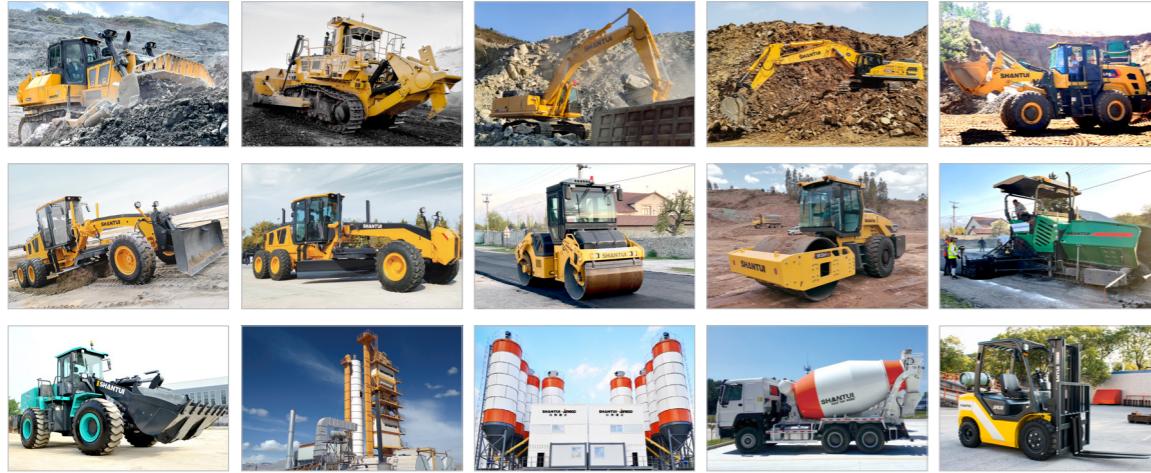


GROUP PRODUCTS



VALUE THAT WORKS

SHANTUI



Shantui Social

SHANTUI CONSTRUCTION MACHINERY CO., LTD.
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TEL: +86-537-2909369
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EMAIL: trade@shantui.com
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Engine Model: CUMMINS QST30
Gross Power: 708kW/2100 rpm
Operating Weight: 106,260kg

SHANTUI Torqflow Travel Drive
electronically controlled

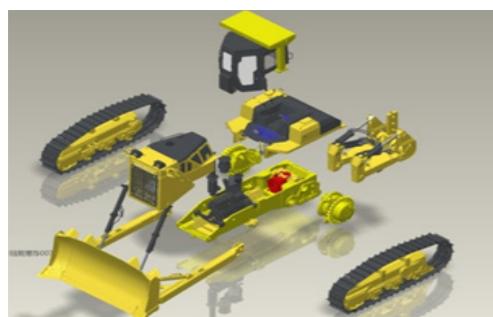
| SD90-C5 CRAWLER DOZER



VALUE THAT WORKS

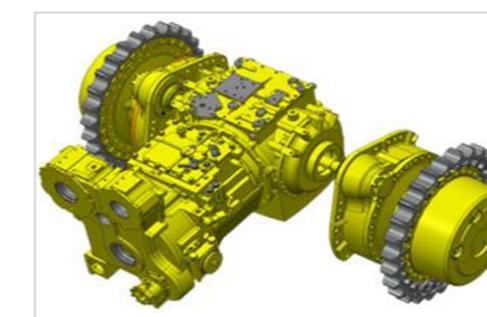
The Shantui SD90-C5 features a modular design as its iconic feature, adopting advanced technologies such as normally closed brakes, single handle travel control, locking torque converters, high-voltage variable working systems, temperature controlled cooling systems, floating travel systems, and intelligent display and control terminals. Mainly suitable for mining, blasting replacement, large-scale water conservancy, infrastructure and other earthwork operations. This equipment can adapt to more harsh working environments, greatly improve productivity, and reduce operating costs.

The SD90-C5 bulldozer has an advanced structure and a solid and reliable engine, chassis system, and transmission system. Through system matching, the entire machine has strong power, low fuel consumption, and low noise; Intelligent electric control walking system, achieving gear preset and fault diagnosis functions, meeting different operating habits; Renew the pressurized cabin with fresh air for a more comfortable driving experience.

BEST-IN-CLASS PERFORMANCE

MODULAR STRUCTURE DESIGN

- The SD60-C5 adopts advanced sealed modular structure design, which is easy for cleaning, processing, maintenance and inspection.
- It is easy to standardize and interchange equipment.
- Increase the convenience of transportation and on-site installation of components.



MODULAR DRIVE SYSTEM

- The drive system adopts modular design, can be installed and removed as a whole unit.
- Reduce the quantity of hydraulic lines outside the system.
- Facilitate the replacement of gearbox assembly on site.



The seven-sided design with high-strength structure ensures good visibility and operating safety.

WIDE VIEW

The exhaust pipe and pre-filter are placed on the side of the engine hood to minimize the impact on the forward view.

Thicken cab door glasses and glass wipers make maximum ease to view the blade work.

The ROPS/FOPS protective frame is standard to ensure the operator's safety.

ADJUSTABLE SEAT

- The mechanical suspension seat has good shock absorption performance.
- The forward and back positions, height and backrest angles can be adjusted.
- The seat can be rotated 15° to the right side for easy view of work.



AIR CONDITIONER

The evaporator of AC locates on the rear top of the cab to optimize layout of the air conditioning system.



AC VENTS

5 AC vents are arranged surround the seat that the operator could adjust and close them easily.



COMBINED CAB ELECTRICAL SYSTEM SWITCH, RADIO AND CIGARETTE LIGHTER.



AIR CONDITIONING CONTROL PANEL

The air conditioning control panel is located on the left side of the seat, with 2 switches, the left switch controls air flow and the right one controls temperature.



LARGE SPACE

The cab has a large internal space and the operating devices are reasonably layout for maximum comfort.



ELECTRICALLY CONTROLLED TRAVELING OPERATION HANDLE

The operator could control traveling precisely by the operating handle, and achieve variable speed by pressing the button without excessive force in a comfortable way.



Knob engine speed hand throttle.



Engine reduction pedal and brake pedal.



PPC WORKING OPERATION HANDLE

The handle with proportional pressure control valve can operate the work device precisely, makes job easy and comfort.



Safety lock lever avoids misoperation.



POWER TRAIN

ENGINE



-Cummins QST30 turbo charged, air-air intercooler diesel engine performs at full rated net power of 708 kW (950 hp), meet the EU stage IIIA and Chinese Tier 3 emission regulation.
-Engine type : Four stroke, V-shaped, 12 cylinder, water-cooled, electronically controlled, turbocharged, air-cooled, with powerful power, low fuel consumption, and high reliability.

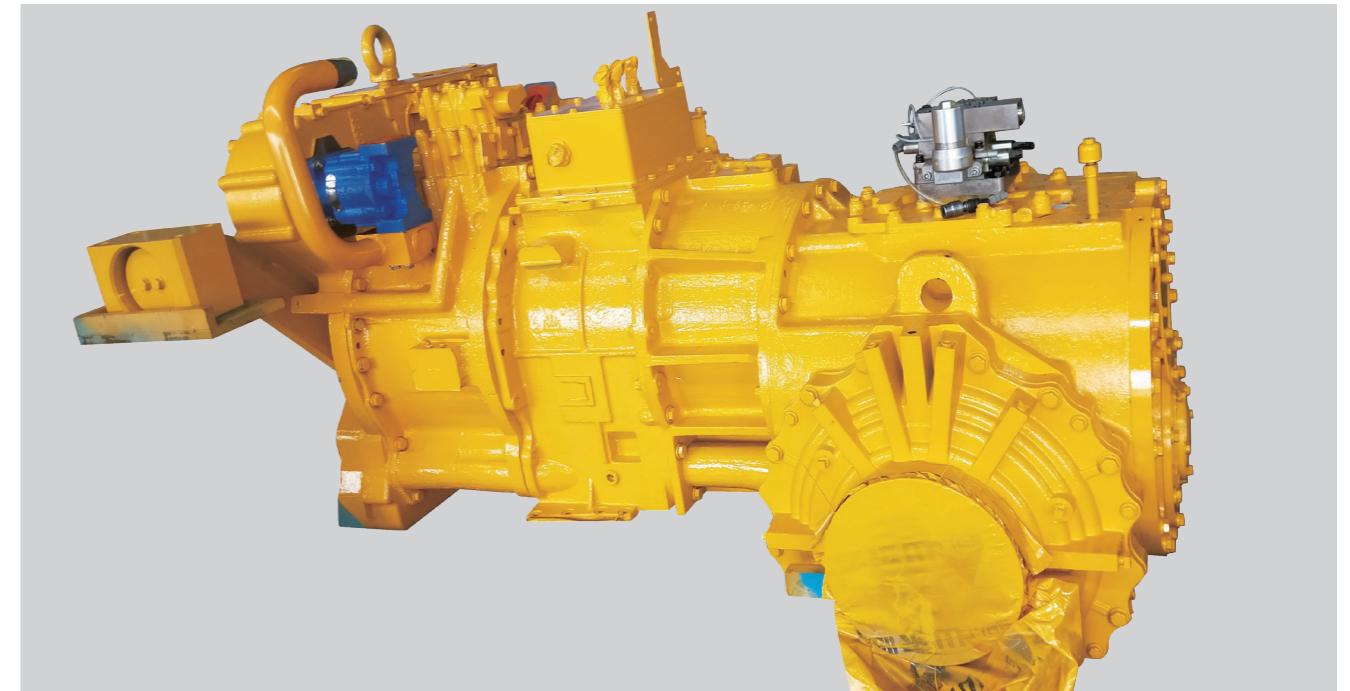
AIR PREFILTER



Cyclone intake system with double pre-filters and Donaldson filter, effectively reduces the inlet resistance and improves the dedusting ability, prevents the earlier malfunctions of engine.

MODULAR TRANSMISSION SYSTEM

Transmission components adopt modular design and can be assembled independently to ease the repairs.



DAMPER



8 units block rubber effectively absorb the vibration caused by engine when speed suddenly rising during heavy load job, so to protecting the engine and transmission system.

RADIATOR

Aluminum material and integrated modular design, with good heat dissipation performance and vibration resistance.



The temperature controlled fan system can intelligently control the fan speed and adjust on-demand to improve fuel economy and reduce nosie effect, the fan can achieve the reversing function, for cooling fan works in forward direction, for radiator cleaning .

HYDRAULIC DRIVEN FAN



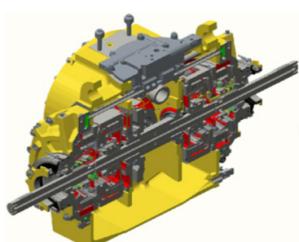
TRANSFER CASE AND TORQUE CONVERTER

-Transfer case distribute power to every pump unit and transfer the power to torque converter.
-Torque converter : 3-element, 1 stage, 1 phase.



STEERING AND BRAKE CLUTCH

-Steering clutch: Lubricated, multi-disc, spring applied, hydraulically applied.
-Brake clutch: Lubricated, multi-disc, spring applied, hydraulically applied.
-The normally closed brake plays the parking brake function to effectively prevent the machine gliding on slopes and realize high safety.



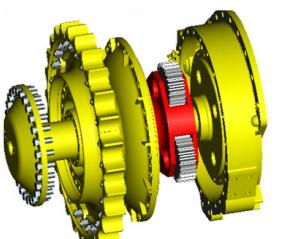
TRANSMISSION BOX

-Planetary powershift with multi-disc clutch.
-Forced-lubrication, electric controlled hydraulic gear shifting with 3 forward speed and 3 reverse speed.
-Equipped with solenoid transmission control valve.



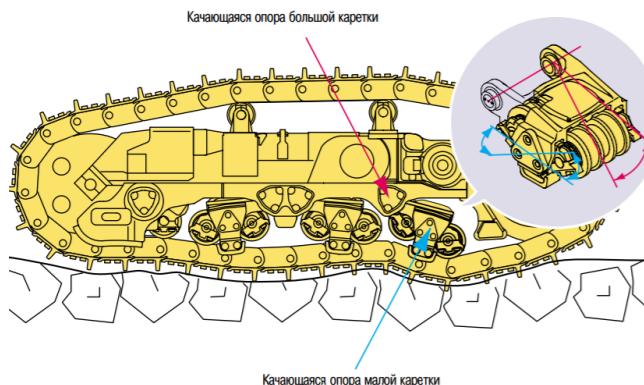
FINAL DRIVE

Two-stage reduction spur gear and planetary gear reduction are modular designed and can be assembled independently to ease the repairs .



UNDERCARRIAGE

K SUSPENSION DESIGN CHASSIS SYSTEM



The chassis system adopts track rollers of type K suspension design, achieve floating traveling function, give operator a smoother ride, isolated from harsh impact loads, prolong the machine life, ensure strong road adaptability and good traction performance.

When the dozer work on complicated working conditions:

1.Track rollers swing up and down corresponding to the oscillation frame.

2.Oscillation frame swing up and down corresponding to the chassis frame.

3.Cushion rubber limits the swing range of the track roller and absorb the vibration and impact from ground.

Oscillation: front equalizer bar and rear pivot shaft suspension structure.

OIL LUBRICATION IDLER



OIL LUBRICATION CARRIER ROLLER



HIGH ABRASION RESISTANT SPROCKET SEGMENT



OIL LUBRICATION TRACK ROLLER



LUBRICATED TRACK SHOE ASSEMBLY



LUBRICATED TRACK LINK



Sealed and lubricated pin shaft prevent the wear of pin shaft and pin bush, extend the track link service life.

WORK DEVICE

BIG CAPACITY BLADE



The 18.9m³ semi-U blade features large capacity and high efficiency. Blades are made of high tensile strength steel, providing high wear-resistant performance.

RIPPER



Rippers could penetrate tough material fast and rip thoroughly, ripping depth can be easily adjusted in 3 position by the ripper pin puller.

RIPPER PIN PULLER



Operator can adjust the shank depth from seat by using a hydraulic handling ripper pin puller to increase the efficiency and reduce the labour cost.

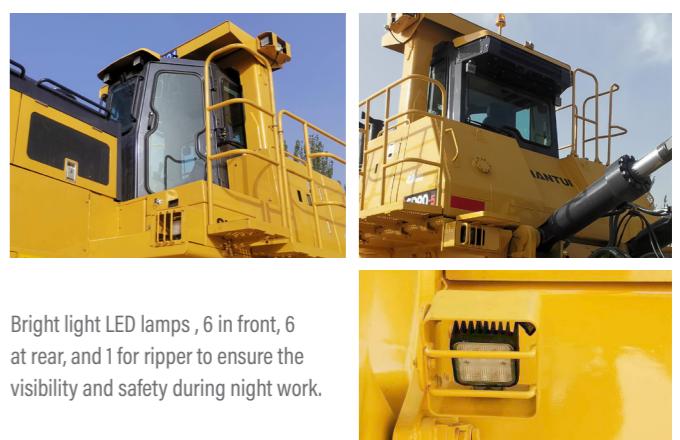
ELECTRONIC AND LIGHTING SYSTEM

ELECTRONIC SYSTEM



High quality electric elements ensure a reliable system.
Monitoring system with self-diagnosis function displays the operating and failure information.
Large size LCD screen is easy to read.
Pin puller and fan reverse function can be controlled through the display.
System language selection is easy to operate.

LIGHTING SYSTEM



Bright light LED lamps, 6 in front, 6 at rear, and 1 for ripper to ensure the visibility and safety during night work.

■ SERVICEABILITY

SELF-DIAGNOSTICS

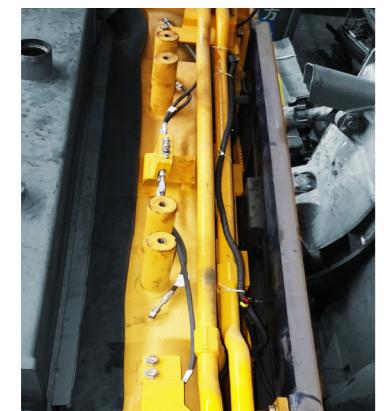


Intelligent electronic system is easy to get the operating and failure information on the screen. Dozer controller communicating with engine ECU shows the engine failure in time, help the operator and technician to make fast service.

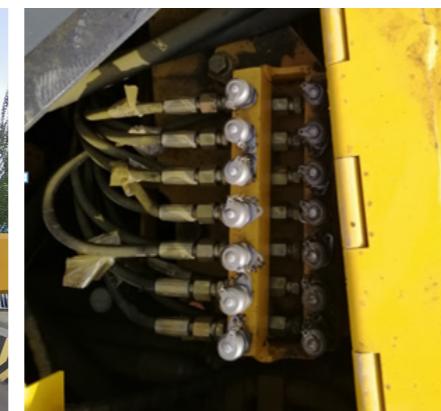
AIR FILTER INDICATOR



Air filter indicator shows the filter condition in different color, remind the operator to replace filter in time.



Adjust the lubricating point, easy for daily maintenance.

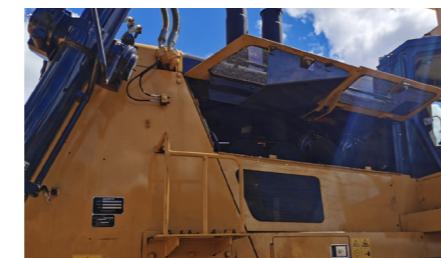
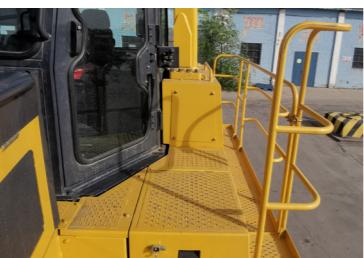


Centralized pressure measuring point for transmission system is easy for service.

GUARD PROTECTION AND WALKING PLATFORM



This guard and platform design can well protect the operator and make it easy to reach oil filling position, clean the window or check the lighting system etc.



Large opening engine hood is easy for engine service.

■ STANDARD & OPTIONAL

STANDARD

- Generator 24/100A
- Starter 24V/8KW
- Reverse alarm
- Working alarm light
- Horn
- Battery OPTIMA 12V,75Ah *4
- Temperature hydraulic driven fan
- Decelerate pedal
- Air filter indicator
- Dirtboard
- Hinged guard
- Bottom guard with towing hook
- Lighting system 13 LED lamps
- Parking brake
- Wet clutch
- Muffler
- Rain proof exhaust pipe
- FOPS cabin
- ROPS cabin
- Replaceable sprocket segment
- 7 track roller each side
- 610mm lubricated track shoe
- Suspension seat
- Single electric controlled joystick for travelling
- Oscillation undercarriage
- A/C
- Distinguisher
- Ripper pin puller
- Centralized pressure measuring system
- Semi-U blade(18.9m³)
- Single-shank ripper

OPTIONAL

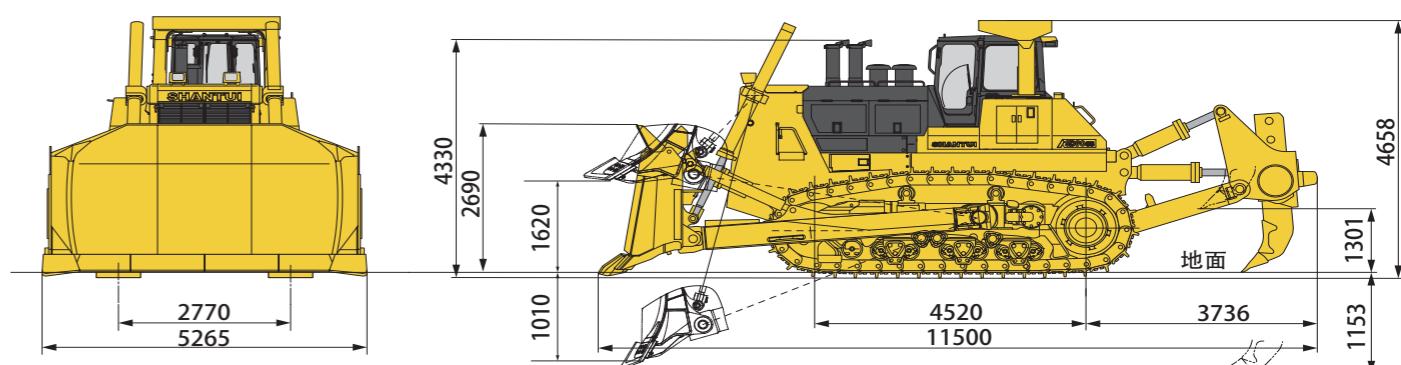
- 710mm or 810mm track shoe
- Central lubrication system
- Ether start assist
- Coal blade(41.4m³)
- Reverse camera
- Quick refueling system
- Fuel heater
- Fuel cooler



SPECIFICATIONS

WEIGHT		Rated power	9kw
Operating weight	106260kg	BATTERY	
Transport weight	80250kg	Unit capacity	75Ah
DRIVE			Unit rated voltage
MIN TURNING RADIUS			12V
Without blade	4600mm	Quantity	4
TRANSMISSION SYSTEM			
Torque converter	1 stage, 1 phase, 3-element, electronic controlled lockup clutch, forced lubrication	Transmission box	Planetary, multi-disc, hydraulic applied, forced lubricated, 3 forward gear, 3 reverse gear
Bevel gear	Spiral bevel gear, splash lubrication	Steering clutch	Wet, multi-disc, spring application, hydraulic separated (electronic controlled) linked with brake clutch
Brake clutch	Wet, multi-disc, spring application, hydraulic separated (electronic controlled) linked with steering clutch	Final drive case	Spur gear reduction, planetary gear reduction, splash lubrication
HYDRAULIC SYSTEM			
TRANSMISSION PUMP	Gear pump	Front pump: transmission and steering pump	Displacement 160ml/r
Rear pump: lubrication pump	Displacement 112ml/r	Temperature controlled fan pump	Swash plate plunger pump, 140ml/r
WORKING PUMP			
Type	Fixed displacement gear pump and double pump confluence	SCAVENGE OIL PUMP	
Type	Gear pump	Front pump	Displacement 63ml/r
Rear pump	Displacement 280ml/r	Rear pump	Displacement 110ml/r
Fan motor	Swash plate plunger motor, 110ml/r		
HYDRAULIC CYLINDER			
Blade lift cylinder	Bore of working cylinder 180mm External diameter of piston rod 110mm Stroke of working cylinder 1943mm Min. length between mounting hinge points 1262mm Relief valve setting 28mpa		

HYDRAULIC SYSTEM		UNDERCARRIAGE SYSTEM	
Blade tilt cylinder	Bore of working cylinder 250mm External diameter of piston rod 140mm Stroke of working cylinder 338mm Min. length between mounting hinge points 1725mm Relief valve setting 28MPa	Structure	Modular design, equalizing beam, K type oscillation suspension
Ripper lift cylinder	Bore of working cylinder 225mm External diameter of piston rod 120mm Stroke of working cylinder 645mm Min. length between mounting hinge points 1530mm Relief valve setting 28MPa	Number of carrier roller	2
Ripper tilt cylinder	Bore of working cylinder 225mm External diameter of piston rod 140mm Stroke of working cylinder 562mm Min. length between mounting hinge points 1480mm Relief valve setting 28MPa	Number of track roller	7
Pin puller cylinder	Bore of working cylinder 55mm External diameter of piston rod 30mm Stroke of working cylinder 180mm Min. length between mounting hinge points 419mm Relief valve setting 3 MPa	Single flange each side	2
		Double flange each side	5
		Track shoe type	Master link single grouser lubricated track shoe
		Number of track shoe	41
		Pitch	317.5mm
		Width of track shoe	710mm
WORKING DEVICE			
Semi-U blade	Max. lifting height/digging depth 1620/1010mm Max. tilting adjustment 1010mm Blade capacity 28 ³ Blade width 5265mm Blade height 2690mm Digging angle of blade 55°		
Single-shank ripper	Max. digging depth 1813mm Max. lifting height 1301mm Departure angle (at highest lifting) 37~63° Ripper width 1770mm Depth position 4		



* The specifications are subject to change without notice. The pictures may include options. The actual color & appearance of the product may differ from what is shown.