



# SANY

Quality Changes the World



## SANY SINGLE DRUM ROLLER SMR SERIES

# ENERGY SAVING STAR, LEADING THE INDUSTRY



## P1

### Overview

Detailed introduction to the main functions and features for the integrated machine

## P4

### Reliability

International branded key parts and complete testing system ensures high reliability

## P6

### Performance

The design concept of 'more than expected' brings extra benefits to customers

## P7

### Equipment Specifications

Main technical specifications are listed on this page





# OVERVIEW

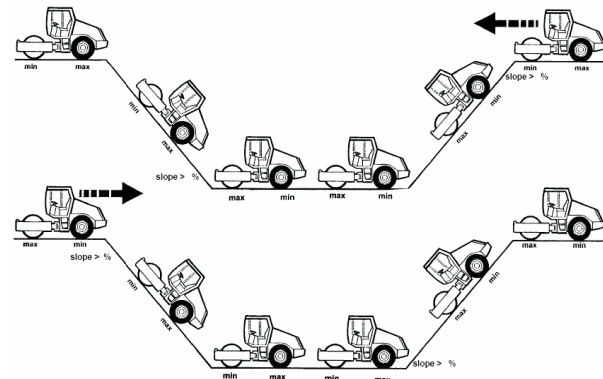
## Streamline Design

New streamline design of SANY mechanical roller awarded 2011 'Furong Cup' Enterprise Innovation Prize of Hunan province in China.



## Anti-Slip Control System (Optional)

Anti-slip control system improves the machine's adaptability to different jobsites and gradeability.



## Rear-Positioned Triple Pump

The triple pump is positioned in the rear part of the roller for easy maintenance.



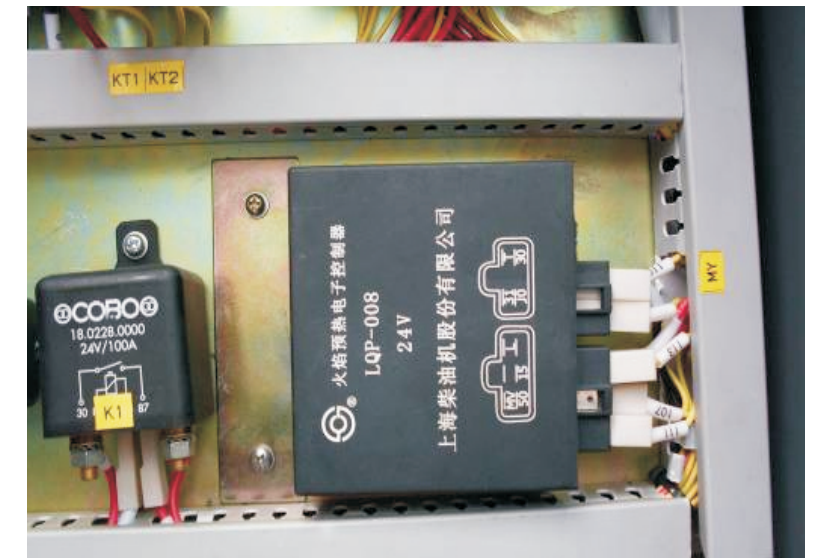
## Visibility

Wide rear view meets the international safety standard of 1m × 1m.



## Electrical System

SANY patented SYMC electrical system is equipped with LCD display screen. It features self-diagnose and easy to upgrade.





## Driver's Cab

The cab with FOPS & ROPS certified highly ensures operator's security. Devices such as air conditioner, cup seat, speakers are equipped to create a spacious & comfortable space for the operator.



Radio



Cup Seat



Driver's cab

## Operation Device

Travel & vibration are all controlled by just one joystick. With a steering wheel and a red button, operation of SANY tandem roller becomes easy and less fatigue. Vibration is automatically started if traveling speed goes over 1 km/h.



## RELIABILITY

### Technical Features Of The Roller

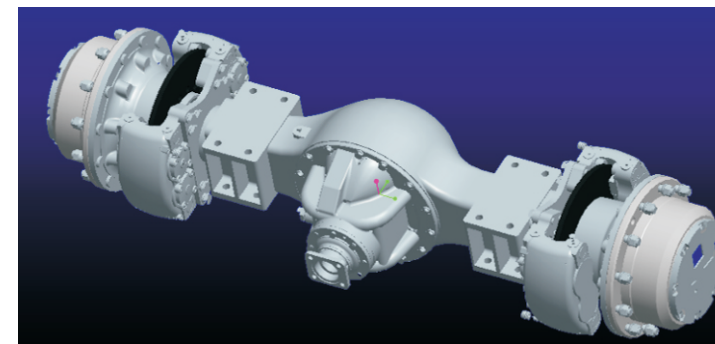
- Traveling system with 4-gear stepless speed regulation and 4 traction modes.
- The unique pouch-type positive lubrication mechanism is adopted to lubricate and cool off the vibration bearing, which greatly improves the service life of the vibration bearing.
- 4-grade vibration absorbing system and mechanical damping device provide a comfortable working environment for operator.
- 3-step brake system including traveling brake, parking brake and emergency brake ensures safe and reliable operation.
- Key parts are imported from international branded company to ensure reliability of the machinery.



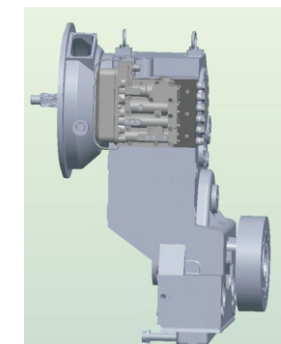
Four-point support



4-grade vibration absorbing system



Made in China



Gear box



Hydraulic parts



Hydraulic parts



## Lean Manufacture

Key parts are machined by digital welding robots and digital machining center. Automatic assembly production line is adopted in the workshop to improve working efficiency.



## Testing

Before being put into market, every new machine must go through strict tests in all aspects (including vibration parameters, vibration absorbing effects, power matching, ergonomics, stress testing, etc.) and reliability tests on site (> 1000h).

## Key Parts

Key parts are purchased from international branded company to ensure machinery's reliability, such as Deutz engine, DANA rear axle, Rexroth or Sauer hydraulic components, Bonfiglioli or Rexroth reducer, FAG vibration bearing and so on.

## SYMC Electrical System

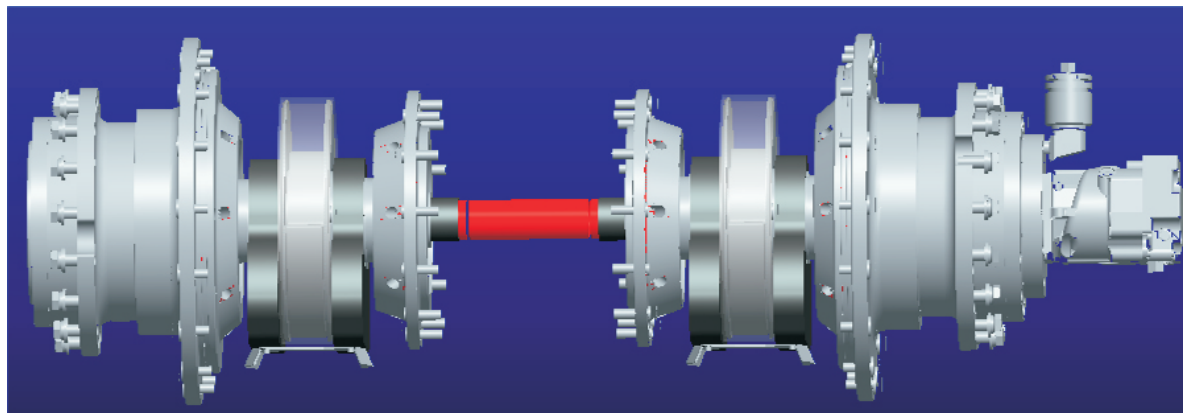
SANY patented SYMC electrical system features high intelligent, easy to upgrade, strong anti-interference ability and high reliability.

## Digital Technology

Advanced design methods such as 3D design, FEA, dynamic simulation are widely used in R&D process. By this way, key parts and systems such as vibratory drum, driving cab shock-absorption, centralized articulated joint are accurately calculated and designed to shorten R&D circle and improve product quality and reliability.

## 4-Level Shock Absorption Technology

Driver's seat, damp block, articulated joint and shock absorbing device in the vibratory drum make operator enjoy his job.



# WORKING PERFORMANCE AND ADVANTAGES

### Customer's First Choice

As a leader in construction machinery market, SANY mechanical single roller is well-commented for its advanced technology and reliable quality. It takes more and more market share. Now the SMR single rollers are the 4th generation products featuring improvement of overall working performance and human-machine engineering.

### 'More than Expected' Concept & High Performance Price rate

SMR mechanical single roller features stronger vibrating force and larger compaction capacity. The vibrating force is 10% higher than that of similar product of other brand.

### Energy-saving & Environment-friendly Euro II Engine

SMR single roller is equipped with Euro II engine which is more energy-saving and environment friendly. Overall power is increased by 10% to get a stronger traction.

### Outstanding Adaptability to Job Sites

Optional anti-slip control system improves the adaptability greatly and increases the gradeability by 20%-30%.

### Visibility

Full view cab with big arc windscreen and streamlined rear cover offer a 1m x 1m front & rear view for the operator.

### 4-grade Vibration Absorbing Technology

The 4-grade vibration absorbing system is equipped with mechanical damping device. It enhances vibration absorption obviously.

### Safe & Comfortable Operation Environment

The cab is equipped with an air conditioner, a cup holder and a stereo. Operation system is designed according to ergonomics. Emergency stop button is positioned next to operation joystick so that it is easy to get.

### Convenient Maintenance

Rear-positioned triple pump features convenient maintenance. Layout of hydraulic pipes features reasonable. Electrical components are installed in the electrical control case for convenient maintenance. Bearings which are free from maintenance are widely used in articulated joint & steering cylinders to save maintenance time for our clients.



Working in Africa



Working in Europe

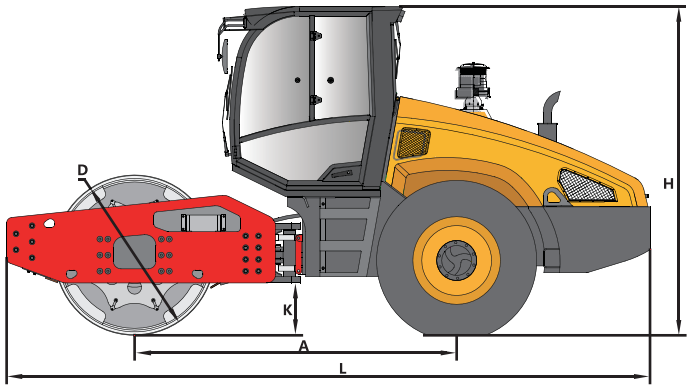
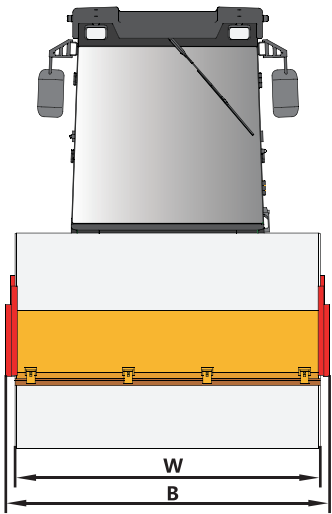
EQUIPMENT SPECIFICATION

SPECIFICATION

SMR Series Mechanical Single Drum Roller Data

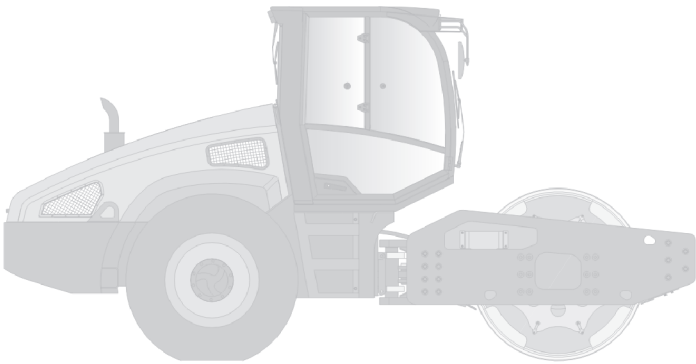
Model				SMR222
Weight load	Working weight(kg)			22500
	Distributed weight for drum(kg)			11300
	Distributed weight for driving axle (kg)			11200
	Static linear load for drum (N/cm)			521
Compact Performance	Frequency (Hz)			28/33
	Nominal amplitude(mm)			1. 86/0. 93
	Exciting force (kN)			390/275
	Diameter of drum (mm)			1600
	Width of drum (mm)			2170
	Rim thickness of drum(mm)			40
Maneuverability performance	Travel speed	High speed	(km/h)	5. 3~8. 6
		Low speed	(km/h)	2. 6
	Theoretical gradeability vibration(%)			30
	No vibration(%)			30
	Min.Ground cleanrance (mm)			440
	Wheelbase(mm)			3100
	Steering angle	( ° )		± 35
	Swing angle	( ° )		± 12
	Min. Steering outer diameter(mm)			12600
	Tyre specification			20. 5-25-16

DIMENSION



SMR222	
A (mm)	3100
B (mm)	2370
L (mm)	6198
D (mm)	1600
H (mm)	3190
W (mm)	2170
K (mm)	440

OPERATION RANGE



Model		SMR222
Engine	Manufacturer	Shanghai Diesel
	Model	SC8D180G2
	Rated Power(kW)	132
Capacity	Storage battery(VXAh)	24× 100
	Fuel tank(L)	300
	Hydraulic oil tank(L)	150

Materials and specifications are subject to change without further notice in accordance with our continuous technical innovations.Photos and illustrations may not include additional equipments.





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For our consistent improvement in technology, specifications may change without notice.  
The machines illustrated may show optional equipment which can be supplied at additional cost.