DH20-C3i2

3D GRADE CONTROL
FOR MOTOR DOZERS

MACHINE CONTROL
& CONSTRUCTION

SHANTUI

HIGH ACCURACY

CONTROL SYSTEM

AUTOMATIC DOZER

The DH20-C3i2 automatic dozer control system for graders improves the quality and efficiency of grading operations. The high-precision dual-GNSS positioning system and inertial sensor provide reliable 3D positioning and heading to control the motor dozer blade, regardless of the machine's position. Real-time automatic control of the blade to the design surface allows finished grade accuracy to be achieved in less time, increases efficiency and productivity by eliminating the need for manual staking.

The 10.1-inch industrial touch screen keeps system operation at the operator's fingertips. Detailed displays of job information, including project configuration, cut and fill data, and geofencing areas are always accessible at a glance. It can be widely used in farmlands, airports, roads, parks and other scenes.

Automatic leveling

High dynamic dual-GNSS+INS positioning performances. Combines dual GNSS satellite positioning with inertial navigation to ensure ultimate accuracy in driving the dozer blade to within ±2.5 cm, regardless of themachine's position. The multi-band GNSS sensor supports multiple correction sources, including RTK NTRIP and SDK base station, to match your operating conditions.

The high response valve module, adjusts the blade position to maintain accurate grading. This ensures that the precision requirements of earthmoving operations are met at all times, and only the right quantity of material is moved.

FAST, EASY-TO-USE

Intuitive software for quick learning. The software runs on a 10.1" industrial color display for optimal readability in jobsite environments. It supports common AutoCAD DXF design files, including surfaces, slopes, and road features, to manage all common grading operations. The software enhances the user experience in every way possible to complete projects quickly and accurately, even with less experienced machine operators. Several user-defined configurations can be set up to define the working parameters of the site and make the operator's job simpler and easier.

Efficiency improvement

The blade elevation is displayed in real time, and the actual value/design value deviation is clear at a glance. The manipulator can work independently; Work day and night. No measuring personnel are required, reducing fuel consumption by 30%. The number of construction times is doubled, and the construction efficiency is increased by 40%. The construction cost is greatly reduced.

Digital construction

Integrated handle, manual/automatic one button switch. Only one design is required for each construction site; The base station supports 1 to many devices..

Support plane/slope/road design. Instrument integration, construction interface/main interface displayed as required . Environmental perception such as electronic fence, obstacle avoidance area and overspeed reminder.

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3D AUTOMATIC CONTROL SYSTEM FOR MOTOR DOZER

Display Console

10.1 inch, capacitive touch screen
The shell is made of engineering plastics
IP65 dust- and waterproof
Sunlight readable
Hardware customization

Construction Controller

Centimeter RTK accuracy
Dual GNSS antenna inputs
Dual serial radio
Appearance independent design

GNSS Antenna

Adopt GPS1000 receiver antenna
Full GNSS constellations
Dual waterproof and
UV protection

Valve Module

High dynamic response
Pressure-compensated flow control
Suitable for compound movements and easy to control

INS Sensor

Adopt GPS1000 receiver antenna
Full GNSS constellations
Dual waterproof and
UV protection

IO Acquisition Boards

Supports 22-channel digital signal input and 8-channel analog signal inputs
Support CAN signal output
Used as a 5V power supply module

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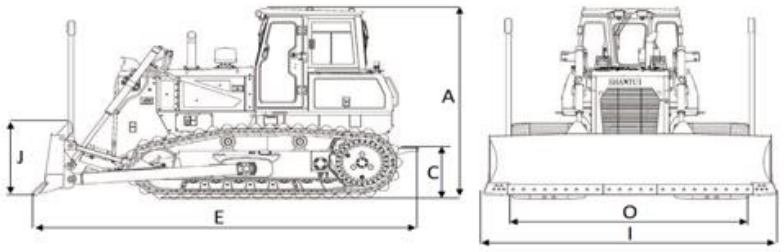
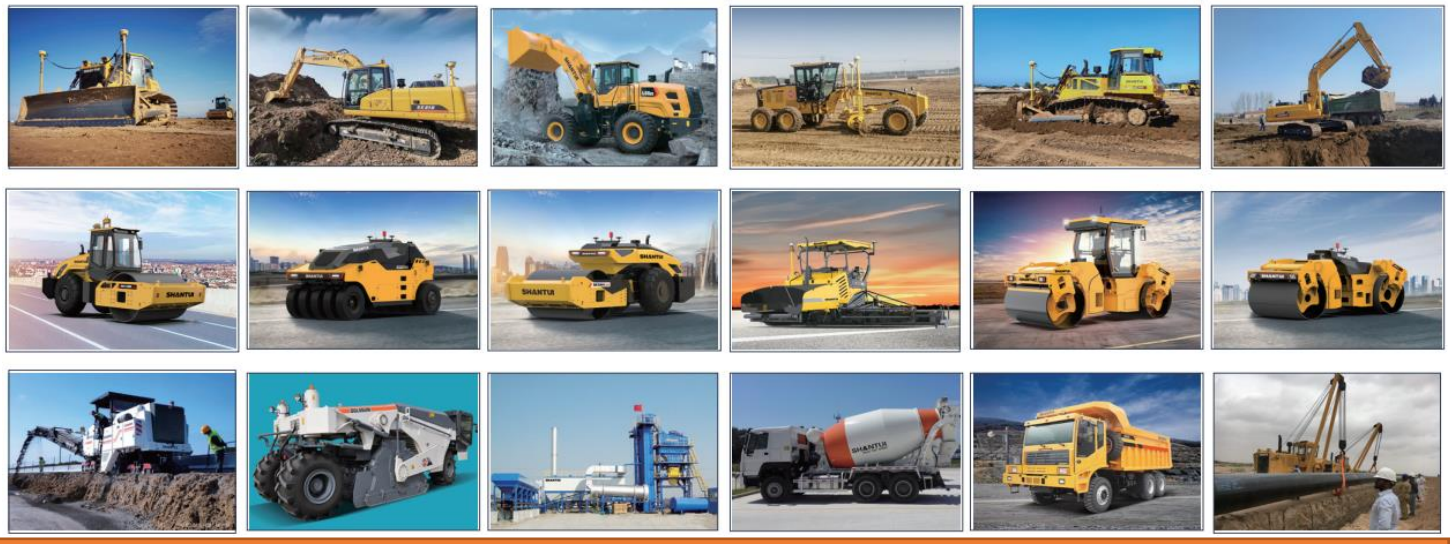
Technical parameters



Number	Project	Parameter
A	Overall height（mm）	3154
C	Ground clearance（mm）	410
E	Overall length（mm）	5086
I	Overall width（mm）	3400
J	Blade height（mm）	1010
O	Outer track spacing（km/h）	2390

Project	Parameter	Project	Parameter
Quality（kg）	19410	Track center distance（mm）	1880
Pressure（kPa）	63.7	Track plate width（mm）	510/560
Engine model	WP7	Grounding length（mm）	2675
Min turning radius（mm）	2390/3745	Blade type	U the shovel
Rated power/ speed（kW/rpm）	152/1800	Max lift height（mm）	1010
Max torque（N.m）	1035	Max cutting depth（mm）	520
Forward/backward speed（km/h）	0-10	Construction precision（cm）	±2.5
Track plates（Unilateral/piece）	39	Construction scope（m）	5000

GROUP PRODUCTS



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