

GROUP PRODUCTS



VALUE THAT WORKS

SHANTUI

SG21-C6 AWD

Motor Grader



Shantui Social

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SHANTUI

Engine Model: Weichai WP7G220E300
Gross Power: 162kW @ 2200rpm
Operating Weight: 17,600kg

We Level Subgrade Fast and Flat
easy operation and maintenance

WALK-AROUND

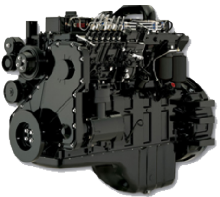
COMFORTABLE OPERATING ENVIRONMENT

- Four-pillar hexahedral ROPS & FOPS cab, air suspension seats, cold & warm AC;
- Three-segment adjustable instrument panel, 8-inch LCD screen with reversing image;
- Well sealed micro-pressure cab with fresh air function, and low noise
- New control mechanism, with a control force of 20N and a small control stroke.



EXCELLENT POWERTRAIN

- Reliable high-torque Weichai engine ensures stable power output;
- Newly designed electronically controlled shift hydraulic transmission for smooth and efficient shifting and ensures reliability;
- Temperature controlled fan technology makes it possible to adjust the fan speed according to heat dissipation needs, reducing energy consumption by 3%;
- Load-sensitive hydraulic system for micro-control and compound action saves energy and improves operating efficiency by 30%;
- The front wheel drive hydraulic control system achieves full drive and crawling modes for the entire machine, with a 30% increase in traction.



INTELLIGENT THERMAL MANAGEMENT SYSTEM

- Four zone temperature controlled cooling system;
- Flexible control thermal management strategy;
- Control of heat dissipation according to heat dissipation requirements, with high environmental adaptability;
- Simulation to assist analysis, optimize air intake orifices and reduce internal eddy currents.

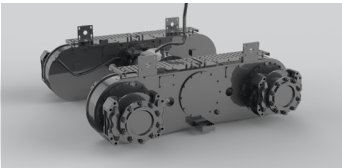
EASY MAINTENANCE

- Side hood can be opened at a large angle;
- Maintenance-free high-performance batteries;
- The hydraulic system has a low oil volume of 85L;
- Fuel system has a large capacity of 360L;
- Surface oil outlet, centralized lubrication point make it possible to fill and maintenance on ground.



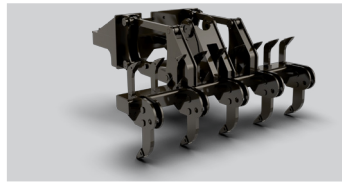
HIGH RELIABILITY

- Internal tooth meshing working device of rotary bearing;
- CAE analysis, full life design concept, box type heavy-duty frame;
- World-class brand no-spin automatic differential, integral drive axle of heavy roller chain drive box;
- Industry renowned brand gear pumps, multi way valves and MICO brake units.



MULTIPLE WORKING EQUIPMENT

- Widened high-strength 100% wear-resistant blade;
- Front blade, front scarifier, moldboard, and rear scarifier are optional.



COMFORT



COMFORTABLE OPERATING ENVIRONMENT

The FOPS/ROPS cab adopts a new four-column structure for a better view. With two-stage shock absorption technology and a mechanical suspension seat, the airtightness of the cab is upgraded and the noise is lower, making the operator feel more comfortable.



HIGH POWER AIR CONDITIONER

The cab is equipped with 12 overhead air-conditioning vents, which can defrost the front and rear glass and have the function of changing fresh air.

CENTRALLY ARRANGED BUTTONS

The frequently used control buttons are arranged on the left and right columns, which greatly improves the convenience of operation.

HUMANIZED INTERIOR

The front and rear water spray wipers, front and rear sunshades, Bluetooth radio, USB charging port and cup holder make the driving experience excellent.



SUPERIOR ERGONOMIC PERFORMANCE

Electronically controlled button-type shift handle, cruise control hand throttle, 8-inch LCD screen with integrated reversing image.

RELIABILITY

ENGINE

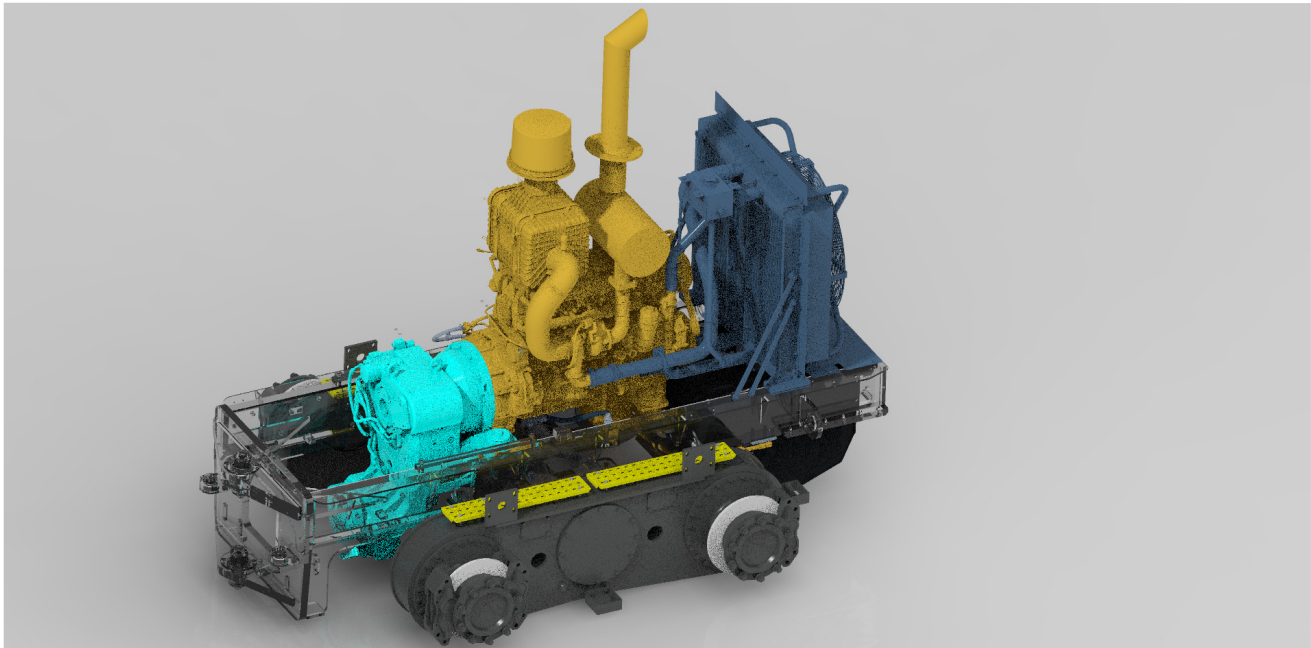
SG21-C6 is powered by Weichai WP7G220E300 engine, a strong engine featuring compact structure, stable performance, high efficiency and torque reserve, which enables a stable power output under rough working conditions.

TRANSMISSION

The electro-hydraulic control power shift transmission produced with shantui has 6 forward and 3 reverse gears. The best gear can be selected according to the working conditions to achieve the perfect combination in walking and operation.

AXLE

The rear axle is built internally with No-Spin automatic slide-proof differential to guarantee stable and reliable drive. The heavy roller chain drive tandem box can swing by $\pm 15^\circ$, to ensure the middle and rear wheels touch the ground at the same time to significantly increase the traction.



ADVANCED SIMULATION DESIGN

The square structured main frame and I-beam structured vertical plates have superior bending and torsion resistance. Power transmission system is scientifically matched, the heat dissipation system is designed by fluid simulation, the overall fuel consumption can be reduced by 5%.



ALL WHEEL DRIVE TRANSMISSION SYSTEM

Upgraded load-sensitive hydraulic system with electronically controlled adjustment of all-wheel drive, crawling and rear-wheel drive modes. Through the all-wheel drive button on the shift handle, it enters the six-wheel drive mode, and through the crawl button, it can enter the front-wheel drive mode. This function is suitable for working conditions such as frozen soil, muddy roads, road snow removal, roadbed construction and other working conditions that are complicated and harsh.

DURABILITY

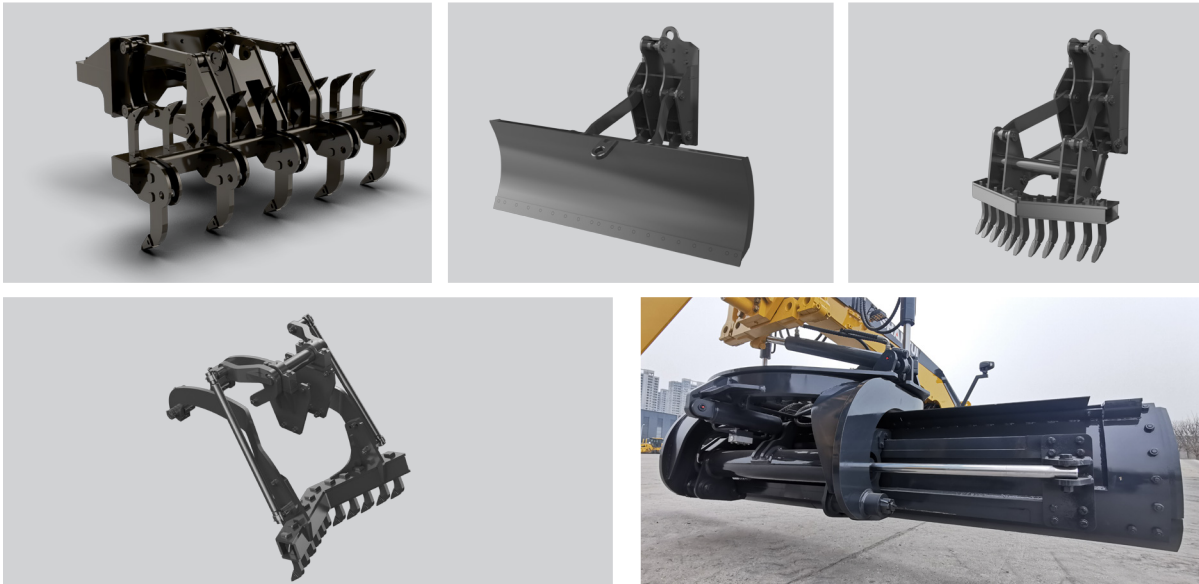
EASY MAINTENANCE

The real-time online multi-function monitoring is applied to the machine. Centralized lubricating points and filter elements, and the double engine hoods offer a convenient access and easy maintenance. Relying on Shantui's global agent service system, it minimizes downtime caused by failures and guarantees your smooth construction.



OPTIONAL EQUIPMENT

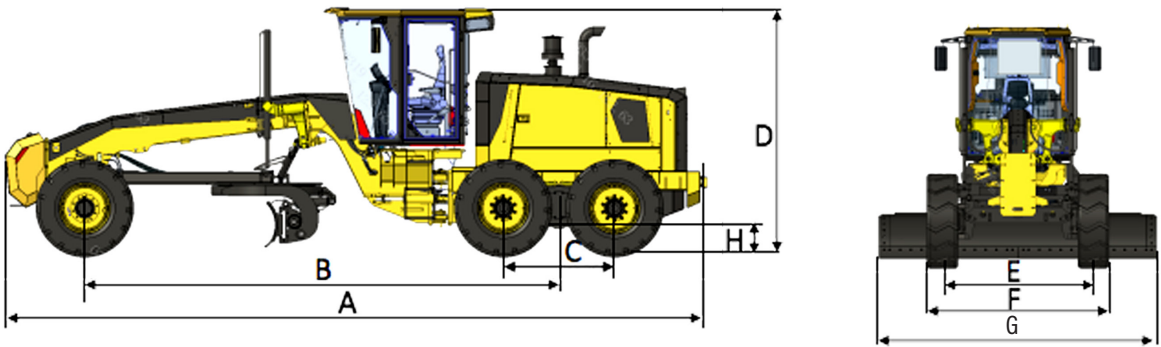
- Front blade
 - Rear ripper
 - 14ft(4270mm) moldboard
 - 13ft(3965mm) moldboard
 - ZF transmission/ADVANCE transmission
- Gearbox protective cover
 - Overload protection worm gearset box
 - Centralized lubrication
 - Tire protection system
 - Standard seat
- Fire extinguisher
 - Turbo prefilter
 - Reverse camera



SPECIFICATIONS

ENGINE	
Model	Weichai WP7G220E300
Number of cylinders	6
Type	4-cycle, electric Control, water-cooled
Bore x stroke	108*136mm
Displacement	7.47L
Gross power	162kW @ 2200rpm
Max. traction	138kN
Max. torque	1000N.m @ 1300-1500rpm
Rated fuel consumption	220g/kW.h
Emission	China-III
POWER TRAIN	
Transmission	Fixed-axis type, electro-hydraulic control
Torque converter	Single-stage,single-phase,three basic elements
Rear axle	Modular, planetary reduction, "no-Spin" anti-skid differential
Tandem drive	Roller chain. Oscillating angle:±15°
Tire	17.5-25PR12
Front axle	Oscillating angle:±16° Tilting angle:±18°
STEERING	
Type	Hydraulic power
Front wheel steering angle	±50°
Articulation angle	±23°
Min. turning radius	7500mm
BRAKES	
Service brake	Drum type , foot operated,single circuit , hydraulically actuated on four tandem wheels
Parking brake	Drum type, manually actuated
MOLDBOARD	
Rotation	360°
Moldboard width	3660/3965/4270mm
Moldboard height	620/635mm
Moldboard thickness	20mm
Moldboard tip angle	22~73°
Max. cutting depth	970mm
Max. lifting height	480mm
Max. shoulder reach (left/right)	650/650mm
Max. tilting angle (left/right)	2250/2100mm
SPEED	
Forward,1-6	5.3\9.1\11.9\20.2\25\40.9km/h
Reverse,1-3	5.3\11.9\25km/h

HYDRAULICS	
Tandem pump	Gear pump.32ml/r \ Piston pump 75ml/r
Relief pressure for working equipment	24MPa
Relief pressure for steering	17.5MPa
Relief pressure for brakes	10MPa
CAPACITIES	
Fuel tank	360L
Hydraulic oil tank	85L
Engine crank case	19L
Engine coolant	33L
ELECTRICAL SYSTEM	
Battery	2x12V,105Ah
Alternator	28V,70A
Starter motor	24V,6kW
OPERATING WEIGHT	
Standard	17600kg
With front blade	18460kg
With rear ripper	18850kg
With front blade & rear ripper	19500kg
RIPPER (OPTIONAL)	
Ripping depth	270mm
Shank supports	5
Shank support spacing	520mm
Working width	2080mm
FRONT BLADE (OPTIONAL)	
Width x height	2740x890mm
Thickness	16mm
Max. lifting height	528mm
Max. digging depth	170mm
DIMENSIONS	
A Overall length: Standard	9700mm
A Overall length: With rear ripper	10620mm
A Overall length: With front blade	10380mm
A Overall length: With front blade & rear ripper	11140mm
B Length: Front axle to mid tandem	6560mm
C Length: Between tandem axles	1538mm
D Height: Cab	3358mm
E Tread	2155mm
F Width: Outside tires	2600mm
G Moldboard width	3660/3965/4270mm
H Minimum ground clearance	375mm



* 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.