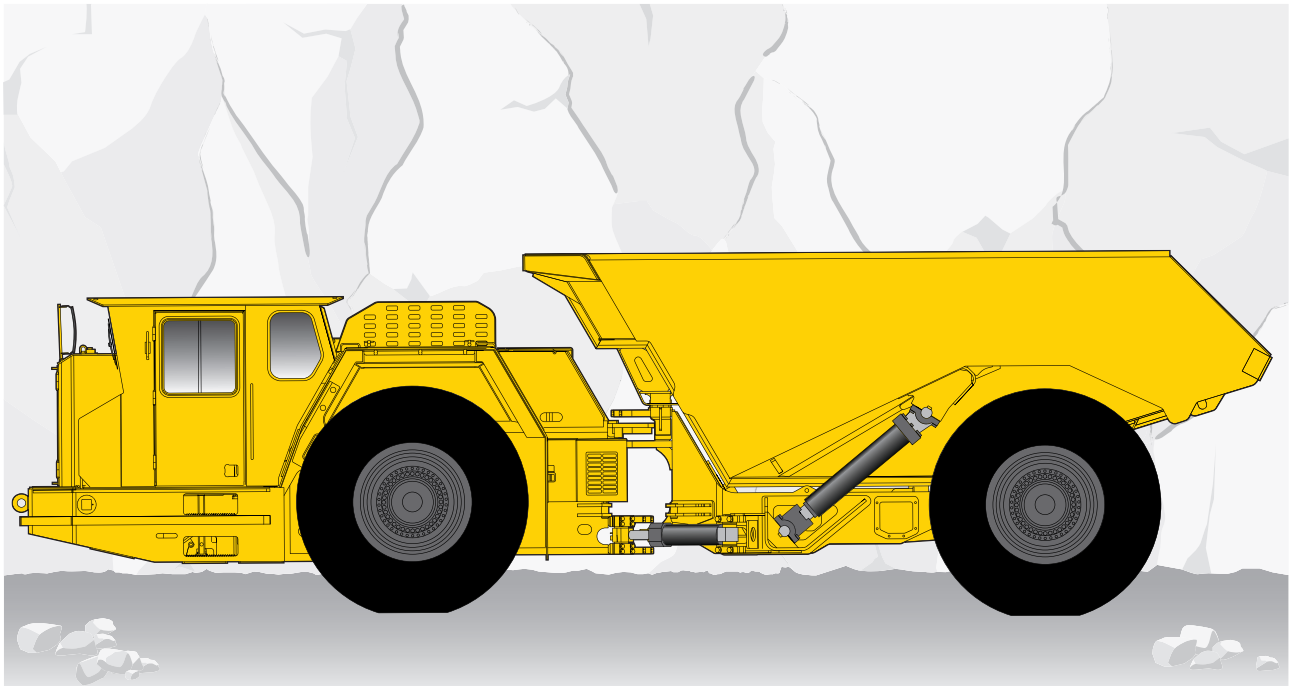


Minetruck MT6020

Technical specification



The Minetruck MT6020 is a fast 60 metric tonne capacity articulated underground truck, with an ergonomically designed operator's compartment for unparalleled productivity in demanding mines.

Features

Dump box

- Optimum box profile for clean and fast dumping
- Box support and lock for safe work under box

Operator's compartment

- Ergonomically and spacious designed compartment for maximum safety and minimal operator fatigue with:
 - Forward seating enclosed cabin
 - ISO ROPS/FOPS certified for maximum safety
 - Air conditioning for comfortable working conditions
 - Tilt-telescopic steering wheel
 - Trainer seat
 - Compliant with sound regulations to minimize operator's fatigue; reduced noise level to 83 dB(A) inside the cab
 - Wide windows for safety and enhanced operator's visibility
 - 3 point mounting points for entry and exit from operator's compartment
 - Back up camera and monitor for operator assistance

Power frame

- Front axle suspension, a gas-hydraulic system for improved operator comfort and vehicle handling
- Atlas Copco unique powertrain includes an upbox, a drop box and a combined transmission and converter which improves visibility and accessibility to components
- Electronic transmission and engine control system for smooth and precise shifting
- A high power-to-weight ratio
- High horsepower per tonne loaded

General

- Great serviceability with centralized service points
- Long-life roller bearing centre hinge
- Anti skid material at service access points
- Central manual lubrication
- Hydraulic hoses, electric cables and hot surfaces are well routed and protected

Specifications

Capacities

SAE

Tramming capacity	60 000 kg
-------------------	-----------

Motion times

Dump box

Dumping	15 seconds
---------	------------

Engine

- Cummins..... QSK19-C760, EPA Tier 1/EU Stage I A
- Power rating at 2 100 rpm 567 kW/760 hp
- Maximum torque at 1 300 rpm 3 084 Nm
- Catalytic exhaust purifier and silencer
- Dry type air cleaner
- Exhaust heat protection
- Engine oil drain

Transmission and converter

- Planetary, automatic 6 speeds forward/2 speeds reverse with integral single stage converter with automatic lock up
- Allison.....M6610AR
- Up box: Power transmitted through a 1:1 gear ratio box
- Drop box: Power transmitted through a 1:1 gear ratio box

Axles

- Kessler 111
- Conventional front and rear differential
- Front-axle oscillating suspension "A" frame with hydraulic suspension cylinders and accumulator cushioning
- All wheel drive

Brakes

Fully enclosed, force cooled, multiple wet discs at each wheel end

- Service/parking/emergency brakes SAHR
- Hydraulic retarder

Tyres

Tubeless, steel radial, lug tread design for underground mine service

- Dimensions 35/65, R33*

** As applications and conditions vary, Atlas Copco recommends that the user consults with tyre suppliers to obtain the optimum tyre selection*

Operator's compartment

- Forward facing seat
- Cabin; ISO ROPS/FOPS approved
- KAB 555 seat with retractable seat belts
- Air conditioner
- Trainer seat
- Back up video monitor

Suspension

The suspension is a gas-hydraulic system for improved operator comfort and vehicle handling while minimizing frame stress

- Suspension, max 105 mm
- Individual self leveling suspension

Hydraulic system

- System pressure 20.7 MPa
- Hydraulic tank capacity 238 litres
- Filtration, return line 4.0 µm
- Heavy duty gear type pumps.
- Cylinders diameter:
 - Steer cylinders (2) 160 mm
 - Dump cylinders (2) 177.8 mm
 - Suspension cylinders (2) 125 mm

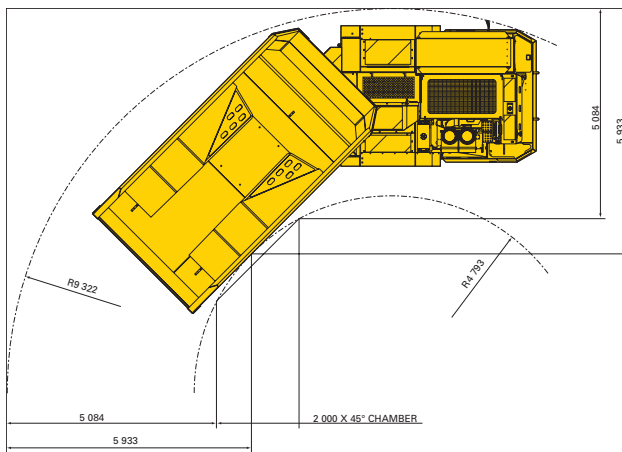
Electrical system

- Voltage, system start & accessories 24 V
- Alternator, high output 100 A
- Hydraulic warning system; temperature, hyd. oil level
- Rock Tough projection lights
- Isolation switch lockout

Fuel

- Fuel tank capacity 844 litres
- Fuel consumption, full load 67 litres/hour
- Fuel filtration 10 µm
- Anti-siphon fuel supply

Turning radius



- Turning angle +/-42.5°
- Dimensions shown are based on standard vehicle configuration with 27 mm tyre deflection
- All dimensions are shown in millimetres

Grade performance

NB. 3% rolling resistance assumed. Actual performance may vary depending on the application

Standard configuration, box empty

Percent grade	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0
Ratio					1:12	1:10	1:8	1:7			1:5
1st gear (km/h)	6.4	6.4	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
2nd gear (km/h)	9.5	9.5	9.4	9.4	9.4	9.4	9.3	9.3	9.3	9.3	9.2
3rd gear (km/h)	12.6	12.6	12.5	12.5	12.4	12.4	12.4	12.3	12.3	12.2	12.2
4th gear (km/h)	18.3	18.2	18.2	18.1	18.0	17.9	17.8	17.7	17.6	17.5	17.1
5th gear (km/h)	25.2	25.1	24.9	24.7	24.5	24.3	24.2	23.2	21.2		
6th gear (km/h)	37.5	37.1	36.7	36.3	35.6	30.9					

Standard configuration, box loaded

Percent grade	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0
Ratio					1:12	1:10	1:8	1:7			1:5
1st gear (km/h)	6.3	6.3	6.3	6.2	6.2	6.2	6.2	6.1	6.1	6.1	6.0
2nd gear (km/h)	9.4	9.3	9.3	9.2	9.2	9.1	9.0	9.0	8.3	7.3	
3rd gear (km/h)	12.5	12.4	12.3	12.2	12.1	11.9	10.6				
4th gear (km/h)	18.1	17.9	17.6	17.2	13.5						
5th gear (km/h)	24.8	24.3	22.5								
6th gear (km/h)	36.5	31.7									

Optional equipment

Main frame

- Wheel chocks and chock brackets

Ergonomic

- Grammer seat with retractable seatbelts
- Heater

System

- Ansul dual bottle fire suppression with engine shutdown
- Electric hydraulic tank fill pump

- Diesel fuel filter with heater and water separation (7 micron)

- Lincoln auto lube with timer
- Wiggins fast fuel-, transmission-, hydraulic- oil fill

Drive train

- Neutral brake apply

Electrical system

- Amber strobe light - power on
- Load lights
- Side light opposite operator
- Tail and brake lights

- Turn signals, front and rear

- 24/12 V power converter
- Loading camera
- Battery heater, 120 V
- Block heater, 120 V
- Hydraulic oil heater, 120 V
- Engine oil heater, 120 V
- Fire extinguisher (9kg)

Controls and instruments

- Blockout 5th and/or 6th gears
- Emergency steering- accumulator type
- Extended data gauge package

Power unit

- Epoxy coated radiator

Documentation

- LinkOne parts catalogue, CD
- Parts and service manual - plasticized

Parts kit

- 1 000 hour consumables

Other

- Tool box

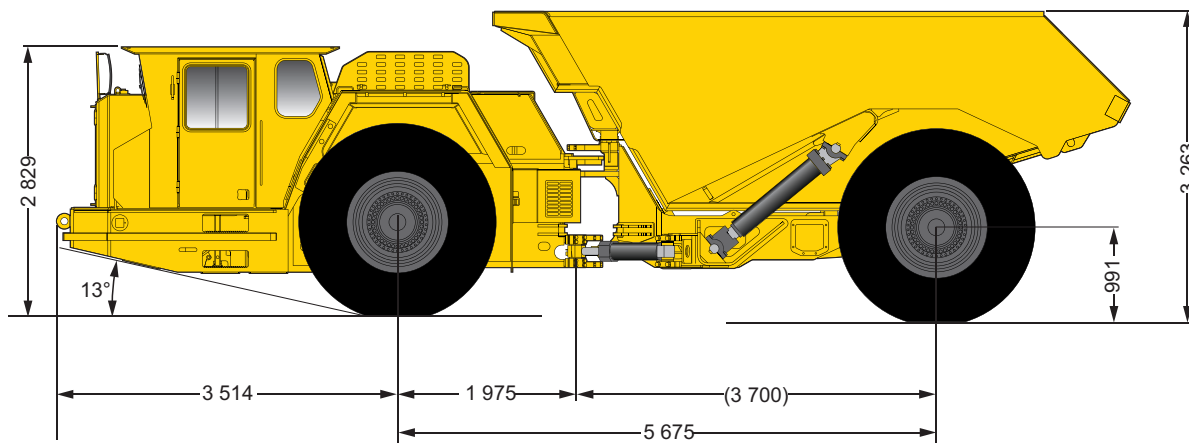
Dump boxes

Dump box data		STD			
Material density (t/m ³)	1.8	2.0	2.2	2.4	
Volume, SAE struck (m ³)	30.4	26.6	24.1	21.7	
Volume, Semi-heaped (m ³)	33.3	29.7	27.3	25.0	
Volume, SAE heaped (m ³)	36.3	32.8	33.4	28.2	
Width, dump box (mm)	W	3 440	3440	3440	3440
Dump position: Box height, max (mm)	H1	6909	6842	6750	6689
Tramming position: Dump box height (mm)	H2	3462	3263	3122	2993
Dump position: Clearance (mm)	C	471	471	471	471

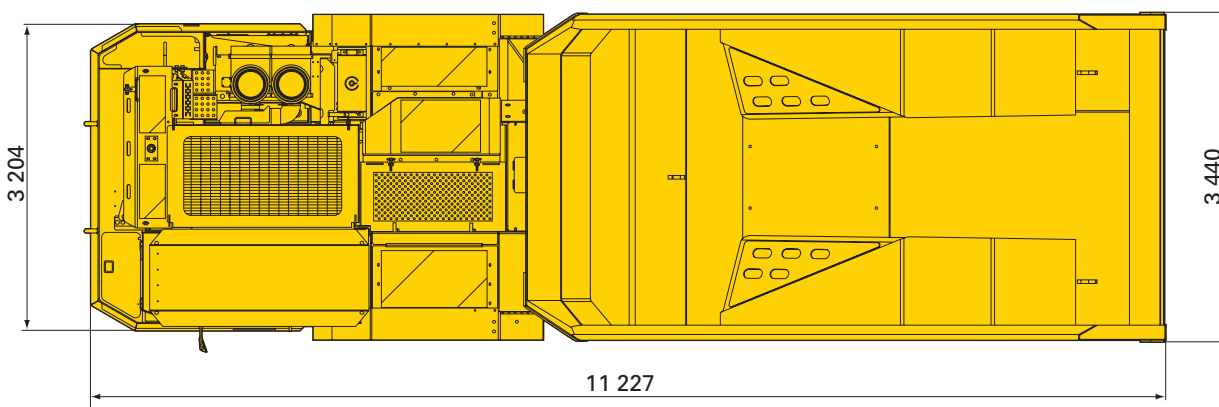
Dimensions and weights*

Approximate net weight.....43 900 kg
 Axle load, front end29 700 kg
 Axle load, back end.....14 200 kg

*Standard equipped vehicle with empty box



Side view



Top view

- Dimensions shown are based on standard vehicle configuration with 27 mm tyre deflection
- All dimensions are shown in millimetres



© Copyright 2010, Atlas Copco Rock Drills AB, Örebro, Sweden. All product names in this publication are trademarks of Atlas Copco. 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 Atlas Copco Customer Center for specific information.

9851 2553 01 f
08/2010