

Quality Changes the World



# SANY DOUBLE DRUM ROLLER STR SERIES

### ENERGY SAVING STAR, LEADING THE INDUSTRY

P2 Power Of China

P4 High Reliability

**P7** 

**P9** 

Job Sites

Suit For Different

Quick & Convenient Maintenance







Extraordinary Compacting Performance



Perfect Design Ensures Safety & Comfortable Operation



Specific Performance & Customized Design



Equipment Specification

### Power Of China

SANY full hydraulic tandem roller is the leading brand of road machinery in China. SANY has been devoted into R&D of full hydraulic tandem vibratory roller since 1999. There are two generation products of Y series and S series. Their operating weights include 10tons, 11tons, 12tons, 13tons, and so on.

S series tandem roller was developed in 2010.

As a market creator of full hydraulic tandem roller in China, SANY is well-commented for its impressive performance & reliable quality. After taking more and more domestic market share, SANY focuses more attention on overseas market. More and more SANY tandem rollers are exported to South America, Africa, South-east Asia, Oceania, and so on.

- S series tandem roller was launched in 2010.
- STR 130C was shown in Shanghai Bauma China 2010 for the first time. It was a big bomb for its new style & streamlined design.
- S series tandem roller was also appeared in BICES in Beijing on Oct, 2011.

	<b>N</b>
	red <mark>dot</mark> design award
Overview of the results of the products submitted by you to the "red dot award: product design 2011"	
The following product was awarded an "honourable mention":	
13-3125-2011PD Sany Road Roller	

# EXTRAORDINARY COMPACTING PERFORMANCE

Compared with similar product, SANY tandem roller features steady work & high gradeablity which is less than or equal to 2.5mm/3m.

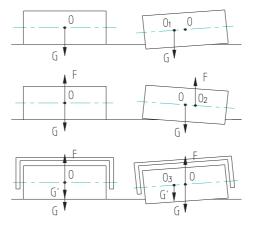
 Damp blocks located by driving motor & vibrating motor are not rotary so that vibration balance is improved.



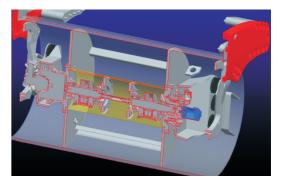
 Five-step buffering structure of vibratory wheel effectively reduces shock of on-off vibration to improve gradeability.



• 'Four centers in one' as shown in below figure guarantees high gradeability.



• Four-point supporting structure of vibratory wheel effectively reduces pressure of vibrating system. It also reduces instability of on-off vibration to improve system reliability & vibrating stability.



• Driving motor & vibrating motor are separately installed on two sides of steel drum. This layout improves traveling stability and compensates gradeability.



- SANY tandem roller features high compaction thickness & density. For example, 10mm asphalt & concrete can be compacted with a high density reach to 98.7%.
- O Shape center of the drum
- $O_1-$  Weight center of the drum
- $O_{\rm 2}-$  Force center of the vibration
- O3- Weight center of the frame
- G Gravity of the drum
- G' Gravity of the frame
- F Vibratory force

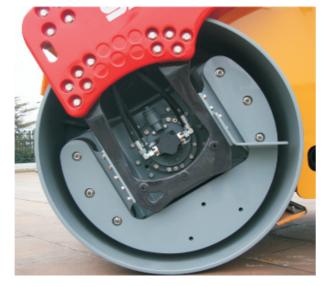
### HIGH RELIABILITY

• Key parts are totally purchased from international branded company, such as Deutz engine, Rexroth hydraulic pump & motor, SKF vibratory bearing, Fairfield reducer, and so on.



• Endurable Nord damp block is adopted with a symmetrical installation structure. It doesn't rotate with steel drum.



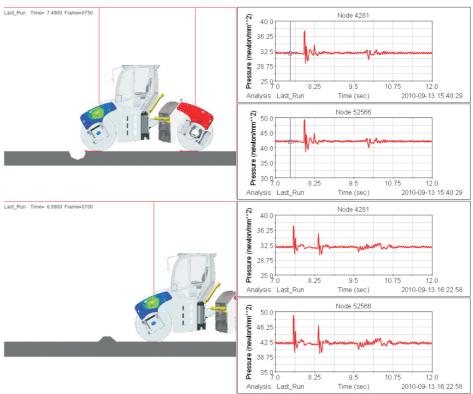


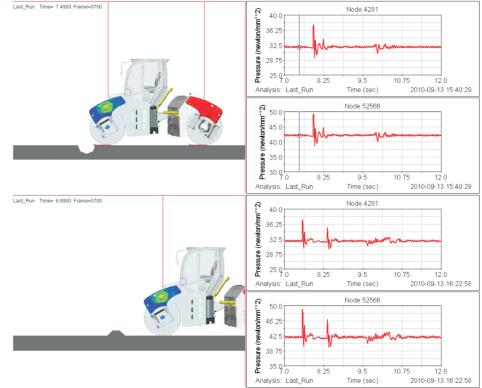
# PERFECT DESIGN ENSURES safety & COMFORTABLE OPERATION

There is no blind area when operator working in the cab.



structural parts to make roller tough and powerful.

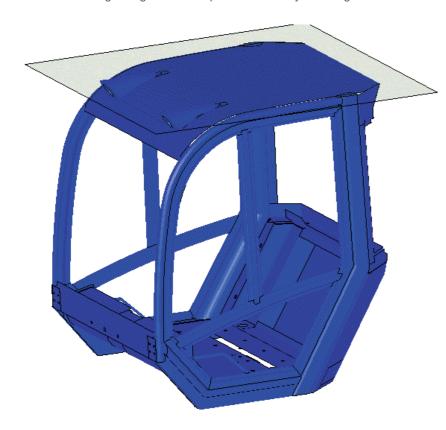




• Front & rear visibility meets the security requirement of 1m x 0.5m which is higher than Euro security standard.

• Digital dynamic simulation of compacting uneven earth helps engineers find the right stiffness of integrated

• PAE analysis on ROPS of driving cab guarantees operator's security in rolling accident.



• Well-equipped driving cab brings you fantastic operating experience in any time under any weather. Air conditioner is no longer an optional part. 3-direction adjustable seat suits for operator with different body figure. Details such as cup seat, radio, fog-removing device are considerate.



• Max working noise is only 84 db out of driving cab under low frequency & high amplitude vibration.

## Quick & Convenient Maintenance

- Air filter, diesel filter, hydraulic oil filter are all in mechanic's reach. It's easy to check and change filter core.
- Exposed double pump makes maintenance became easy. Layout of hydraulic pipes is regular and decent. All the electrical control components are installed in the cab. Maintenance is convenient.
- Engine is easy to check after flipping cab up.
- Maintenance of exposed water sprinkler is convenient.
- It's easy to check and change filters, pumps and wearing parts.



# Specific Performance & Customized Design

• Double handles & double steering wheels' design suits for operators with different driving habits.



• STR series roller can work on 35° slope for its advance anti-slip technology.



• Rotatable & extendable seat makes curb compaction completely in the control of operator.



 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.

# SUIT FOR DIFFERENT JOB SITES

SANY full hydraulic tandem roller can cope with different job sites. For example, it works steady not only in Guangzhou under 45°C high temperature but also in Harbin under -20°C low temperature. Either asphalt compaction or concrete compaction, STR series roller is impressive.

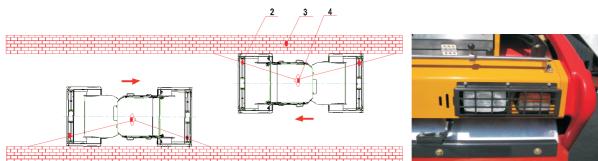


STR130C working in Kunming, China



STR130C working in Xinjiang, China

Adjustable cursor locating device makes curb compaction become easy.
 Operator can judge machine's position even in the cab.





STR100C working in Shaoguan, China

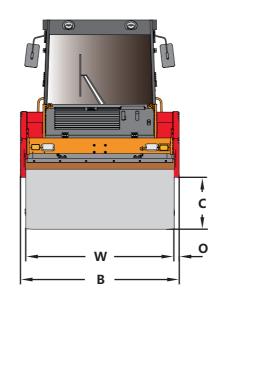
# EQUIPMENT SPECIFICATION

#### DIMENSION

#### **SPECIFICATION**

### STR-Series Double Drum Roller

	Model	STR100C	STR110C	STR120C	STR130C
Weight Load	Working weight (with cab)(kg)	10700	11400	12500	13500
	Distributed weight for front drum(kg)	5400	5700	6250	6750
	Distributed weight for rear drum(kg)	5300	5700	6250	6750
	Static linear load for front drum(N/cm)	315	330	300	310
	Static linear load for rear drum(N/cm)	310	330	300	310
	Frequency (Hz)	40/50	40/50	40/50	40/50
PC	Norminal amplitude (mm)	0. 70/0. 30	0.70/0.30	0. 70/0. 30	0.70/0.30
Compaction Performance	Exciting force(kN)	110/70	120/75	130/85	140/90
pact	Diameter of drum(mm)	1220	1220	1230	1230
ion nce	Width of drum(mm)	1680	1680	2135	2135
	Rim thickness of drum(mm)	19	19	23	23
	Travel speed High(km/h)	0~10.5	0~10.5	0~10.5	0~10.5
Z	Low (km/h)	0~5.4	0~5.4	0~5.4	0~5.4
Maneuverability performance	Theoretical gradeability vibration(%)	30	30	30	30
Iver	No vibration(%)	35	35	35	35
abili	Min. Ground cleanrance (mm)	350	350	350	350
ty pe	Wheelbase (mm)	3300	3300	3300	3300
erfoi	Steering angle (°)	$\pm 30$	$\pm 30$	$\pm 30$	$\pm 30$
rmai	Swing angle(°)	±6	±6	$\pm 6$	$\pm 6$
nce	Min. Steering outer diameter (mm)	12600	12600	13000	13000
	Crab traveling(mm)	$\pm 170$	$\pm 170$	±170	$\pm 170$
ш	Manufacturer	Deutz	Deutz	Deutz	Deutz
Engine	Model	BF4M2012C	BF4M2012C	BF4M2012C	BF4M2012C
	Rated Power(kW)	98	98	98	98
Capacity	Storage battery (V $\times$ Ah)	12×100	12×100	12×100	12×100
	Water tank(L)	1000	1000	1000	1000
	Fuel tank(L)	200	200	200	200
	Hydraulic oil tank (L)	60	60	60	60

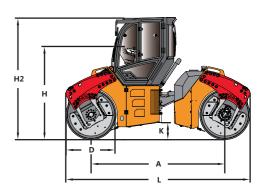


#### **OPERATION RANGE**

### **Compaction Performance**

Model	STR100C	STR110C	STR120C	STR130C
Frequency (Hz)	40/50	40/50	40/50	40/50
Norminal amplitude (mm)	0.70/0.30	0.70/0.30	0.70/0.30	0.70/0.30
Exciting force(kN)	110/70	120/75	130/85	140/90
Diameter of drum(mm)	1220	1220	1230	1230
Width of drum(mm)	1680	1680	2135	2135
Rim thickness of drum(mm)	20	20	23	23

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.



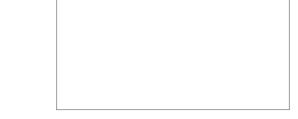
	STR100C	STR110C	STR120C	STR130C
A (mm)	3300	3300	3300	3300
B (mm)	1830	1830	2285	2285
C (mm)	750	750	750	750
D (mm)	1228	1228	1236	1236
H (mm)	2260	2260	2260	2260
H2 (mm)	3000	3000	3000	3000
K (mm)	400	400	400	400
L (mm)	4550	4550	4550	4550
0 (mm)	75	75	75	75
W (mm)	1680	1680	2135	2135



### **Quality Changes the World**

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