





SANY HEAVY INDUSTRY CO., LTD.

SANY Industry Town, Changsha Economic and Technological Development Zone, Hunan Province, China Service Line: +86 4006 098 318 E-mail: crd@sany.com.cn

www.sanygroup.com



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

© Printed in China File No.: 59010962 Date: Mar 2016

Contents



Pos Sany SSR SERIES SINGLE DRUM ROLLERS

P11 SANY STR SERIES
TANDEM DRUM ROLLERS

P15 SANY SPR SERIES
PNEUMATIC ROLLERS

P₁₉ LEAN MANUFACTURING

P21 TEST SYSTEM

P₂₃ CASES



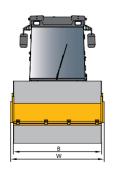
SANY ROLLE

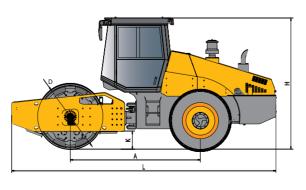
TECHNICAL SPECIFICATIONS

SSR Series Single Drum RollerTechnical Specifications

Model		SSR100-5	SSR120-5	SSR180-5S	SSR200-5S
	Operating Weight (kg)	10000	12000	18000	20000
Weight and Load	Weight at Drum (kg)	5700	7000	12400	13600
	Weight at Rear Axle (kg)	4300	5000	5600	6400
	Drum Static Linear Load (N/cm)	268	329	582	638
	Vibration Frequency (Hz)	30/30	32/36	29/35	29/35
	Nominal Amplitude (mm)	2.0/1.0	1.8/0.9	1.9/0.95	1.9/0.95
Compaction	Excitation Force (kN)	246/124	280/178	380/275	380/275
Mechanism	Drum Diameter (mm)	1500	1500	1600	1600
	Drum Width (mm)	2130	2130	2130	2130
	Drum Edge Thickness (mm)	25	25	40	40
	Travel Speed	0~8.2/0~10.1	0~8.2/0~10.1	0~60~8	0~60~8
	Travel opecu	0~6.2/0~7.3	0~6.2/0~7.3	$0\sim4.5~0\sim5.5$	0 ~ 4.5 0 ~ 5.5
	Theoretical Gradeability	51	51	45	45
		55	55	50	50
Maneuverability	Ground Clearance (mm)	480	480	410	410
waneuverability	Wheelbase (mm)	2950	2950	3185	3185
	Steering Angle (°)	±35	±35	±35	±35
	Swing Angle (°)	±12	±12	±12	±12
	Min. Turning Outside Diameter(mm)	11600	11600	12350	12350
	Tires	23.1-26-8PR	23.1-26-8PR	23.1-26-8	23.1-26-8
	Model	Cummins	Cummins	Sany	Sany
Engine	Wildel	QSB4.5-C160	QSB4.5-C160	D07S3T3	D07S3T3
Eligilie	Emissions	Tier III /Tier IV	Tier III /Tier IV	Tier III	Tier III
	Rated Power (kW)	119	119	180	180
	Battery (VxAh)	24×120	24×120	24×100	24×100
Capacity	Fuel Tank (L)	200	200	300	300
	Hydraulic Oil Tank (L)	120	120	150	150

Size Code	SSR100-5	SSR120-5	SSR180-5S	SSR200-5S
A(mm)	2950	2950	3185	3185
W(mm)	2240	2240	2270	2270
L(mm)	5750	5750	6620	6620
D(mm)	1500	1500	1600	1600
H(mm)	3190	3190	3330	3330
B(mm)	2130	2130	2130	2130
K(mm)	480	480	410	410

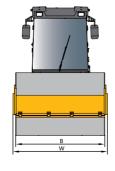


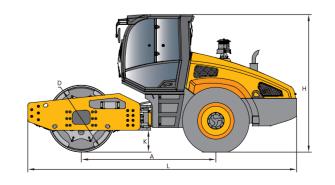


SSR Series Single Drum RollerTechnical Specifications

	Model	SSR200-3	SSR220-3	SSR260-5S
	Operating Weight (kg)	20000	22000	26000
Weight and Load	Weight at Drum (kg)	10000	11000	17000
	Weight at Rear Axle (kg)	10000	11000	9000
	Drum Static Linear Load (N/cm)	470	516	783
	Vibration Frequency (Hz)	29/35	29/35	27/31
	Nominal Amplitude (mm)	1.9/0.95	1.9/0.95	2.05/1.03
Compaction	Excitation Force (kN)	368/258	390/258	416/275
Mechanism	Drum Diameter (mm)	1600	1600	1700
	Drum Width (mm)	2130	2130	2170
	Drum Edge Thickness (mm)	40	40	40
	Travel Speed	0 ~ 6	0 ~ 6	0~80~11
	Traver Speed	$0\sim 10$	0 ~ 10	$0\sim6~0\sim7.5$
	Theoretical Gradeability	30	30	43 45
	Ground Clearance (mm)	440	440	495
Maneuverability	Wheelbase (mm)	3185	3185	3261
	Steering Angle (°)	±35	±35	±35
	Swing Angle (°)	±12	±12	±12
	Min. Turning Outside Diameter(mm)	12350	12350	12800
	Tires	20.5-25-16PR	20.5-25-16PR	23.5-25-16
	Model	Weichai	Weichai	Sany
Engine	iviouei	WP6G200E330	WP6G200E330	D07S3T3
Liigille	Emissions	Tier III	Tier III	Tier III
	Rated Power (kW)	147	147	180
	Battery (VxAh)	24×100	24×100	24×100
Capacity	Fuel Tank (L)	300	300	300
	Hydraulic Oil Tank (L)	100	100	200

Size Code	SSR200-3	SSR220-3	SSR260-5S
A(mm)	3185	3185	3261
W(mm)	2300	2300	2450
L(mm)	6480	6480	6717
D(mm)	1600	1600	1700
H(mm)	3300	3300	3190
B(mm)	2130	2130	2170
K(mm)	440	440	495





SANY ROLLEI

TECHNICAL SPECIFICATIONS

Single Drum Rollers SSR100-5/SSR120-5 Standard and Optional Configurations

Config.	Systems	Parts	Quantity	D	etails	Remarks		
	Roller, Standard 1.Engine 2.Travel Rump		2 Travel Pump 10. Electrical System					
Standard	Main Machine	SSR100-5 Single Drum Roller, Standard	1	4.Travel Motor 5.Vibration Motor 6.Reduction Gears 7.Transaxle	4.Travel Motor 5.Vibration Motor	4.Travel Motor 5.Vibration Motor	12.Front Frame 13.Rear Frame 14.Covering Part	Select one of three
_		SSR120-5 Single Drum Roller, Standard	1		15.Rear Axle Assembly 16.Center Articulated Frame			
	Cab	Cab Assembly	1	Work in windy and sandy conditions		Substitute operating platforms permissible		
	Cab + Air Conditioner	Cab Assembly	1	Work in windy sandy and	extreme temperature conditions	Substitute operating		
Optional	Cab + All Collulionel	Air Conditioner	1	Work in willdy, sandy, and t	extreme temperature conditions	platforms permissible		
<u>a</u>	Vibratory Drum with Welded pad foot	Drum with Welded pad foot	1	Vibratory drum with welded pad foot, which cannot be removed, suitable for compaction of clay, semi-clay, rocks, gravels, expansive soil, and coal cinder base		Substitute smooth drums permissible		
	Vibratory Drum with Assembled pad foot	Drum with Assembled pad foot	1	Vibratory drum with assembled pad foot, which can be removed to form a smooth drum; suitable for compaction of clay, semiclay, rocks, gravels, expansive soil, and coal cinder base				

Single Drum Rollers SSR180-5S/SSR200-5S Standard and Optional Configurations

Config.	Systems	Parts	Quantity	Det	ails	Remarks
Star		SSR180-5 Single Drum Roller, Standard	1	1.Engine 2.Travel Pump 3.Vibration Pump 4.Travel Motor	9.Vibratory Drum (Smooth) 10.Electrical System 11.Operating System 12.Front Frame	
Standard	Main Machine	SSR200-5 Single Drum Roller, Standard	1	5.Vibration Motor 6.Reduction Gears 7.Transaxle	13.Rear Frame 14.Covering Part 15.Rear Axle Assembly 16.Center Articulated Frame	Select one of two
	Cab	Cab Assembly	1	Work in windy and sandy conditions		Substitute operating platforms permissible
	Cab + Air Conditioner	Cab Assembly	1	Work in winds and on	trama tamparatura agaditiana	Substitute operating
Optional	Cab + All Conditioner	Air Conditioner	1	vvoik in windy, sandy, and ex	treme temperature conditions	platforms permissible
า <u>ล</u>	Vibratory Drum with Welded Pad Foot	Drum with Welded Pad Foot	1	Vibratory drum with welded pad foot, which cannot be removed, suitable for compaction of clay, semi-clay, rocks, gravels, expansive soil, and coal cinder base Substitute sm permis		
	Vibratory Drum with Assembled Pad Foot	Drum with Assembled Pad Foot	1	Vibratory drum with assembled pad foot, which can be romved to form a smooth drum; suitable for compaction of clay, semi-clay, rocks, gravels, expansive soil, and coal cinder base		

Single Drum Rollers SSR200-3/SSR220-3 Standard and Optional Configurations

Config.	Systems	Parts	Quantity	Det	ails	Remarks
Star		SSR200-3 Single Drum Roller, Standard	lard 2.Travel Pump 3.Vibration Pump		9.Electrical System 10.Operating System 11.Front Frame	
Standard	Main Machine	SSR220-3 Single Drum Roller, Standard	1	4.Travel Motor 5.Vibration Motor 6.Transaxle 7.Operating Platform 8.Vibratory Drum(Smooth)	12.Rear Frame 13.Covering Part 14.Rear Axle Assembly 15.Center Articulated Frame	Select one out of two
0	Cab	Cab Assembly	1	Work in windy and sandy conditions		Substitute operating platforms permissible
Optional	Cab + Air Conditioner	Cab Assembly	1	Work in windy, sandy, and extreme temperature conditions		Substitute operating
=	Cab · All Collutione	Air Conditioner	1			platforms permissible

Single Drum Rollers SSR260-5S Standard and Optional Configurations

Config.	Systems	Parts	Quantity	Det	ails	Remarks
Standard	Main Machine	SSR260-5 Single Drum Roller, Standard	1	1.Engine 2.Travel Pump 3.Vibration Pump 4.Travel Motor 5.Vibration Motor 6.Reduction Gears 7.Transaxle 8.Operating Platform	9.Vibratory Drum (Smooth) 10.Electrical System 11.Operating System 12.Front Frame 13.Rear Frame 14.Covering Part 15.Rear Axle Assembly 16.Center Articulated Frame	Compulsory
	Cab	Cab Assembly	1	Work in windy and sandy conditions		Substitute operating platforms permissible
	Cab + Air Conditioner	Cab Assembly	1	Work in winds and on	trama tamparatura agaditiana	Substitute operating
Optional	Cab + Air Conditioner	Air Conditioner	1	vvork in windy, sandy, and ex	treme temperature conditions	platforms permissible
<u>a</u>	Vibratory Drum with Welded Pad Foot	Drum with Welded Pad Foot	1	Vibratory drum with welded pad foot, which cannot be removed, suitable for compaction of clay, semi-clay, rocks, gravels, expansive soil, and coal cinder base		
	Vibratory Drum with Assembled Pad Foot	Drum with Assembled Pad Foot	1	to form a smooth drum; suitab	pad foot, which can be removed ble for compaction of clay, semi- ve soil, and coal cinder base	Optional

SANY STR SERIES TANDEM DRUM ROLLER

Designed In Germany Made In China

OPERATOR COMFORT AND SAFETY FEATURES

- Cab mounted on three stage vibration damping mounts
- Cab climate control
- Specially designed parking brake system

RELIABLE AND EFFICIENT POWER

- Sufficient power to operate on slopes
- Three stage fuel filter system
- Engine cover opens wide to provide easy access for maintenance

RELIABLE SPRINKLER SYSTEM

- 1,000L plastic lined water tanks provide water for up to 5.7 continuous hours of work
- Optimized spray amount prevents asphalt from sticking to drums and limits asphalt cooling.
- A back-up spray pump for greater reliability

INDUSTRY LEADING DRUM VIBRATION TECHNOLOGY

- The use of water wheel type lubrication on the vibratory bearing extends the bearing life up to 5,000 hours.
- Drum evenness and smoothness meets stringent highway surface work requirements.
- Road surface clearance height at the edge can be up to 950mm.

EFFICIENT CONTROL DESIGN

- ◆ The operating controls can swing up to 70° right or left to allow the operator a clear view when working at the road edges.
- ◆ The speed and direction control joystick are integrated for greater control

ADVANCED HYDRAULIC SYSTEM

- The closed loop hydraulic system has three filters for greater reliability.
- filters for greater reliability.



TECHNICAL SPECIFICATIONS

STR Series Full Hydraulic Tandem Roller Technical Specifications

	Model	STR30-5	STR100-5	STR130-5
	Operating Weight (kg)	3000	10500	13000
	Weight at Drum (kg)	1450	5250	6500
Weight and Load	Weight at Rear Axle (kg)	1550	5250	6500
	Front Drum Static Liner Load(N/cm)	118	270.8	298.3
	Rear Drum Static Liner Load(N/cm)	126	270.8	298.3
	Vibration Frequency (Hz)	55/65	40/50	43/50
	Nominal Amplitude (mm)	0.5	0.67/0.305	0.67/0.305
Compaction	Excitation Force (kN)	28/39	110/80	130/80
Mechanism	Drum Diameter (mm)	700	1240	1250
	Drum Width (mm)	1200	1900	2135
	Drum Edge Thickness (mm)	14	17	23
	Travel Speed	0~12	0 ∼ 12.5	0 ∼ 12.5
	Traver Speed	0~6	0 ~ 7.5	0 ∼ 7 .5
	Theoretical Gradeability Vibratory (%)	30	30	30
	Theoretical Gradeability Non-Vibratory(%)	40	35	35
Maneuver	Ground Clearance (mm)	240	380	380
ability	Wheelbase (mm)	1728	3530	3530
	Steering Angle (°)	±30	±33	±33
	Swing Angle (°)	±6	±8	±8
	Min Turning Outside Diameter(mm)	7800	13430	13900
	Crab Distance (mm)	1	±170	±170
	Model	Kubota	Cummins	Cummins
Engine	Wiodei	D1703-M	QSB4.5-C160	QSB4.5-C160
Liigilie	Emissions	Tier III	Tier III	Tier III
	Rated Power (kW)	26.1	119	119
	Battery (VxAh)	12×40	24×100	24×100
Capacity	Water Tank (L)	160	960	960
Capacity	Fuel Tank (L)	45	200	200
	Hydraulic Oil Tank (L)	28	96	96

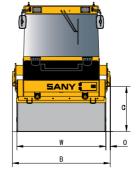
Tandem Drum Rollers STR30-5 Standard

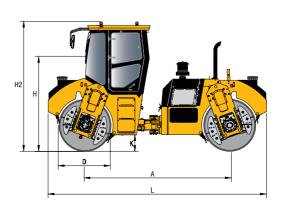
Config.	Systems	Parts	Quantity	Details	
Standard	Main Machine	STR30-5 Tandem Drum Roller, Standard	1	1.Engine 2.Travel Pump 3.Vibration Pump 4.Travel Motor 5.Vibration Motor 6.Reduction Gears 7.Transaxle 8.Operating Platform	9.Electrical System 10. Vibratory Drum (Smooth) 11.Front Frame 12.Rear Frame 13.Water-Spraying System 14. Covering Parts

Tandem Drum Rollers STR100-5/STR130-5 Standard and Optional Configurations

Config	Systems	Parts	Quantity	De	tails	Remarks
Standard	Main Machine	STR100-5 Tandem Drum Roller, Standard	1	1.Engine 2.Travel Pump 3.Vibration Pump 4.Travel Motor	9.Electrical System 10. Vibratory Drum (Smooth) 11. Rotating Seat	Choose one of two
dard	Main Machine	STR130-5 Tandem Drum Roller, Standard	1	5.Vibration Motor 6.Reduction Gears 7.Transaxle 8.Operating Platform	12.Front Frame 13.Rear Frame 14.Water-Spraying System 15. Covering Parts	Choose one of two
	Cab	Cab Assembly	1	Best for windy ar	Best for windy and sandy conditions	
Optional	Cob I Air Conditioner	Cab Assembly	1	Best for windy and sand	y and extreme temperature	Substitute operating
	Cab + Air Conditioner	Air Conditioner	1	con	ditions	platform allowed

Size Code	STR30-5	STR100-5	STR130-5
A (mm)	1728	3530	3530
B (mm)	1280	2116	2335
C (mm)	550	950	950
D (mm)	700	1240	1250
H (mm)	1755	2275	2280
H2 (mm)	2535	3107	3113
K (mm)	240	380	380
L (mm)	2515	5300	5300
O (mm)	40	100	100
W (mm)	1200	1900	2135







TECHNICAL SPECIFICATIONS

SPR Series Pneumatic Roller Technical Specifications

	Model	SPR200-5	SPR260-5	SPR300-5
	Max. Operating Weight (kg)	20000	26000	30000
	Min. Operating Weight (kg)	Min. Operating Weight (kg) 10000 11000		11000
Compaction Mechanism	Ground Pressure (kPa)	200~480	200~520	200~540
	Single Tire Load (t) 2.5 2.89		3.33	
	Tire Inflation Pressure (Kpa) 200~800 200~800		200~800	
	Compaction Width (mm) 2085 2368		2368	2368
	Overlap (mm)	36	63	63
	Working Speed (km/h)	0~7.6	0~6.4/0~9.8	0~6.4/0~9.8
	Travel Speed (km/h) 0~14 0~14.4		0~14.4	
	Streering Angle (°)	30	30	30
Maneuver	Gradeability (%)	25	25	25
ability	Swing Distance (mm)	50	50	50
	Ground Clearance (mm)	350	380	380
	Wheelbase (mm)	3750	4170	4170
	Min. Turning Outside Diameter (mm)	16850	19000	19000
	Model	Cummins	Cummins	Cummins
	Wodel	4BTAA3.9-C125	QSB4.5-C160	QSB5.9-C180
Engine	Emissions	Tier II	Tier III	Tier III
	Power (kW)	93	119	132
	Accumulator (VxAh)	24×120	24×120	24×120
	Water Tank (L)	500	500	500
Capacity	Fuel Tank (L)	160	200	200
	Hydraulic Oil Tannk (L)	100	100	100

Size Code	SPR200-5	SPR260-5	SPR300-5
L (mm)	5000	5435	5435
B (mm)	2085	2368	2368
H (mm)	3275	3280	3280
A (mm)	3750	4170	4170
W (mm)	2036	2279	2279
K (mm)	350	380	380

Pneumatic Rollers SSPR200-5/PR260-5/SPR300-5 Standard and Optional **Configurations**

Config.	Systems	Parts	Quantity	Details	Remarks
Standard	Main Machine	SPR260-5/SPR300-5 Pneumatic Roller, Standard	1	1.Engine 2.Travel Pump 3.Travel Motor 4.Transaxle 5. Cab 6. Front Covering Part 7. Front Wheel Assembly 8. Rear Wheel Assembly 9. Electrical System 10.Frame Assembly 11. Water Spraying System	
	Air Conditioner	Air Condition System	1	Work in windy, sandy, and extreme temperature conditions	Optional
Optional	Rear Vision System	Rear Vision System	1	Work in confined areas such as residential areas	Optional
	Centralized Inflation and Auto- Lubrication System	Centralized Inflation and Auto-Oil-wiping System	1	High-grade road works	Optional

Config.	Systems	Parts	Quantity	Details	Remarks
Standard	Main Machine	SPR200-5 Pneumatic Roller, Standard	1	1.Engine 2.Travel Pump 3.Travel Motor 4.Transaxle 5. convertible 6. Front Covering Part 7. Front Wheel Assembly 8. Rear Wheel Assembly 9. Electrical System 10.Frame Assembly 11. Water Spraying System	
Optional	Cab	Cab	1	Work in windy, sandy, and extreme temperature conditions	Optional
	Air Conditioner	Air Condition System	1	Work in windy, sandy, and extreme temperature conditions	Optional (Air conditioning is optional only when the cab is selected)
	Rear Vision System	Rear Vision System	1	Work in confined areas such as residential areas	Optional (Rear view camera is optional only when the cab is selected)
	Centralized Inflation and Auto- Lubrication System	Centralized Inflation and Auto-Oil-wiping System	1	High-grade road works	Optional





LEAN MANUFACTURING

Sany uses a lean manufacturing system designed to produce reliable products in the most efficient manner possible.









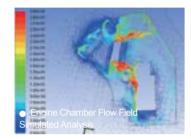




Sany's world-class road machinery production line is the result of advanced design, optimized layout, and technical innovation. Sany continuously researches automation and intelligent equipment technologies and has created an information-oriented production management system, utilizing fully automatic robotic welders, automatically guided vehicles (AGVs) and automated warehouses. Rigorous quality control ensures that each machine is defect free, even when working in the most complicated conditions.

Sany has set a new standard of engineering for the machinery industry to meet.

TEST SYSTEM







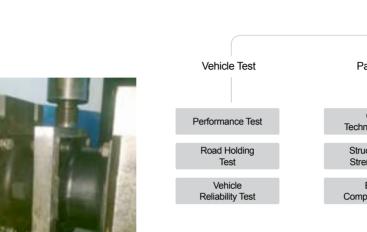






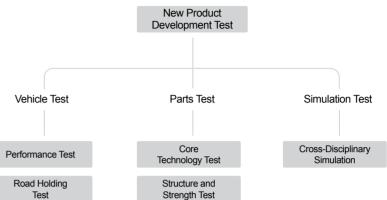






R&D and Test System

To build the 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 to increase our overall competitiveness.













CASES



The construction of the 2,000 kilometer Chita-Haba highway in Russia used six SANY tandem drum rollers and three pneumatic rollers.



The construction of BR-116 in Rio-Negroof PR in southern Brazil used SANY's SPR260 pneumatic rollers. The 1.9 billion USD, 412.7 kilometer, federally chartered road connects Curitiba PR and the borders between Santa Catarina and Rio Grande do Sul. Daily traffic on the road is about 78,390 vehicles.

A SSR120 single drum roller along with other SANY equipment is shown here working at the Los Tres Pastorcitos quarry in Arequipa Peru. The quarry is located at an altitude of 2,300m above sea level.



SANY single drum rollers and pad foot shell kit rollers were used in the construction of the ring road surrounding the city of Sao Paulo, Brazil. The 180km road is 23km from the city center and will significantly improve traffic flow within and around the city.



