



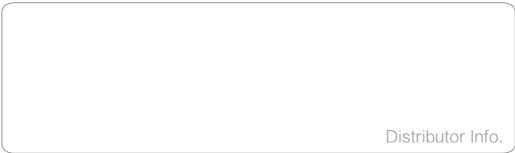
SANY MOTOR GRADER



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Distributor Info.

Due to our process of continuous innovation, materials and specifications are subject to change without notice.

© Printed in China File No.: 59010962 Date: Apr. 2019

SANY ROAD MACHINERY

SANY Heavy Industry Co., Ltd. is one of the largest complete equipment suppliers of road machinery. The products cover pavers, rollers, asphalt batching plants, graders, and milling machines etc.

Taking "Quality changes the world" as the mission and "Creating the greatest values for customers" as the duty, Hunan SANY Road Machinery Co., Ltd., has set up SANY (USA) Road Machinery Institute and SANY (Germany) Road Machinery Institute and integrated the most cutting-edge technologies into its products, of which: heavy graders designed by the United States and double drum vibratory rollers designed by Germany are high-quality products of internationally top level; the pavers and asphalt batching plants, having been best sellers in China for 5 consecutive years, are No.1 brand in China and sold well in over 60 countries across the world.

Faced with the construction of expressways, roads in airports and urban high-class roads and with the global market, we provide road construction complete equipment and series of solutions. We have created an unmatched service system to eliminate the customers' worries. In the service satisfaction surveys performed by China Association for Quality, SANY has ranked No.1 for 3 consecutive years and won high trust from the customers. Keeping "Construct roads in China, Connect with the world freely" in mind, SANY Road Machinery Co., Ltd. will spare no effort in serving the global economic development and road construction.



Contents

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STG SERIES MOTOR GRADER

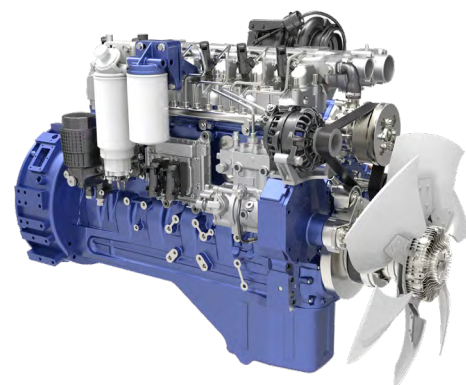
STG170C-8 STG190C-8 STG210C-8 STG230C-8

RELIABLE, EFFICIENT AND COMFORTABLE

- **Efficient and energy-saving:** heavy-load engine and VHP technology.
- **Reliable with heavy load:** reliable rear axle and work implements of rotary bearing structure.
- **Humanized design:** safe and comfortable ride and operation experience.
- **Comfortable and convenient:** easy maintenance and low operation cost.



STG170/190/210/230C-8 MOTOR GRADER



STG170/190 /210C-8 WEICHAH Engine



STG230C-8 SANY Engine

POWERFUL ENGINE WITH HIGH EFFICIENCY AND LESS FUEL CONSUMPTION

- WEICHAH/SANY high-power and heavy-load engine is strong and powerful.
- VHP technology can adapt to different work conditions, such as light load, middle load and heavy load, with different power curves, so that the machine can always work within the minimum fuel consumption range.

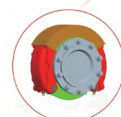
RELIABLE REAR AXLE AND WORK IMPLEMENTS OF ROTARY BEARING STRUCTURE

- Work implements adopt fully-sealed rotary bearing structure, which provides easy maintenance, high operation accuracy, low cost, and service life longer than 10000h.
- Rear axle adopts rotary bearing structure instead of conventional copper sleeve structure, which provides easy maintenance, high operation accuracy and service life longer than 10000h.
- 4-front and 2-rear disc-type brake is safer than drum brake with less braking distance and maintenance cost.

Slewing bearing



Caliper disc brake



Reinforced chain



NO-SPIN differentail lock



Slewing bearing working device

EASY AND CONVENIENT MAINTENANCE

- High-end SYCD liquid crystal display has operation instructions in multiple languages.
- Engine hood with wide opening provides large maintenance space and is easy to access for daily maintenance.
- Centralized arrangement of common electrical elements is more convenient for inspection and maintenance.
- Automatic fault diagnosis and maintenance tips, automatic monitoring of work conditions of engine and transmission.
- Fuel tank of super-large capacity is located at the rear of frame, which is convenient for fuel filling.
- Various filter elements and wearing parts, as well as 27 high-quality maintenance tools are provided along with the machine.



Fuel tank filler



SYCD screen

SAFE AND COMFORTABLE RIDE AND OPERATION EXPERIENCE

- ROPS/FOPS safe cab is equipped with high-grade interior, air conditioner with cooling and heating functions, fan, radio, sound system, cup holder, and cigar lighter (the same as USB interface in car).
- It also has horizontal sliding window, sun visors, curtains, radio, double rear view mirrors, and mechanical suspension seat with head rest.
- With LED lamps arranged at multiple positions, the operator has better vision at night.



Sliding windows



Luxurious cab



Radio, sound equipment, reversing video system

SANY MOTOR GRADERS

TECHNICAL SPECIFICATIONS

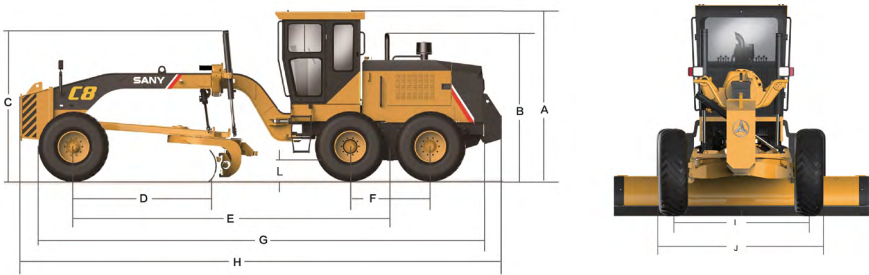
STG Series Motor Grader Technical Specifications

	Model	STG170C-8	STG170C-8W3(IN)	STG190C-8
Power System	Engine	Weichai	Weichai	Weichai
	Emission	China III	China III	China III
	Model	WP6G175E301	WP6G175E301	WP6G200E330
	Rated Power	129 kW	129 kW	147 kW
	Rated Rotation Speed	2000 rpm	2000 rpm	2200 rpm
	Peak Torque	760 Nm	760 Nm	900 Nm
Dimensions	Standard (with front and rear counterweight): L*W*H	8580mm × 2740mm × 3310mm	8580mm × 2740mm × 3310mm	9080mm × 2740mm × 3310mm
		/	/	/
	Front and Rear Axle Base	6127 mm	6127 mm	6082 mm
	Middle and Rear Wheel Base	1538 mm	1538 mm	1538 mm
	Min. Ground Clearance	410 mm	410 mm	410 mm
Load Spec.	Standard (with frontand rear counterweight)	14500 kg	14500 kg	15800 kg
		/	/	/
	Max.traction (Standard)	/	/	/
Operating Parameter	Blade Length	3660 mm (12ft)	3660 mm (12ft)	3660 mm (12ft)
	Blade Height	620 mm	620 mm	620 mm
	Blade Tilt Angle	± 90°	± 90°	± 90°
	Blade Rotation Angle	360°	360°	360°
	Blade Max. Lifting Height	450 mm	450 mm	450 mm
	Blade Max. Cuting Depth	630 mm	630 mm	630 mm
	Blade Cuting Angle Range	25°~75°	25°~75°	25°~75°
Moving Parameter	Gears	6 forward and 3 reverse	6 forward and 3 reverse	6 forward and 3 reverse
	Forward Speed	5/7/12/18/26/36 (km/h)	5/7/12/18/26/36 (km/h)	6/10/13/21/27/42 (km/h)
	Reverse Speed	5/12/26 (km/h)	5/12/26 (km/h)	6/13/27 (km/h)
	Front Wheel Steering Angle	± 45°	± 45°	± 45°
	Front Wheel Tilt Angle	± 17°	± 17°	±17°
	Joint Steering Angle	± 27°	± 27°	± 27°
	Front Axle Swing Angle	± 16°	± 16°	± 16°
	Min. Turning Radius	7.3 m	7.3 m	7.3 m
	Tire	17.5-25-12PR	/	17.5-25-12PR
Tank Capacity	Hydraulic Oil Tank Capacity	140 L	140 L	140 L
	Fuel Tank Capacity	300 L	300 L	350 L

Notes: (1) equipped with Jingda Axle
(2) equipped with Meritor Axle

STG Series Motor Grader Standard and Optional Configurations

Model	Standard	Optional
STG170C-8	12ft Moldboard	/
	Overload Protection Circle Drive	/
	HVAC	/
	/	Intake Preheater (meet -20℃)
	/	Rear Camera
	/	Front Scarifier
STG170C-8W3(IN)	/	Front Dozer Blade
	/	Five-tooth Rear Ripper
	12ft Moldboard	/
	Overload Protection Circle Drive	/
	HVAC	/
	/	intake preheater (meet -20℃)
STG190C-8	/	Rear Camera
	/	Front Scarifier
	/	Front Dozer Blade
	/	Five-tooth Rear Ripper
	12ft Moldboard	14ft Moldboard
	Overload Protection Circle Drive	/
STG190C-8	HVAC	/
	/	Intake Preheater (meet -20℃)
	/	Rear Camera
	/	Front Scarifier
	/	Front Dozer Blade
	/	Five-tooth Rear Ripper



STG170C-8 / 190C-8 / 210C-8 / 230C-8 Motor Graders Specifications

Size Code	Name	STG170C-8	STG170C-8W3(IN)	STG190C-8
A	Height to Top of Cab (mm)	3310	3310	3310
B	Height to Filter/Rain Shield (mm)	2830	2830	2885
C	Height to Top of Cylinders (mm)	2900	2900	2900
D	Length - Front Axle to Moldboard (mm)	2500	2500	2500
E	Length - Front Axle to Mid Tandem (mm)	6127	6127	6082
F	Length - Between Tandem Axles (mm)	1538	1538	1538
G	Length - Front Tire to Rear of Machine (mm)	8580	8580	8580
H	Overall Length - Standard / with Front Dozer Blade and Rear Ripper(mm)	8580/11100	8580/11100	9080/11100
I	Rear wheel distance (mm)	2280/2170	2280/2170	2280/2170
J	Width - Outside Front Tires (mm)	2580	2580	2580
K	Width - Outside Rear Lines (mm)	2740	2740	2740(1) 2620(2)
L	Ground Clearance at Rear Axle (mm)	410	410	410

Note1:(1) equipped with Jingda Axle;(2) equipped with Meritor Axle
Note2:Due to technical and product updates, data on specifications might change without prior notice.The pictures may differ from a real machine.

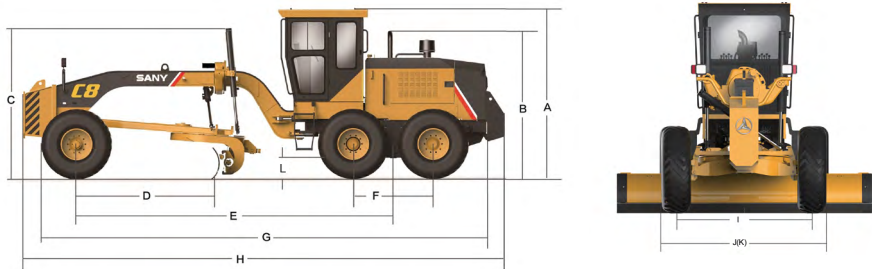
STG Series Motor Grader Technical Specifications

	Model	STG210C-8	STG210C-8	STG230C-8
Power System	Engine	Dongfeng Cummins	Weichai	SANY
	Emission	EU Stage II	China III	China III
	Model	6CTAA8.3-C215	WP6G210E330	D07S3-231E0
	Rated Power	160 kW	154 kW	170 kW
	Rated Rotation Speed	2200 rpm	2200 rpm	2200 rpm
	Peak Torque	980 Nm	900 Nm	925 Nm
Dimensions	Standard (with front and rear counterweight): L*W*H	9080mm × 2740mm × 3310mm	9080mm × 2740mm × 3310mm	9080mm × 2740mm × 3310mm
		/	/	/
	Front and Rear Axle Base	6082 mm	6082 mm	6082 mm
	Middle and Rear Wheel Base	1538 mm	1538 mm	1538 mm
	Min. Ground Clearance	410 mm	410 mm	410 mm
Load Spec.	Standard (with frontand rear counterweight)	16200 kg	16200 kg	16600 kg
		/	/	/
	Max.traction (Standard)	/	/	/
Operating Parameter	Blade Length	3660 mm (12ft)	3660 mm (12ft)	4270 mm (14ft)
	Blade Height	620 mm	620 mm	620 mm
	Blade Tilt Angle	± 90°	± 90°	± 90°
	Blade Rotation Angle	360°	360°	360°
	Blade Max. Lifting Height	450 mm	450 mm	450 mm
	Blade Max. Cutting Depth	630 mm	630 mm	630 mm
	Blade Cutting Angle Range	25°~75°	25°~75°	25°~75°
Moving Parameter	Gears	6 forward and 3 reverse	6 forward and 3 reverse	6 forward and 3 reverse
	Forward Speed	6/10/13/21/27/42 (km/h)	6/10/13/21/27/42 (km/h)	6/10/13/21/27/42 (km/h)
	Reverse Speed	6/13/27 (km/h)	6/13/27 (km/h)	6/13/27 (km/h)
	Front Wheel Steering Angle	± 45°	± 45°	± 45°
	Front Wheel Tilt Angle	± 17°	± 17°	± 17°
	Joint Steering Angle	± 27°	± 27°	± 27°
	Front Axle Swing Angle	± 16°	± 16°	± 16°
	Min. Turning Radius	7.3 m	7.3 m	7.3 m
	Tire	17.5-25-12PR	17.5-25-12PR	17.5-25-12PR
Tank Capacity	Hydraulic Oil Tank Capacity	140 L	140 L	140 L
	Fuel Tank Capacity	350 L	350 L	350 L

Notes: (1) equipped with Jingda Axle
(2) equipped with Meritor Axle

STG Series Motor Grader Standard and Optional Configurations

Model	Standard	Optional
STG210C-8 (Dongfeng Cummins)	12ft Moldboard	14ft Moldboard
	Overload Protection Circle Drive	/
	HVAC	/
	/	Rear Camera
	/	Front Dozer Blade
STG210C-8 (Weichai)	/	Five-tooth Rear Ripper
	12ft Moldboard	14ft Moldboard
	Overload Protection Circle Drive	/
	HVAC	/
	/	Intake Preheater (meet -20℃)
	/	Rear Camera
	/	Front Dozer Blade
STG230C-8	/	Five-tooth Rear Ripper
	14ft Moldboard	12ft Moldboard
	Overload Protection Circle Drive	/
	HVAC	/
	/	IntakePreheater (meet -20℃)
	/	Rear Camera
	/	Front Dozer Blade
	/	Five-tooth Rear Ripper



STG170C-8 / 190C-8 / 210C-8 / 230C-8 Motor Graders Specifications

Size Code	Name	STG210C-8	STG230C-8
A	Height to Top of Cab (mm)	3310	3310
B	Height to Filter/Rain Shield (mm)	2885	2885
C	Height to Top of Cylinders (mm)	2900	2900
D	Length - Front Axle to Moldboard (mm)	2500	2500
E	Length - Front Axle to Mid Tandem (mm)	6082	6082
F	Length - Between Tandem Axles (mm)	1538	1538
G	Length - Front Tire to Rear of Machine (mm)	8580	8580
H	Overall Length - Standard / with Front Dozer Blade and Rear Ripper(mm)	9080/11100	9080/11100
I	Rear wheel distance (mm)	2280/2170	2280/2170
J	Width - Outside Front Tires (mm)	2580	2580
K	Width - Outside Rear Lines (mm)	2740(1) 2620(2)	2740(1) 2620(2)
L	Ground Clearance at Rear Axle (mm)	410	410

Note1:(1) equipped with Jingda Axle;(2) equipped with Meritor Axle
Note2:Due to technical and product updates, data on specifications might change without prior notice.The pictures may differ from a real machine.

SMG SERIES HEAVY-DUTY MOTOR GRADER

Designed In the US Made In China

POWERFUL POWERTRAIN SYSTEM

- ◆ Direct drive power shift transmission delivers smooth, responsive shifting.

COMFORTABLE OPERATOR ENVIRONMENT

- ◆ Provides the operator with a 360 degree field of vision.
- ◆ "Silent ride" engineered cab.

PRECISION HYDRAULIC SYSTEM

- ◆ The load sensing hydraulic system provides adequate flow during multiple implement operation. The rapid, precise response to control input results in exceptional grading quality.
- ◆ The automatic regulation of pump flow based on load conditions results in increased fuel economy.
- ◆ In the optional "intelligent fan" cooling system, the fan speed is continuously variable the cooling system operating temperature.

RELIABLE STRUCTURE

- ◆ The precision, reliable, low maintenance circle bearing reduces maintenance costs.

CONVENIENT MAINTENANCE

- ◆ Conveniently located handrails and steps provide easy access to filters, fluids and service items.
- ◆ The centralized lay-out of filters are easy for maintenance.



TECHNICAL SPECIFICATIONS

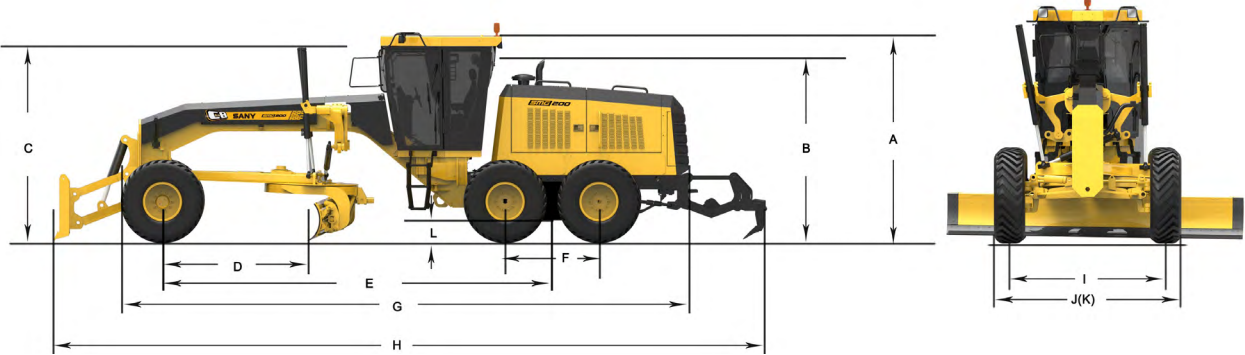
SMG Series Heavy-duty Motor Grader Technical Specifications

	Model	SMG200C-8	SMG200	SMG200-LR(LA)
Power System	Engine	Cummins	Cummins	Dngfeng Cummins
	Emission	EPA Tier 4(f)	EPA Tier III	EPA Tier III
	Model	QSL 9	QSC	QSB 6.7
	Rated Power	186 kW	153 kW	164 kW
	Rated Rotation Speed	2200 rpm	1950 (rpm)	2200(rpm)
	Peak Torque	1085Nm	1010 Nm	949 Nm
Dimensions	Basic Size : L*W*H	9187mm × 2725mm × 3498mm	8960mm × 2720mm × 3310mm	8946mm×2725mm×3310mm
	Front and Rear Axle Base	6300 mm	6175 mm	6175 mm
	Middle and Rear Wheel Base	1524 mm	1524 mm	1524 mm
	Min. Ground Clearance	370 mm	370 mm	370 mm
Mass Load	Weight of basic type	17960kg	16920 kg	16000 kg
Operating Parameter	Blade Length	4270 mm	3660 mm	3660 mm
	Blade Height	620 mm	620 mm	620 mm
	Blade Tilt Angle	± 90°	± 90°	± 90°
	Blade Rotation Agle	360°	360°	360°
	Blade Max. Lifting Height	480 mm	480 mm	480 mm
	Blade Max. Cuting Depth	715 mm	715 mm	715 mm
	Blade Cuting Angle Range	5°~40°	5°~40°	5°~40°
Moving Parameter	Gears	8 forward and 6 reverse	8 forward and 6 reverse	8 forward and 6 reverse
	Forward Speed	4.0/5.4/8.0/10.9/19.1/23.4/32.3/46.8(km/h)	3.8/5.1/7.5/10.3/16.1/21.9/30.1/43.8(km/h)	4.0/5.4/8.0/10.9/17.1/23.4/32.3/46.8(km/h)
	Reverse Speed	3.2/5.9/8.7/13.5/25.3/37 (km/h)	3.0/5.6/8.1/12.7/23.8/34.6 (km/h)	3.1/5.9/8.7/13.5/25.3/37 (km/h)
	Front Wheel Steering Angle	± 50°	± 50°	± 50°
	Front Wheel Tilt Angle	± 17°	± 17°	± 17°
	Joint Steering Angle	Left 22°, right 22°	Left 20°, right 20°	Left 20°, right 20°
	Front Axle Swing Angle	Up 16°, down 16°	Up 16°, down 16°	Up 16°, down 16°
	Min. Turning Radius	7.5 m	7.4 m	7.4 m
Tank Capacity	Tire	17.5-25-20PR	17.5-25-12PR	17.5-25-12PR
	Hydraulic Oil Tank Capacity	115 L	120 L	120 L
	Fuel Tank Capacity	340 L	380 L	380 L

SMG Series Heavy-Duty Motor Grader Standard and Optional Configurations

Model	Standard	Optional
SMG200C-8	14ft Moldboard	12ft Moldboard
	HVAC	/
	/	Front Dozer Blade
	/	front scarifier
	/	Rear Ripper
	Warning Light	/
	/	Automatic Leveling System
SMG200	12ft Moldboard	14ft Moldboard
	HVAC	/
	/	Front Dozer Blade
	/	front scarifier
	/	Rear Ripper
	/	Warning Light
	/	Automatic Leveling System
SMG200-LR (LA)	12ft Moldboard	14ft Moldboard
	HVAC	/
	/	Front Dozer Blade
	/	front scarifier
	/	Rear Ripper
	/	Warning Light
	/	Automatic Leveling System

Notes: Due to the fact that engine configurations may vary based on different options, technical specifications may change without prior notice. Plea



SMG200C-8 / SMG200C-8 / SMG200(LA)Motor Graders Specifications (The External Dimension Diagram Based SMG200C-8)

Size Code	Name	SMG200C-8	SMG200	SMG200-LR(LA)
A	Height to Top of Cab (mm)	3498	3310	3310
B	Height at Exhaust Stack (mm)	2915	3155	2842
C	Height to Top of Cylinders (mm)	3110	3110	3110
D	Length - Front Axle to Moldboard (mm)	2520	2520	2462
E	Length - Front Axle to Mid Tandem (mm)	6300	6175	6175
F	Length - Between Tandem Axles (mm)	1524	1524	1524
G	Length - Front Tire to Rear of Machine (mm)	9187	8960	8946
H	Overall Length - Front Dozer Blade to Ripper (mm)	11554	11137	11062
I	Width - Tire Center Lines (mm)	2184	2076	2184
J	Width - Outside Front Tires (mm)	2725	2720	2725
K	Width - Outside Rear Tires (mm)	2634	2492	2634
L	Ground Clearance at Rear Axle (mm)	370	370	370

Notes: Due to technical and product updates, data on specifications might change without prior notice.The pictures may differ from a real machine.

LEAN MANUFACTURING

We constantly strive to produce the best machines.
We are constantly breaking the records that we set.
Behind all of the honors is our dedication to our customers.



Unique design, optimized layout, revolutionary technology, attention to quality control, and modern manufacturing workflow.
Digitalized production management, fully automated welding robots, AGV trolleys, automated 3-D parts depot.
Continuous automation and smart technology research, extensive application of new technologies, equipment, and materials, combined with extremely strict quality control.
All of these have made each and every one of our road machinery products border on perfection - able to excel in any demanding work environment. At Sany, we pursue a path of development based on technology and innovation, constantly setting new benchmarks in the industry.

TEST SYSTEM



STG Motor Grader in reliability



SMG200 Motor Grader in Gradeability Test



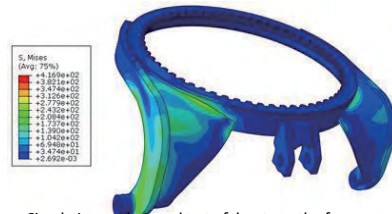
STG190C-8 Motor Grader in reliability test



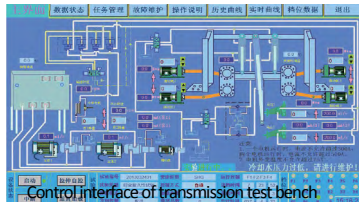
SMG200 Motor Grader in Traction Performance test



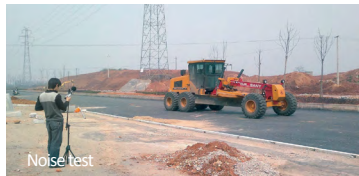
SAG200 Motor Grader in reliability test



Simulation analysis and test of the strength of key structural parts



Control interface of transmission test bench



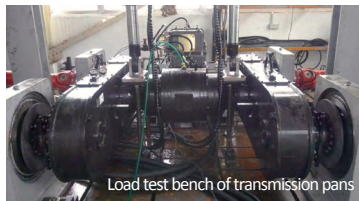
Noise test



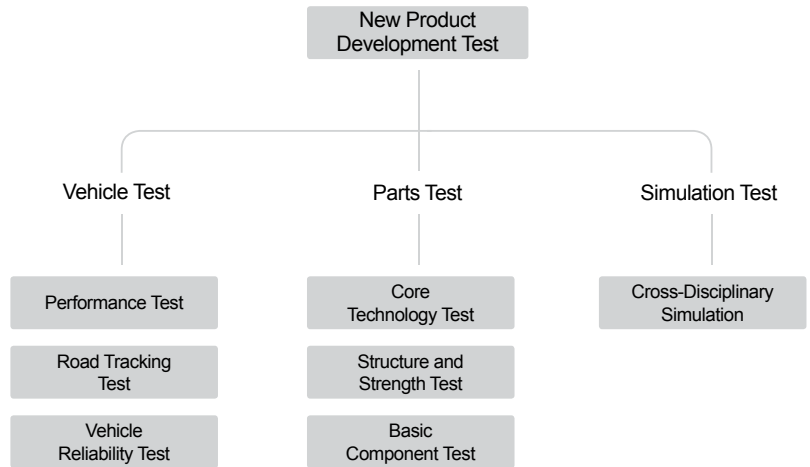
Transmission assembly line



Transmission performance testbed



Load test bench of transmission parts



R & D AND TEST SYSTEM

In order to create a world leading R & D platform for road machinery, Sany Road Machinery Co., Ltd. has formed a multi-system-and-department product development process in virtue of its 9 test and inspection centers such as remote monitoring service and fault diagnosis lab for engineering machinery, hydraulic lab, electromechanical hydraulic control and simulation lab, diesel lab, equipment fatigue (service life) lab, welding lab, strength (stress) lab, wearing resistant materials lab, auto chassis full automatic detection line and 58 enterprise labs.

By constructing "test infrastructure, new product development test, customer experience platform and working condition simulation database", Sany has established a 3-level system including whole vehicle test, parts test and simulation test; it has owned the development and relevant core technology research and test capacity of asphalt batching plant, paver, grader, road roller and milling machine.

CASES

Construction Cases
Location: Tibet
Time: August, 2016
Project: STG190C-8 working at
5000m altitude construction site
in Ali Tibet construction site



Location: Bangkok, Thailand
Time: March, 2014
Name of Project:
Bangkok National
Railway Station
(Landmark Project)

Location : Arkansas ,The U.S.
Time: September 2019
Name of Project:
Public Road Maintenance



Location: Beijing
Date: April, 2018
Project: Filling earthwork at
Universal Theme Park in Beijing



Location: Johannesburg,
South Africa
Time: August 2014
Name of Project:
Municipal Construction Project

