

**Better gradeability: better gradeability
than competitors to get more jobs**

- ◆ Optimized front and rear drive capacity and mass distribution, achieving the maximum gradeability of 65% in the industry and better adaptability to working conditions.

**More comfortable and safer driving:
no fatigue during long-term driving**

- ◆ New generation of cambered noise reduction and vibration reduction cab (the best noise and vibration reduction performance in the industry), optimized air conditioning outlet (from up to straight), ergonomic manipulation space, making driving a pleasant experience.



C10S Series



SANY HEAVY INDUSTRY CO., LTD.

Sany Industrial City, Changsha Economic and Technological Development Zone, Hunan Province, China
Zip: 410100
Fax: 0086-731-85835199 Enquiry and Complaint Telephone: 0086-4006098318

Warm reminder:
As the technology is constantly updated, technical parameters and configurations are subject to change without prior notice.
The machine on the picture may include additional equipment, this album is for reference only, subject to the actual.
The copyright belongs to SANY Heavy Industry, and no part of this catalog may be reproduced or copied for any purpose without SANY Heavy Industry's written permission.

© China print Apr. 2025 edition



Scan the QR code to follow
the WeChat Official Account of
SANY Road Machinery

V 20250409



SPECIFICATION



**Road roller
SSR120C-10S**
Euro II

QUALITY CHANGES THE WORLD
www.sanyglobal.com

Product Highlights

**More earnings: 10% more efficient
in road-rolling than competitors**

- ◆ High-frequency vibration and even compaction (the industry's highest vibration frequency is 40Hz, the maximum exciting force is 280kN, and amplitude uniformity <7%), achieving a compaction efficiency and quality 10% better than those of competitors.

**Less cost: 10% more fuel saved
than competitors**

- ◆ ECO energy-saving technology: The engine works in the optimal economic zone (1850rpm) with unchanged compaction performance, and the fuel consumption is 10% lower than that of competitors under the same working condition.

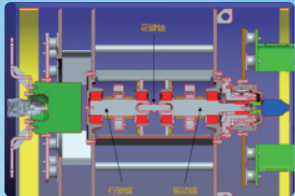


SSR120C-10S

Road roller
C10S Series

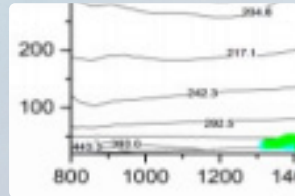
Faster and better compaction

- ◆ The excitation force is 280/216kN, and the compaction capacity is stronger;
- ◆ The maximum vibration frequency is increased to 40Hz, and the compaction efficiency is higher;
- ◆ The amplitude uniformity is less than 7%, and the compaction quality is higher.



Lower fuel consumption, 9–11L/h for high-frequency and high-speed compaction

- ◆ Intelligent load matching technology, with comprehensive fuel consumption 10% lower than that of competitors;
- ◆ The engine features customized curve and increased energy-saving speed range, reducing specific fuel consumption by 3–5g/kW.h;
- ◆ SANY ECO energy-saving technology ensures that the engine works in the optimal economic zone (1850rpm) and the compaction performance remains unchanged (the maximum vibration frequency and excitation force).



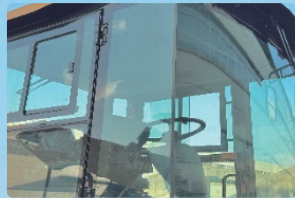
Super gradeability

- ◆ Reinforced mine rear axle (speed ratio increased to 64), with the theoretical gradeability improved from 53% to 65%;
- ◆ The front and rear mass distribution and the front and rear driving forces of the complete machine are optimally matched to improve the adaptability to working conditions;
- ◆ The driving force of front drums and rear tires can be adjusted separately to effectively prevent slipping of drums or tires.



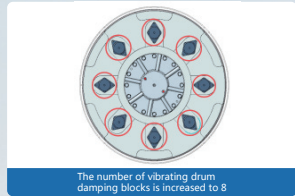
New generation of noise and vibration reduction cab

- ◆ The cab is certified by FOPS&ROPS, which makes it safer and more reliable;
- ◆ The new generation of noise and vibration reduction cab has a good damping effect, with only 76.8 dB inside the cab and 107 dB outside the cab;
- ◆ Ergonomic control space, curved panoramic front windshield, unobstructed view (no A-pillar), making driving more comfortable and safer;
- ◆ High-power air conditioning system, four-wraparound air outlet in the cab (from up to straight); better air tightness. The indoor temperature can be cooled to 19.4°C within 15 minutes in summer.



The reliability of core components (vibrating drum, rear axle, etc.) is comprehensively upgraded to ensure durability

- ◆ Reinforced four-point support + vibration bearing waterwheel lubrication technology (patent) is adopted for the vibrating drum, with a service life of more than 10,000 hours;
- ◆ The number of damping blocks at the traveling end of vibrating drum is increased to 8;
- ◆ Reinforced mine rear axle is adopted (the planetary reducer has independent lubrication, with larger modulus of main reducer, and the number of wheel-hub planet gears is increased from 3 to 4) to ensure durability for more than 5,000 hours.



One-stop maintenance (1.1m above the ground), large opening range (61°) of cover parts

- ◆ All filters are facing outward, which is convenient for maintenance personnel to replace them directly outside the frame;
- ◆ Integrated cover (integrated side plate), opening range up to 61° , easy and convenient maintenance;
- ◆ The frame is only 1.1m above the ground, realizing one-stop maintenance.

Economic value analysis

Efficient compaction, earning an additional RMB 12,000 per year:

- ◆ Large exciting force, good uniformity, with efficiency and quality more than 10% higher, making an additional profit of RMB 12,000/year;
Scenario 1: Calculated according to the variable quantities and more pay for more work, SANY is 10% more efficient in road-rolling than competitors every year. According to the industry average annual income of RMB 120,000, SANY earns an additional RMB 12,000 (RMB 120,000 × 10%=RMB 12000) every year;
- ◆ Scenario 2: Calculated according to the fixed quantities, SANY has high efficiency and saves 10% of time for the same project. According to the average annual construction hours of 1,500 hours, SANY saves about RMB 12,000 (oil price RMB 8/L, oil consumption 10 L/h, 150 h × RMB 8/L × 10 L/h =RMB 12,000) every year. In addition, the driver's salary can be saved for 1 month;
- ◆ Compaction amplitude uniformity < 7%, with less roughness of pavement.

Low O&M cost, saving RMB 14,000/year:

- ◆ The fuel consumption is lower, the engine features customized curve, intelligent load matching and unique ECO energy-saving mode, and the fuel consumption of high frequency and high speed compaction is as low as 9–11L/h (fuel price: RMB 8/L; annual working time: 1500h; fuel consumption reduction: 1L/h), saving RMB 12,000/year;
- ◆ The maintenance takes the least time, saving 50% of time and RMB 2,000/year in labor cost.

Product options and smart kit (*)

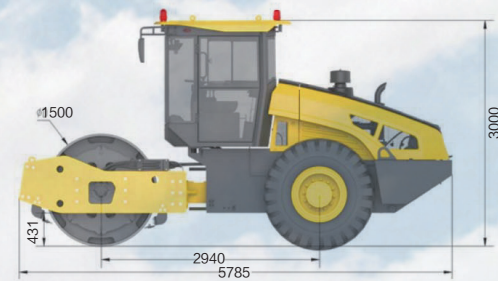
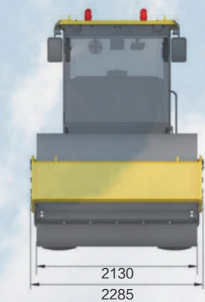
Optional configuration	Application Scenarios and Descriptions	SSR120C-10S(Euro II)
Smooth wheel	Compaction of earthwork, cement stabilized macadam and other subgrade	●
Combined padfoot	Commonly used for clay compaction; padfoot removable	○
Welded padfoot	Padfoot cannot be removed	○
Cab	Enclosed manoeuvring space with air conditioning	●
Driving shed	Open manoeuvring space without air conditioning	○
Rear axle without differential lock	Applicable to conventional subgrade compaction	●
Rear axle with differential lock	Used for compaction of sandy and soft subgrades Force the left and right tires to roll at the same time, so as to avoid slipping.	○
Tractor tire (herringbone type)	Used for compaction of soft and slippery earthwork subgrade Stronger grip for better driving force of tires.	○
Standard buoyancy tire (quincunx type)	Commonly used for compaction of cement stabilized macadam and sandy land; Small tire indentation and large contact area with the ground.	●
Thickened buoyancy tire (quincunx type)	Deep pattern, more skid-resistant and wear-resistant	○
Electronic anti-skid system	Often used for compaction of subgrade on sandy land and with large slope (≥30%); Intelligently adjusting the driving force of drums and tires to avoid slipping.	○
Intelligent rolling system	Used for key projects such as expressways and high-speed railways (with strict density requirements); Visually display compactness changes in real time through light display.	○
Backup camera	Display real-time images at the rear of cab; Integrate images into the display screen of cab.	○
Manual release of parking brake	Emergency: When the engine cannot be started, it is urgent to drag the machine away from the site; Press the button manually to release the reducer and rear axle brake, so as to facilitate the dragging of the machine	○

●Standard ○Optional

Product Parameters

Overall Dimensions

All dimensions are approximate and overall dimensions vary depending on the service condition of the device.



Unit: mm

Item		Performance parameter	Item		Performance parameter
Load	Operating mass (kg)	12400	Maneuverability	Minimum ground clearance (mm)	431
	Mass allocated to vibrating drum (kg)	6950		Wheelbase (mm)	2940
	Mass allocated to driving axle (kg)	5450		Steering angle (°)	±35
	Static linear load of vibrating drum (N/cm)	326		Swing angle (°)	±12
Compaction	Vibration frequency (Hz)	32/40		Engine	Minimum turning outer diameter (mm)
	Nominal amplitude (mm)	1.8/0.9	Tire specification		23.1-26
	Excitation force (kN)	280/216	Supplier		DCEC
	Diameter of vibrating drum (mm)	1500	Model	4BTA3.9-C125	
	Width of vibrating drum (mm)	2130	Emission	Euro II	
	Vibrating drum rim thickness (mm)	25	Rated power (kW)	93	
Maneuverability	Travel speed (km/h)	0~5	Capacities	Battery, V×Ah	24×120
		0~6		Fuel tank (L)	200
		0~9		Hydraulic oil tank (L)	80
		0~12			
	Theoretical gradeability	65%			

