Lincoln pump)	
Cylinders: chrome-plated valve stems, diameter	-
Steer cylinders (2): 140 mm	
Dump cylinders (2): 160 mm	
Front suspension cylinders (2): 150 mm	

FUEL

Fuel tank capacity: 580 liters	
Fuel filtration: 7 µm	
Anti-siphon fuel supply	•

TIRES*

Tubeless, treaded for underground mine service
Tire dimensions: 29.5R25

* As applications and conditions vary, Atlas Copco recommends that the user consult tire suppliers for optimum tire selection.

•= STANDARD	O= OPTION
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SUSPENSION	
The suspension is a gas-hydraulic system for improved operator comfort and vehicle handling while minimizing frame stress	
Suspension, maximum travel: 140 mm	•

SYSTEM	
Ansul CHECKFIRE® automatic fire suppression	0
Ansul dual bottle fire supression with engine shut down	0
Handheld fire extinguisher, 2 x 6 kg	0
Wiggins central service points - engine, transmission, hydraulics, radiator	0
Wiggins fast fuel fill	0
Emergency steering (Required for CE)	0
Blockout gears	0
Remote monitoring vehicle kit	0
Load weighing (logging of production data, weight per box, number of boxes and accumulated payload)	•

DRIVE TRAIN	
Corrosion-resistant radiator	0
Retarder, Telma, integrated into control system	0
Machine protection system	0

MAIN FRAME	
Knock-down construction	0
Wheel chocks and brackets	
Guard rails	0

DOCUMENTATION	
LinkOne parts book CD	0
LinkOne viewer	0
Parts manual - plasticized	

PARTS AND SERVICE	
Preventive maintenance kits	0
Repair and rebuild kits	0
Face mechanic's tool set	0
Shop mechanic's tool set	0
Service tools for RCS	0

ATLAS COPCO SERVICE. IT'S NOT JUST ABOUT PROMISES, IT'S ABOUT DELIVERY.

We offer several levels of service agreements to meet the requirements of your operation and safeguard your productivity. Our service agreements help you build a quality operation focused on proactive, planned maintenance to minimize unplanned downtime. We support maintenance with detailed parts information on every item in our full inventory of components, accessories, and tools.



GRADE PERFORMANCE, BOX EMPTY*

%	Grade	0.0	2.0	4.0	6.0	8.3	10.0	12.5	14.3	16.0	18.0	20.0
Ratio	Grade	-	-	-	-	1:12	1:10	1:8	1:7	-	-	1:5
km/h	1st gear	5.8	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.6	5.6
	2nd gear	7.6	7.5	7.5	7.5	7.5	7.5	7.5	7.4	7.4	7.4	7.4
	3rd gear	10.3	10.3	10.3	10.2	10.2	10.2	10.1	10.0	10.0	10.0	9.9
	4th gear	13.6	13.5	13.5	13.4	13.3	13.3	13.2	13.1	13.0	13.0	12.7
	5th gear	18.1	18.0	17.9	17.8	17.7	17.6	17.4	17.0	16.2	15.3	13.6
	6th gear	23.8	23.6	23.5	23.3	23.1	22.4	20.9	18.7			
	7th gear	32.3	31.9	31.6	31.2	28.4	23.6					
	8th gear	42.4	41.8	40.7	35.9							

GRADE PERFORMANCE, BOX LOADED*

%	Grade	0.0	2.0	4.0	6.0	8.3	10.0	12.5	14.3	16.0	18.0	20.0
Ratio	Grade	-	-	-	-	1:12	1:10	1:8	1:7	-	-	1:5
km/h	1st gear	5.7	5.7	5.7	5.7	5.6	5.6	5.5	5.5	5.5	5.5	5.5
	2nd gear	7.5	7.5	7.4	7.4	7.4	7.3	7.3	7.2	7.0	6.7	6.4
	3rd gear	10.3	10.2	10.1	10.0	9.9	9.9	9.1	8.6	6.8		
	4th gear	13.5	13.3	13.2	13.1	12.3	11.3					
	5th gear	17.9	17.7	17.4	15.8							
	6th gear	23.5	23.1	20.6								
	7th gear	31.6	28.4									
	8th gear	41.3										

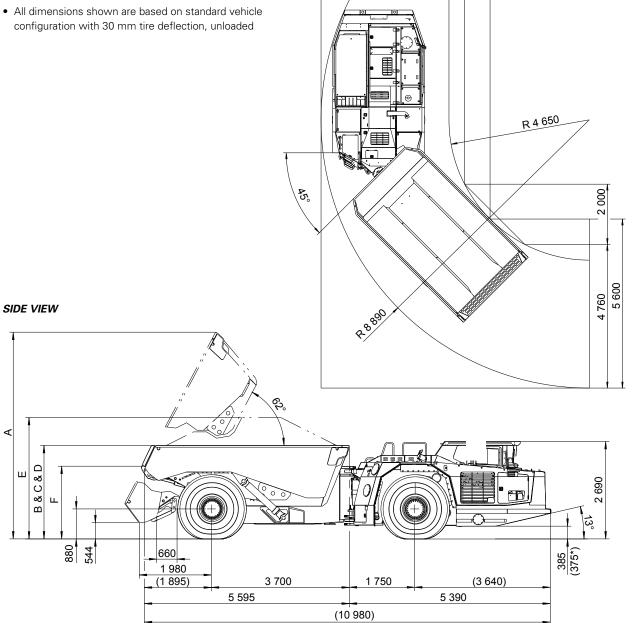
*Standard configuration. 3% rolling resistance assumed. Actual performance may vary depending on the application.



MEASUREMENTS

Dimensions

- All dimensions are shown in millimetres



DUMP BOXES

			STD		
Volume , SAE heaped 2:1 (m ³)	23	21	19	17.5	16
Volume SAE struck (m ³)	19.3	17.1	15	13.1	11.8
Material density (t/m ³)	1.8	2.0	2.2	2.4	2.6
Dump height (mm), A	5 835	5 730	5 625	5 625	5 625
Spill guard height (mm), B	2 885	2 733	2 585	2 585	2 585
Load height (mm), C	2 885	2 733	2 585	2 460	2 460
Tailgate height (mm), D	2 575	2 575	2 585	2 460	2 460
Height loaded heaped, (mm), E	3 560	3 410	3 260	3 135	3 135
Height rear end of box (mm), F	2 030	2 030	2 030	2 030	2 030
H6 Height SAE heaped 2:1 (mm)	3 635	3 485	3 335	3 210	3 210
Width outside (mm), W1	3 050	3 050	3 050	3 050	3 050
Width inside box (mm), W2	2 865	2 865	2 865	2 865	2 865

TURNING RADIUS

2015-01

2014

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COMMITTED TO SUSTAINABLE PRODUCTIVITY

We stand by our responsibilities towards our customers, towards the environment and the people around us. We make performance stand the test of time. This is what we call – Sustainable Productivity.



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