

SD320Y-1 BULLDOZER



MAIN FEATURES

- The appearance of the vehicle is optimally designed.
- Equipped with the engine that features high power rise , big output torque, fuel saving and excellent reliability.
- Hydraulically controlled drive, automatically speed regulating and non-stop gear shifting.
- 3-element, single stage, single phase torque converter for higher efficiency and bigger capacity.
- The hexagonal cab offers excellent visibility, the powerful ventilation.
- Newly improved cab effectively improved cab dust proofing capability and reduces noise level at driver position. Driver position noise less than 95dB(A),meet GB16710 requirements.
- The final drive uses triangle spline and tip relief, crowned gear drive for enhanced balance and the stability during power transmission, and increased life.
- Newly designed blade is more durable and with more capacity.
- Implement controls are piloted to minimize operating effort.



Professional Power, Best Quality



- Pulse exhaust manifold for improving performance and emission.
- With a high torque reserve and a low speed under the maximum torque condition for a good adaptation.
- High quality cast iron and special designed value guide for the seal performance and durability.
- Robust and precise balance design for crankshaft.
- Advanced turbocharger and air aftercooler technology.
- 4 valves per cylinder for high power and low fuel consumption.

Gearbox

This machine is equipped with transmission of planetary gear and rotary lockup multi-disc clutch hydraulically engaged and force lubricated. Forward 3 speeds and reverse 3 speeds can be gained by actuating hydraulic control valve.



Hydraulic Torque Converter

Hydraulic torque converter is a newly developed product with the improvement made to the material, process and layout based on introduced advanced international technology. It features simple archite cture, easy maintenance, low noise, excellent reliability.

Torque converter is of 3-element, 1-stage, 1-phase, centripetal turbine type with simple structure but good technology. It provides high power efficiency, great penetration, big capacity and less loss when the turbine idles.



Final Drive

We, as the first domestic company, master the technology in the manufacturing tip relief, crowned gear which features heavy load capacity, stable drive and long life.



SD320Y-1



Work Equipment			
Blade Type	Straight Tilt Blade	Angle	U dozer
Width x Height (mm)	4130 x 1590	4850 x 1140	4225 x 1745
Max.Lift above Ground (mm)	1560	1560	1560
Max.Drop below Ground (mm)	560	560	560
Pitch Adjustment (°)	55	55	55
Max. Tilt (mm)	1000	1000	1000
Blade Capacity (m ³)	10.4	6.3	12.3

Ripper		
Туре		
Max. dig below ground (mm)	1250	842
Max. lift above ground (mm)	955	883
Weight (kg)	3937	5142

Engine	
Model	Cummins NTA855-C360
Туре	Turbocharged,aftercooled,Four-Stroke
Rated Power (kW)	345HP (257kW)
Rated speed (r/min)	2000
Number of Cylinders- bore x Stroke (mm)	6 - Φ139.7 x 152.4
Starting Method	Electric starting 24V 11kW
Battery	24V (12V x 2)
Air Cleaner	Dry horizontal type with precleaner
Min Fuel Consumption Ratio(min)	207

Transmission	
Torque Converter	3-element, single-stage, single-phase
Gearbox	Planetary gear, multiple-disc clutch, hydraulic actuated,forced lubrication by gear pump, 3forward and 3 reverse speeds
Bevel Gear	Helical bevel gear, Splash lubricated
Steering Clutch	Wet, Multiple-disc clutch, spring loaded, hydraulically released
Steering Brake	Wet, band brake, operated with hydraulic booster
Final Drive	Spur gear, double reduction, splash lubricated

Hydraulic System of Work Equipment		
Working Pressure (Mpa)	14	
Rated Flow (L/min) (2000r/min)	365	
Pump	gear pump	
Control Valve	Hand-operated plunger servo controlling	
Cylinder, Bore x Rod x Stroke (mm)	Ф140 х Ф75 х 1340	

Track		
Туре	Master pin type, Single grouser	
Track Pitch (mm)	228.6	
Track Width (mm)	560	
Number of Track Snoes(each side)	41	
Length of Track on Ground (mm)	3150	
Track Gauge (mm)	2140	

Travel Speed (km/h)			
	1st	2nd	3rd
Forward	3.6	6.6	11.5
Reverse	4.4	7.8	13.5

Under Carriage	I
Sprocket	Segmented
No. of Carrier Roller (each side)	2
No. of Track Rollers (each side)	7(2 Single, 5 Double)
Track Tension	Hydraulic-adjusted

Floating seals are used in all sprockets, track rollers, carrier rollers and front idlers



Sunward intelligent equipment group was founded in 1999 under the leadership of Professor He Qinghua of Central South University. It started with a revolutionary and innovative product - Hydrostatic pile driver, Now it has developed into a listed company - Sunward Intelligent Equipment Co., Ltd. as the core (Stock Code: 002097), an international enterprise group with Changsha as its headquarters and certain influence at home and abroad. With total assets of 18 billion yuan, the company is one of the leading enterprises of underground engineering equipment in China, one of the top 50 global construction machinery manufacturers, the top 20 world excavator enterprises and the top 3 global regional aircraft leasing enterprises.

In accordance with the company's policy of continuous product improvement, we reserve the right to change the parameters and design without prior notice to end-user. The illustrations in the product manual are not necessarily the standard style of the equipment, and Sunward intelligent equipment group reserves the right of final interpretation.



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