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Final data and configuration are according to contract or real rig. The price varies according to the configuration.

SANY SR150C ROTARY DRILLING RIG



SR150C rotary drilling rig blends productivity and durability to give you the best return on your investment.

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With max. drilling diameter 1500mm and max. drilling depth 56m, the rig is suitable for pile foundation constructions of industrial and civil buildings.

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Hydraulic drive and telescopic crawler structure improve the reliability and stability of the rig in construction.

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Matching the constant power of hydraulic system perfectly, the whole machine performs the maximum working efficiency.

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Based on the CAN-BUS electronic control system, the machine realizes intellectual control of engine monitoring, machine action control, virtual Instrument display, malfunction check, alarming and information display. The key parts are all world-famous brands products.

Driving Mechanism Page 7

Including rotary drive, main/auxiliary winch, boom mechanism, mast, etc.

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Operate comfortably—the best cab would greatly improve productivity.

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SANY Kelly bar plays the leading role in China, and is exported to Asia, Europe, America and Africa.

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It includes drilling bucket, auger, core barrel, centrifugal discharge drilling tools, belling drilling tools and so on, and can drill in clay layer, sandy gravel, cobble layer and weathered strata.

Rock-drilling Technique Page 10

Rotary drilling rig feeding with crowd cylinder has been developed by SANY. Interlocking Kelly bar with auger, core barrel and rock bucket, the rig can drill in rock within drillability < grade 8 and uniaxial compressive strength $\leq 100\text{MPa}$.

Working Equipment Optional Page 11-12

It includes Kelly bar with drilling tools, casing installation with rotary drive, SMW, CFA drilling, twin rotary drive drilling, drilling with casing oscillator, drilling with diaphragm wall grab, etc.

Convenient Maintenance Page 13

The fittings originally imported and components of superior quality have longer maintenance cycle. The remote assembly of wearing parts is realized so that the maintenance is more convenient, thus enhancing the utilization ratio of machine and lowering the maintenance costs.

Safety Page 13

SANY rotary drilling rig embodies the human-centric design conception on each aspect. The guard devices, added at many positions in the rig, minimize the possibility of injuries.

Customer Support Page 14

All customers of SANY Rotary Drilling Rig can enjoy the commitment of overall services.

Certificate Page 14

In 2005 Beijing SANY Heavy Machinery Co., Ltd. was awarded with ISO9001 Quality System certification. In 2008, SANY SR150(C) Rotary Drilling Rig passed CE certification of Rhine company of Germany.

Construction Cases Page 15

SANY series Rotary Drilling Rig can be seen through Asia, Europe, America and Africa.

Whole Solution Page 16

SANY engineers can provide the whole solution of rig model-configurations-construction methods recommendation according to construction requirements and geological data from clients.



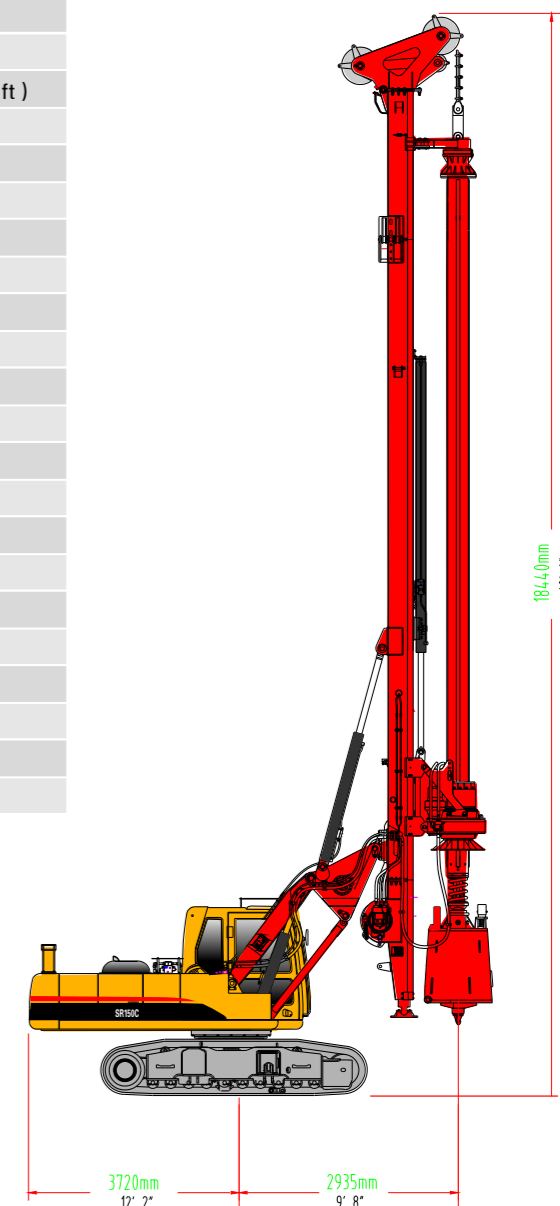
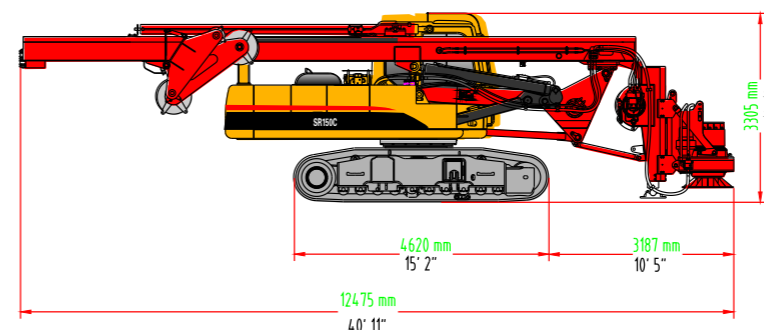


Technical Data

With max. drilling diameter 1500mm and max. drilling depth 56m, the rig is suitable for pile foundation constructions of industrial and civil buildings.

- With max. drilling diameter 1500mm and max. drilling depth 56m, the rig is suitable for pile foundation constructions of industrial and civil buildings.
- CC-6BG1TRP, Isuzu diesel engine owns the functions of load-sensing and output power auto-adjusting.
- Hydraulic system adopts LUDV load sensitive system and pilot control loop to achieve the optimal power match under various working conditions.
- Key parts such as hydraulic pump, hydraulic motor, hydraulic valve and joint are introduced in world-famous brands to ensure high reliability of system.
- Embedded system based on core of work mechanism controller and perfect CAN-BUS technique take full charge of whole machine monitoring.
- Telescopic undercarriage, crawler structure, low gravity center and rear-mounted counterweight realize the stability of the rig.
- Parallelogram boom mechanism ensures the accuracy of drilling tool locating, and the self-developed verticality-auto-adjusting function ensures the verticality of drilling hole.
- Added cylinder at the bottom of mast provides higher stability of the rig during working.

Max. drilling dia.	1500 mm (4' 11")
Max. drilling depth	56 m (184 ft)
Max. output torque	150 kN.m (110633 lbf.ft)
Drilling speed	7-40 rpm
Max. Push	150 kN (33720 lbf)
Max. Pull	160 kN (35970 lbf)
Stroke of crowd cylinder	4250 mm (13' 11")
Mast sideward	± 3°
Mast forward	5°
Main winch pull (1st layer)	160 kN (35970 lbf)
Main winch rope dia.	28 mm (1.1")
Main winch line speed	70 m/min (2.6 mph)
Auxiliary winch pull (1st layer)	60 kN (13490 lbf)
Auxiliary winch rope dia.	14 mm (0.55")
Auxiliary winch line speed	60 m/min (2.2 mph)
Operating height	18440 mm (60' 6")
Operating width	4000 mm (13' 1")
Transport length	12475 mm (40' 11")
Transport height	3305 mm (10' 10")
Transport width	3000 mm (9' 10")
Traction force	220 kN (49458 lbf)
Max. total weight	45 t (44 long ton)



Chassis

Hydraulic drive and telescopic crawler structure improve the reliability and stability of the rig in construction.

Chassis is the installation base to the upper structure of the rig, it is used to install and support crawler travel mechanism, and there is hydraulic cylinder inside it. The "centre revolving joint" of hydraulic system transfers working pressure oil of hydraulic system of upper machine to the crawler travel mechanism and crawler telescopic mechanism, and by the telescopic movement of hydraulic cylinder, the extension and retraction of crawler travel mechanism is realized.

This function can make the rig broaden the distance of crawlers, which greatly improves the rig operating stability; while transporting, crawlers would be retracted to meet the requirement of highway traffic regulations.

Hydraulic drive and telescopic crawler mechanism improve the reliability and stability of the rig during operation.

Model	SY230RC Series
Weight	210 kN (47210 lbf)
Engine	CC-6BG1TRP
Rated power	125 ± 2.9 kW @ 2100 rpm 168 ± 3.9 hp @ 2100 rpm
Crawler length	4620 mm (15' 2")
Track shoe width	700 mm (2' 4")
Crawler height	940 mm (3' 1")
Overall width (extended side frames)	4000 mm (13' 1")



Engine

Matching the constant power of hydraulic system perfectly, the whole machine performs the maximum working efficiency

The rig adopts international advanced super strength, large torque, electronic control, directly spraying, turbocharged, intercooling Isuzu engine. High efficient turbocharged function improves the performance and power of the engine; special compressor enables the machine to work on plateau; electric injection supplies precise spray oil volume, energy-saving and lower consumption; high efficient combustion chamber realizes high power output with low oil consumption, low discharge and low noise.



Engine manufacturer	Isuzu Japan
Engine model	CC-6BG1TRP
Style	4-stroke water-cooled overhead valve type Direct injection
Intake form	Turbocharger; inter cooler
Fuel	Diesel oil (JIS Type 2)
Emission Regulation	EU stage II/EPA Tier 2
No. of cylinder – bore x stroke	6-105 x 125 mm / 6-4.1 x 4.9 in
Displacement	6.494 L / 396 in ³
Compression ratio	18:1
Rated power	125 ± 2.9 kW (168 ± 3.9 hp) @ 2100 rpm
Max. Torque	637.9 ± 60 N.m (471 ± 44 lbf.ft) @ 1800 rpm
Fuel consumption (at 100% rated output)	220 ± 17 g/(kW.h) 0.365 ± 0.028 lbs/(hp.h)



Hydraulic System

Adopting stable, reliable and high-performance hydraulic system of international brands.

Main oil circuit adopts advanced negative flow control technology; consequently, flow supply according to requirement is realized. Based on it, constant power and electricity power override control make the best use of the engine power.

Auxiliary oil circuit adopts load sensitive control system which is welcomed by the international engineering machinery industry. The core parts as load-sensing pump and multi-way directional valve with load compensation make the output power and all kinds of operating conditions achieve optimal match, which mostly improves system transmission efficiency.

The rig adopts pilot control system. Reliable pilot logic valve controls all actions of the rig. Pilot control is flexible, safe, comfortable and precise, which greatly improves the operational performance, flexibility, safety and comfort, and fully shows the integration of man-mechanics-electronics-hydraulics.

Advanced control system, international brand hydraulic pump, hydraulic motor, hydraulic valve and joint perfectly express product essence of SANY—high reliability!

Major hydraulic component	Major supplier
Main hydraulic pump	Japan Kawasaki K3V main pump
Main multi-way directional valve	Japan Kawasaki KMX multi-way directional valve
Auxiliary multi-way directional valve	Germany Rexroth M4 valve/ Germany Hawe PSV valve
Main/auxiliary winch motor	Germany Rexroth A2FE plug-in motor / optional Parker or native aux. winch motor
Main/auxiliary winch gearbox	Germany Rexroth GFT gearbox / others
Rotary drive motor	Germany Rexroth A6VM variable motor
Rotary drive gearbox	Italy brevini / Italy bonfiglioli gearbox / others
Logic control electromagnetic valve	Germany Rexroth control valve
Balance valve of cylinder	Italy OIL CONTROL

Note: final model and data are according to contract or real rig.



Control System

Based on the CAN-BUS electronic control system, the machine realizes intellectual control of engine monitoring, machine action control, virtual Instrument display, malfunction check, alarming and information display. The key parts are all world-famous brands products.

Combination of electro-hydraulic control

Be in charge of compound control and check/protection of the engine, hydraulic pump, hydraulic valve and the rig fully and duly. The electrical equipment checks the operating conditions, and drives the hydraulic and mechanical equipment according to the requirement of construction processing.

Man-machine interactive technology

The friendly interface displays the machine operating conditions real-timely, which is directly related to the operating performance of the rig, and more information would help the operator to know the operating conditions of the rig and make the correct judgment and adjustment. The choice of working state, setting of working parameters, online adjustment of input and output signals, system calibration and equipment malfunction check and inquiry are finished by pressing buttons. The system is safe and reliable with steady performance, friendly interface, convenient and intellectual operation.

Automatic verticality adjusting control technology

The rig automatic verticality adjusting function is developed self-reliantly. The function module is integrated inside the main control system, which greatly improves the combination of control precision, cost and the main control system of the rig.

Mast automatic erecting and lying control technology

The erecting/lying and lateral inclination of the mast are adjusted automatically according to the feedback of the mast angle. With unattended condition, the mast can also be lifted and adjusted automatically to verticality, and the speed and synchronism of the mast automatic erecting and lying can be changed by parameters setting.

Engine pump power control technique

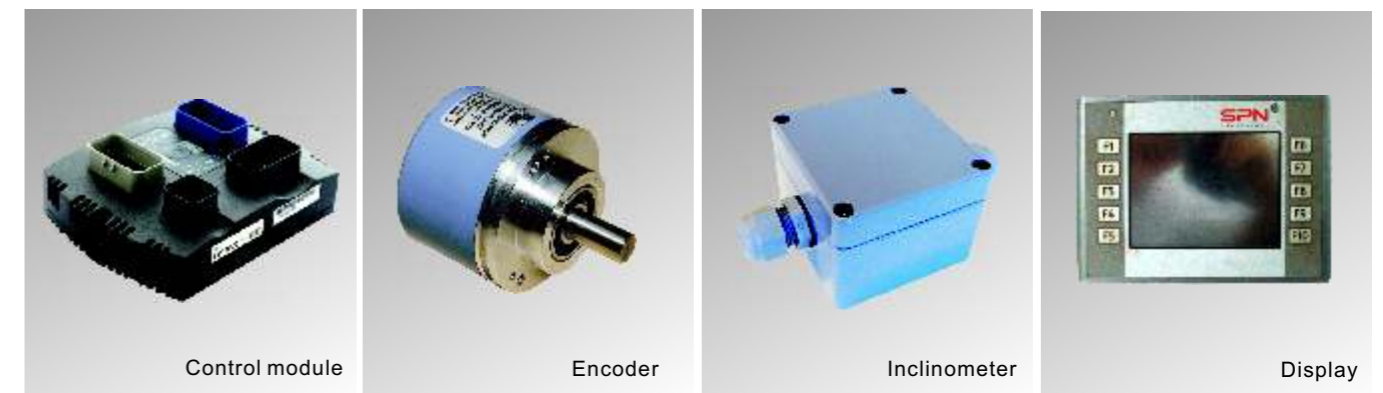
Closed-loop control is adopted. While working, the hydraulic pump absorption power is adjusted automatically by control system according to the change of the engine power and load to achieve the optimal match of the engine power and the pump power. Graded power control technology is adopted to set the engine working ability according to the specific operating conditions, which reduces the work intensity and ensures steady operation of the engine on economical point.

Fault intelligent diagnosis technology

The parameters of engine, hydraulic system and control system are cycled checked by fault diagnosis device to judge whether the rig works normally or not. When a fault occurs, the rig will be shut down timely and the code of fault will be displayed to avoid more severe damage.

Main electric component	Supplier	Note
Encoder	Germany Wachendorff	Major supplier
Control module	Finland EPEC	Major supplier
Inclinometer	Finland Axiomatic	Major supplier
Display	Shanghai SPN	Major supplier
Pressure sensor	Beijing Huguang Weiye	Major supplier
Inductive sensor	Germany Turck	Major supplier
Relay module	Germany Phoenix	Major supplier

Note: final model and data are according to contract or real rig.



Including rotary drive, main / auxiliary winch, boom mechanism, mast, etc.



Rotary drive Super drilling torque; power is much stronger with double motor and double gearbox; special hub built-in detachable key patent and pulley yoke sliding plate abrasion compensation technology are adopted; rotary drive speed electrical multistage control ensures the rig working steadily; the slew ring drives the Kelly bar to rotate by its inner dental lamina of sleeve type spindle and realizes drill-in.

Boom mechanism The parallelogram adjusting mechanism and triangle uniform load bracing frame ensure both accurate location of drilling tool and verticality of mast; The joint between parallelogram adjusting mechanism and mast is as upwards as possible to increase the stability of mast; adjust the working range of mast and the height of machine during transportation; all joints of boom mechanism adopt initiated new type auto-lubricating bearings.

Main / auxiliary winch With world-famous brands motors and gearboxes, it works stably and reliably; rope retainer is used to prevent rope from overlapping, slipping, squeezing and wearing; Lebus drum is adopted to ensure the layered winding of wire rope to prolong the service life of the rope.

Mast It is of box type structure with gusset plates as stiffeners to increase its torsion and bending resistance. The mast is articulated and folded in 3 sections, which is convenient for transportation. The Kelly bar and rotary drive are installed on the both side tracks of the mast, which owns guiding function when drilling. Special mast turnplate patent technology owns joint function. Electro-mechanical interlock spacing makes the system safe and reliable. Added cylinder at the bottom of mast provides higher stability of the rig during working. The mast can match different Kelly bars.



Operate comfortably—the best cab would greatly improve productivity.



Falling Object Protective Steel Part Welding Structure

The cab came into shape by stamping hi-strength steel plate. Its window is made of toughed glass. It's equipped with safety belt to best protect operator's safety.

Air Conditioner

The imported full automatic air-conditioner of standard configuration and big capacity is capable of admitting air by adjusting and purifying the cab air circularly, and hence keeping the air fresh in the cab .It can realize quick refrigeration and temperature rise to obtain comfortable temperature in cab all the year round. Moreover, it has a powerful control panel, which is convenient in operation.

Wide Visual Field

The optimized cab with the same high strength reduces the area of column and effectively lessens the blind area of the visual field, therefore making operation with high safety. The front and side visual windows allow the operator see the state of work device and the surrounding environment. The rear visual window and engine casing in conformity with design height provide wide rear visual field.

All-directionally Adjustable Suspended Seat with Dual-slide-rail Structure

The height and location of the seat, obliquity of the backrest, height of the armrest and headrest are easily adjustable. The adjusting buttons are within the operator's reach. The rigidity of the seat is also adjustable in accordance with the weight of the operator so that

the operator can operate the machine comfortably in spite of his build.

High-level Sealed Cab

The cab is equipped with seal ring of good sealing to prevent dust and rainwater from entering the cab and keep the cab clean. It's quiet in the cab, so the operator's fatigue can be effectively mitigated.

Multi-point Tridimensional Wind Blowing

With 9 air ports in the cab, the operator can enjoy the favorable performance of the air-conditioner. There is a defrosting air port on the front windshield in the cab to ensure the operator clear visual field. The air ports blowing face and back of the operator can be freely switched as required to adjust the wind direction and bring comfort.

Computer Monitoring System

The computer monitoring system is assembled with sound and light automatic alarm, and the content and position of malfunction can be automatically displayed. The system checks the machine timely and notifies the operator when the malfunction will happen so as to maintain timely.

Convenient and Comfortable Operation

It is very quiet in the cab while operating the machine. The all-directionally adjustable seat of superior quality is very comfortable. The joystick and operation buttons are within your reach, which is labor saving and convenient.

SANY Kelly bar plays the leading role in China, and is exported to Asia, Europe, America and Africa.

Friction Kelly bar

It owns such merits as easy operating, large drilling depth (more tubes than the interlocking Kelly bar), lifting smoothly without unlocking between inner and outer pipe. It depends on the friction force to transfer the pressure to drilling tools, so it is not suitable for drilling in hard formation. The shock absorbing spring on the Kelly bar is designed according to different inertia force of Kelly bar while releasing wire rope, which will protect the base machine.

Interlocking Kelly bar

Interlocking Kelly bar owns great anti-twisted abilities, transfers greater pressure to drilling tools without pressure lost, so it is suitable for drilling in hard formation. SANY interlocking Kelly bar adopts high strength alloy pipes, wear-resistant alloy spline, and special design and treatment to the pressure points, lower pipe parts, baffle ring, torque transfer points. During production, key parts are under strict monitoring to ensure high reliability and long service life.

Core technology of SANY Kelly bar

Based on real operating conditions, SANY Kelly bar is the product of whole structure calculated and verified.

During manufacture of Kelly bar, it is important content of SANY process management to keep the finished product in the best state.

As the manufacturer, SANY devotes itself to construction method research and guides customers to operate correctly.

To design qualified Kelly bar for the requirement of construction methods. SANY is the manufacturer familiar with construction methods.

SANY Kelly bar is prepared precisely.



Type	Outer dia.	No. of tubes × Length per section	Nominal torque
Friction Kelly bar	Φ377mm / Φ1'3"	4 × 12 m (4 × 39' 4")	150 kN.m/110633 lbf.ft
		4 × 13 m (4 × 42' 7")	
		5 × 12 m (5 × 39' 4")	
Φ325mm / Φ1'1"	4 × 12 m (4 × 39' 4")		
Interlocking Kelly bar	Φ377mm / Φ1'3"	4 × 12 m (4 × 39' 4")	

Note: SANY only guarantees Kelly bars meeting the requirements of SANY insurance and operate rules. More information see *Kelly bar user's guide*.

It includes drilling bucket, auger, core barrel, centrifugal discharge drilling tools, bellling drilling tools and so on, and can drill in clay layer, sandy gravel, cobble layer and weathered strata.



- Flat bottom bucket is suitable for clay layer, loose soil and preferable cemented pebble.
- Double bottom bucket is suitable for pebble, frozen soil, strong weathered bedrock, especially for montmorillonite.
- Flat bottom bucket for clay layer
- Flat bottom bucket for tuff
- Flat bottom bucket for hole bottom cleaning
- Double bottom bucket for soil layer
- Double bottom bucket for mixed-layer
- Double bottom bucket for medium hard rock
- Double bottom bucket for hole bottom cleaning



- Single start auger is designed for strata and soil layer above groundwater level.
- Double start auger has been designed for drilling big diameter hole and for rock drilling.
- Single start clay auger
- Single start auger for mixed-layer
- Single start rock auger
- Double start clay auger
- Double start auger for medium hard rock
- Double start tapered rock auger
- Double start auger for soft rock
- Double start auger for hard rock



- The centrifugal discharge drilling tools are used for drilling with small diameter hole. It is used for clay layer, soft soil layer and shale cemented rock layer.
- Core barrels are special tools which can remove a core by cutting an annular groove so that the center core can be broken out with chisel or rock auger. It is suitable for large erratic boulder or bedrock.
- Centrifugal Rock Bucket
- Centrifugal Soil Bucket
- Centrifugal Core Barrel

- The bearing capacity of bored piles can be increased significantly by enlarging the bottom of holes. Belling drilling tools are the right tools for base enlargement in stable ground conditions. It is suitable for soil layer or bedrock.

Rock-drilling Technique

Effective solution for drilling into the final several meters of pile embedding rock.

Rotary drilling rig feeding with crowd cylinder has been developed by SANY. Interlocking Kelly bar with auger, core barrel and rock bucket, the rig can drill in rock within drillability < grade 8 and uniaxial compressive strength ≤ 100MPa economically and efficiently. (More information see SR220R/250R/280R brochure)

It is not recommend to drill in rock with SR150C rotary drilling rig.

Manifold working equipments are supplied to meet special requirement of customers.

At present, common construction methods are as follows: Kelly bar with drilling tools, casing installation with rotary drive, SMW (Soil Mixing Wall), reverse circulation (hard rock), Continuous Flight Auger drilling, twin rotary drive drilling, drilling with casing oscillator, drilling with diaphragm wall grab, etc. Construction technologies include dry drilling, slurry support drilling, whole-course-casing drilling, wall building drilling, etc.

Continuous Flight Auger drilling

Drilling in and carrying soil simultaneously, CFA drilling is an efficient construction method. It is irreplaceable for dry drilling, drilling shallow hole (depth<30m), drilling small hole (Φ400-800), especially for Φ400-600 small hole. Its working system includes concrete pipe joint, pulley, rotary drive, CFA drill rod lengthening joint, hollow spiral drill rod with concrete pipe inside, drill rod guiding mechanism with earth cleaner, bit, etc. (see SR200M/250M brochure)



Drilling with casing oscillator

Greater embedding pressure can be achieved by casing oscillator instead of Casing Drive Adapter, casing can be embedded even in hard layer.

Casing oscillator owns such merits as strong adaptability to geology, high quality of completed pile, low noise, no mud contamination, slight influence to former foundation, easy to control, low cost, etc. It owns advantages in following geological conditions: instable layer, underground slip layer, underground river, strata, old pile, erratic boulder, quicksand, foundation of emergency and temporary building. (see SRT150 brochure)



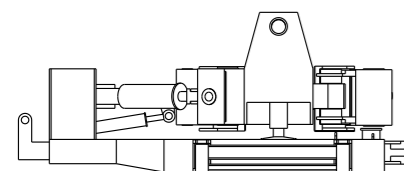
Casing installation with rotary drive

This method has solved problems such as large construction for manual casing embedding, need for auxiliary equipment as excavator, potential collapse of drilling embedded hole and the hole-collapse during drilling. It gains obvious advantages in drilling in backfill soil layer, shallow sand pebbles layer and karst cave limestone layer. The powerful rotary drilling rig of SANY-series is capable of installing and extracting casing without the assistance of casing oscillator. Installing casing with Casing Drive Adapter ensure verticality and avoid collapse. Drilling in and installing casing can carry out simultaneously to improve efficiency.

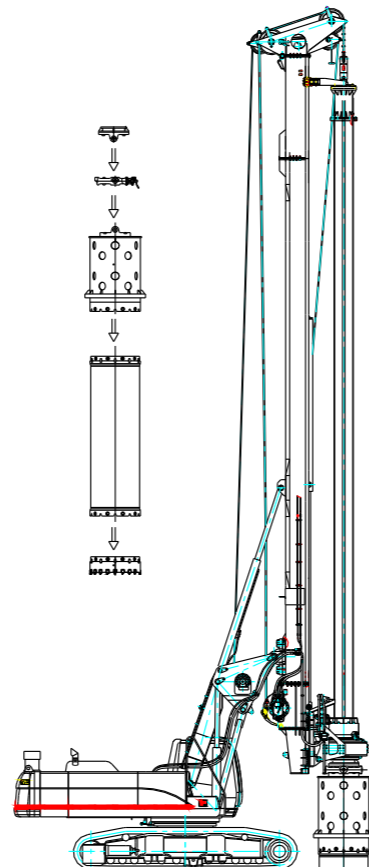
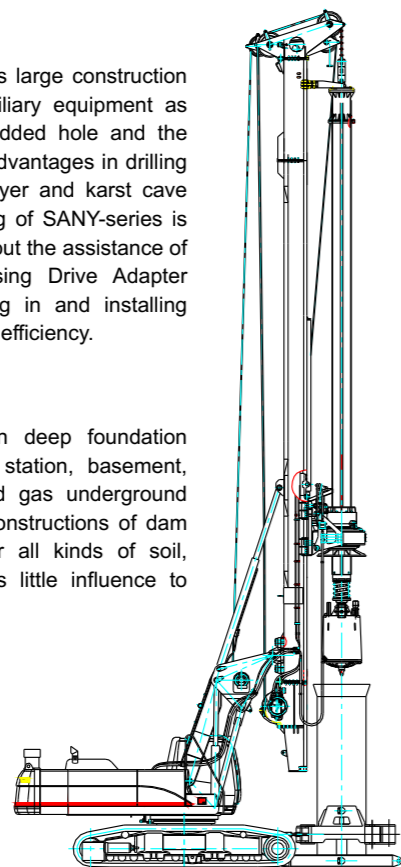
Drilling with diaphragm wall grab

Diaphragm wall grab is widely used in deep foundation engineerings of high-rise buildings, subway station, basement, sewage treatment plant, fender wall, oil and gas underground reservation groove, bridge, square pile and constructions of dam foundation, cutoff wall etc. It is suitable for all kinds of soil, especially for soft soil. The construction has little influence to adjacent buildings and underground facilities.

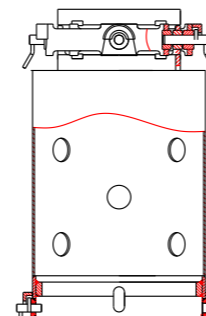
SANY Casing Oscillator		
Casing diameter	600/800/1000/1200/1500 mm	2' /2' 7"/3' 3"/3' 11"/4' 11"
Operating pressure	32 MPa	4641 psi
Max. torque	1980 kN.m (1.5 m dia.)	1460355 lbf.ft (4' 11" dia.)
Stroke	500 mm	1' 8"
Max. lifting force	2130 kN	478843 lbf
Counterweight (self-made)	4-10 t	4.4-11.0 sh.ton
Clamping force	2200 kN	494580 lbf
Rotation angle	20°	
Travel of casing	260 mm	10"
Height of clamping collar	650 mm	2' 2"
Weight	18 t	19.8 sh.ton
Overall length	4280 mm	14'
Overall width	2730 mm	9'
Overall height	1810 mm	5' 11"



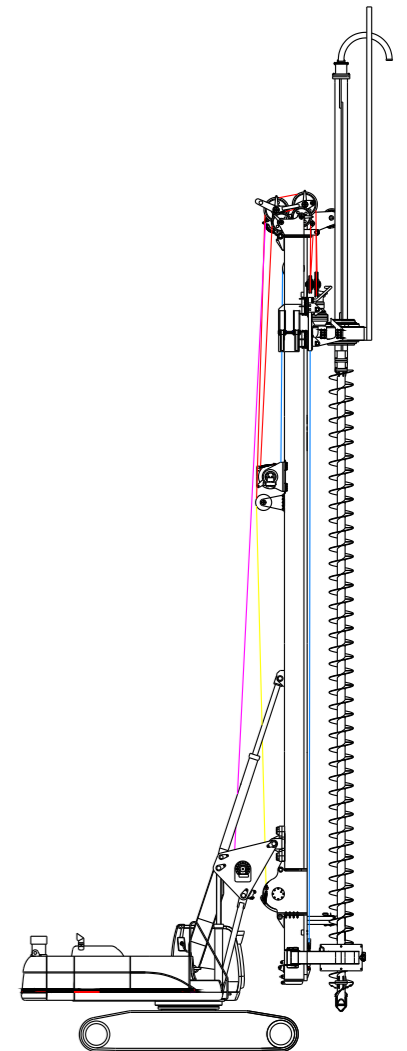
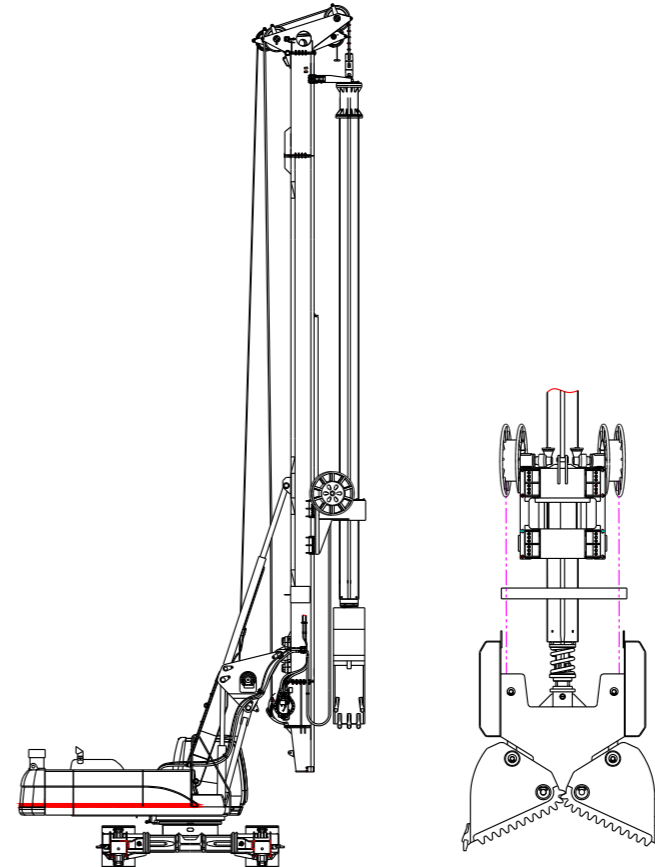
With Casing Oscillator



With Casing Drive Adapter



With Diaphragm Wall Grab



With CFA

Convenient Maintainability

The fittings originally imported and components of superior quality have longer maintenance cycle. The remote assembly of wearing parts is realized so that the maintenance is more convenient, thus enhancing the utilization ratio of machine and lowering the maintenance costs.

Easy to maintain

It is close to the maintenance points to ensure the service being finished quickly and timely and easy to disassemble and maintain the hydraulic system, working equipments, main and auxiliary winch.

Easy Cleaning of Radiator

It's accessible to the radiator of the engine once opening the service door. The radiator has special guard shield outside to block dirt. When cleaning the radiator, it only needs dismantle the guard rail for washing.

Easy Replacement of Filter element

For easy replacement of wearing parts, the fuel, engine oil, hydraulic oil and air filters conduct the remote installation in the design process, accordingly, the operator can quickly replace them even standing on the ground as long as the service door is opened.

Long Maintenance Cycle

The spare parts of superior quality can effectively prolong the service life, lessen the maintenance time and enhance the availability of the machine.

Bottom Emission Screw Plug

The radiator, fuel tank, hydraulic oil tank and engine oil bottom shell are equipped with screw plugs at the bottoms, which is convenient for discharging foreign substances and waste liquid out in the replacement of oil or cleaning. A quick detachable baffle is installed at the bottom to prevent the emission screw plug from damage.

Overhead Guard of Engine

The overhead guard of engine is equipped with a spring for convenient opening. After opening the overhead guard of engine, the engine can be easily maintained.

Oil Tank

The oil tank of large capacity can reduce the cycle of oil filling. The oil tank adopts the top-grade anti-rust technology so that it will not rust even if the oil containing such chemical substances as water and phosphoric acid dips inside for long time.



Safety

SANY rotary drilling rig embodies the human-centric design conception on each aspect. The guard devices, added at many positions in the rig, minimize the possibility of injuries.

Fan Cover

The engine radiator fan are enclosed by the thin iron wire net, which lessens the overhaul danger and prevents damage of blade in case of other objects' downfall

Hydraulic Pilot Lock

The control handle will not work when the hydraulic pilot lock lever is at the locking position. Therefore, the possible accident in consequence of inadvertent operation will be avoided.

Slip-proof Footboard and Large Armrest

The specially designed footboard efficaciously prevents the backward and sideward slip of soles. The large armrest prevents the operators from tumbling when he loses his balance.

High-strength Top Guard Plate

The cab top plate is made by Integration of the thick high-strength steel plate and the reinforced bar stamping. It bears excellent collision resistance and seldom gets deformed. Under the working condition of falling rubbles, the top plate will secure the operator. The optional OPG top guard plate and the front window protection net are the optimal choice for high-altitude working against falling objects.

Rear View Mirror and Escape Window

The left and right sides of cab are equipped with rear view mirrors, through which the operator can clearly see the situation of rear of the rig without turning back. Thus, the occurrence of

accidents is greatly avoided. In the cab, there is an escape window, through which the operator can make his escape in case of unexpected dangers.

Splash-proof Baffle

In the middle of pump chamber and engine lays the baffle, which prevents the oil from splashing to the hot position of engine if the hydraulic system is damaged.

Strengthened Transparent Anti-ultraviolet Glass

When there is intense light, the light-color glass effectually abates the entry of ultraviolet, relieves the visual fatigue of operator and enables the operator to see the working object easier.

Slip-proof Plate and Pad

The slip-proof plate with star-shape hole covers on the top of main valve and the air cleaner. And the slip-proof pad adheres to many positions of the vehicle body. Such a layout is applied to obviate the maintainer's tumble when they are undertaking maintenance.



Fan Cover Extinguisher Escape Window Splash-proof Baffle

Customer Support

All customers of SANY Rotary Drilling Rig can enjoy the commitment of overall services.

SANY has established branches and offices over 100 countries and regions, including 12 overseas subsidiaries in North Africa, West and Central Africa, South Africa, Europe, Middle East, North America, India, Russia, South-east Asia, Australia as well as Ukraine, and 68 service offices.

SANY now has 128 international service engineers to

provide after-sale service and technical support to 69 sites of 65 countries in five continents. Besides, 6 overseas central warehouses have been set up in Middle East, India, North America, Europe, South-east Asia and North Africa, and another 6 overseas central warehouses are prepared to construct in West and Central Africa, South Africa, South America, Russia, Ukraine and Australia.

Service Response

- After receiving the service call from customer or distributor, the service engineer will afford technical support by communicating to customer by phone or at the site.
- The service engineer must arrive at the site on time by appointment with customer.
- 24 hours waiting-on-orders system for service engineers.
- The service engineer shall not leave the site before successfully solving the malfunctions, and shall be permitted by the customers.
- In case of not solving the problem within three days, technical support and guide will be supplied from headquarter.

Pre-sale service

- Technical consultations for special project: to offer free technical consultations for special project and to assist in studying out construction scheme for reference.
- Equipment model selecting: to offer free consultations and various alternatives

and to recommend the most suitable product.

In-sale Service

- Pre-inspection of product: to conduct pre-inspection for product and make Machine-starting training.
- Transportation protection: Normative anticorrosive and antirust technology is adopted to insure the product quality during transportation.

After-sale Service

- Assist the customers in working out the initial construction scheme.
- Install and debug the equipment.
- Train the operator on site
- In-process quality control of the machine periodically.
- Solve the malfunction on site, rapid and actively.
- Initiate large maintenance program.
- Special service for key projects.
- Provide unconventional service.
- Provide the opportunity for technical exchange.

Guarantee for Service Commitment

- Based on the above commitment to product service, SANY is responsible and obligated to accredit certain number of service personnel with relevant knowledge and skills to instruct and insist distributor to set up administrative office.



Certificate

In 2005 Beijing SANY Heavy Machinery Co., Ltd. was awarded with ISO9001 Quality System certification.

In 2008, SANY SR150(C) Rotary Drilling Rig passed CE certification of Rhine company of Germany.



SR series Rotary Drilling Rig can be seen throughout Asia, Europe, America and Africa.

Excellent quality can be only proved after market test. Due to advanced technique, high reliability of the quality and perfect after-sale service, SANY series Rotary Drilling Rig is widely accepted and trusted by customers and exported to many countries and regions of Asia, Europe, America and Africa. SANY has made active contribution to the pile foundation construction around the world and has gotten recognition from industrial market.



Yinchuan Yellow River Bridge construction project



Wu Guang Railway construction site



Zhengxi Railway passenger dedicated line project



Hefei municipal construction site



Xi'an urban construction site



Airport construction in Doha, Qatar.

You will feel relieved to buy and use our rig with the whole solution of purchase guide, technical support and construction methods recommendation.

SANY engineers can provide the whole solution of rig model-configurations-construction methods recommendation according to construction requirements and geological data from clients.

Drilling depth (m)	Hole dia. (mm)
(If necessary, please attach geological data.)	

Recommended model		
Recommended configurations	Chassis	Engine
	Lengthened mast or not	Crowd type
	Spin-off or not	
	Casing drive adapter or not CFA or not	Casing oscillator or not
	Vibratory hammer or not	Grab or not
	Kelly bar	Interlocking Friction
	Drilling tools	
Others		

Recommended construction methods

(Effective with copy)