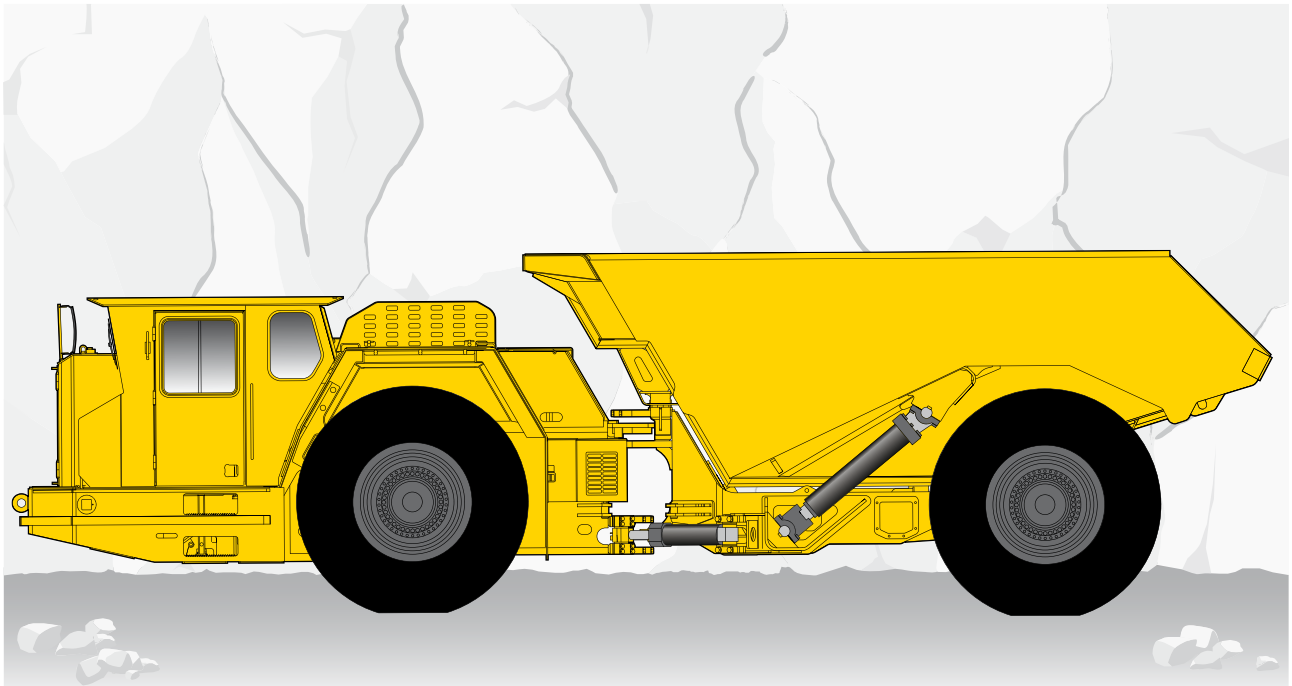


# Minetruck MT6020

## 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 <sup>3</sup>	Standard box volume (SAE heaped)	27.0

## MOTION TIMES

sec	Dumping	15
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## 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 ..... 1360 m<sup>3</sup>/min
- MSHA part 7 particulate index ..... 467 m<sup>3</sup>/min
- 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/s<sup>2</sup>

## 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
<b>Ratio</b>	<b>Grade</b>	–	–	–	–	<b>1:12</b>	<b>1:10</b>	<b>1:8</b>	<b>1:7</b>	–	–	<b>1:5</b>
<b>km/h</b>	<b>1st gear</b>	6.4	6.4	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	<b>2nd gear</b>	9.5	9.5	9.4	9.4	9.4	9.4	9.3	9.3	9.3	9.3	9.2
	<b>3rd gear</b>	12.6	12.6	12.5	12.4	12.4	12.4	12.4	12.3	12.3	12.2	12.2
	<b>4th gear</b>	18.3	18.2	18.2	18.1	18.0	17.9	17.8	17.7	17.6	17.5	17.1
	<b>5th gear</b>	25.2	25.1	24.9	24.7	24.5	24.3	24.2	23.2	21.2		
	<b>6th gear</b>	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
<b>Ratio</b>	<b>Grade</b>	–	–	–	–	<b>1:12</b>	<b>1:10</b>	<b>1:8</b>	<b>1:7</b>	–	–	<b>1:5</b>
<b>km/h</b>	<b>1st gear</b>	6.3	6.3	6.3	6.2	6.2	6.2	6.2	6.1	6.1	6.1	6.0
	<b>2nd gear</b>	9.4	9.3	9.3	9.2	9.2	9.1	9.0	9.0	8.3	7.3	
	<b>3rd gear</b>	12.5	12.4	12.3	12.2	12.1	11.9	10.6				
	<b>4th gear</b>	18.1	17.9	17.6	17.2	13.5						
	<b>5th gear</b>	24.8	24.3	22.5								
	<b>6th gear</b>	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
- Fire extinguisher, 2 x 6 kg
- Fire extinguisher, 8 kg

### 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

### Documentation

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

### Parts and Services

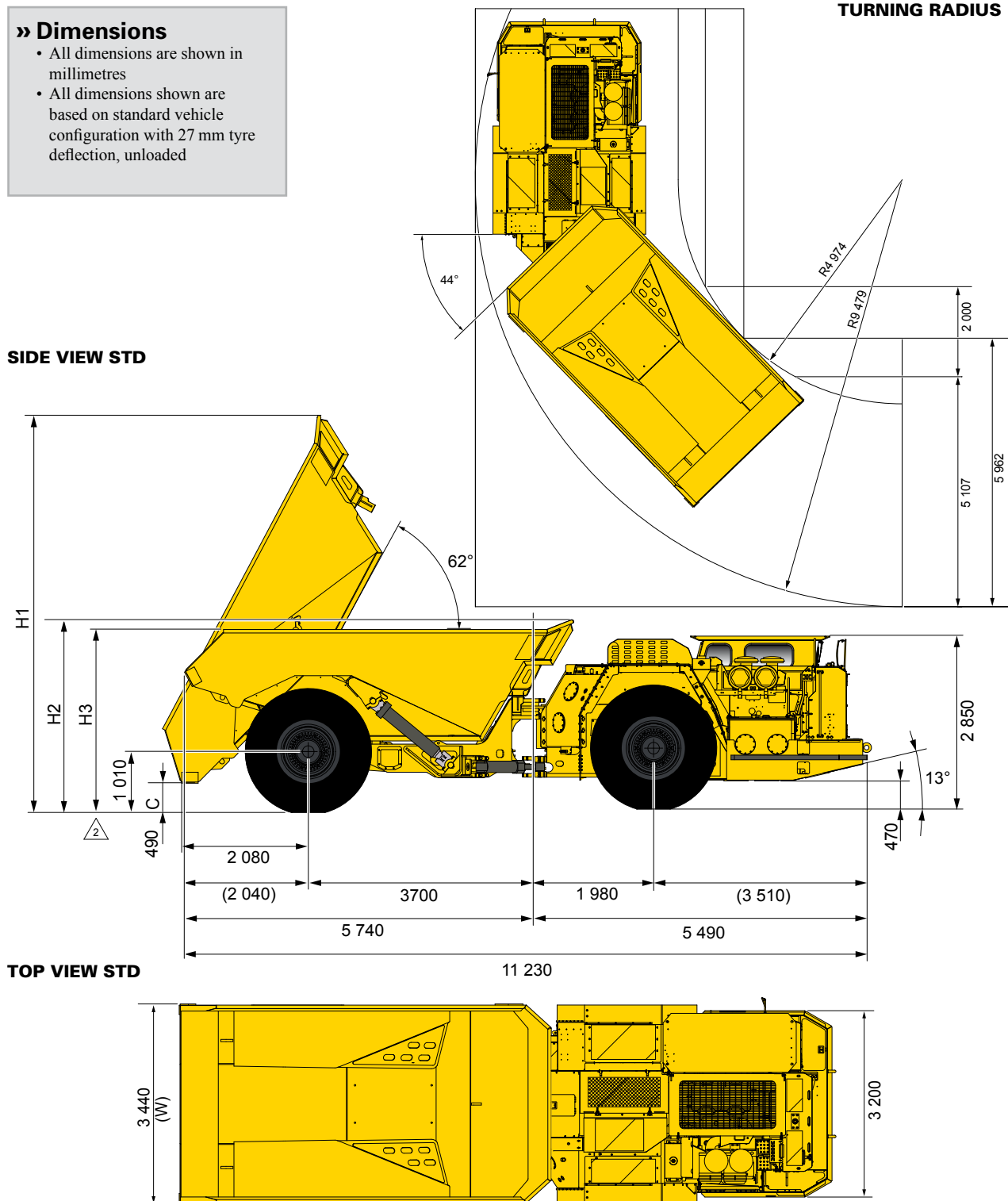
- Preventive maintenance kits
- Repair and rebuild kits
- Face mechanics tool set
- Shop mechanics tool set

# 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

		36.5	33.0	30.5	27.0	25.0
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