SANY®

SANY TRAILER-MOUNTED CONCRETE PUMP

SANY®

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

Distributor Info.

DRIVE CHINA'S RISE
SHOW NATIONAL POWER

1997

SANY trailer-mounted concrete pump ranks the top in Chinese market, and its output and sales volume always maintain the first place in domestic market.

1998

Created domestic pumping height record (300.8 m) at Shenzhen SEG Plaza, and won the title of "King of Chinese Pumps".

2002

At the International Financial Center (Hong Kong), SANY ultra high pressure pump created a new world record, namely, the C60 single concrete pump conveyed the concrete upwards to the height of 406 m.

2003

Successfully developed the HBT120A three-graded concrete delivery pump, and won the "National Invention Patent". Meanwhile, the maximum diameter of pumped aggregate hit 80mm, which resolved the world hard nut that three-graded concrete cannot be pumped.

2005

"R&D and Application of Key Concrete Pumping Technology" was honored the level-II prize of "National Award for Progress in Science and Technology". And it passed CE certification in China and acquired CE certificate from Germany TUV Company.

2006

SANY trailer-mounted concrete pump was titled "National Inspection-free Product".

2007

SANY HBT90CH ultra-high pressure pump conveyed the concrete to the height of 492 m at Shanghai World Financial Center, setting a new world pumping record.

2008

SANY trailer pump participated in construction of Guangzhou New TV Tower Project (height: 610m, reputed as the world No. 1 tower)

2009

SANY HBT90CH ultra-high pressure pump successfully conveyed the concrete to Hong Kong International Commerce Center (Height: 490 m, Hong Kong No. 1 Skyscraper and the World No. 4 Skyscraper)

2010

SANY Pump successfully completed the work of pouring the groundsill of 60,000 m^3 for Shanghai Tower, reputed as China No.1 Skyscraper.

2011

SANY trailer pump served construction of Osaka HARUKAS Building (Japan No. 1 Skyscraper), during which it continuously poured concrete of 4,000 m^3 and incurred no fault. In the future, SANY trailer pump will partake in construction of Japan Yomiuri Shimbun Building, and some concrete strength even hits C150.

2012

HBT90CH ultra-high pressure pump partook in construction of the East Tower, reputed as Guangzhou No. 1 Skyscraper.

2014

SANY Ultra-high pressure pump successfully finished the main body of Shanghai Center. Sany has updated the record of single pump vertically pump to 620m.

SANY TRAILER-MOUNTED CONCRETE PUMP UPGRADES TO C5

Pump King Of The World, Class 5A Quality
Rank The Top In Sales Volume For 10-Odd Years

CHALLENGE THE SKY'S HEIGHT

By virtue of its unrivaled technical strength in the trailer-mounted concrete pump sector, SANY continuously created the vertical concrete pumping record in China and even in the world.

Amongst those high-rise buildings with height of above 300 m that have been completed or are under construction, 80% of them are participated by SANY trailer-mounted concrete pump.

SANY trailer-mounted concrete pump contributes to China's every breakthrough in height.

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 is of high saline degree and strong corrosiveness. Moreover, the bridge shall be resistant to freezing-thaw abrasion more than 50 times per year. Due to this, the bridge pier shall be poured with the dedicated high-performance marine concrete with extremely high viscosity and resistance. That poses extremely rigorous requirement to the concrete pump. SANY HBT80C-2122 trailer pump was employed in the bridge concrete pump construction. Thanks to its super strong pumping capacity and steady performance, the pump created a long-distance marine concrete pumping record (above 1,000 m).

Theoretically, horizontal pumping distance exceeds 4,000m

SANY has developed the super pump with outlet pressure of 50MPa, which ranked the world top. Also, it renewed the trailer-mounted concrete pump's theoretic horizontal pumping distance to more than 4,000 m.

ANY PLACE

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

In the winter of 2007, Moscow's temperature reached -22°C. However, SANY trailer-mounted concrete pump operated normally in construction of the Russian Federation Building. By virtue of its strong product stability and adaptability, SANY trailer-mounted concrete pump won reputation in the entire Europe.

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

In the midsummer of 2007, temperature in Dubai is extremely high. At the construction site of Burj Dubai, reputed as the World No. 1 Skyscraper, the temperature rocketed to more than 50°C, but SANY HBT120C-2120D trailer-mounted concrete pump still operated in order.

ANY DURATION

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

In the Wushan Yangtze River Bridge Steel Pipe Concrete Pumping Project, SANY trailer-mounted concrete pump created three world records: steel pipe concrete pumping length hits 560 m, and steel pipe single continuous concrete pumping volume hits 600 m3, and steel pipe single continuous concrete pumping time exceeds 12 h.

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

In the concrete pouring for Shanghai Tower, reputed as China No. 1 skyscraper (height: 632m), the entire groundsill pouring project employs SANY pumping equipment, and 18 SANY equipment (including four trailer-mounted concrete pumps) completed the incessant pouring for 60,000 m3 concrete within 60 h.

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

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

ANY FLUID

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

Moscow Federation Building is reputed as the World No.1 Steel Bar Building of Concrete Structure. During the project construction process, SANY trailer-mounted concrete pump 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 super diameter is a hard nut in pouring work. SANY 120A concrete delivery pump can pump the aggregate with diameter of up to 80mm, which resolves the world hard nut that three-graded concrete cannot be pumped.

In Japan Tokyo Yomiuri Shimbun Building Project, concrete pumping height is up to 200 m, and some concrete strength even hits C150. SANY HBT80C-818D trailer-mounted concrete pump partook in the Japan-based project and lived up to its mission. That exemplifies the rejuvenation of Chinese nation.

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

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

Motar pump

5 CORE PUMP TECHNOLOGY THE WORLD HIGHEST QUALITY

INTELLIGENT CONTROL SYSTEM

EFFICIENT PUMP SYSTEM

ADVANCED ENERGY-SAVING TECHNOLOGY

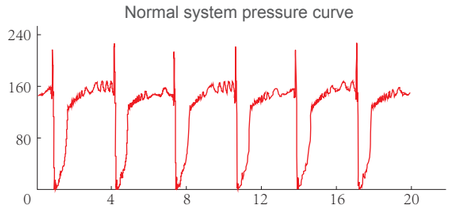
ADVANCED HYDRAULIC SYSTEM

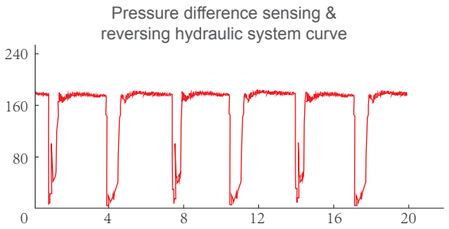
EXTREME WEAR-RESISTING TECHNOLOGY

ADVANCED HYDRAULIC SYSTEM

Pressure difference sensing & reversing hydraulic system

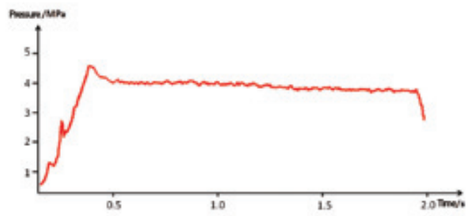
SANY trailer-mounted concrete pump adopts pressure difference sensing & reversing technology, in addition to electro-hydraulic proportional buffering technology. Therefore, the pump has not only features like self-cyclic impurities filtering by open-type system, hydraulic oil's high cleanliness, and low temperature etc., but also characteristics like close-type system's small reversing impact. That helps improve the system efficiency to the maximum extent, mitigate abrasion between parts, prolong the equipment's service life, and reduce the maintenance cost.





Large-flow high-efficiency main valve system

The system adopts high-pressure, large-flow, and electro-hydraulic precision control main valve, as well as integrated valve bank with optimized runner design and layout. Due to this, the system features short reversing time, small pressure loss, low temperature, and high reliability.



Automatically retracted double-piston

Make two concrete pistons retract into the water tank only by using one button. Due to this, the time for replacement and maintenance is reduced by half, and daily maintenance is more convenient.

INTELLIGENT CONTROL SYSTEM

Fault self-diagnosis technology

Monitor the pump status at any time, as well as monitor and diagnose more than 50 faults in real time, reduce the troubleshooting time by 70%, and save the time and worry for you.

Dedicated motion controller

Adopt the dedicated pumping motion controller, integrate classic pumping algorithm and function library, making the arithmetic speed faster and performance more excellent. That perfectly integrates with the pumping condition.

Compulsory pumping technology

When the peripheral test loop incurs faults during the construction process, "Compulsory" function starting pump operation can be activated for emergency handling.

EFFICIENT PUMP SYSTEM

High-efficiency pumping technology

Adopt pressure difference sensing & reversing technology and main oil pump electric proportional control buffering technology to shorten the reversing time, optimize the main oil cylinder and swing cylinder buffering & reversing time matching, and realize high-efficiency pumping.

Large-power mixing motor

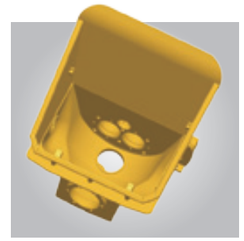
Forced feeding by large-displacement and large-torque steel ball motor. Mix normally when there is aggregate difference and the hopper is heightened. That will prevent the mixing motor from getting stuck and improve the aggregate absorbing performance.

Large-bore reversing cylinder

Adopt large-bore reversing cylinder, making the reversing powerful, and perfectly avoid pipe blocking.

New-type hopper

Optimize the hopper's inner cavity, improve the aggregate absorbing efficiency, and guard against aggregate inapplicability, and easily handle high-difficulty concrete.



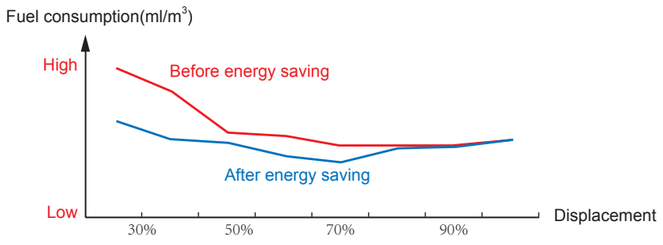
ADVANCED ENERGY-SAVING TECHNOLOGY

New-generation energy-saving technology, and automatically adjust the engine and power according to the load, making every drop of fuel produce strong power, and save the energy by 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.

Fuel consumption comparison table



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


Wear plate and cutting ring


Concrete piston


Delivery cylinder

Discharge port

Inner bushing adopts the special steel, whose abrasive resistance is 15 times that of ordinary steel, with service life hitting 60,000 to 80,000 m^3.

Wear plate and cutting ring

Adopt special inlaying process, with connecting strength surpassing 100MPa. Of which, the wear plate's service life is up to 50,000 to 60,000 m^3, and the cutting ring's service life hits 20,000 to 30,000 m^3.

Concrete piston

Take rubber as the substrate, and on its exterior layer there is compound wear-resisting fabric, which is extremely resistant to pressure, heat, and abrasion, and applicable to different severe working conditions, with service life hitting 25,000 to 30,000 m^3.

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 m^3.

PRODUCT SPECTRUM

OUTPUT m^3/h	S VALVE		GATE VALVE	
	Diesel	Electric	Diesel	Electric
50	HBT5008C–5S			
60	HBT6013C–5D	HBT6013C–5	HBT6006A–5D	HBT6006A–5
	HBT6016C–5D	HBT6016C–5		
80	HBT8018C–5D			
120	HBT12020C–5D			
Ultra-high pressure	HBT9028CH–5D			
	HBT9035CH–5D			

50 SERIES

Gate valve Diesel
Max. delivery pressure: 8 Mpa
Max. concrete output: 50 m^3/h
Engine Power (Diesel): 55 kW

60 SERIES

Gate valve/S valve Electric/Diesel
Max. delivery pressure: 7/13/16 Mpa
Max. concrete output: 65/70/75 m^3/h
Engine Power (Electric): 75/90/110 kW
Engine Power (Diesel): 115/186 kW

120 SERIES

S valve Diesel
Max. delivery pressure : 21 Mpa
Max. concrete output: 120 m^3/h
Engine Power (Diesel): 273 kW

80 SERIES

S valve Electric/Diesel
Max. delivery pressure : 18/22 Mpa
Max. concrete output: 85 m^3/h
Engine Power (Electric): 2 × 110 kW
Engine Power (Diesel): 186 kW

Ultra-high pressure SERIES

S valve Diesel
Max. delivery pressure : 28/35 Mpa
Max. concrete output: 95/100 m^3/h
Engine Power (Diesel): 2 × 186/2 × 273 kW

TECHNICAL PARAMETER

Motor

Item \ Model		HBT6013C–5	HBT6016C–5	HBT6006A–5
Max.delivery pressure(theoretical) Low pressure/High pressure	Mpa	8/13	10/16	7
Max.concrete output(theoretical) Low pressure/High pressure	m^3/h	65/40	70/45	70
Rate power of motor	kW	90	110	75
Delivery cylinder Bore *Strok	mm	Φ200 × 1400	Φ200 × 1800	Φ200 × 1400
Hopper capacity * Feeding heigh	m^3/mm	0.7 × 1320	0.7 × 1320	0.6 × 1415
Dimension (L*W*H)	mm	6095 × 2100 × 2232	6495 × 2100 × 2232	6587 × 2099 × 2232
Gross weight	kg	6130	6810	6100
Max. aggregate size: Φ150 mm delivery pipe	mm	50		
Max. aggregate size: Φ125 mm delivery pipe	mm	40		
Type		S–valve		gate valve
Slump of concrete	mm	100 ▮ 230		

Diesel

Item \ Model		HBT5008C–5S	HBT6013C–5D	HBT6016C–5D	HBT8018C–5D	HBT12020C–5D	HBT6006A–5D
Max.delivery pressure(theoretical) Low pressure/High pressure	Mpa	6/8	8/13	10/16	10/18	13/21	7
Max.concrete output(theoretical) Low pressure/High pressure	m^3/h	50	65/40	75/45	85/50	120/75	70
Rate power of motor	kW	55	115	186	186	273	115
Delivery cylinder Bore *Strok	mm	Φ180 × 1400	Φ200 × 1400	Φ200 × 1800	Φ200 × 1800	Φ200 × 2100	Φ200 × 1400
Hopper capacity * Feeding heigh	m^3/mm	0.6 × 1240	0.7 × 1320	0.7 × 1420	0.7 × 1420	0.7 × 1420	0.6 × 1415
Dimension (L*W*H)	mm	5626 × 2045 × 2450	6695 × 2068 × 2578	6736 × 2125 × 2628	7161 × 2125 × 2628	7413 × 2125 × 2900	6787 × 2100 × 2628
Gross weight	kg	3950	6100	7040	7560	9100	6300
Max. aggregate size: Φ150 mm delivery pipe	mm	50					
Max. aggregate size: Φ125 mm delivery pipe	mm	40					
Type		S–valve	S–valve	S–valve	S–valve	S–valve	Gate valve
Slump of concrete	mm	100 ▮ 230	100 ▮ 230	100 ▮ 230	100 ▮ 230	100 ▮ 230	100 ▮ 230

Ultra-high pressure

Item \ Model		HBT9028CH–5D	HBT9035CH–5D
Max.delivery pressure(theoretical) Low pressure/High pressure	Mpa	19/28	19/35
Max.concrete output(theoretical) Low pressure/High pressure	m^3/h	95/70	100/78
Rate power of motor	kW	2 × 186	2 × 273
Delivery cylinder Bore *Strok	mm	Φ200 × 2100	Φ180 × 2100
Hopper capacity * Feeding heigh	m^3/mm	0.7 × 1420	0.7 × 1420
Dimension (L*W*H)	mm	7508 × 2272 × 2750	7914 × 2490 × 2950
Gross weight	kg	11500	13000
Max. aggregate size: Φ150 mm delivery pipe	mm	50	
Max. aggregate size: Φ125 mm delivery pipe	mm	40	
Slump of concrete	mm	100 ▮ 230	

SANY

QUALITY CHANGES THE WORLD