



# UK-30 Underground Mining Truck

The UK-30 is an articulated underground mining truck with 30 tons capacity. It has innovative features that can easily cope with harsh conditions and provide great power, strength and reliability to help you maximize your 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 articulated swing reduces the large center of gravity offset of the vehicle and ensures that the front and rear frames can swing freely, ensuring that the tires form good contact with the ground under severe conditions. The fully sealed slewing bearing unit can effectively cope with the harsh working environment, prolong the service life and reduce operating costs.



## MAIN SPECIFICATIONS

Rated capacity	30000 kg
Maximum traction force	330kN
Standard bucket	15.0m <sup>3</sup>
Dimensions	9920×2800×2560 (mm)

## SPEEDS FORWARD & REVERSE WITH VOLVO TAD1372VE

1st gear	4.1km/h
2nd gear	9.8km/h
3rd gear	13km/h
4th gear	18.6km/h
5th gear	25.3 km/h
6th gear	30.4 km/h
<b>REVERSE</b> 1st gear	4.3 km/h

## BUCKET UNLOADING ANGLE & APPROACHING ANGLE

Bucket unloading angle	65 °
Approaching angle	15 °

## EMPTY LOAD\*

Total operation weight	31000 kg
Front axle	20200 kg
Rear axle	10800 kg

## LOADED WEIGHTS\*

Total loaded weight	61000 kg
Front axle	29280 kg
Rear axle	31720 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 TAD1372VE No power loss below 3500 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 TAD1372VE
Output	315 kW @ 1900rpm
Torque	2175Nm @ 1200rpm
Number of cylinders	In-line 6
Displacement	12.8 L
Cooling system	Liquid-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	Euro Stage IV
Exhaust system	SCR+ Urea Tank
Average fuel consumption at 50% load	30.0 L/h
Fuel tank capacity	360 L

#### CONVERTER

Allison 4200ORS-TC551	With lock-up
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#### TRANSMISSION

UK300340	Made in China
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### AXLE

Front axle SAHR Fixed axle	KESSLER D102 Standard differential
Rear axle SAHR Fixed axle	KESSLER D102 Standard differential

### TIRE

Model	26.5R25 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 45 °C ambient temperature
Fittings	JIC
Hoses	GB3683
Hydraulic oil tank capacity	360L

### STEERING HYDRAULICS

Full hydraulic, centre-point articulation, power steering with two double acting cylinders.	Steering controlled by steering wheel
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

Adopted spring brake , multidisc wet brakes ; Integrate service brake, park brake and emergency brake in a whole system. Brake system performance complies with requirements of GB/T 33921、JB/T 13003	
Automatic brake activation system, ABA	Standard
Manual emergency brake release pump	Standard

### OPERATOR'S COMPARTMENT

The cab offers a spacious ergonomic operating space with temperature control and ventilation system; a spacious front windshield with omni-directional view, push-pull glazing and large mirrors; operator-friendly console layout for added comfort and production efficiency.

The cabin is ROPS/FOPS certified to protect the operator in case of roll over or falling objects. The interior side of the cab adopts 25mm flame-proof and noise-reducing materials and the external covering has flame-proof material, which is not only beautiful and comfortable, but also effective in dustproof and noise-reducing functions. The cab has laminated safety glass windows, emergency exits which adopts sealing strip to remove the glass inside and outside for emergency escape.



#### 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

#### DASHBOARD AND DISPLAYS

Equipped with IFM 7 inch color display, all required information and alerts are displayed on one display, allowing the operator more time to watch the road. In order to reduce eye strain, new dark background graphics with clear symbols were designed

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-30 driver seat with adjustable mechanical suspension seat, equipped with three-point seat belt. The seat is adjustable up and down, forward and backward.

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 adds a heavy-duty design that better stabilizes the equipment when transporting and loading ore. The heavy-duty front frame and cab minimize the damage to the impact and collision to the roadway wall. High-strength alloy steel plate is used to optimize material thickness, reduce self-weight, and improve overall transportation capacity, high structural reliability and long service life.

Box structure enhances the overall strength of the vehicle and it is optimized to reduce damage and collisions from the impact of the roadway walls.

Central hinge	Rotary connection
Tanks	Welded to the frame

## ELECTRICAL SYSTEM

### MAIN COMPONENTS

Alternator	24 V, 150A
Batteries	2×12 V, 165Ah
Starter	24V / 7KW
Driving and working lights	6PCS on front frame 2PC in cabin 2PCS on rear frame
Sensor	Diesel, hydraulic oil level sensor, working, steering, braking system pressure sensor
Alarm	Low oil level alarm / oil pressure 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	8kg 1 PC
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	2 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
Carriage maintenance support device	Standard
Manual centralized fire extinguishing system	Standard
Automatic centralized lubrication system	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 fire extinguishing system and automatic shutdown

Manual centralized lubrication system

### PERFORMANCE

Volvo TAD1372VE, Tier IV emissions (3 % rolling resistance)

With converter lock-up

### OPERATING SPEED AT NO LOAD AND FULL LOAD

#### NO LOAD

Grade (%)	0	5	10	15	20
1st gear (km/h)	4.1	4.1	4.1	4.1	4.1
2nd gear (km/h)	9.8	9.8	9.8	9.8	9.5
3rd gear (km/h)	13	13	12.6	11	10.2
4th gear (km/h)	18.6	18.6	18.0	15	
5th gear (km/h)	25.3	23.2			
6th gear (km/h)	30.4				

#### FULL LOAD

Grade (%)	0	5	10	15	20
1st gear (km/h)	4.1	4.1	4.1	4.1	4.1
2nd gear (km/h)	9.8	9.8	9.8	8.8	4.7
3rd gear (km/h)	13	13	12.1		
4th gear (km/h)	18.6	18.6			
5th gear (km/h)	25.3	20.5			
6th gear (km/h)	30.4				



