



# UK-10 Underground Mining Truck

UK-10 ton truck is a compact underground mine truck with 10 tons carrying capacity, equipped with a central hinged swing device. The new design of UK-10 not only improves production efficiency, but also improves underground transportation. Safety, maintainability and operating comfort of mining and construction operations.

Heavy-duty front and rear frame designed to cope with the harsh underground environment, excellent quality, reliability and durability meet customer requirements, making transportation simpler, more efficient.

The center hinge adopts rotary bearing to ensure that the front and rear frame can swing freely and ensure that the tire can form good contact with the ground under bad working conditions.



## MAIN SPECIFICATIONS

Rated capacity	10000 kg
Maximum drawbar pull	148 kN
Standard bucket	5.0m <sup>3</sup>
Dimensions (mm)	7816×1780×2350

## SPEEDS FORWARD & REVERSE WITH VOLVO TCD2013L04

1st gear	4.5km/h
2nd gear	8.5km/h
3rd gear	14.9 km/h
4th gear	24.3 km/h

## BUCKET UNLOADING ANGLE & APPROACHING ANGLE

Bucket unloading angle	70°
Approaching angle	15°

## EMPTY LOAD\*

Total operation weight	12380 kg
Front axle	8200 kg
Rear axle	4180kg

## LOADED WEIGHTS \*

Total loaded weight	22380 kg
Front axle	11000 kg
Rear axle	11380 kg

\* Equipment weight is dependent on the selected options

OPERATIONAL CONDITIONS AND LIMITS	
Environmental temperature	-15°C~+45°C
Standard operating altitude	With engine DEUTZ TCD2013L04 No power loss below 2000 meters above sea level

REQUIREMENTS AND COMPLIANCE	
JB/T8436	Underground mining truck with tire
JB/T5501	Underground loader testing method
GB21500	Safety requirements for railless tire-type underground mining trucks
XY12.1-2011	Underground mining truck

POWER TRAIN	
ENGINE	
Diesel engine	DEUTZ TCD2013L04
Output	120kW @ 2300rpm
Acrot orque	618Nm @ 1600rpm
Number of cylinders	In-line 4
Displacement	4.7 L
Cooling system	Water cooled
Combustion system	Integrated hand pump, Remotely located fuel filter
Intake system	Turbocharger Two stage filtration, dry type
Control System	Fuel electronically controlled injection system
Starting system	24Vstarting motor
Emissions	Euro Stage III
Exhaust system	DOC+POC+ Silencer
Average fuel consumption at 50% load	16.0L/h
Fuel tank capacity	210 L

CONVERTER	
Dana C270	

TRANSMISSION	
Dana 32000	Hydraulic shift Forward 4 gear & backward 4 gear

AXLE	
Front axle SAHR Fixed axle	UK-10 Standard differential
Rear axle SAHR Fixed axle	UK-10 Standard differential

TIRE	
Model	14.00-24

HYDRAULICS	
Hydraulic oil radiator Transmission oil radiator	Capability up to 45°C ambient temperature
Fittings	JIC
Hoses	GB3683
Hydraulic oil tank capacity	205L

STEERING HYDRAULICS	
Full hydraulic, centre-point articulation, power steering with two double acting cylinders.	Steering controlled by joystick
Steering main valve	Open circuit type
Steering hydraulic cylinders	2 pcs
Steering pump	Gear pump

BUCKET HYDRAULICS	
The oil flow from Steering hydraulic pump is directed to Bucket hydraulics when steering is not used.	Joystick controlled
Lifting cylinder	2 pcs
Main valve	Open circuit type
Working pump	Gear pump

BRAKES	
Service brakes are SAHR multidisc wet brakes on all wheels.; Integrate service brake, park brake and emergency brake in a whole system. Brake system performance complies with requirements of EN ISO 3450, AS2958.1 and SABS 1589	

### OPERATOR'S COMPARTMENT

The UK-10 cab provides a spacious ergonomics operating space, and meets the requirements of ergonomics. The lateral cab uses steering handle to control the steering of the vehicle. Compared with the steering wheel, it is more advantageous for the driver to operate. It improves comfort and production efficiency.

UK-10 cab passed the ROPS/FOPS certification to protect the safety of the operator.

#### CABIN

---

ROPS certification according to ISO 3471

---

FOPS certification according to ISO 3449

---

### DASHBOARD AND DISPLAYS

The IFM 4.3-inch color display displays the required engine information on a large display, giving operators more time to watch the road.

---

XINGYE Standard Intelligent Control System

Critical warnings and alarms	Displayed with sound and light
------------------------------	--------------------------------

Instrument Panel	IFM 4.3" Color display Full-featured rocker switch control
------------------	--



### OPERATOR'S SEAT

The UK-10 driver's seat adopts ergonomically comfortable seat equipped with a two-point safety belt.

### FRAME

#### REAR AND FRONT FRAME

The rear frame is heavy-duty designed to make the equipment more stable when it is transported and loaded and unloaded. Heavy-duty design of the front frame and cab minimizes damage from roadway wall shocks and collisions.

High strength alloy Q460C steel plate is adopted to optimize material thickness, reduce deadweight, improve overall transportation capacity, high structural reliability and long service life.

The box structure is adopted to improve the overall strength of the carriage and to reduce the impact from the tunnel wall, the damage caused by collision and the prolongation of service life.

Central hinge	Slew Bearing
Tanks	Welded to the frame

## ELECTRICAL SYSTEM

### MAIN COMPONENTS

Alternator	28 V,80A
Batteries	2×12 V, 100Ah
Starter	24V/4.0KW
Driving and working lights	2PCS on front frame 2PCS on rear frame
Alarm	Low oil pressure alarm / Rotating warning light
Dual horn	Standard

### SAFETY FEATURES INCLUDED

#### FIRE PREVENTION

Portable fire extinguisher	2kg IPC
Exhaust pipe insulation cotton protection	Standard

#### ENERGY ISOLATION

Main power switch can be locked	Standard
Emergency brake button	1 pc in cabin
Engine water tank manual pressure release box cover	Standard
Front and rear frame locking device	Standard

## DOCUMENTATION

### STANDARD MANUALS

Operator's Manual	English
Maintenance Manual	English
Parts Manual	English
Service and Repair Manual	English
Decals	English

## OPTIONS

### SAFETY OPTIONS

Automatic centralized lubrication system
Manual Fire suppression system
Emergency steering

### Electrical system optional configuration

Reversing video system
------------------------

### OTHER OPTIONS

Customized Bucket Capacity
----------------------------

## PERFORMANCE

Deutz TCD2013L04, Tier 3 emissions (3 % rolling resistance)

### OPERATING SPEED AT NO LOAD AND FULL LOAD

#### NO LOAD

Grade (%)	0	10	15	20
1st gear (km/h)	4.7	4.6	4.5	4.4
2nd gear (km/h)	8.8	8.6	8.5	8.4
3th gear (km/h)	14.8	14.2	13.8	12.8
4th gear (km/h)	24.6	20.8		

#### FULL LOAD

Grade (%)	0	10	15	20
1st gear (km/h)	4.5	4.4	4.2	4.0
2nd gear (km/h)	8.5	8.0	7.7	6.8
3th gear (km/h)	14.9	12.1		
4th gear (km/h)	24.3			



