

SHANTUI

SG19-B6i

3D GRADE CONTROL

FOR MOTOR GRADERS



MACHINE CONTROL
& CONSTRUCTION

HIGH ACCURACY AUTOMATIC GRADER CONTROL SYSTEM

Shantui SG19-B6i auxiliary construction grader can directly input the construction design data into display console, control the machinery for construction until it reaches the design position, truly realizing the pile-free construction, greatly reducing the number of on-site construction personnel (reducing two thirds of the number of traditional construction personnel), saving the tedious measurement work, just re-measuring after the construction, and at the same time ensuring that the machinery works at full load, therefore the utilization rate of the machine is improved; The time for re-measurement is saved and the night construction can be carried out, which greatly improves the construction progress.

During traditional construction, drivers need to operate repeatedly and adjust the grader blade until it is scraped close to the design position, which puts forward high requirements for the driver's technical level and experience. With the use of the 3D auxiliary construction grader, drivers don't need to control the blade basically, only need to pay attention to driving, which greatly reduces the requirements for the driver's work intensity and skills.

Automatic leveling

- Automatic control of blade, automatic construction according to design elevation;
- Free right hand, reduce personnel skills and labor intensity

One-button switch

- Integrated handle, manual/automatic one button

Quick setting

- At the new construction site, it only takes 30 minutes to Import Design and erect base station;
- Only one design is required for each construction, One base station supports multiple machines

Built-in measurement

- The blade elevation is displayed in real time, the deviation of actual value and design value is clear at a glance
- Drivers can work independently, day or night

Powerful function

- Support plane/slope/road design;
- Operation radius up to 5km

Precision construction

- The number of times of construction has decreased and the efficiency is increased by 40%;
- Accuracy of land leveling can reach $\pm 2\text{cm}$

cost reduction

- No Surveyors required, reducing fuel consumption by 30%;
- Greatly reduce costs

Innovative interactive display

- Integrated Instrument, construction interface/main interface displayed as required;
- Environment-aware such as reminder of overspeed

Reliable performance

- Special front axle and frame with high-strength structure, higher reliability;
- Connecting rod swing frame, with strong resistance to external impact, suitable for work environment with large workload.



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Display Console

- 10.1" capacitive touch screen
- engineering plastics shell
- IP66 dust-free and waterproof
- Brightness 900 nits adjustable ,sunlight readable



Valve Module

- Load sensitive multi-way valve with pressure compensation, suitable for compound action, easy to control
- Drive module: PVEH ratio, high performance, with spool position feedback



INS Sensor

- The dynamic inclination sensor is specially used for construction machinery
- Supports CAN interface output
- Protection class: IP68



GNSS Antenna

- Support GPS, GLONASS, BDS, GALILEO four GNSS system satellite signals
- The antenna structure is designed with a double waterproof, UV-proof housing



Rear View Camera

- 120° field of view

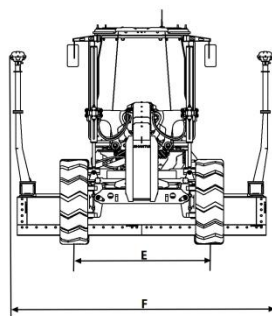
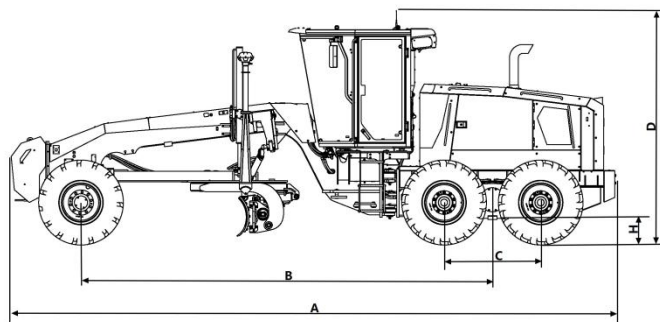


GNSS Receiver

- Core boards: controller PCB, RTK module, radio module
- The appearance is independently designed

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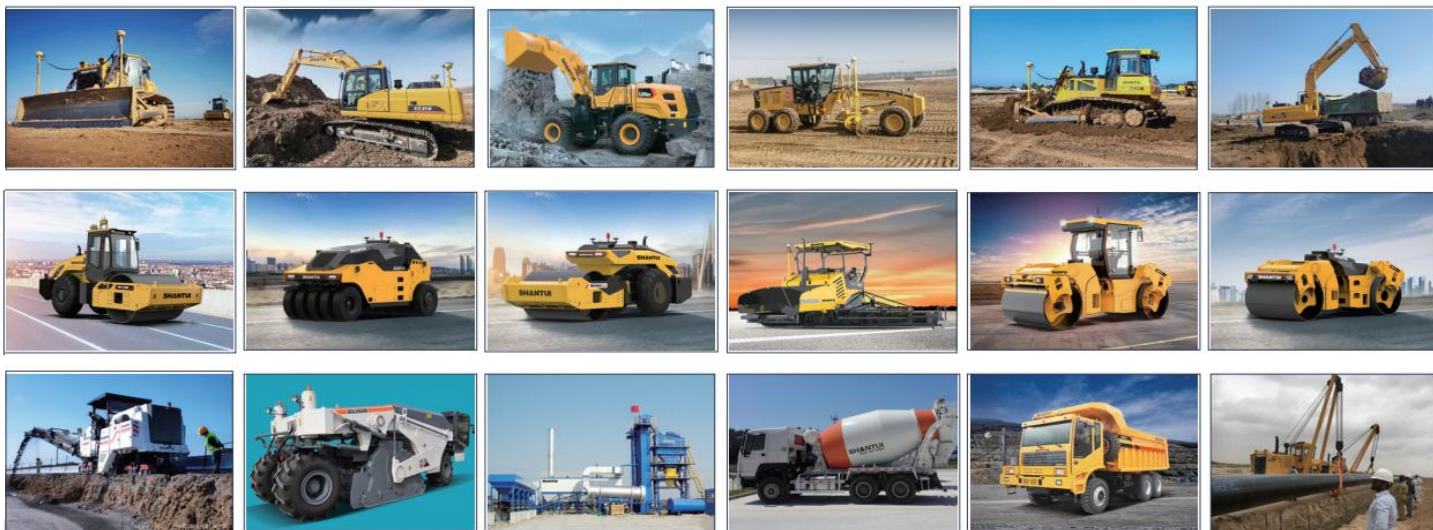
Technical parameters



No.	item	parameter
A	Machine length (mm)	9700
B	Front and rear wheelbase (mm)	6558
C	Rear wheel track (mm)	1540
D	Machine height (mm)	3400
E	tread (mm)	2155
F	Maximum width (mm)	4200
H	Minimum ground clearance (mm)	635

item	parameter	item	parameter
Machine quality (kg)	16000	Climbing ability (°)	20
Maximum traction (kN)	87.8	Minimum turning radius (mm)	7500
Rated power/speed (kW/rpm)	151/ 2200	Working oil pressure (M Pa)	18
Maximum engine torque	780N.m/1500rpm	Brake oil pressure (M Pa)	10
Flat ground braking capability (m)	≤13	Maximum reach left/right of the blade (mm)	1900/1950
Side-of-ear noise (dB)	≤80	Maximum cutting depth of the blade (mm)	970±20
Gears	Six gears forward, three gears back	Maximum blade lift height (mm)	480±20
Forward speed (km/h)	5.1/8.8/11.6/19.7/24.4/40.7	Construction accuracy (cm)	±2
Reverse speed (km/h)	5.1/11.6/24.4	Scope of construction (diameter m)	5000

GROUP PRODUCTS



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