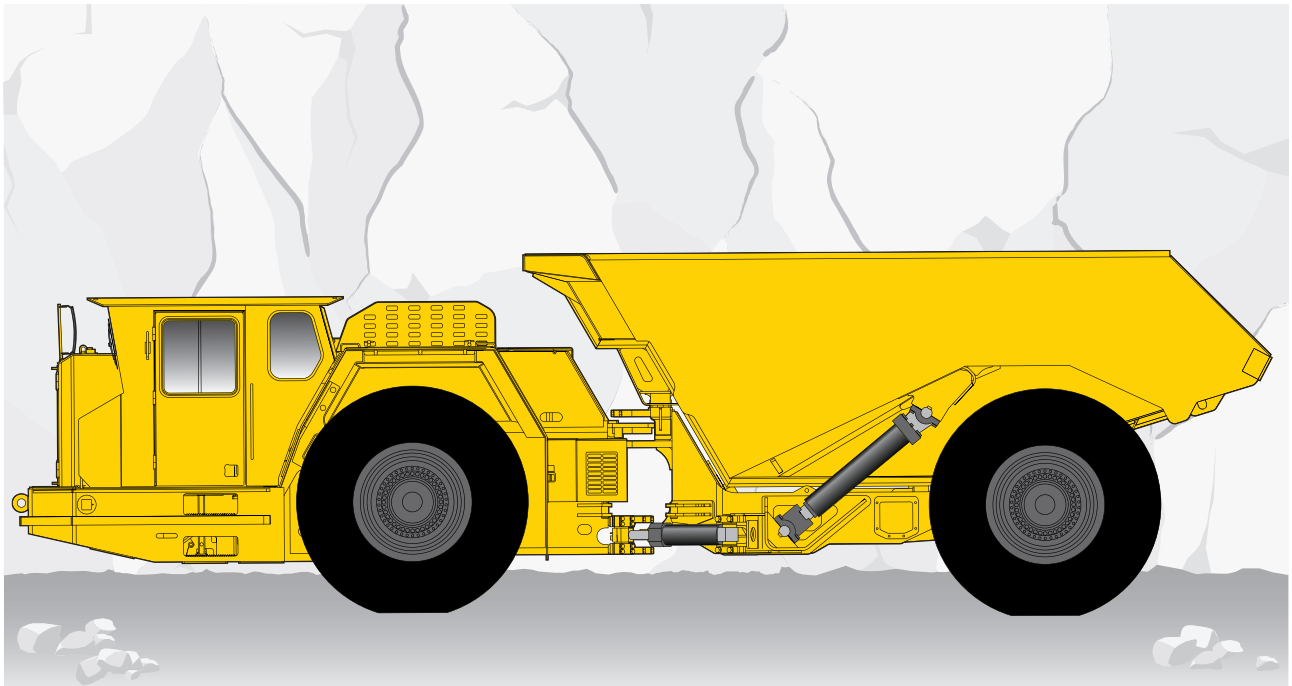


Minetruck MT6020

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 85 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

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

| | | |
|----------------|----------------------------------|-------|
| kg | Tramming capacity | 60000 |
| m ³ | Standard box volume (SAE heaped) | 27.0 |

MOTION TIMES

| | | |
|-----|---------|----|
| sec | Dumping | 15 |
|-----|---------|----|

WEIGHTS

| Standard equipped vehicle (empty weight) | | |
|--|--------------------|--------|
| kg | Approximate weight | 44 600 |
| | Front axle load | 31 400 |
| | Rear axle load | 13 200 |

Engine

- Cummins..... QSK19 MCRS C760, EPA Tier 2/ EU Stage 2
- Power rating at 2 100 rpm 567 kW/760 hp
- Maximum torque at 1 300 rpm 3 084 Nm
- MSHA** part 7 ventilation rate TBA
- MSHA part 7 particulate index TBA
- 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.....M6620AR
- Up box: Power transmitted through a 1:1 gear ratio box
- Drop box: Power transmitted through a 1:1 gear ratio box

Axles

- Kessler D 111 axles
- 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.

**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.

Operator's compartment

- Forward facing seat
- Cabin; ISO ROPS/FOPS approved
- KAB 555 seat with retractable seat belts
- Air conditioner
- Trainer seat
- Speedometer
- Back up video monitor
- External sound level according to ISO 6393 LwA 124.5 dB(A)
- Sound level in Cabin according to ISO 6394 LpA 85 dB(A)
- Whole body vibration value according to below
- EN14253 A(8) w - maximum 0.65+/-0.2m/s²

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
- Isolation switch lockout
- Driving lights LED 11 x 40w
- Tail and brake lights
- 24/12 V power converter

Fuel

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

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 | – | – | – | – | 1:12 | 1:10 | 1:8 | 1:7 | – | – | 1:5 |
| km/h | 1st gear | 6.4 | 6.4 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 |
| | 2nd gear | 9.5 | 9.5 | 9.4 | 9.4 | 9.4 | 9.4 | 9.3 | 9.3 | 9.3 | 9.3 | 9.2 |
| | 3rd gear | 12.6 | 12.6 | 12.5 | 12.4 | 12.4 | 12.4 | 12.4 | 12.3 | 12.3 | 12.2 | 12.2 |
| | 4th gear | 18.3 | 18.2 | 18.2 | 18.1 | 18.0 | 17.9 | 17.8 | 17.7 | 17.6 | 17.5 | 17.1 |
| | 5th gear | 25.2 | 25.1 | 24.9 | 24.7 | 24.5 | 24.3 | 24.2 | 23.2 | 21.2 | | |
| | 6th gear | 37.5 | 37.1 | 36.7 | 36.3 | 35.6 | 30.9 | | | | | |

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

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 | – | – | – | – | 1:12 | 1:10 | 1:8 | 1:7 | – | – | 1:5 |
| km/h | 1st gear | 6.3 | 6.3 | 6.3 | 6.2 | 6.2 | 6.2 | 6.2 | 6.1 | 6.1 | 6.1 | 6.0 |
| | 2nd gear | 9.4 | 9.3 | 9.3 | 9.2 | 9.2 | 9.1 | 9.0 | 9.0 | 8.3 | 7.3 | |
| | 3rd gear | 12.5 | 12.4 | 12.3 | 12.2 | 12.1 | 11.9 | 10.6 | | | | |
| | 4th gear | 18.1 | 17.9 | 17.6 | 17.2 | 13.5 | | | | | | |
| | 5th gear | 24.8 | 24.3 | 22.5 | | | | | | | | |
| | 6th gear | 36.5 | 31.7 | | | | | | | | | |

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

Optional equipment

Operators compartment

- Grammer seat with retractable seatbelts
- Heater

System

- Ansul dual bottle fire suppression with engine shutdown
- Electric hydraulic tank fill pump
- Ansul check fire automatic fire suppression
- Diesel fuel filter with heater and water separation (7 micron)
- Lincoln auto lube with timer
- Wiggins fast fuel-, transmission-, hydraulic- oil fill

Controls and instruments

- Blockout 5th and/or 6th gears
- Emergency steering- accumulator type
- Brake apply after 3 sec.

Power unit

- Corrosion resistant radiator

Main frame

- Wheel chocks and chock brackets

Electrical system

- Amber strobe light - power on
- Load lights
- Turn signals, front and rear
- Loading camera
- Battery heater, 120 V
- Block heater, 120 V
- Hydraulic oil heater, 120 V
- Engine oil heater, 120 V
- Fire extinguisher (8 kg)

Documentation

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

Parts and Services

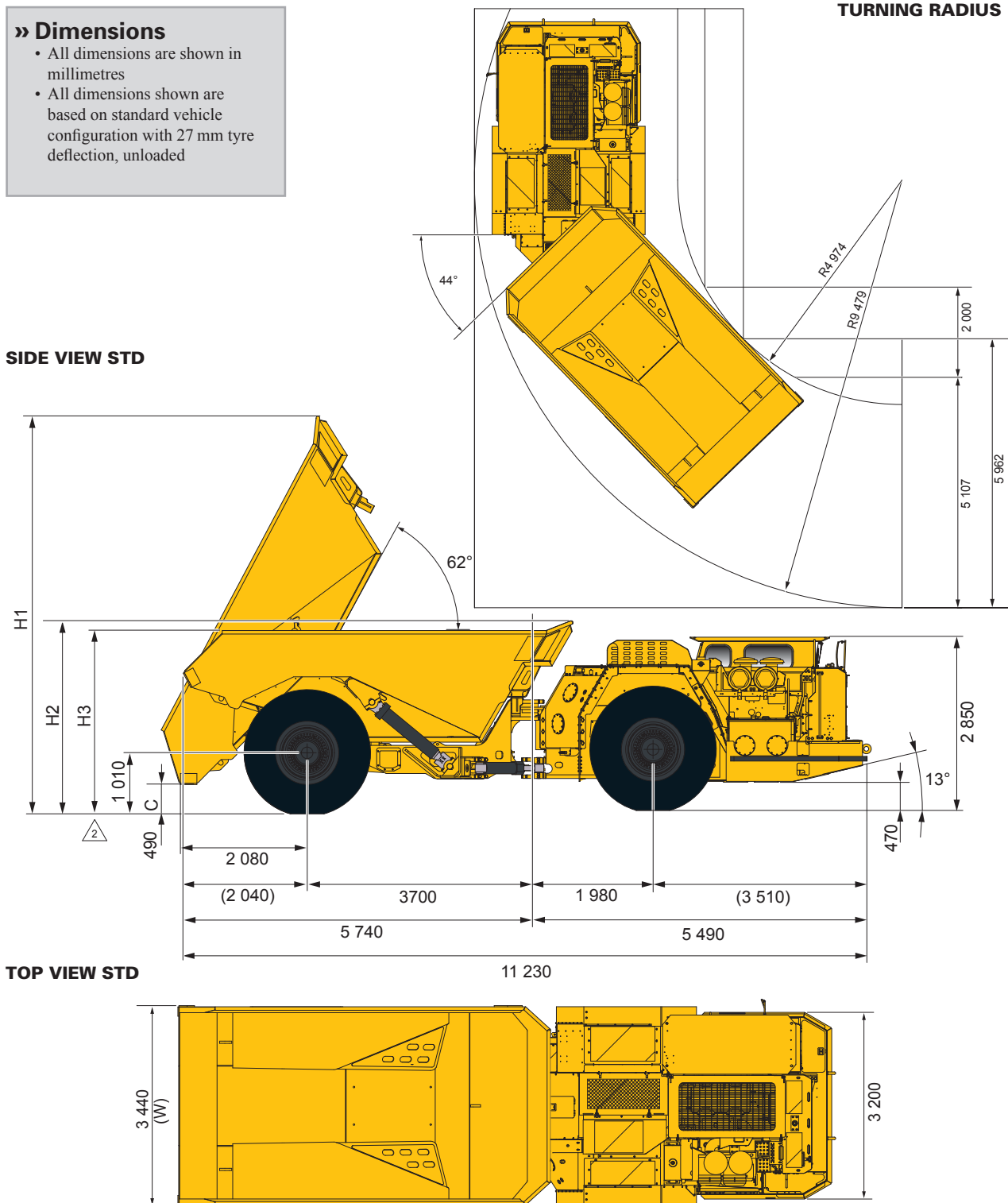
- Preventive maintenance kits
- Repair and rebuild kits
- Face mechanics tool set
- Shop mechanics tool set

Measurements and weights

» Dimensions

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

TURNING RADIUS



DUMP BOXES

STD

| | | | | | | |
|---|------|-------------|-------------|-------------|-------------|-------------|
| Volume, SAE heaped (m3) | | 36.5 | 33.0 | 30.5 | 27.0 | 25.0 |
| Volume, Semi heaped (m3) | | 33.5 | 29.5 | 27.0 | 24.0 | 22.0 |
| Volume, SAE struck (m3) | | 30.5 | 26.5 | 24.0 | 20.5 | 18.5 |
| Maximum material density (t/m3) | | 1.6 | 1.8 | 2.0 | 2.2 | 2.4 |
| Width, dump box (mm) | (W) | 3 440 | 3 440 | 3 440 | 3 440 | 3 440 |
| Dump position: box height, max (mm) | (H1) | 6 960 | 6 860 | 6 740 | 6 540 | 6 530 |
| Tramming position: dump box spillguard (mm) | (H2) | 3 480 | 3 280 | 3 390 | 3 180 | 3 190 |
| Tramming position: dump box height (mm) | (H3) | 3 480 | 3 280 | 3 210 | 3 020 | 2 900 |
| Dump position: clearance (mm) | (C) | 490 | 490 | 490 | 490 | 490 |