

QUALITY CHANGES THE WORLD

SANY®

SANY MOTOR GRADERS



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Dealer Information

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LEADING TECHNOLOGIES**



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SANY ROAD MACHINERY

Hunan Sany Road Machinery Co., Ltd, a subsidiary of Sany Heavy Industry, is one of the largest whole-set road machinery suppliers in China. Its products portfolios include six product series: the asphalt paver series, the roller series, the asphalt mixing equipment series, the motor grader series, the cold planer series, and the casting-style asphalt paving equipment series.

With its motto of "Quality changes the world," and the mission of "Creating Max. value for customers," the company has set up the Sany Road Machinery Research Institute in the US and the Sany Road Machinery Research Institute in Germany. Its products embody the most cutting-edge technologies in the world. Among them, the heavy-duty motor graders designed in America and the tandem drum compactors designed in Germany are the best of the best in the world. Its asphalt pavers and asphalt batching plants have had the largest market share in China for five years in a row and have been sold to over 60 countries as China's number one brand. The company's eco-friendly and energy saving asphalt batching plants, dubbed the "green asphalt plants," are industry-leading products in environment conservation. Its casting-style asphalt paving equipment will make history in road building.

For construction of highways, airports and higher-grade roads in cities and the global market, we provide our customers with whole-set road-building equipment and serial solutions. We have built a truly exceptional service system to rid our customers of any worry or concern. We have been voted the first place for three consecutive years in a national customer satisfaction survey conducted by the China Quality Association, which shows how much confidence our customers have put on us. We make road-building machinery for China and the world. We will strive non-stop to contribute to global economic development and road building.



SMG SERIES HEAVY-DUTY MOTOR GRADERS

Designed In the Us Made In China

Serial Products: SMG170-3、SMG200-3、SMG230-3

POWERFUL POWERTRAIN SYSTEM

- ◆ Direct drive power shift transmission delivers smooth, responsive shifting and increase working efficiency
- ◆ The engine has applied the power variable technology and is able to match different power curves according to the working condition, featuring low fuel cost(US Cummins Engine)

COMFORTABLE OPERATION ENVIRONMENT

- ◆ 360° Operator vision field
- ◆ "Silence-mode" engineered cab

PRECISE CONTROL OF HYDRAULIC SYSTEM

- ◆ The load sensitive hydraulic working system helps distribute hydraulic flow at different working mechanisms according to actual needs, respond rapidly and control precisely, resulting in excellent leveling quality
- ◆ It automatically regulates the flow volume of the system according to external load, saving engine power and lowering fuel cost
- ◆ The intelligent fan cooling system monitors the system's temperature realtime; the hydraulic motor controls the rotating speed of the fan steplessly, resulting in low power consumption and low noise (Option)

RELIABLE STRUCTURE

- ◆ Slewing bearing operation device featuring high precision, long maintenance periods, low failure rate, and low maintenance cost

CONVENIENT MAINTENANCE

- ◆ The centralized filter makes it more accessible and easier to check
- ◆ The well-designed handrail makes routine check easier to do



TECHNICAL PARAMETERS

SMG Series Heavy-duty Motor Grader Technical Parameters

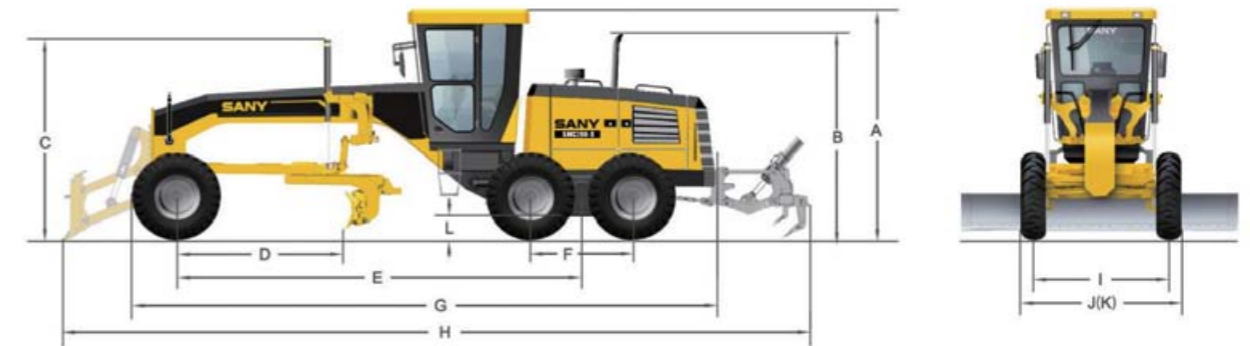
Model		SMG170-3	SMG200-3	SMG230-3	
Basic Parameter	Engine Model	QSB6.7-C170 (Stage III)	QSB6.7-C220 (Stage III)	QSC8.3-C240 (Stage III)	
	Rated Power (kW) /Speed (rpm)	129/2200	164/2200	179/2200	
	Max. Torque (N.m) /Speed (rpm)	800/1500	949/1500	1085/1500	
	Dimensions (Standard) (mm)	8398 × 2567 × 3214	8946 × 2725 × 3257	8910 × 2725 × 3214	
	Operating Weight (Standard) (kg)	14600	16120	16980	
Performance Parameter	Top Speed – Forward (km/h)	3.7/5.1/7.4/10.1/15.8/21.6/29.8/43.3	4.0/5.4/8.0/10.9/17.1/23.4/32.3/46.8	4.0/5.4/8.0/10.9/17.1/23.4/32.3/46.8	
	Top Speed – Reverse (km/h)	2.9/5.5/8.0/12.5/23.4/34.2	3.2/5.9/8.6/13.5/25.3/37.0	3.2/5.9/8.6/13.5/25.3/37.0	
	Minimum Turning Radius (m)	7.2	7.4	7.4	
	Max. Hydraulic Working System Pressure (MPa)	21	21	21	
	Gearbox Transmission System Pressure (MPa)	2.2~3.0	2.2~3.0	2.2~3.0	
Working Device Parameter	Max. Front Wheel Turning Angle (°)	± 50	± 50	± 50	
	Max. Front Wheel Tilt Angle (°)	± 17	± 17	± 17	
	Max. oscillation angle of front axle (°)	± 15	± 15	± 15	
	Max. oscillation angle of tandem box (°)	Forward 15 Backward 15	Forward 15 Backward 25	Forward 15 Backward 25	
	Ground Clearance at Rear Axle (mm)	370	370	370	
	Blade Range	Moldboard Width × Arc Radius (mm)	3660 × 620	3660 × 620	3660 × 620
		Max. Lift above Ground (mm)	480	480	480
		Max. Depth of Cut (mm)	715	715	715
		Max. Blade Position Angle (°)	± 90	± 90	± 90
		Blade Tip Range (°)	Forward 40 Backward 5	Forward 40 Backward 5	Forward 40 Backward 5
		Circle reversing rotation (°)	360	360	360
	Ripper	Max. Scarifying Depth (mm)	400	470	470
		Maximum lift above ground (mm)	590	522	522
		Max. Departure Angle (°)	25	22	22
		Max. Working Width (mm)	2044	2300	2300
	Dozer Blade	Max. Depth of Cut (mm)	229	229	229
		Max. Lift above Ground (mm)	614	614	614
		Max. Penetrating Angle (°)	63	63	63
Max. Working Width (mm)		2740	2740	2740	

Size Code	Name	SMG170-3	SMG200-3	SMG230-3
A	Height to Top of Cab (mm)	3214	3257	3214
B	Height to Exhaust Stack (mm)	2885	3155	3155
C	Height to Top of Cylinders (mm)	3110	3110	3110
D	Length – Front Axle to Moldboard (mm)	2428	2462	2520
E	Length – Front Axle to Mid Tandem (mm)	5932	6156	6175
F	Length – Between Tandem Axles (mm)	1538	1524	1524
G	Length – Front Tire to Rear of Machine (mm)	8398	8946	8910
H	Overall Length – Front Dozer Blade to Ripper (mm)	10627	11120	11137
I	Width – Tire Center Lines (mm)	2159	2077	2077
J	Width – Outside Front Tires (mm)	2567	2725	2725
K	Width – Outside Rear Tires (mm)	2550	2634	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.

SMG Series Heavy-Duty Motor Grader Standard and Optional Configurations

Model	Parts	Standard	Optional
SMG170-3	Moldboard	12ft	/
	Air-Con	/	Air Conditioner
	Dozer Blade	/	Front Dozer Blade
	Ripper	/	Rear Ripper (3-Tooth)
SMG200-3	Engine	Dongfeng (Stage III)	US Cummins (Stage III)
	Moldboard	12ft	14ft
	Air-Con	/	Air Conditioner
	Dozer Blade	/	Front Dozer Blade
SMG230-3	Ripper	/	Rear Ripper (5-Tooth)
	Moldboard	12ft	14ft
	Air-Con	/	Air Conditioner
	Dozer Blade	/	Front Dozer Blade
	Ripper	/	Rear Ripper (5-Tooth)



SAG SERIES MOTOR GRADERS

The World's First Hydraulic-Mechanical Transmission System

Serial Products: SAG120-3、SAG200-3

POWERFUL TRANSMISSION

- ◆ Combines advantages of both hydraulic and mechanical transmission, which is powerful
- ◆ Rear axle applies no-spin differential lock technology, enhancing synchronization
- ◆ Large torque rotary motor and worm-gear case with overload protection, making the blade more powerful in ground leveling

EXCELLENT EFFICIENCY AND SMART CONTROL

- ◆ Auto change of gears, easy to operate, highly efficient
- ◆ Speed range and initial gear can be set by operator, making operating extremely easy
- ◆ Intelligent reversing technology, reducing the time for direction shift

SAFETY AND COMFORT

- ◆ Step-less speed change, low gear-shifting impact and comfortable operation
- ◆ Joystick requires less exertion of physical force and less distance, is able to realize synchronous actions
- ◆ Trippl braking (when travelling, when parked, and assisted by the hydraulic system) leading to greater safety and reliability

CONVENIENT MAINTENANCE

- ◆ Engine cabin door on each of the two sides which can be opened wider, making maintenance points more accessible and giving more space for maintenance work
- ◆ Commonly used electrical devices centrally arranged, making it easier to check
- ◆ Filters centrally arranged, easier to access and maintain



TECHNICAL PARAMETERS

SAG Series Motor Grader Technical Parameters

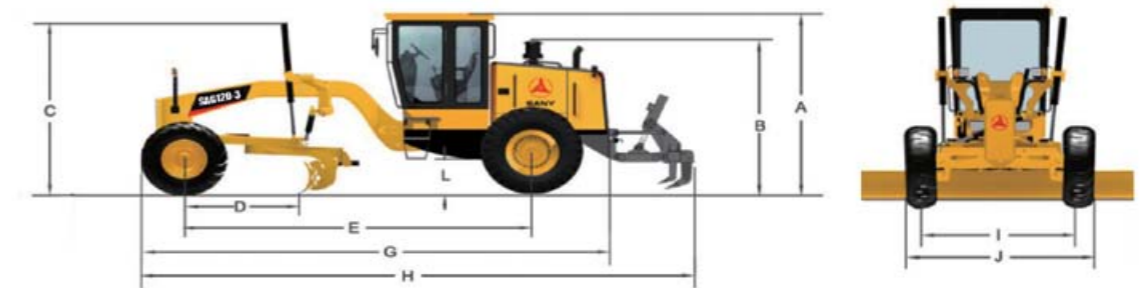
Model		SAG120-3	SAG200-3	
Basic Parameter	Engine Model	4BTAA3.9-C125 (Stage II)	6CTAA8.3-C215 (Stage II)	
	Rated Power (kW) /Speed (rpm)	93/2200	160/2200	
	Max. Torque (N.m) /Speed (rpm)	480/1400	980/1500	
	Dimensions (Standard) (mm)	6810 × 2280 × 3310	9254 × 2725 × 3260	
	Operating Weight (Standard) (kg)	8390	15600	
Performance Parameter	Top Speed Forward/Backward (km/h)	4/7/12/20/30	Working Mode 3/5/7/9/13	
			Travelling Mode 6/10/16/28/38	
	Minimum Turning Radius (m)	6.2	7.4	
	Max. Hydraulic Working System Pressure (MPa)	18	18	
Working Device Parameter	Gearbox Transmission System Pressure (MPa)	/	1.6 ~ 2.2	
	Blade Range	Max. Front Wheel Turning Angle(°)	± 45	± 50
		Max. Front Wheel Tilt Angle(°)	± 17	± 17
		Max. oscillation angle of front axle (°)	± 15	± 16
		Max. oscillation angle of tandem box(°)	/	Forward 15 Backward 15
	Ripper	Ground Clearance at Rear Axle (mm)	440	370
		Moldboard Width × Arc Radius(mm)	3050 × 620	3660 × 620
		Max. Lift above Ground (mm)	460	480
		Max. Depth of Cut (mm)	420	715
	Dozer Blade	Max. Blade Position Angle (°)	± 56	± 90
		Blade Tip Range (°)	Forward 30	Forward 40 Backward 5
		Circle reversing rotation (°)	360	360
		Max. Scarifying Depth (mm)	298	466
	Dozer Blade	Maximum lift above ground(mm)	510	590
		Max. Departure Angle (°)	24	25
		Max. Working Width (mm)	1494	2060
Max. Depth of Cut (mm)		/	229	
Dozer Blade	Max. Lift above Ground (mm)	/	614	
	Max. Penetrating Angle (°)	/	63	
	Max. Working Width (mm)	/	2740	
	Max. Working Width (mm)	/	2740	

Size Code	Name	SAG120-3	SAG200-3
A	Height to Top of Cab (mm)	3310	3260
B	Height to Filter/Rain Shield (mm)	2680	3180
C	Height to Top of Cylinders (mm)	2816	3110
D	Length - Front Axle to Moldboard (mm)	1987	2430
E	Length - Front Axle to Mid Tandem (mm)	5000	6229
F	Length - Between Tandem Axles (mm)	/	1538
G	Length - Front Tire to Rear of Machine (mm)	6810	9254
H	Overall Length - Front Dozer Blade/Tire to Ripper(mm)	7464	11254
I	Width - Tire Center Lines (mm)	1945	2273
J	Width - Outside Front Tires (mm)	2280	2725
L	Ground Clearance at Rear Axle (mm)	440	370

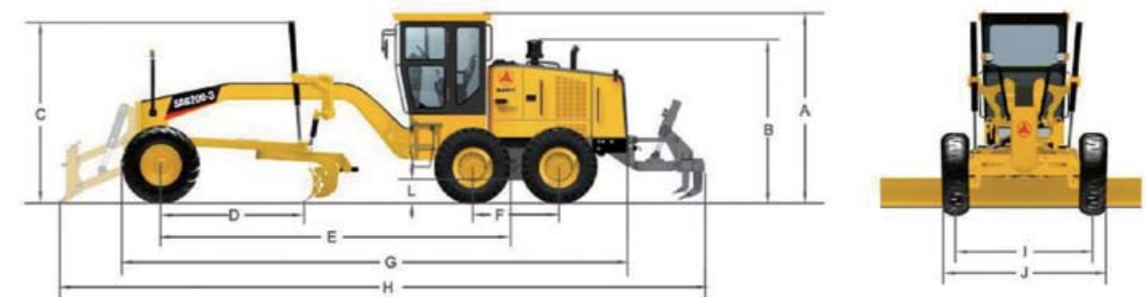
Notes:Due to technical and product updates, data on specifications might change without prior notice.The pictures may differ from a real machine.

SAG Series Motor Grader Standard and Optional Configurations

Model	Parts	Standard	Optional
SAG120-3	Engine	Dongfeng Cummins (Stage II)	/
	Moldboard	10ft	/
	Air Con	/	Air Conditioner
	Dozer Blade	/	/
	Ripper	/	Rear Ripper (3-Tooth)
SAG200-3	Engine	Dongfeng Cummins (Stage II)	Dongfeng Cummins (Stage III)
	Working Hydraulic System	Constant Displacement Pump + Open Center Control Block	Load-sensitive pump + Load-sensitive Control Block
	Moldboard	12ft	14ft
	Air Con	/	Air Conditioner
	Dozer Blade	/	Front Dozer Blade
	Ripper	/	Rear Ripper (5-Tooth)



SAG120-3 Motor Grader Specifications



SAG200-3 Motor Graders Specifications

LEAN MANUFACTURING

We try very hard to produce the best machines.
And we are constantly updating the records we have made.
Behind all 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 depot... Continued automation and smart technology research, extensive application of new technologies, equipment, and materials, together with extremely strict quality control. All these have made each and every one of our road machinery bordering perfection and able to excel in any complex working environment. We at Sany pursue a brand new path of development, depending on technology and innovation, and setting a new benchmark in the industry.

TEST SYSTEM



● SAG200-3 Motor Grader in blade-tip digging test



● SAG200-3 Motor Grader in reliability test



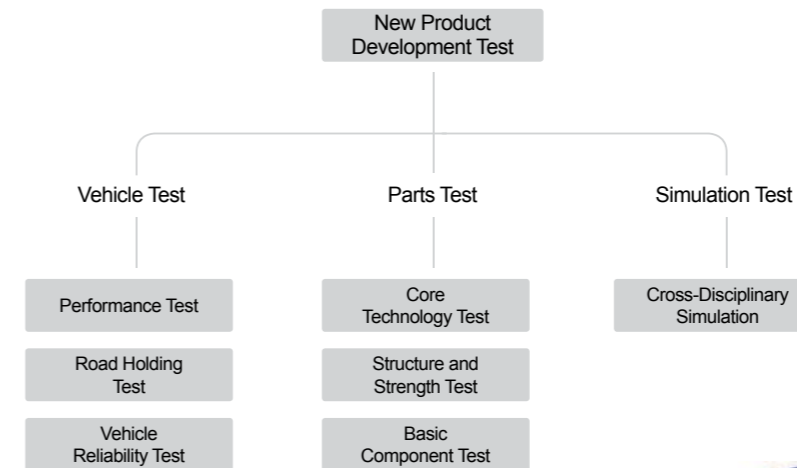
● SAG200-3 Motor Grader in Traction Performance Test



● SAG200-3 Motor Grader in Gradeability Test



● SMG230-3 Motor Grader in Stress Test



R&D and Test System

To build a leading road machinery R&D platform in the world, Sany Road Machinery now has at its disposal 9 testing and checking centers and 58 labs to form a cross-disciplinary and cross-sector product development work flow. The 9 testing and checking centers include: the Construction Machinery Remote Monitoring Service and Fault-Diagnosis Lab, the Hydraulics Lab, the Mechanical-Electrical-Hydraulic and Simulation Lab, the Diesel Engine Lab, the Equipment Fatigue (Working Life) Lab, the Welding Lab, the Strength (Stress) Test Lab, the Wear-Resistant Material Test Lab, and the Automobile Chassis Auto Check Lab. Through working on the testing infrastructure, new product development test, customer experience platform, and the work conditions simulation data base, we have put in place a three-Stage testing system comprising vehicle test, parts and components test, and simulation test. So far the system has the capacity to develop asphalt batching plants, asphalt pavers, motor graders, rollers, and cold planers and the research and testing capacity of relevant core technologies, so as to uplift our core competitiveness for research in an all-round way.



CASES



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

Location: Johannesburg,
South Africa
Name of Project:
Vereeninging



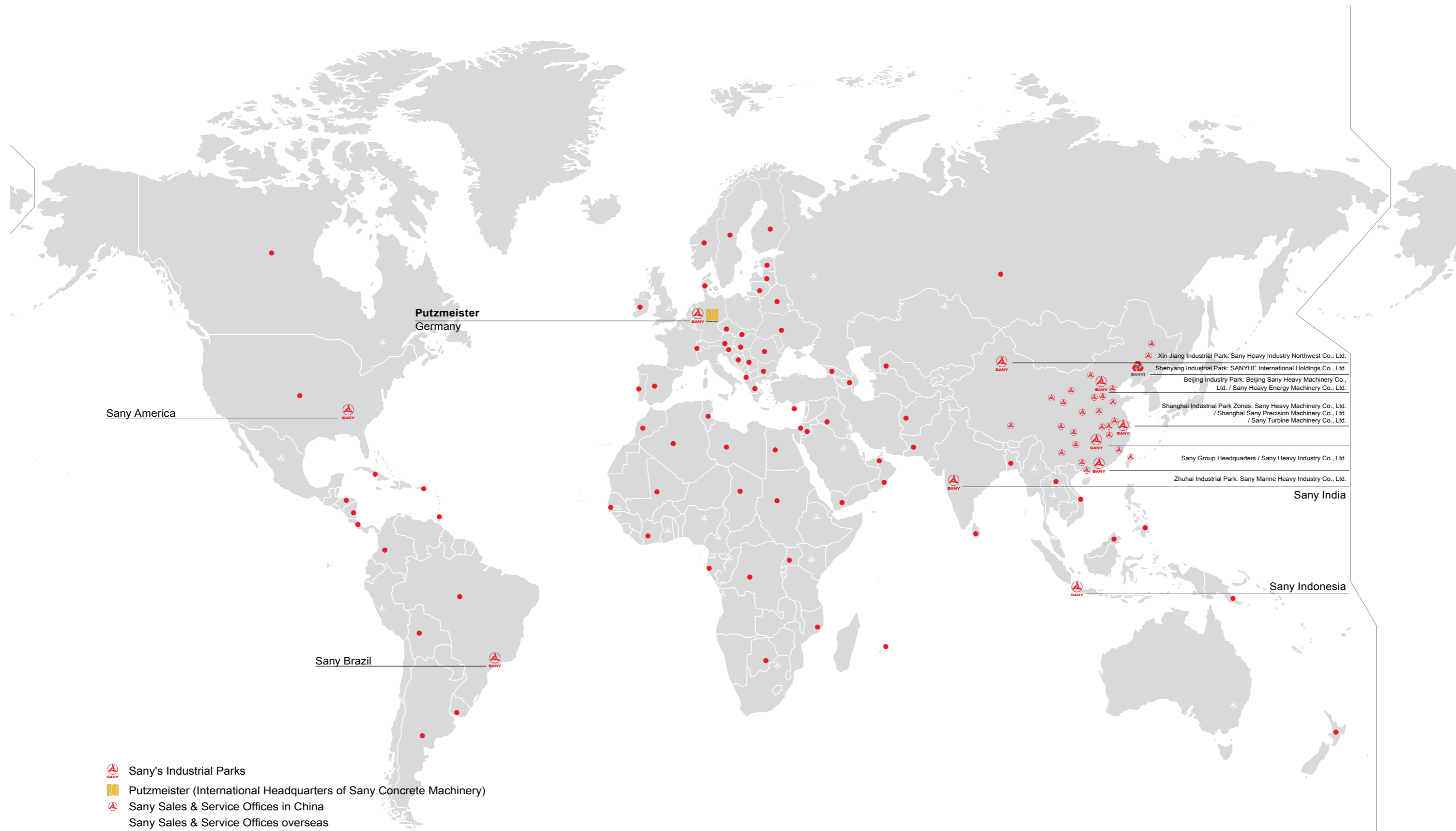
Location : New South Wales ,
Australia
Time: May, 2014
Name of Project:
Public Works Construction



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



Location: Lima, Peru
Time: July 2014
Name of Project: Municipal
Construction Project



-  Sany's Industrial Parks
-  Putzmeister (International Headquarters of Sany Concrete Machinery)
-  Sany Sales & Service Offices in China
-  Sany Sales & Service Offices overseas
-  Sany Global Coverage