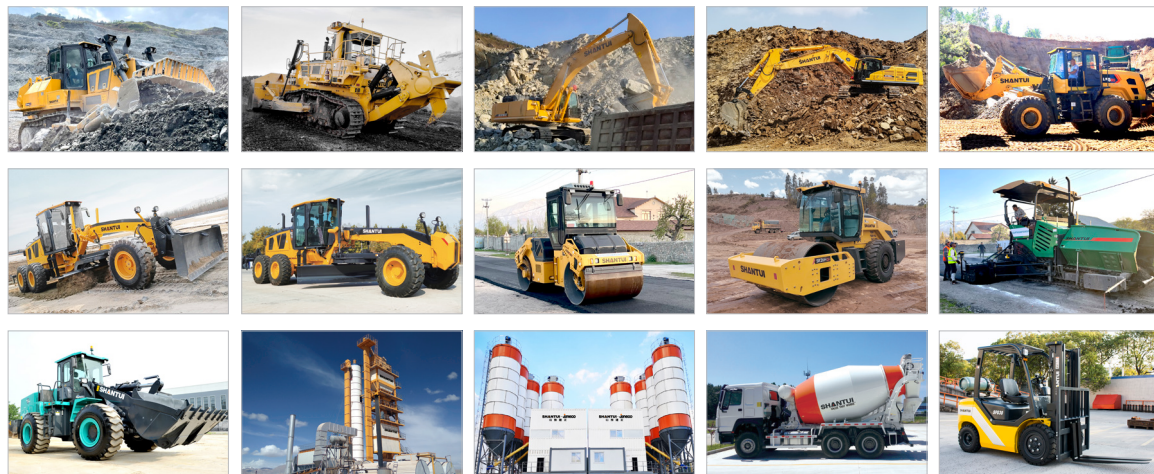


GROUP PRODUCTS



VALUE THAT WORKS



Shantui Social

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SHANTUI

SHANTUI

SD90-C5

Crawler Dozer



Engine Model: CUMMINS QST30
 Gross Power: 708kW/2100 rpm
 Operating Weight: 106,260kg

SHANTUI Torqflow Travel Drive
 electronically controlled

| SD90-C5 CRAWLER DOZER



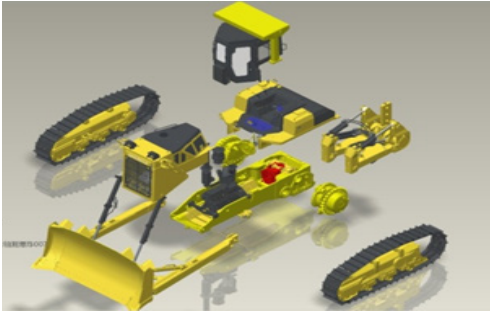
- MODULAR STRUCTURE DESIGN
- LARGE SPACE MICRO SUPERCHARGED CAB
- STRONG POWER DEVICE
- 5G REMOTE CONTROL SYSTEM
- STRONG CHASSIS SYSTEM
- HIGH-EFFICIENCY WORK DEVICE
- COMPREHENSIVE LIGHTING SYSTEM
- 4D LIGHT FIELD HOLOGRAPHIC DEVICE

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.

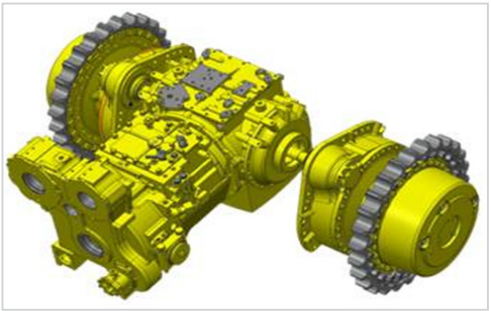
The SD90-C5 bulldozer has an advanced structure and a solid and reliable engine, chassis system, and transmission system. Through system matching, the entire machine has strong power, low fuel consumption, and low noise; Intelligent electric control walking system, achieving gear preset and fault diagnosis 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.



COMBINED CAB ELECTRICAL SYSTEM SWITCH, RADIO AND CIGARETTE LIGHTER.



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.



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.



PPC WORKING OPERATION HANDLE

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



Knob engine speed hand throttle.



Engine reduction pedal and brake pedal.

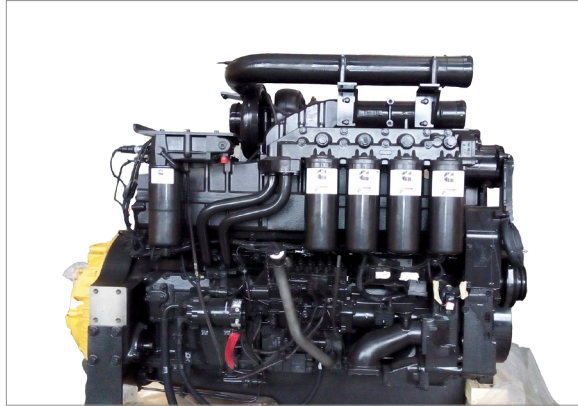


Safety lock lever avoids misoperation.



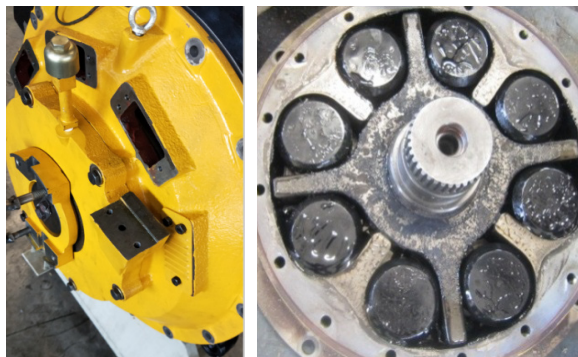
POWER TRAIN

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.

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.

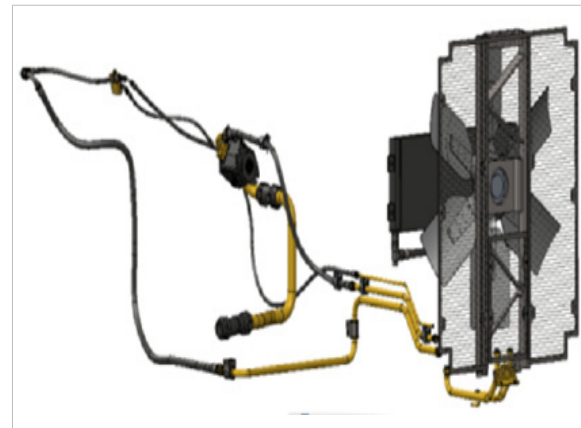


AIR PREFILTER



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.

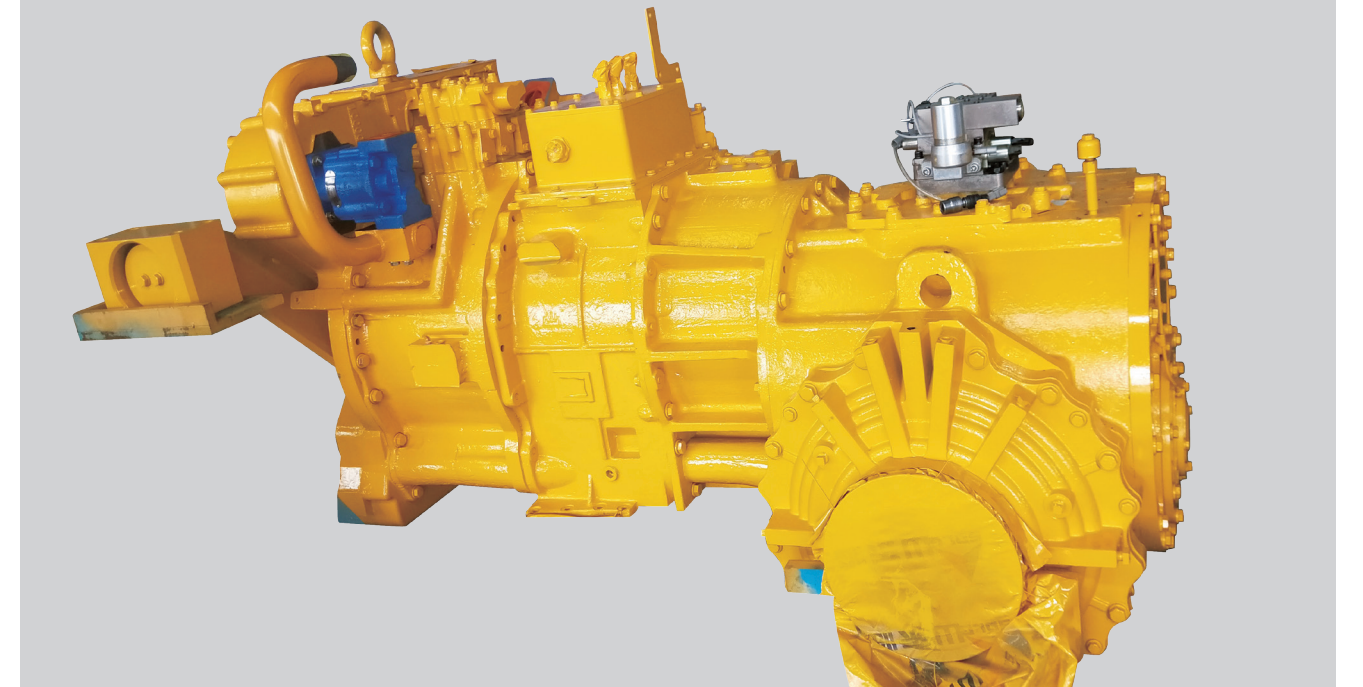
HYDRAULIC DRIVEN FAN



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

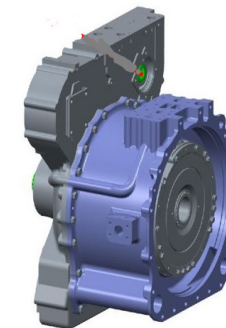
MODULAR TRANSMISSION SYSTEM

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



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.



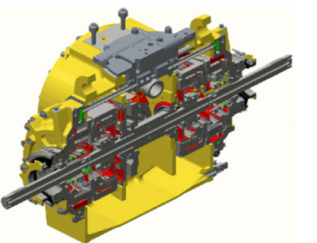
TRANSMISSION BOX

-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.



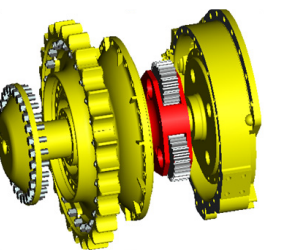
STEERING AND BRAKE CLUTCH

-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.



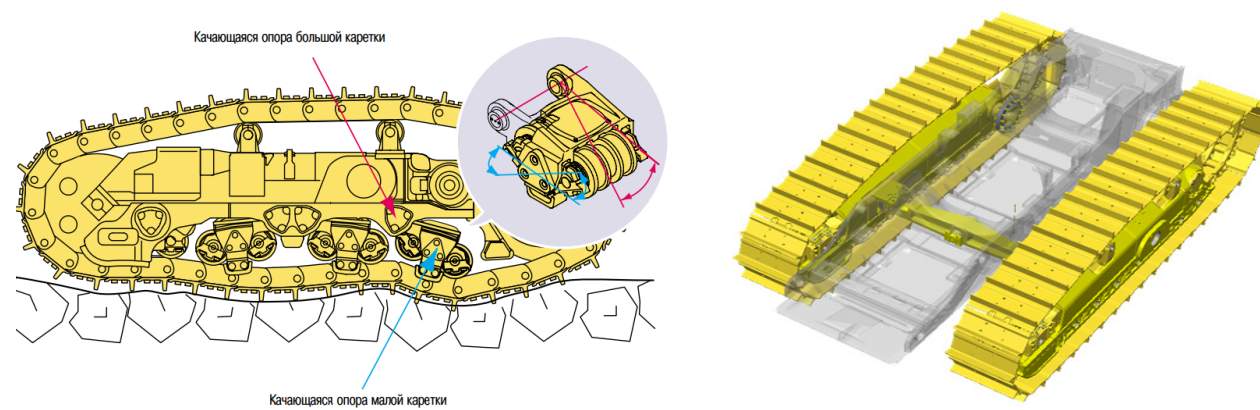
FINAL DRIVE

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



LUBRICATED TRACK SHOE ASSEMBLY



OIL LUBRICATION CARRIER ROLLER



HIGH ABRASION RESISTANT SPROCKET SEGMENT



LUBRICATED TRACK LINK



OIL LUBRICATION TRACK ROLLER



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.

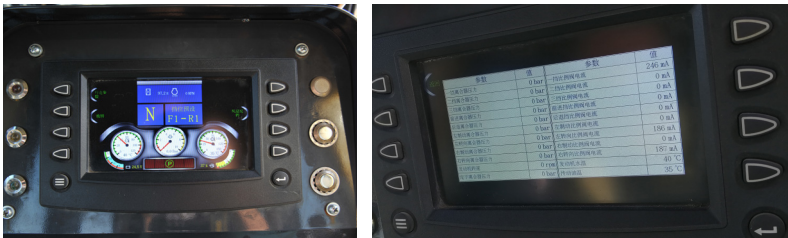
LIGHTING SYSTEM



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.



Adjust the lubricating point, easy for daily maintenance.

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.

AIR FILTER INDICATOR



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



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

LARGE OPENING ENGINE HOOD



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



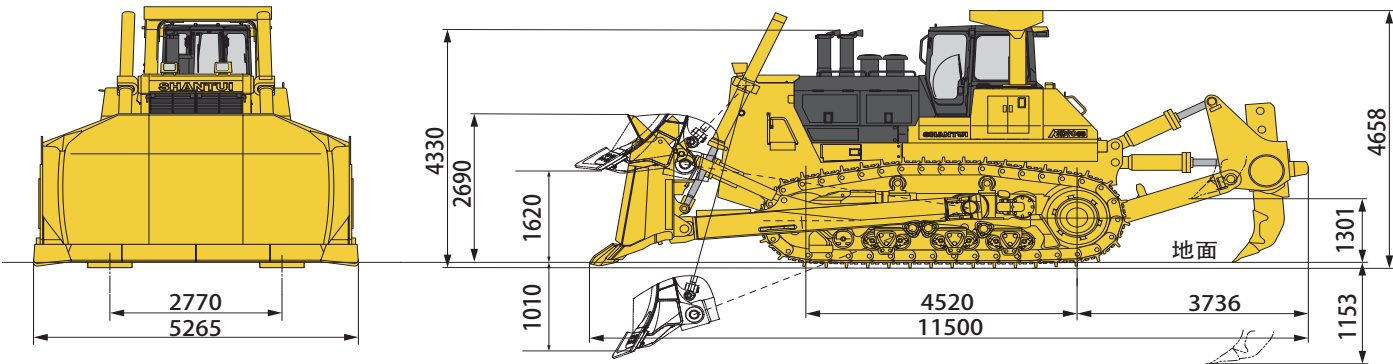
SPECIFICATIONS

WEIGHT	
Operating weight	106260kg
Transport weight	80250kg
DRIVE	
MIN TURNING RADIUS	
Without blade	4600mm
With blade	6900mm
Gradeability	30°
Stability:front/rear; left/right	35°
Ground pressure	143.7kPa
Travelling speed	
F.1st	3.5km/h
F.2nd	6.3km/h
F.3rd	10.9km/h
R.1st	4.7km/h
R.2nd	8.4km/h
R.3rd	14.3km/h
ENGINE	
Model	Cummins QST30
Type	Four stroke, V-shaped, 12 cylinder, water-cooled, electronically controlled, turbocharged, air-cooled
Bore*stroke	140*165mm
Displacement	30.5L
Rated power	780/2100kw/rpm
Max. torque	4191/1300Nm/rpm
Low/High idle speed	750/2250rpm
Min fuel consumption	222g/kw.h
Applicable altitude	≤3048m
Applicable temperature	-30~46°
GENERATOR	
Rated voltage	24V
Rated current	100A
START MOTOR	
Rated voltage	24V

Rated power	9kw	
BATTERY		
Unit capacity	75Ah	
Unit rated voltage	12V	
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
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		
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
Ripper lift cylinder	Relief valve setting	28MPa
	Bore of working cylinder	225mm
	External diameter of piston rod	120mm
	Stroke of working cylinder	645mm
Ripper tilt cylinder	Min. length between mounting hinge points	1530mm
	Relief valve setting	28MPa
	Bore of working cylinder	225mm
	External diameter of piston rod	140mm
Pin puller cylinder	Stroke of working cylinder	562mm
	Min. length between mounting hinge points	1480mm
	Relief valve setting	28MPa
	Bore of working cylinder	55mm
Pin puller cylinder	External diameter of piston rod	30mm
	Stroke of working cylinder	180mm
	Min. length between mounting hinge points	419mm
	Relief valve setting	3 MPa

UNDERCARRIAGE SYSTEM		
Structure	Modular design,equalizing beam, K type oscillation suspension	
Number of carrier roller	2	
Number of track roller	7	
Single flange each side	2	
Double flange each side	5	
Track shope 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	28m³
	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.