UK-15
Underground Mining Truck

UK-15 ton truck is a compact underground mine truck with 15 tons carrying capacity, equipped with a central hinged swing device. The new design of UK-15 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	15000 kg
Maximum traction force	200kN
Standard bucket	7.5m³
Dimensions	8359×2050x2360

SPEEDS FORWARD & REVERSE WITH DEUTZ TCD2013L06	
1st gear	5.2km/h
2nd gear	10.3km/h
3rd gear	17.1 km/h
4th gear	28.2 km/h

BUCKET UNLOADING ANGLE & APPROACHING ANGLE	
Bucket unloading angle	69°
Approaching angle	15°

EMPTY LOAD*	
Total operation weight	15820 kg
Front axle	10500 kg
Rear axle	5320kg

LOADED WEIGHTS *	
Total loaded weight	30820 kg
Front axle	14200 kg
Rear axle	16620 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 TCD2013L06 No power loss below 1000 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 TCD2013L06
Output	160 kW @ 2300rpm
Acrot orque	880 Nm @ 1500rpm
Number of cylinders	In-line 6
Exhaust volume	7.1L
Cooling system	Water cooled
Fuel System	Integrated hand pump, remote fuel filter
Intake system	Turbocharger Dry air filtration, two-stage filtration
Control System	Fuel electronically controlled injection system
Starting system	24V starting motor
Emissions	Euro Stage III
Exhaust system	DOC+POC+ Silencer
Average fuel consumption at 50% load	15L/h
Fuel tank capacity	220 L

CONVERTER
Dana C270

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

AXLE	
Front axle SAHR Fixed axle	KESSLER D81 Standard differential
Rear axle SAHR Fixed axle	KESSLER D81 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	215L

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 type quantitative pump

BRAKES
Spring brake, Fully closed multi-disc wet brake with spring brake;Integrated service brake, parking brake and emergency brake Brake system performance complies with requirements of GB/T33921、JB/T13003

OPERATOR'S COMPARTMENT

The UK-15 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-15 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

OPERATOR'S SEAT

The UK-15 driver's seat adopts ergonomically comfortable seat equipped with a three-point safety belt.

DASHBOARD AND DISPLAYS

Equipped with IFM 4.3-inch color display on one large display
display the required engine information, giving the operator more time to focus on the road
noodle.

Critical warnings and alarms	Displayed with sound and light
Instrument Panel	IFM 4.3 Color display Full-featured rocker switch control

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

FRAME

ELECTRICAL SYSTEM	
MAIN COMPONENTS	
Alternator	28 V,55A
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

INCLUDED SAFETY FEATURES	
FIRE PREVENTION	
Portable fire extinguisher	2kg 1PC
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 TCD2013L06, Tier 3 emissions (3 % rolling resistance)

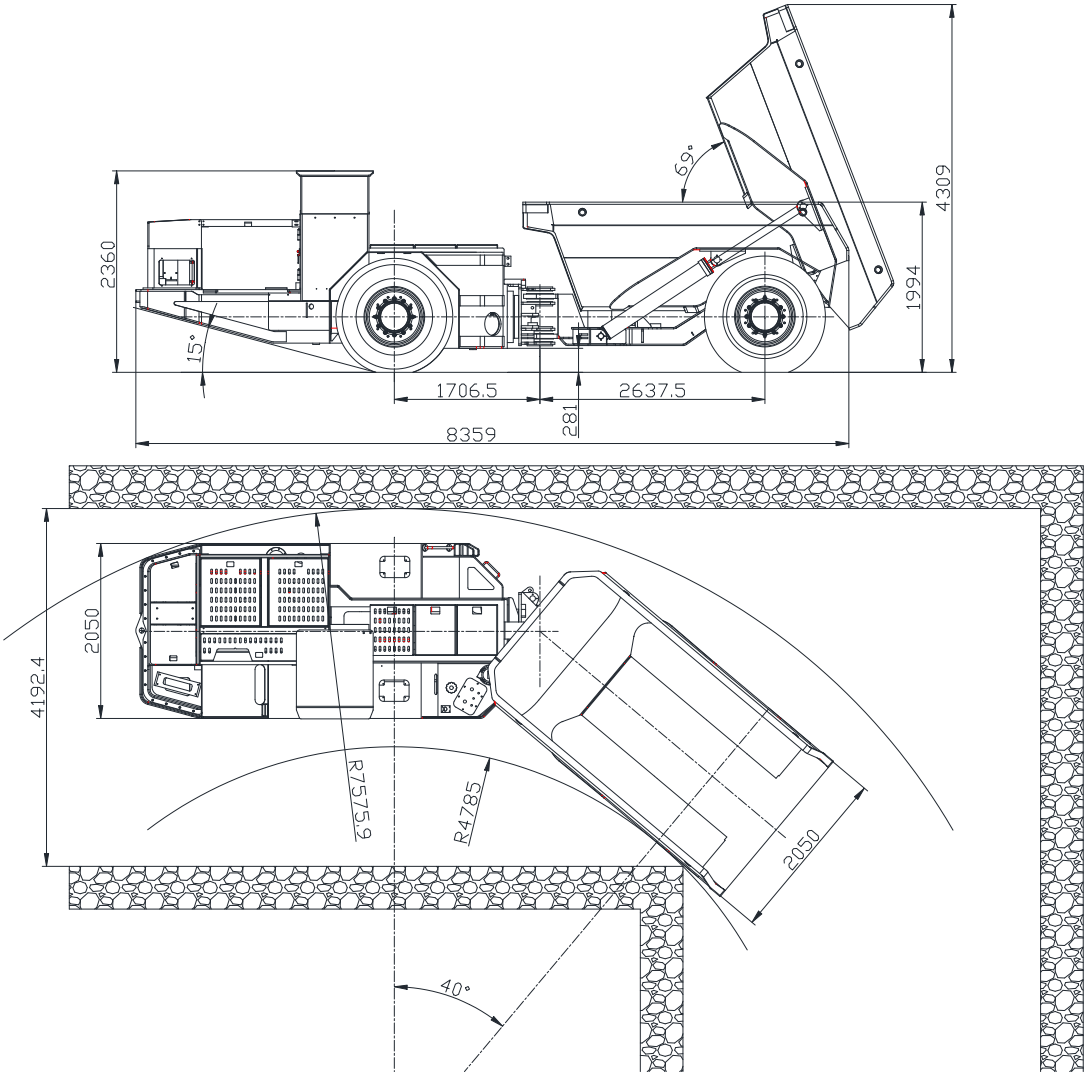
OPERATING SPEED AT NO LOAD AND FULL LOAD

NO LOAD

Grade（%）	0	10	15	20
1st gear（km/h）	5.2	4.9	4.8	4.6
2nd gear（km/h）	10.3	9.8	9.7	9.6
3th gear（km/h）	17.1	16.5	15.9	14.8
4th gear（km/h）	28.2	23.8		

FULL LOAD

Grade（%）	0	10	15	20
1st gear（km/h）	5.1	44.9	4.7	4.4
2nd gear（km/h）	10	9.5	9.2	8.0
3th gear（km/h）	16.9	16.1		
4th gear（km/h）	27.9			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4309
2360
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15°
1706.5
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8359
2050
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R4785
2050
40°