

UK-20 MineTruck



UK-20 Low profile dumper truck is a wheeled transporting equipment designed for underground mining. It works together with LHD underground wheel loader for transporting mine ores and other materials.

UK-20 adopts diesel engine, four wheel drive, rear dump wagon box, central articulation framework with big steering angle and small turning radius.

It is suitable for tunnel section no less than 4mx4m, external turning radius no less than 9m, and slope no more than 14°.

Tunnel temperature -5°C ~ 40°C, Maximum moisture \leq 85% (Temperature=25°C)

Evaluation \leq 1000m; when the evaluation is more than 1000m please inform us in advance.

Sulfur content in diesel \leq 0.2%

1. Advantage and Characteristics:

- Power system: Cummins GBIII low speed big torque water-cooled low pollution diesel engine;
- Power transfer system: Integrated transmission and spring-brake hydraulic release drive axles, mining cut-resistance inflation tires, four wheel drive;
- Hydraulic components: famous brakes like MICO charging valve, brake valve etc.;
- Chassis: central articulated framework, swinging frame for front and rear axles, sealed cabin;
- Rear dump wagon box with big lifting angle, easy for dumping mine ores and other materials;
- All hydraulic hoses, electric cables are sealed with fire-resistance tubes to give protection for explosion or fire;

Main Specifications	
Rated loading capacity	20000 KG
Wagon box volume (Heap)	10 m ³
Travelling speed	
1st gear	3.7 km/h
2nd gear	5.8 km/h
3rd gear	14.7 km/h
4th gear	30 km/h
Wagon box lifting	12 s
Wagon box descending	9 s
Maximum machine height (offload)	4550mm
Maximum grade ability (Full load)	25%
Maximum traction force	≥190 KN
Turning radius	8400 mm
Maximum machine height (Off-load)	5200 mm
Maximum off load angle	68°
Steering angle	±40°
Ground clearance	330 mm
Air-conditioner	Optional
External dimensions (L×W×H)	9000 mm×2300 mm×2450 mm
Vehicle kerb mass	18000KG

2. Main components

2.1 Engine: Cummins QSC8.3 Water-cooled low pollution diesel engine

Rated power output: 194 kw/2100rpm

Maximum torque output: 1135 N·m@1500 r/min

Starting method: electric starter

Exhaust purifying method: catalyst purifier with silencer

Accelerator control: Williams electric throttle control

2.2 Power transfer: HZ117A+YJ375

Drive axle: KAMACH-40T

Main reducer ratio: 5.286

Wheelside ratio: 4.94

Main reducer ratio: 26.11

Tyres: 16.00-25 inflation tires (Guizhou Advance)

2.3 Brake system

Braking pump: Weichai Power CBLZ1016 (displacement 16ml/r)

Braking pressure: 16 MPa

Travelling brake: MICO wet multiple discs spring brake, hydraulic release

Parking brake valve model: RA3/3/2/G-3

2.4 Steering device

Type: Central articulation, hydraulic steering

Steering pump: CBLZ2080, displacement 80ml/r

Maximum steering pressure: 14 MPa

Steering device: BZZ-1000

Priority valve: YXZ-F250

Steering cylinder: Cylinder housing Dia/rod dia×Qty: $\phi 100/\phi 55$ mm×2

2.5 Service system

Working directional valve: SN-6

Lifting cylinder Cylinder housing Dia/rod dia×Qty: $\phi 160/\phi 90$ mm×2

Service system maximum pressure: 16 MPa

2.6 Electric system:

System voltage: 24 DC

Starter voltage/power: 24V/6kw

Illumination:

Front lamp: 2×75W, 24V

Rear lamp: 2×75W, 24V

Mining signal light: 2 pcs, 24V

Ceiling light: 1 pc, 24V

2.7 Oil tank volume

Hydraulic oil tank: 300L

Diesel tank: 300L

Transmission: 36L

Drive axle main reducer: 17L×2

Drive axle wheelside reducer: 3.5 L×4

Engine lubrication oil; 28L

OPTIONS:

- Automatic fire suppression system on engine
- 360° camera/Video system
- Automatic lubrication system
- Sealed cabin with air-conditioner

3. DIMENSIONS

