TECHNICAL SPECIFICATION

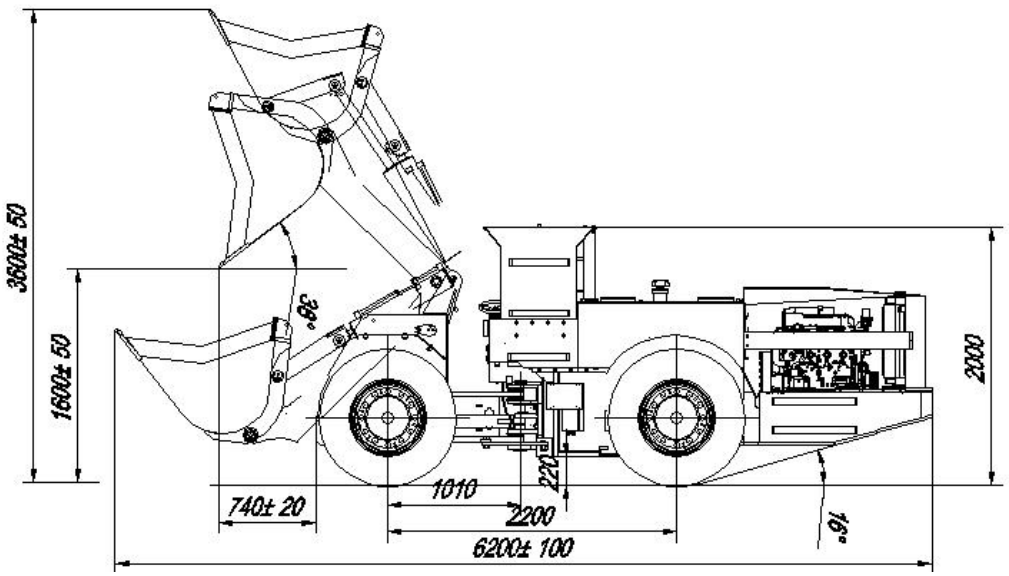
DRWJ-1 UNDERGROUND Load Haul Dump(LHD) Loaders

DRWJ-1 Underground Diesel LHD Loader is a diesel-powered load-haul-dump machine with a payload capacity of up to 2 tons, making it especially suitable for small-scale underground mining operations. Its compact design overcomes the spatial constraints of narrow mine tunnels.

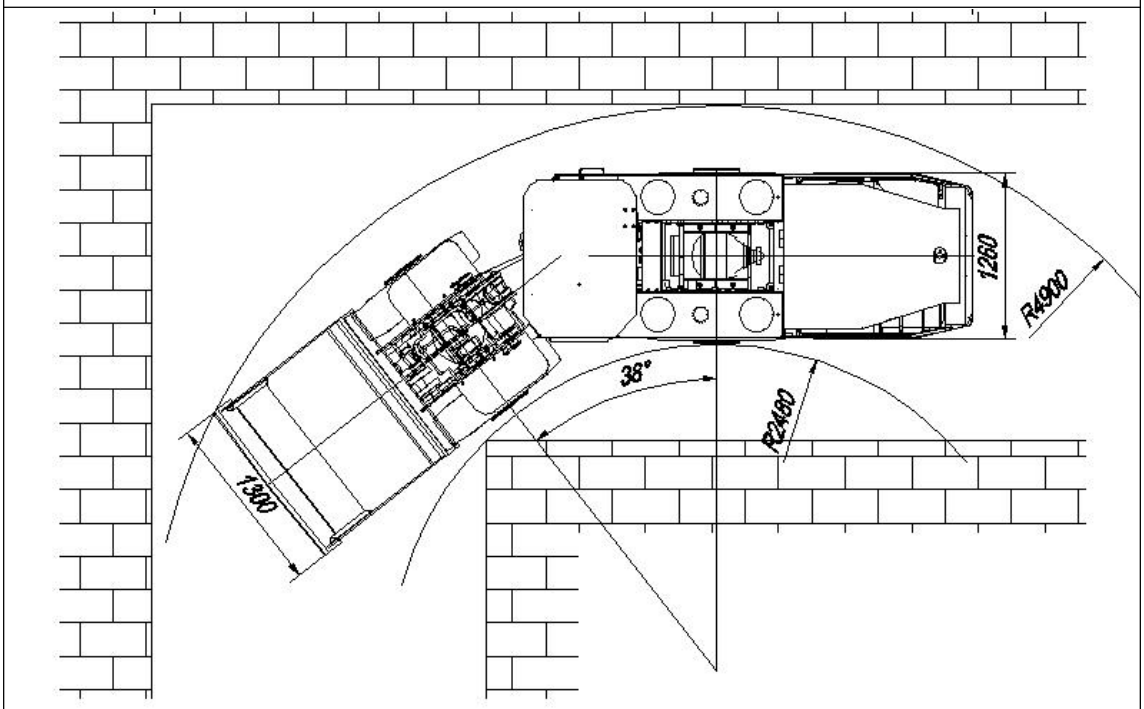
Main Technical Parameters of the Complete Machine		
No.	Parameter Description	Value
1	Bucket Capacity (m^3)	1
2	Rated Payload (kg)	2,000
3	Operating Weight, Empty (kg)	7,150
4	Max. Digging Force (kN)	≥48
5	Max. Dump Height (mm)	≥58
6	Transport Dimensions (L×W×H) (mm)	6200×1300×2000

7	Min. Ground Clearance (mm)		220
8	Max. Dump Clearance Height (mm)		3,600
9	Max. Dump Height (mm)		1,600
10	Min. Dump Reach (mm)		740
11	Steering Angle (°)		38
12	Dump Angle (°)		44
13	Departure Angle (°)		≥16
14	Frame Oscillation Angle (°)		±6~±8
15	Max. Gradability (Loaded) (°)		≥14
16	Min. Turning Radius (Outside) (mm)		,450
17	Min. Turning Radius (Inside) (mm)		2,480
18	Travel Speed(km/h)	Forward	9±0.5
		Reverse	9±0.5

Front View



Steering View



Main Benefits

Low Failure Rate

- Incorporates a Sauer (USA) hydraulic system characterized by low failure rates and optimal engine compatibility, maximizing overall engine efficiency.

- Technological innovation enables the direct series connection of gear pumps and variable displacement pumps, reducing the incidence of faults and extending the service life of gear pumps.

- Key components, including the

axle housing, differential, planetary gears, and half-shafts, are designed with enhanced structural optimization and material reinforcement for robustness, durability, high impact resistance, and reduced failure rates.

Durability

- Specially treated hydraulic tanks provide reliable protection for the service life of the vehicle's core components, including pumps and motors. The use of high-quality related parts extends the overall product lifespan.
- All copper bushings of the machine are made of high-strength brass, radially embedded with orderly arranged cylindrical graphite fillers as friction material. This offers advantages such as high precision, strong load-bearing capacity, and excellent wear resistance

Engine					
Brand/Model	DEUTZ D914L04	DEUTZ BF4L914	Weichai WP4.1G100E311	Yanmar 4TNV98T	Futian Cummins QSF4.5CS499
Rated Power	58kW	68.5kW	74kW	56.5kW	74kW
Standard	Wind cooling	Wind cooling	Water cooling	Water cooling	Warer cooling

Transmission	
Travel Pump	√
Travel Motor	√
Transfer Case	√
Drive Axle(Danfoss T90)	√
Tube tyres design for underground mine service	√

Hydraulic System	
Working Steering Pump(Gear Pump)	√
Multi-way Directional Control Valve	√

Electric system	
Working Voltage,24V	√
4.3-inch Color Display Screen	√
Real-time Monitoring of Operating Status of Main System Components	√
CAN Bus Communication	√

Fuel	Litres
Fuel tank capacity	80
Working Hydraulic Oil Tank	150
Travel Hydraulic Oil Tank	125

Main frame	
KA requirement	√
Center hinge and boom up lock device	√
Knockdown construction	√
Central manual lubrication	√
Handheld fire extinguisher	√
Dump cylinder rod protector	√
Checkfire automatically activated fire suppression system	√
Scooptram Radio Remote Control	√
Tool box	√
Dry-Type Three-Way Catalytic Converter	√

Control system	
Engine date display	√
Audio-visual reverse alarm	√
Yellow strobe light-power on	√
Steering Wheel Control	√
Single level dump and hoist control	√

Optional Configurations
Automatic Fire Suppression System
Radio remote control
Harmful Gas Monitoring
Warning Light / Back-up Buzzer
Engine Stop Switch

Operator’s compartment	
Canopy(ISO ROPS and FOPS approved)	√
Side seated operator for bi-directional operation and maximum visibility	√
Two-Point Seat Belt	√

Documentation	
Parts manual	√
Operational manual	√
Maintenance and service manual	√