



UK-40 Underground Mining Truck

UK-40 truck is an articulated underground mining truck with a 40-ton carrying capacity. This model has innovative features that can easily cope with harsh working conditions, providing powerful power, strength and reliability to help you maximize productivity .

Designed to withstand harsh underground environments, the heavy-duty front and rear frames provide superior quality, reliability and durability to meet user requirements, making transportation simpler and more efficient.

The central hinge adopts a 100% maintenance-free, fully sealed coupling device with continuously lubricated bearings, which reduces downtime, reduces operating costs, and ensures that the front and rear frames can swing freely to ensure that the ground is in contact with the ground in harsh conditions. Make good contact.



MAIN SPECIFICATIONS

Rated capacity	40000 kg
Maximum traction force	404KN
Standard bucket	22.0m ³
Dimensions(mm)	10412×3073x2811

SPEEDS FORWARD & REVERSE WITH VOLVO TAD1650 VE

1st gear	5.7km/h
2nd gear	8.5 km/h
3rd gear	11.4 km/h
4th gear	17.0 km/h
5th gear	22.6 km/h
6th gear	33.5 km/h
Reverse	
1st gear	4.5 km/h
2nd gear	6.7 km/h

BUCKET UNLOADING ANGLE & APPROACHING ANGLE

Bucket unloading angle	62°
Approaching angle	15°

EMPTY LOAD*

Total operation weight	36800 kg
Front axle	25300 kg
Rear axle	11500 kg

LOADED WEIGHTS*

Total loaded weight	76800 kg
Front axle	36150 kg
Rear axle	40650 kg

* Equipment weight is dependent on the selected options

OPERATIONAL CONDITIONS AND LIMITS

Environmental temperature	-15°C~+45°C
Standard operating altitude	With engine Volvo Volvo TAD 1650VE, No power loss below 3000 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	Volvo TAD1650VE
Output	450 kW @ 1900rpm
Acrotorque	2757 Nm @ 1260rpm
Number of cylinders	In-line 6
Displacement	16.1 L
Cooling system	water-cooled engine
Combustion system	Integrated hand pump, fuel filter
Intake system	Turbocharger Dry air filtration, pre-filtration + two-stage filtration
Control System	Fuel electronically controlled injection system
Starting system	24V starting motor
Emissions	Tier 3, Euro Stage III
Exhaust system	DOC+POC+ Silencer
Average fuel consumptionat 50% load	40.0 L/h
Fuel tank capacity	700 L

CONVERTER&TRANSMISSION

Allison 6625	With lock-up
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TRANS DER CASE

UK400315	China
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AXLE

Front axle SAHR Fixed axle	KESSLER D106 Standard differential
Rear axle SAHR Fixed axle	KESSLER D106 Standard differential

TIRE

Model	29.5R25 ETNT
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HYDRAULICS

The equipment will brake and cannot move when the cabin door is not locked	Standard
Hydraulic oil radiator Transmission oil radiator	Capability up to 50°C ambient temperature
Fittings	JIC
Hoses	GB3683
Hydraulic oil tank capacity	250L

STEERING HYDRAULICS

Full hydraulic, centre-pointarticulation, power steering withtwo double acting cylinders.	Steering controlled by steering wheel
Steering main valve	Open circuit type
Steering hydraulic cylinders	2 pcs
Steering pump	Gear type quantitative 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 type quantitative 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 GB/T 33921 and JB/T 13003	
Automatic brake activation system, ABA	Standard
Manual emergency brake release pump	Standard
Brake hydraulic oil volume	100L

OPERATOR'S COMPARTMENT

UK-40 cab provides a spacious and ergonomic operating space, equipped with temperature control and ventilation system, a spacious front windshield with all-round vision, sliding glass windows and large rear view mirrors, which are suitable for people. The console layout required for computer interaction improves comfort and production efficiency.

UK-40 cab has passed ROPS/FOPS certification to protect the safety of operators. The interior of the cab is pasted with 25mm flame retardant and noise reduction interior cloth, which is not only beautiful and comfortable inside, but also has effective dustproof and noise reduction functions. Laminated glass windows are used and installed with four-port sealing strips. The glass can be disassembled inside and outside for emergency escape in case of dangerous situations.

CABIN

ROPS certification according to ISO 3471
FOPS certification according to ISO 3449
Enclosed Cabin with Air Conditioner (optional)
Laminated glass windows
Air conditioning and cab installed separately
Sound-absorbing and noise-reducing flame retardant insulating cotton
Emergency escape exit
Washable cab floor to reduce dust
Three-point access to the cab
Adjustable work handle and armrest

DASHBOARD AND DISPLAYS

Equipped with an IFM 7-inch color display that displays all the information and alerts needed on one large display, giving the operator more time to keep his eyes on the road. To reduce eye strain, new dark background graphics with clear symbols have been designed

XINGYE Standard Intelligent Control System	
Critical warnings and alarms	Displayed with sound and light
Instrument Panel	IFM 7" Color display Full-featured rocker switch control



OPERATOR'S SEAT

UK-40 driver's seat adopts an adjustable mechanical suspension seat and is equipped with a three-point seat belt. The seat is adjustable up and down, front and rear, and is equipped with padded arm rests installed in the cab.

Mechanical suspension
Height adjustment
Adjustment according to the operator's weight
Adjustable arm rest
Adjustable lumbar support
Three-point seat belt

FRAME

REAR AND FRONT FRAME

The rear frame adopts a heavy-duty design, which can better stabilize the equipment when transporting and loading and unloading ore. Heavy-duty design of the front frame and cab minimizes damage from roadway wall impacts and collisions.

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

The carriage adopts a box-type structure to improve the overall strength of the carriage and is optimized to reduce damage from roadway wall impacts, collisions and prolong service life.

Central hinge	Rotary connection (patent)
Tanks	Welded to the frame

ELECTRICAL SYSTEM

MAIN COMPONENTS

Alternator	28 V,150A
Batteries	2×12 V, 120Ah
Starter	24V / 7KW
Driving and working lights	2PCS on front frame 1PC in cabin 3PCS on rear frame
Sensor	Diesel, hydraulic oil level sensor, working, steering, braking system pressure sensor
Alarm	Low oil level alarm / oil pressure alarm/Oil temperature alarm Rotating warning light
Control system	Controller Built-in diagnostic and alarm system
Dual horn	Standard
Buzzer	Standard
Reverse camera system	Standard

SAFETY FEATURES INCLUDED

FIRE PREVENTION

Portable fire extinguisher	4kg 2PCS
Fire protection heat source isolation cover	Standard
Exhaust pipe insulation cotton protection	Standard
Turbocharger Cover	Standard
Cooling Fan Cover	Standard

ENERGY ISOLATION

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

Lubricating

Automatic centralized lubrication system	Standard
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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 fire extinguishing system and automatic shutdown
Emergency steering function
Manual centralized lubrication system

Other optional configuration

Air conditioning and heating system
Other buckets can be customized

PERFORMANCE

Volvo TAD1650VE, Tier III emissions (3 % rolling resistance)

With converter lock-up

Operation speed with no load and full load

No load

Grade (%)	0	5	10	15	20
1st gear (km/h)	5.8	5.8	5.8	5.8	5.8
2nd gear (km/h)	8.7	8.6	8.4	8.1	8.0
3rd gear (km/h)	11.6	11.4	11.1	10.8	10.6
4th gear (km/h)	17.2	16.9	16.5	16	15.8
5th gear (km/h)	22.9	21	20.2	19.2	17
6th gear (km/h)	33.8	32	30		

Full load

Grade (%)	0	5	10	15	20
1st gear (km/h)	5.7	5.7	5.7	5.7	5.5
2nd gear (km/h)	8.5	8.5	8.3	8.0	5.3
3rd gear (km/h)	11.4	11	10.8	8.0	4.5
4th gear (km/h)	17	16.3	11.3	1.6	
5th gear (km/h)	22.6	19.3	4.8		
6th gear (km/h)	33.5	13			



