

SANYTRAILER-MOUNTED
CONCRETE PUMP



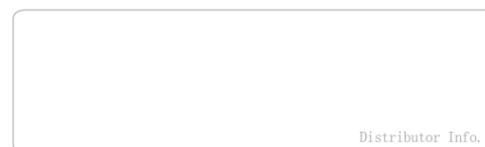
SANYTRAILER-MOUNTED CONCRETE PUMP



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.: 59010963 Date: January 2016

www.sanygroup.com

Sany's Power Drives China's Rise



1997 1998 2002 2003 2005 2006 2007 2008 2009 2010 2011 2012 2014

The Sany trailer mounted concrete pump ranks at the top of the Chinese market.

Set domestic pumping height record at the top of the Chinese market.

At the International Finance Center in Hong Kong, the C60 ultra high pressure pump set a new world record at 406m.

Fielded the HBT120A three grade concrete pump and won the "National Patent Award." This was the world debut of pumping 80mm aggregate.

"R&D and Application of Key Concrete Pumping Technology" received second place in "National Award for Progress in Science and Technology." CE certification awarded by the German TÜV organization.

SANY trailer-mounted concrete pump and won the "National Patent Award." CE certification awarded by the German TÜV organization.

SANY HBT90CH ultra-high pressure pump was titled "National Defect height of 492 m at Shanghai World Financial Center, setting a new world pumping record."

SANY trailer pump participated in construction of Guangzhou New TV Tower Project (height: 610m, reputed to be the world's tallest tower).

The Sany HBT90CH ultra high pressure pump conveyed concrete to a height of 490m at the Hong Kong International Commerce Center, the tallest building in Hong Kong, the 4th tallest in the world.

Sany pumps successfully poured the 60,000 cubic meter foundation of the Shanghai Tower, the tallest skyscraper in China.

A Sany trailer pump working at Japan's Osaka HARUKAS building, the tallest in Japan poured 4,000 trouble-free continuous cubic meters. Sany trailer pumps will participate in the construction of the Yomiuri Shimbun building utilizing up to C150 concrete.

HBT90CH ultra-high pressure pump took part in construction of the East Tower, reputed as Guangzhou tallest.

A Sany ultra high pressure pump finished the main body of the Shanghai Center. Sany broke their own record to set a new record height of 620m.

SANY TRAILER-MOUNTED CONCRETE PUMP UPGRADES TO **C5**

**King of the Pump World, Class 5A Quality
Top in Sales Volume for 10 Consecutive Years**



CHALLENGE THE SKY'S HEIGHT

By virtue of its unrivaled technical strength in the trailer mounted concrete pump sector, Sany has repeatedly surpassed even its own accomplishments to set concrete pumping records across the globe.

SANY trailer mounted concrete pumps have participated in 80% of the high-rise buildings with a height above 300 meters completed or under construction.

SANY trailer mounted concrete pumps have contributed to every construction height breakthrough in China.



Shenzhen SEG Plaza

Hong Kong International Financial Center

Guangzhou TV Tower

Hong Kong International Commerce Center

Shanghai World Financial Center

Guangzhou East Tower

Shanghai Tower

Burj Dubai

ANY DISTANCE



Pumping of marine concrete surpasses **1,000m**

With a total length of 41.58km, Qingdao Bay Bridge is the world's longest cross sea bridge. The bridge is located in Kiaochow Bay sea area, where the sea water has a high saline content and is highly corrosive. Moreover, the bridge needed to be resistant to freeze-thaw cycles that will occur more than 50 times per year. Due to this, the bridge pier was poured with a dedicated high performance marine concrete with extremely high viscosity and corrosion resistance. That placed extremely rigorous requirements on the concrete pump. SANY HBT80C-2122 trailer pump was employed to pump the bridge concrete. Thanks to its super strong pumping capacity and steady performance, the pump achieved a new long distance marine concrete pumping record (above 1,000 m).

Horizontal pumping distance exceeds **4,000m**

SANY has developed the super pump with an outlet pressure of 50 MPa. A new world record. Also, it increased the trailer mounted concrete pump's horizontal pumping distance to more than 4,000m.



ANY PLACE

-22°C cannot freeze SANY trailer mounted concrete pump's awesome power

In the winter of 2007, Moscow's temperature reached -22°C. SANY's trailer mounted concrete pump continued operating during construction of the Russian Federation Building. By virtue of its strong ability and adaptability, SANY trailer mounted concrete pump has earned a strong reputation across all of Europe.



55°C ignites SANY trailer-mounted concrete pump's passion of creating the world record in pumping height

In mid summer of 2007, the temperature in Dubai was extremely high. At the construction site of Burj Dubai, reputed to be the world's tallest skyscraper, the temperature rose to over 50°C. Even in this extreme, the Sany HBT120C-2120D operated without fail.



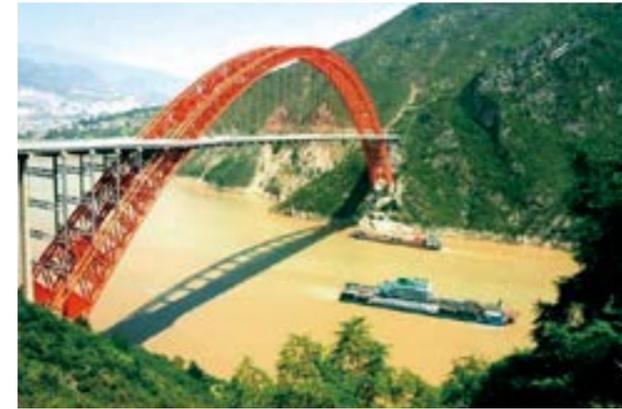
ANY DURATION

12h Continuous Pumping: SANY Trailer-mounted Concrete Pump Lives up to Its Mission

During the Wushan River Bridge Steel Pipe Concrete Pumping project, Sany trailer mounted concrete pumps set three world records. Steel pipe concrete pumping: length of 560m, continuous volume of 600m³ and continuous pumping time of 12 hours.

Continuous Pouring of 60,000m³ concrete completed in 60h

During the concrete pouring of Shanghai Tower, reputed as China's tallest skyscraper (height:632m), the entire foundation pouring project employed 18 pieces of SANY equipment (including four trailer-mounted concrete pumps). The continuous pouring of 60,000 m³ concrete was completed within 60 hours.



SANY Trailer-mounted Concrete Pump's Construction in Wushan Yangtze River Bridge Project



SANY Trailer-mounted Concrete Pump's Construction at Shanghai Tower.



ANY MIX

Easily handle pumping of difficult concrete like B90, C150, and 3-gradation concrete

The Moscow Federation Building is reputed to be the worlds tallest steel and concrete building. During the project construction process, SANY trailer mounted concrete pumps successfully pumped B90 (equivalent to C110) concrete vertically to a height of 120m.

In projects like Three Gorges Hydropower Station and Guangxi Dahua Hydropower station etc. aggregate of large diameter presented many challenges. The SANY 120A concrete delivery pump can pump aggregate with diameter of up to 80mm. This solved the challenge of pumping three gradation concrete.

In Japan Tokyo Yomiuri Shimbun Building Project, the concrete pumping height was up to 200m. Some of the concrete strength even hit C150. SANY HBT80C-1818D trailer mounted concrete pump lived up to its mission.



Silt, slag, waste materials and mortar etc can be pumped

SANY's product lines include special purpose pumps such as filling pumps, tubular pile pumps, and mortar pumps. They can pump different special media, including slag, silt, sewage, mortar, industry waste, etc.



Mortar pump



5 CORE PUMP TECHNOLOGY THE WORLD HIGHEST QUALITY

INTELLIGENT CONTROL
SYSTEM

EFFICIENT PUMP
SYSTEM

ADVANCED ENERGY-SAVING
TECHNOLOGY

ADVANCED HYDRAULIC
SYSTEM

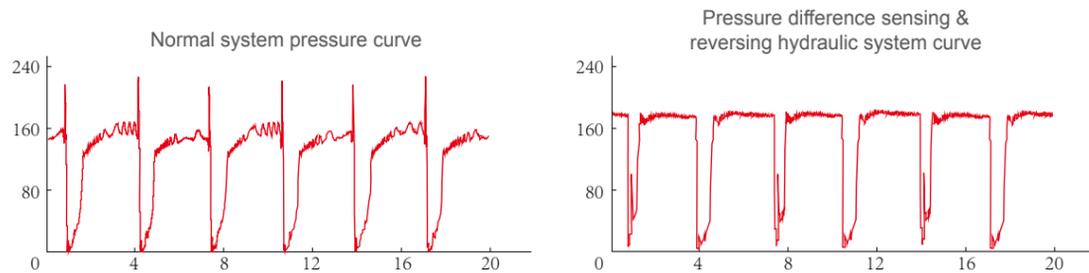
EXTREME WEAR-RESISTING
TECHNOLOGY



ADVANCED HYDRAULIC SYSTEM

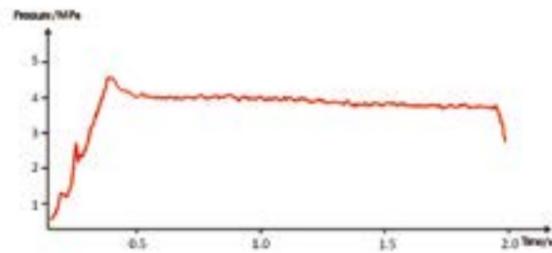
Differential pressure controlled, bi-directional hydraulic system.

Sany trailer mounted concrete pump hydraulic system pump controls use differential pressure sensing technology and bi-directional pumps. The bi-directional pumps feature smooth direction change abilities. The open loop charge system continually circulates the hydraulic oil for filtration and cooling. The constant supply of filtered, cooled hydraulic oil prolongs equipment life and lowers maintenance costs.



High flow, high efficiency valve system

Our system adopts a high pressure, high flow electro-hydraulic main control valve and an integrated valve with optimized tubing design and layout. The system features a short reversing design, low pressure loss, low temperature and high reliability.



Automatically retracted pistons

With the press of a button, the two pistons return to the water tank. This reduces daily maintenance time and extends the life of the pistons.



INTELLIGENT CONTROL SYSTEM

Fault self-diagnosis technology

The intelligent control system monitors the machine for over 50 faults in real time. Faults are displayed on the monitor. Review of the faults can reduce troubleshooting time by 70%.

Dedicated motion controller

Entirely different from conventional motion controllers, the Sany controller integrates the pumping algorithm with an onboard database. The result is faster operation and superior performance.

Emergency Override Available

In case of a fault during operation, an emergency override mode is available for cleanout and shutdown.



EFFICIENT PUMP SYSTEM

High-efficiency pump technology

The hydraulic system pump controls use differential pressure sensing technology and bi-directional pumps. The bi-directional pumps feature smooth direction change abilities. This allows efficient pumping action and precise swing cylinder control.

High power mixing motor

High displacement mixing motor keeps the mixture properly conditioned.

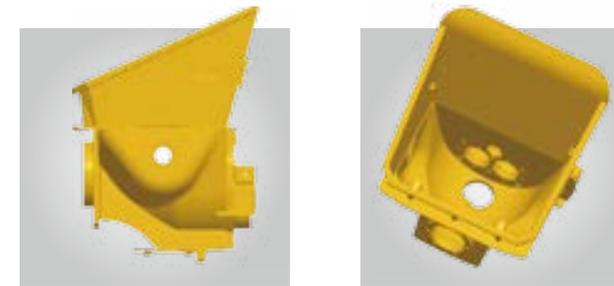
Large bore reversing cylinder

The large bore reversing cylinder allows powerful reversing to prevent pipe blockage.



New-type hopper

The hopper's inner cavity has been optimized to improve aggregate mixing and to high density, complex concrete.



ADVANCED ENERGY-SAVING TECHNOLOGY

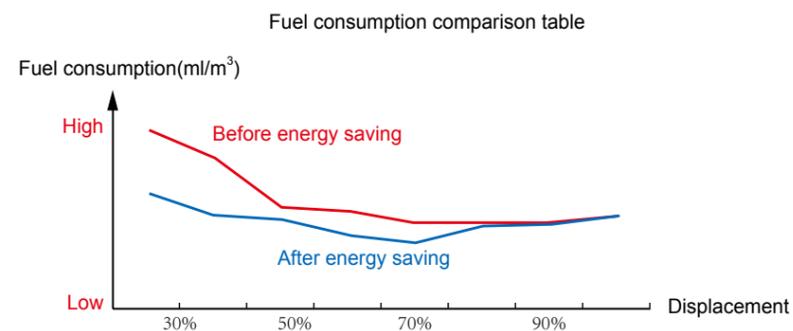
New generation energy saving technology automatically adjusts engine power output to match the load results in fuel savings of up to 25%.

Energy consumption: a decline of

25%



Won the Level-I Prize of Hunan Provincial Award for Progress in Science and Technology (the top prize in construction machinery sector) and the gold prize of Chinese Patent Award.



EXTREME WEAR-RESISTING TECHNOLOGY

G5 improved wearing part Adopt Sino-Germany high-tech materials and advanced technology to greatly improve the product performance



Discharge port
Inner bushing adopts a special steel, whose abrasive resistance is 15 times that of ordinary steel, with service life hitting 60,000 to 80,000 m³.



Wear plate and cutting ring
Using a special process with a bonding strength greater than 100MPa, the wear plate's service life is up to 50,000 to 60,000 m³. The cutting ring's service life is up to 20,000 to 30,000 m³.



Concrete piston
Using German rubber piston technology with excellent abrasion performance and resistance to heavy stress and high temperatures. It has a long service life allowing the piston to pump 25,000 to 30,000 cubic meters concrete without replacement.



Delivery cylinder
The inner layer is plated with chrome with thickness of above 3mm, and so its hardness exceeds HV900, with service life hitting 100,000 to 140,000 m³.



TECHNICAL SPECIFICATIONS

Electric

Model	HBT6006A-5	HBT6013C-5	HBT6016C-5
Max.delivery Pressure(Theoretical) Low Pressure/High Pressure(Mpa)	7	8/13	10/16
Max.concrete Output(Theoretical) Low Pressure/High Pressure(m ³ /h)	70	65/40	70/45
Motor Rated Power	75	90	110
Delivery Cylinder Bore (mm) *Strok(mm)	Φ200×1400	Φ200×1400	Φ200×1800
Hopper Capacity (m ³)* Feeding Heigh(mm)	0.6× 1415	0.7×1320	0.7×1320
Dimension (L*W*H) (mm)	6590×2100×2100	6185×2100×2100	6585×2100×2100
Gross Weight (kg)	5880	5790	6590
Max. Aggregate Size: Φ150 mm Delivery Pipe (mm)	50	50	50
Max. Aggregate Size: Φ125 mm Delivery Pipe (mm)	40	40	40
Type	Gate Valve	S-Valve	S-Valve
Slump of concrete (mm)	100 ~ 230	100 ~ 230	100 ~ 230

Diesel

Model	HBT5008C-5S	HBT6013C-5S	HBT6016C-5S	HBT8018C-5S
Max.delivery Pressure(Theoretical) Low Pressure/High Pressure(Mpa)	8	8/13	10/16	10/18
Max.concrete Output(Theoretical) Low Pressure/High Pressure(m ³ /h)	50	65/40	70/45	85/50
Engine Model	SANY	SANY	SANY	SANY
Engine Rated Power	55	114	180	180
Delivery Cylinder Bore (mm) *Strok(mm)	Φ180×1400	Φ200×1400	Φ200×1800	Φ200×1800
Hopper Capacity (m ³)* Feeding Heigh(mm)	0.6× 1240	0.7×1420	0.7×1420	0.7×1420
Dimension (L*W*H) (mm)	5670×2045×2370	6730×2100×2600	6830×2125×2685	7330×2125×2685
Gross Weight (kg)	3950	6000	6000	7300
Max. Aggregate Size: Φ150 mm Delivery Pipe (mm)	50	50	50	50
Max. Aggregate Size: Φ125 mm Delivery Pipe (mm)	40	40	40	40
Type	S-Valve	S-Valve	S-Valve	S-Valve
Slump of concrete (mm)	100 ~ 230	100 ~ 230	100 ~ 230	100 ~ 230

Ultra-high pressure

Model	HBT9028CH-5S	HBT9035CH-5M	HBT12020C-5W	HBT12020C-5M
Max.delivery Pressure(Theoretical) Low Pressure/High Pressure(Mpa)	19/28	19/35	9.5/21.5	11/21
Max.concrete Output(Theoretical) Low Pressure/High Pressure(m ³ /h)	95/70	90/50	121/60	120/75
Engine Model	SANY	SINOTRUK (Licensed by MAN)	ISUZU	SINOTRUK (Licensed by MAN)
Engine Rated Power	2×180	2×297	300	297
Delivery Cylinder Bore (mm) *Strok(mm)	Φ200 ×2100	Φ180 ×2100	Φ200×2100	Φ200×2100
"Hopper Capacity (m ³)* Feeding Heigh(mm)"	0.7×1420	0.7×1420	0.7×1420	0.7×1420
Dimension (L*W*H) (mm)	7508×2272×2750	8283×2490×2950	7700×2125×2960	7380×2125×2950
Gross Weight (kg)	11910	13000	9000	9310
Max. Aggregate Size: Φ150 mm Delivery Pipe (mm)	50	50	50	50
Max. Aggregate Size: Φ125 mm Delivery Pipe (mm)	40	40	40	40
Type	S-Valve	S-Valve	S-Valve	S-Valve
Slump of concrete (mm)	100 ~ 230	100 ~ 230	100 ~ 230	100 ~ 230

SANY TRAILER-MOUNTED
CONCRETE PUMP

QUALITY CHANGES THE WORLD

