



SANY

SANY

ROTARY DRILLING RIG COLLECTION



ENERGY SAVING STAR, LEADING THE INDUSTRY

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Wide application range

P5

The highest quality foundation
machinery manufacturing center

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No matter what kind of terrain environment, Sany rotary drilling rig can work easily.

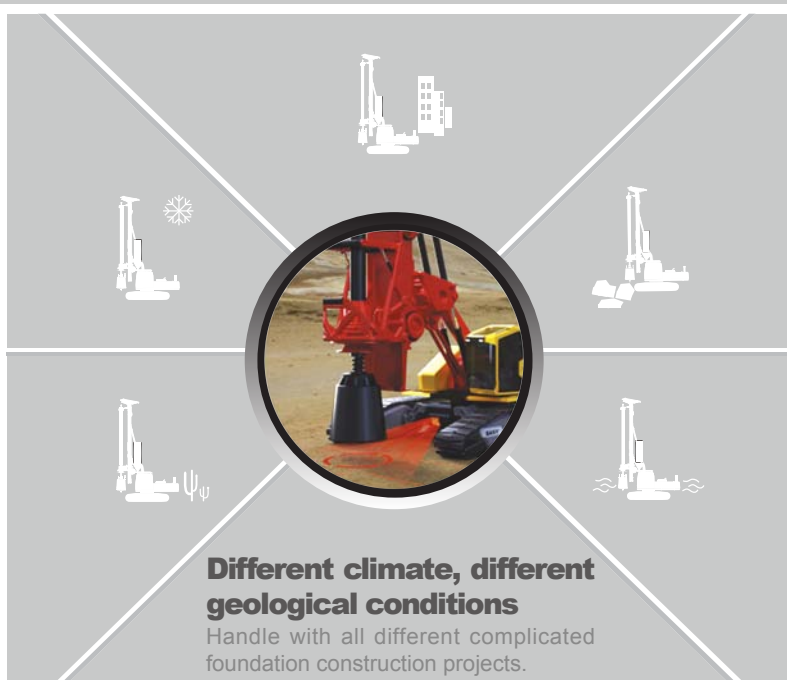
No matter in city, desert, snow, mountain or river, with suitable drilling head and construction method, all construction issues can be resolved by Sany rotary drilling rig.



city



desert



Different climate, different geological conditions
Handle with all different complicated foundation construction projects.



Civil



Bridge



snow



mountain



river



Railway



Highway



airport



Water conservancy

Sany rotary drilling rig, widely used in urban high-rise buildings, railways, highways, bridges, airports, ports and other bored pile foundation constructions, features wide application range, high working efficiency, stable performance, perfect customer support, energy saving and environment-friendly, which now has become the most famous brand around the world.

No.1 workshop of Nankou Industrial Park is an important part of Beijing Sany Manufacturing Center. The production area is 40,000m², and the total investment is 230 million USD. By the end of 2011, it had achieved the capacity of manufacturing 1500 rotary drilling rigs per year. It has a modern production line with greatest output and highest level of automation.



The first in the world





The world **highest** automation level and **largest** production capacity foundation machinery manufacturing center.

Assembly line

6 units

- ◆ Six units can be assembled at the same time.
Transferred by plate chain,
One unit can be assembled in 120 minutes.



CLOOS robot

0.1mm

- ◆ CLOOS upright type robot.
Repositioning and flip precision can reach 0.1mm.
Arc automatic tracking system $\leq 1\text{mm}$



Open groove robot

± 0.2

- ◆ Steel plate laser cutting precision is $\pm 0.2\text{mm}$, international standard is $\pm 2\text{mm}$.





Advantages of Sany Kelly bar

1. Time verified

Verified by long time using, economic and high efficient, Sany Kelly bar has been widely used in the civil foundation construction.

2. More reliable

With the most advanced welding robots, CNC automatic cutting machines and other advanced equipments, high components precision and welding quality guarantee high reliability.

3. Longer service life

Specific debugging filed is established to simulate real Kelly bar working conditions to analyze and improve key parts, like the drive key service life is significantly increased with Sany self developed high strength anti-wearing steel.

4. Optimized structure

Static analysis, dynamic analysis and fatigue analysis are taken with the most advanced analysis software like ANSYS and ADAMS during the designing process, which optimize Kelly bar with lighter weight and better structure without any missing of the design requirements. Dozens of patents have been applied by Sany in this field which keeps Sany's leading position in China.



SANY special drilling tools

SANY can supply with all kinds of standard drilling tools, including DBB-II, DBB-III, CB and so on. For special geological conditions, SANY can also provide special drilling tools accordingly to improve working efficiency. The latest special drilling tools developed by SANY are as follows:

◆ Pilot drilling bucket

Integrate bailing bucket and barrel;
The design of arc reinforcing plate, outside of reinforcing plate welded with transition bending plate;
Hinge is made of high tension steel;
Applicable layers: cave, occlusal pile.



◆ Underreaming bit

Adjustable reamer arms can meet the specific requirements of different bore hole diameters;
After drilling operation, convey soil with bailing bucket or scouring bit ;
Reamer arms are easy to spread and retract; box type structure is easy to service;
Applicable layers: hard stratum, frozen soil and medium soft rock.



◆ Core barrel with centralizer

Suitable for stage drilling of large diameter bore hole;
The cutting teeth and roller bits are interchangeable;
Centralizer supports the hole wall to avoid drilling an inclined hole;
Applicable layers: medium or slightly decomposed bedrock, hard or superhard bedrock.



◆ Cross-shaped core barrel

Core barrel with cross-typed guide plates in the centre;
During annular cutting, guide plates mill down the rocks;
The capacity of soil conveying and orientation is better than common barrels;
Applicable layers: backfill, pebble layer and highly or medium decomposed dipping formation.



◆ Sany drilling teeth

Compare with other drilling teeth, SANY drilling teeth features the following characteristics:
Better material. After many times of material testing, the wear resistance and the strength of SANY teeth are more than 30% higher than the general products in the market.
Construction based designing. SANY V20 drilling teeth has larger cutting angle and has higher working efficiency, SANY drilling bullet is more adaptive to pebble, gravel and soft rock geological formations.



V20 tooth

Bauer tooth

Long cutting teeth

Short cutting teeth

Roller bits

SR150C ROTARY DRILLING RIG

◆ Integrated parameter

SR150C		
Main performances	Unit	Parameters
Overall height	mm	18596
Operating weight	kg	45,000
Max. pile diameter	mm	1,500
Max. pile depth(friction Kelly/inter-locking Kelly)	m	55/45
Rotary Drive		
Max. output torque	kN.m	150
Speed of rotation	rpm	7-40
High speed spin off	rpm	/
Crowd system		
Crowd force	kN	150
Stroke	mm	4,250
Main winch		
Line pull(1st layer)	kN	160
Rope diameter	mm	28
Max. line speed	m/min	70
Auxiliary winch		
Line pull(1st layer)	kN	60
Rope diameter	mm	14
Max. line speed	m/min	60
Mast inclination		
Forward	°	5
Lateral	°	±5

◆ Main parameter

Base engine		ISUZU CC-6BG1TRP
Engine power		125 (168) kW (HP) @ 2100rpm
Rated output		637.9N.m@1800rpm
Fuel		1#2#Diesel
Emission regulation		EU stage II/EPA Tier 2
No. of cylinder-bore x stroke		6-105mm x 125mm
Engine displacement		6.5L

◆ Chassis parameter

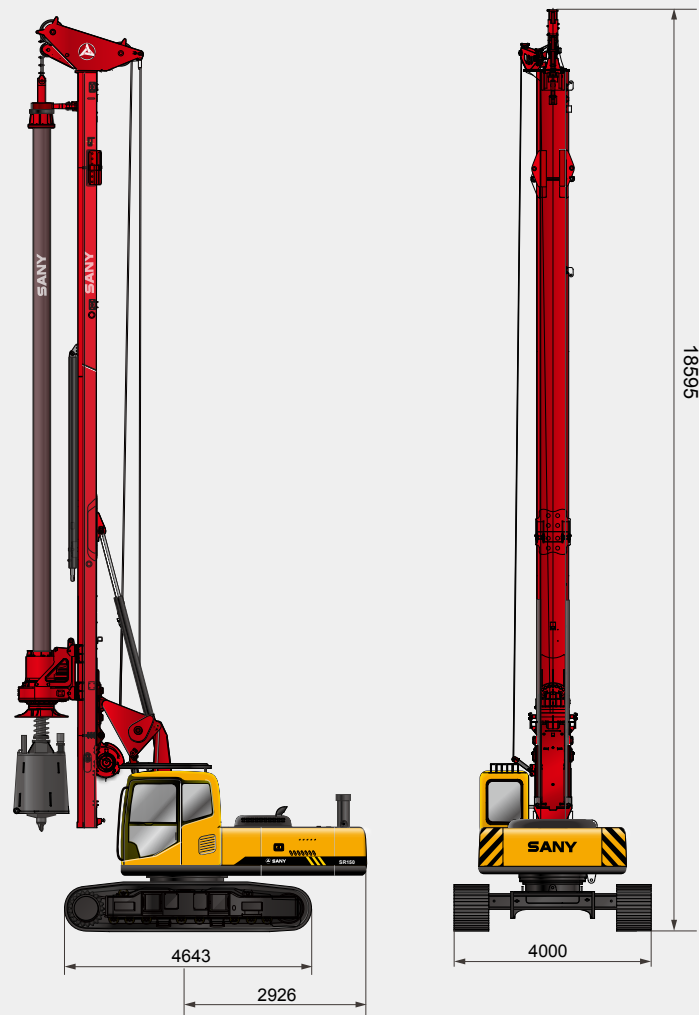
Chassis model		SY230RC
Chassis length	mm	6,310
Extended width	mm	4,000
Track shoe width	mm	700
Swing radius (foreside/backside)	mm	5,160/3,980
Transport width	mm	3,100
Transport height	mm	3,353
Traction force	kN	220

◆ Standard equipment/Optional equipment

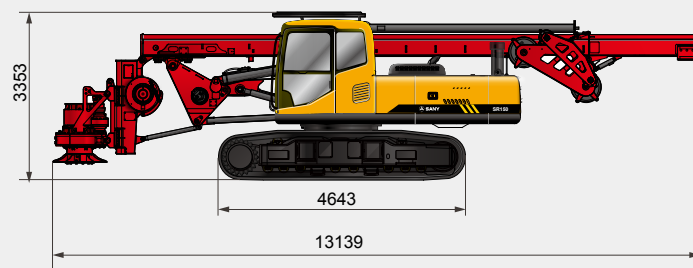
Mast verticality measuring	●	Mast sideward limiters	●
Slew angle measuring	●	Display monitor	●
Drilling depth real time measuring	●	Fault displaying function	●
Main winch pull measuring	●	Main winch lighting	●
Oil pressure measuring device	●	Pile lighting	●
GPS/GPRS data transmission	●	Air-conditioner	●
Engine diagnose system	●	Radio	●
PLC control module	●		
Manual mast adjusting device	●	Derricking angle measuring	□
Auto mast verticality adjusting function	●	Crowding force measuring device	□
Main winch floating control	●	Rotary drive torque output measuring	□
Electric control diesel pump	●	Rotary drive speed measuring	□
Auto idle model	●	Mast standing/lowering remote controller	□
All directional Gradienier	●	Slurry adding remote controller	□
Cab collision protection	●	Emergency stop switch	□
Electric protection module	●	Main winch camera monitor	□
Main winch bottom-touching protection	●	Anemometer	□
Slew siren	●	Caution light	□
Aux. winch protection device.	●	Radar slew protection system	□

● Standard □ Optional

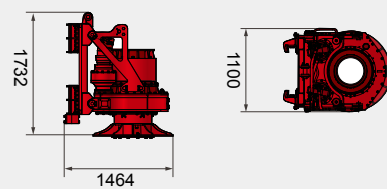
◆ Working dimensions



◆ Transport dimensions (rotary drive assembly)



◆ Rotary drive



SR200C ROTARY DRILLING RIG

◆ Integrated parameter

SR200C		
Main performances	Unit	Parameters
Overall height	mm	20,089
Operating weight	kg	60,000
Max. pile diameter	mm	1800
Max. pile depth(friction Kelly/inter-locking Kelly)	m	58/45
Rotary Drive		
Max. output torque	kN.m	200
Speed of rotation	rpm	7-30
High speed spin off	rpm	/
Crowd system		
Crowd force	kN	150
Stroke	mm	4,300
Main winch		
Line pull(1st layer)	kN	200
Rope diameter	mm	28
Max. line speed	m/min	72
Auxiliary winch		
Line pull(1st layer)	kN	76
Rope diameter	mm	20
Max. line speed	m/min	79
Mast inclination		
Forward	°	5
Lateral	°	±5

◆ Main parameter

Base engine		ISUZU AA-6HK1XQP
Engine power		193.5(259)kW(HP)@2000rpm
Rated output		1557N.m@1400rpm
Fuel		Diesel oil (JIS Type 2)
Emission regulation		EU stage II/EPA Tier 2
No. of cylinder-bore x stroke		6-112×149mm 6-4.4×5.9 in
Engine displacement		7.79L

◆ Chassis parameter

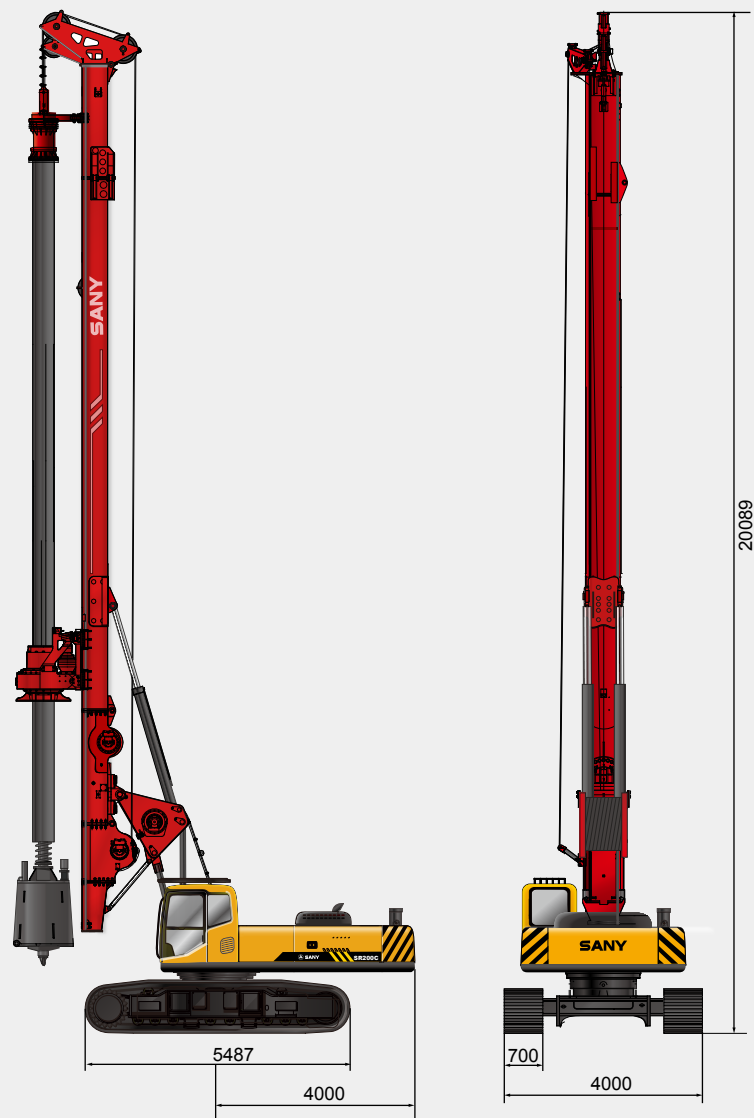
Chassis model		SY310RC
Chassis length	mm	6,790
Extended width	mm	4,000
Track shoe width	mm	700
Swing radius (foreside/backside)	mm	6,020/4,000
Transport width	mm	3,000
Transport height	mm	3,370
Traction force	kN	360

◆ Standard equipment/Optional equipment

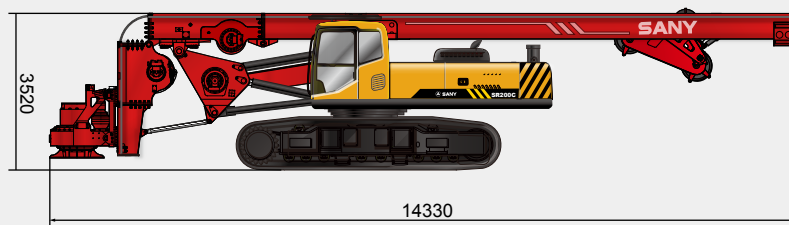
Mast verticality measuring	●	Aux. winch protection device.	●
Slew angle measuring	●	Mast sideward limiters	●
Drilling depth real time measuring	●	Display monitor	●
Main winch pull measuring	●	Fault displaying function	●
Oil pressure measuring device	●	Main winch lighting	●
GPS/GPRS data transmission	●	Pile lighting	●
Engine diagnostic system	●	Rotary drive torque measuring	●
PLC control module	●	Air-conditioner	●
Manual mast adjusting device	●	Radio	●
Auto mast verticality adjusting function	●		
Main winch floating control	●	Luffing angle measuring	□
Electric control diesel pump	●	Automatic pressing control system	□
Auto idle model	●	Mast raising/lowering remote controller	□
All directional gradienter	●	Slurry adding remote controller	□
Cab collision protection	●	Pressing protection device	□
Electric protection module	●	Caution light	□
Main winch bottom-touching protection	●	Radar slew protection system	□
Slew siren	●		

● Standard □ Optional

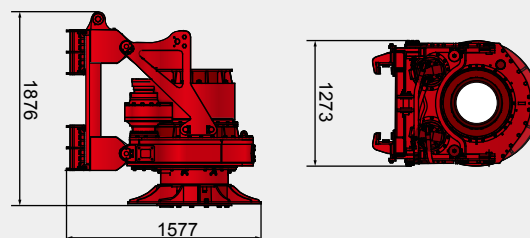
◆ Working dimensions



◆ Transport dimensions (rotary drive assembly)



◆ Rotary drive



SR200II ROTARY DRILLING RIG

◆ Integrated parameter

SR200II		
Main performances	Unit	Parameters
Overall height	mm	19713
Operating weight	kg	62000
Max. pile diameter	mm	1800
Max. pile depth(friction Kelly/inter-locking Kelly)	m	59/46
Rotary Drive		
Max. output torque	kN.m	200
Speed of rotation	rpm	6.7-25
High speed spin off	rpm	144
Crowd system		
Crowd force	kN	155
Stroke	mm	4300
Main winch		
Line pull(1st layer)	kN	200
Rope diameter	mm	28
Max. line speed	m/min	70
Auxiliary winch		
Line pull(1st layer)	kN	90
Rope diameter	mm	20
Max. line speed	m/min	70
Mast inclination		
Forward	°	4
Lateral	°	±5

◆ Main parameter

Base engine	CAT C7 DITA-ATAAC
Engine power	187kW @ 1800rpm
Rated output	/
Fuel	1#2#diesel
Emission regulation	Tier III
No. of cylinder-bore x stroke	6-110×12mm
Engine displacement	7.2L

◆ Chassis parameter

Chassis model	CAT329D
Chassis length	mm 6840
Extended width	mm 4300
Track shoe width	mm 800
Swing radius (foreside/backside)	mm 4260/3420
Transport width	mm 3000
Transport height	mm 3411
Traction force	kN 370

◆ Standard equipment/Optional equipment

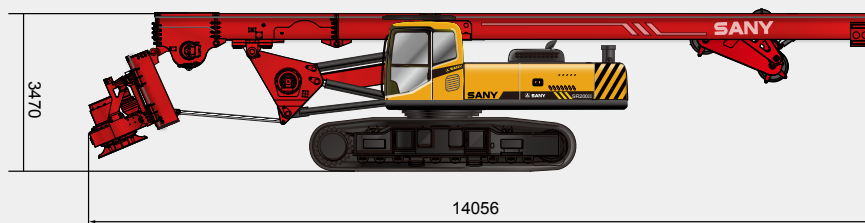
Mast verticality measuring	●	Aux. winch protection device.	●
Slew angle measuring	●	Mast sideward limiters	●
Drilling depth real time measuring	●	Display monitor	●
Main winch pull measuring	●	Fault displaying function	●
Oil pressure measuring device	●	Main winch lighting	●
GPS/GPRS data transmission	●	Pile lighting	●
Engine diagnostic system	●	Rotary drive torque measuring	●
PLC control module	●	Air-conditioner	●
Manual mast adjusting device	●	Radio	●
Auto mast verticality adjusting function	●		
Main winch floating control	●	Luffing angle measuring	□
Electric control diesel pump	●	Automatic pressing control system	□
Auto idle model	●	Mast raising/lowering remote controller	□
All directional gradienter	●	Slurry adding remote controller	□
Cab collision protection	●	Pressing protection device	□
Electric protection module	●	Caution light	□
Main winch bottom-touching protection	●	Radar slew protection system	□
Slew siren	●		

● Standard □ Optional

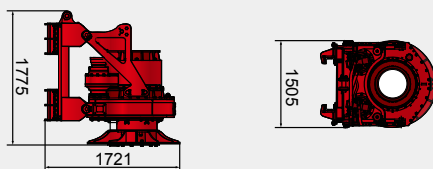
◆ Working dimensions



◆ Transport dimensions (rotary drive assembly)



◆ Rotary drive



SR220C ROTARY DRILLING RIG

◆ Integrated parameter

SR220C		
Main performances	Unit	Parameters
Overall height	mm	21,141
Operating weight	kg	74000
Max. pile diameter	mm	2300
Max. pile depth(friction Kelly/inter-locking Kelly)	m	66/52
Rotary Drive		
Max. output torque	kN.m	220
Speed of rotation	rpm	7~26
High speed spin off	rpm	128
Crowd system		
Crowd force	kN	180
Stroke	mm	5160
Main winch		
Line pull(1st layer)	kN	240
Rope diameter	mm	28
Max. line speed	m/min	70
Auxiliary winch		
Line pull(1st layer)	kN	90
Rope diameter	mm	20
Max. line speed	m/min	70
Mast inclination		
Forward	°	5
Lateral	°	±6

◆ Main parameter

Base engine	CAT C9STH	Mitsubishi 6D24-TL
Engine power	kW(HP) 213(285) @1800rpm	kW (HP) 250(337)/2000rpm
Rated output	213kw@1800rpm 285hp@1800rpm	250@2000rpm 337 hp@1800rpm
Fuel	Diesel oil (JIS Type 2)	Diesel Oil
Emission regulation	EU stage III/EPA Tier 3	EU stage III/EPA Tier 3
No. of cylinder-bore x stroke	6-112×149 6-4.4×5.9in	6-130×150 6-5.1×5.9 in
Engine displacement	8.8L	11.945L

◆ Chassis parameter

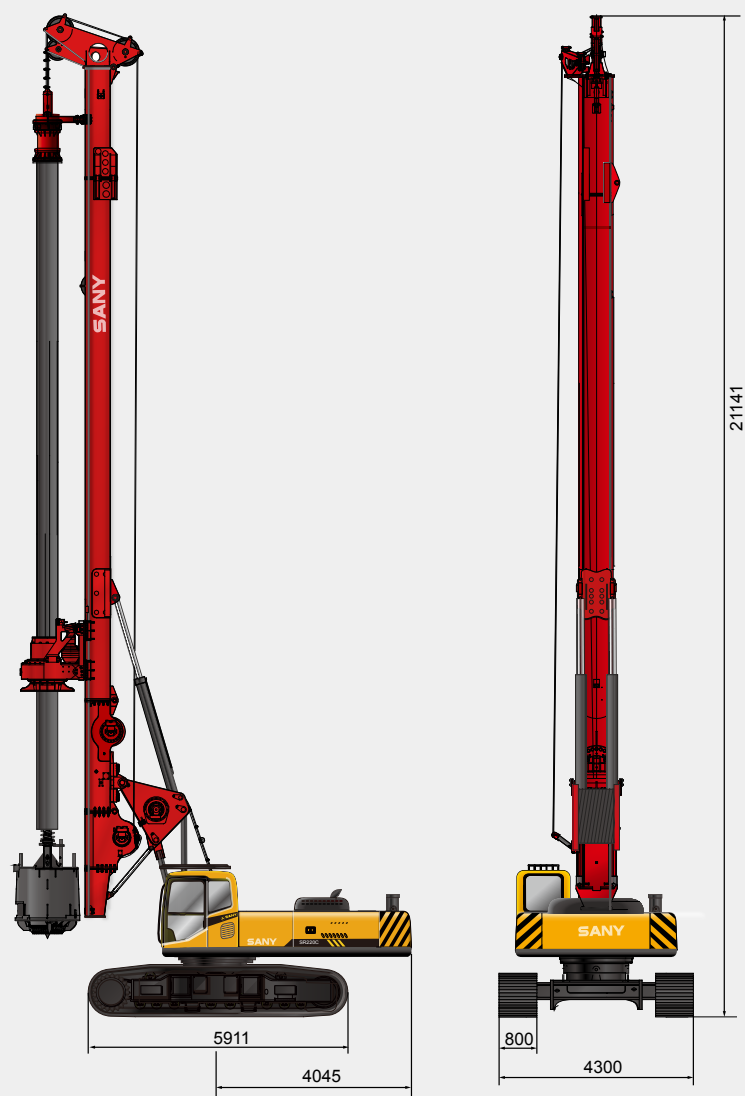
Chassis model		CAT336D	SY460R
Chassis length	mm	7,135	7,035
Extended width	mm	4,300	4,490
Track shoe width	mm	800	800
Swing radius (foreside/backside)	mm	5,060/4,365	5,060/4,265
Transport width	mm	3,000	3,190
Transport height	mm	3,400	3,520
Traction force	kN	510	510

◆ Standard equipment/Optional equipment

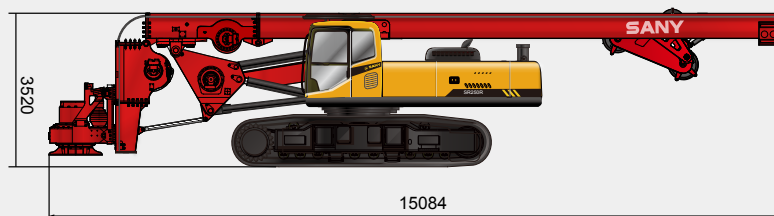
Display monitor	●	Auto mast verticality adjusting function	●
Leveling handle	●	Ground touching protection	●
PLC controller	●	Auto idle mode	●
Gradiometer	●	Diesel engine fault diagnosis	●
Power switch	●	Cab collision protection	●
Slew siren	●	Main winch floating control function	●
Slew angle measuring	●	Pile light	●
Oil pressure measuring device	●		
Mast inclination measuring	●	Luffing angle measuring	□
Main winch tension measuring	●	Rotary drive torque output measuring	□
Depth sounding system	●	Anemometer	□
GPS remote control system	●	Emergency stop switch	□
Auxiliary winch protection device	●	Caution light	□
Mast sideward limiters	●	Radar slew protection system	□
Mast inclination measuring device	●	Slurry adding remote controller	□
Fault displaying function	●	Mast raising/ lowering remote controller	□
Electric controlled diesel pump	●	Crowding force measuring device	□
Air Conditioner	●	High speed spin off	□
Radio	●		

● Standard □ Optional

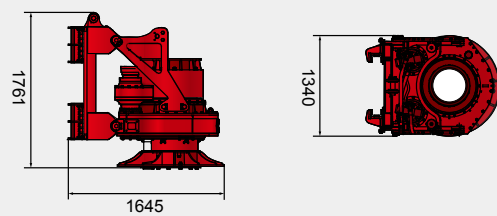
◆ Working dimensions



◆ Transport dimensions (rotary drive assembly)



◆ Rotary drive



SR250 ROTARY DRILLING RIG

◆ Integrated parameter

SR250		
Main performances	Unit	Parameters
Overall height	mm	21,546
Operating weight	kg	70,000/71,000(CAT336D/SY460R)
Max. pile diameter	mm	2,300
Max. pile depth(friction Kelly/inter-locking Kelly)	m	70/56
Rotary Drive		
Max. output torque	kN.m	250
Speed of rotation	rpm	7-26
High speed spin off	rpm	/
Crowd system		
Crowd force	kN	180
Stroke	mm	5,300
Main winch		
Line pull(1st layer)	kN	256
Rope diameter	mm	32
Max. line speed	m/min	63
Auxiliary winch		
Line pull(1st layer)	kN	90
Rope diameter	mm	20
Max. line speed	m/min	70
Mast inclination		
Forward	°	5
Lateral	°	±6

◆ Main parameter

Base engine	CAT C9HHP	Mitsubishi6D24-TLC1B
Engine power	kW(HP) 261(350) @1800rpm	kW(HP) 235(315)/2000rpm
Rated output	261kw@2100rpm 350hp@2100rpm	250@2000rpm 335 hp@2100rpm
Fuel	Diesel oil (JIS Type 2)	Diesel Oile
Emission regulation	EPA Tier III/EU STAGE – III	EPA Tier II/EU STAGE – II
No. of cylinder-bore x stroke	6-112×149 6-4.4×5.9in	6-130×150 6-5.1×5.9in
Engine displacement	8.8L/537in3	11.945L

◆ Chassis parameter

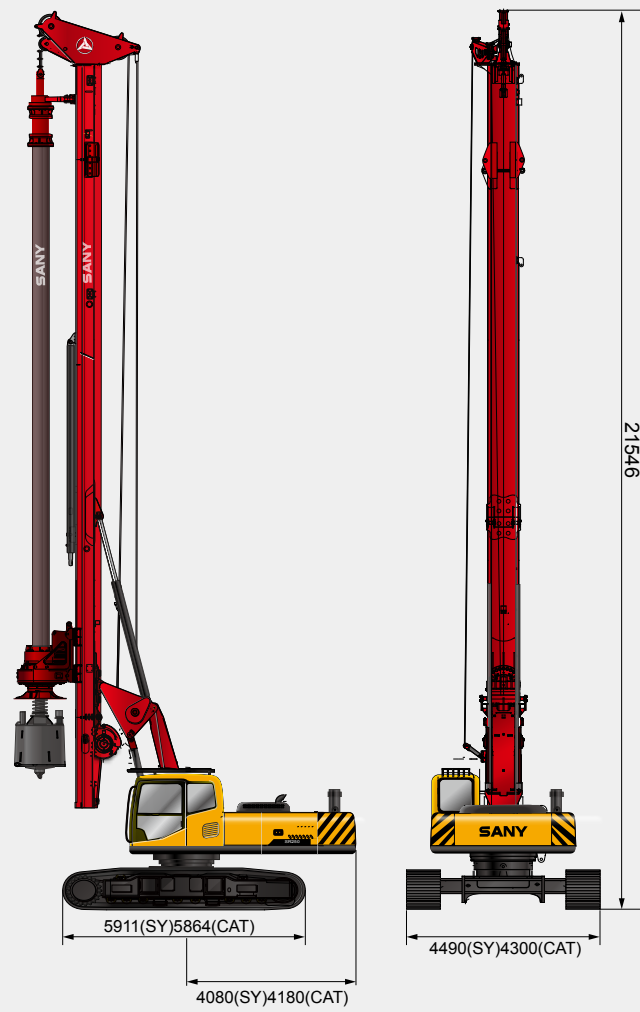
Chassis model	CAT336D	SY460R
Chassis length	mm 7,135	7,035
Extended width	mm 4,300	4,490
Track shoe width	mm 800	800
Swing radius (foreside/backside)	mm 5,060/4,365	5,060/3,900
Transport width	mm 3,000	3,190
Transport height	mm 3,400	3,520
Traction force	kN 510	510

◆ Standard equipment/Optional equipment

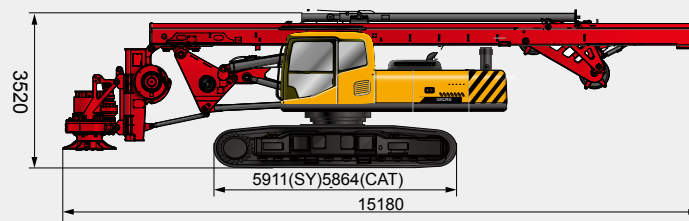
Standard module	●	Radio	●
Display monitor	●	Auto mast verticality adjusting function	●
Leveling handle	●	Ground touching protection	●
PLC controller	●	Auto idle mode	●
Gradienter	●	Diesel engine fault diagnosis	●
Power switch	●	Cab collision protection	●
Slew siren	●	Main winch floating control function	●
Slew angle measuring	●	Main winch hoist rope tension measurement	●
Oil pressure measuring	●	Pile light	●
Mast inclination measuring	●		
Main winch tension measuring	●	Luffing angle measuring	□
Depth sounding system	●	Rotary drive torque output measuring	□
GPS remote control system	●	Anemometer	□
Auxiliary winch protection device	●	Emergency stop switch	□
Mast sideward limiters	●	Caution light	□
Mast inclination measuring device	●	Radar slew protection system	□
Fault displaying function	●	Slurry adding remote controller	□
Electric controlled diesel pump	●	Mast raising/ lowering remote controller	□
Air Conditioner	●	Crowding force measuring device	□

● Standard □ Optional

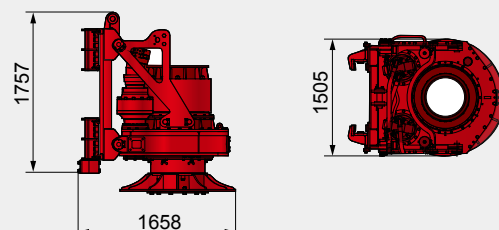
◆ Working dimensions



◆ Transport dimensions (rotary drive assembly)



◆ Rotary drive



SR250R ROTARY DRILLING RIG

◆ Integrated parameter

SR250R		
Main performances	Unit	Parameters
Overall height	mm	22,885
Operating weight	kg	73,000/74,000(CAT336D/SY460R)
Max. pile diameter	mm	2,300
Max. pile depth(friction Kelly/inter-locking Kelly)	m	70/56
Rotary Drive		
Max. output torque	kN.m	260
Speed of rotation	rpm	7~30
High speed spin off	rpm	/
Crowd system		
Crowd force	kN	300
Stroke	mm	10,000
Main winch		
Line pull(1st layer)	kN	256
Rope diameter	mm	28
Max. line speed	m/min	63
Auxiliary winch		
Line pull(1st layer)	kN	110
Rope diameter	mm	20
Max. line speed	m/min	70
Mast inclination		
Forward	°	5
Lateral	°	±6

◆ Main parameter

Base engine	CAT C9HHP	Mitsubishi 6D24-TL
Engine power	261(350)@1800rpm	250(335)kW(HP)@2000rpm
Rated output	/	/
Fuel	Diesel oil (JIS Type 2)	Diesel oil (JIS Type 2)
Emission regulation	EU stage III/EPA Tier 3	EU stage III/EPA Tier 3
No. of cylinder-bore x stroke	6-112mm ×149mm 6-4.4in×5.9 in	6-130mm×150mm
Engine displacement	8.8L/537in3	11.945L

◆ Chassis parameter

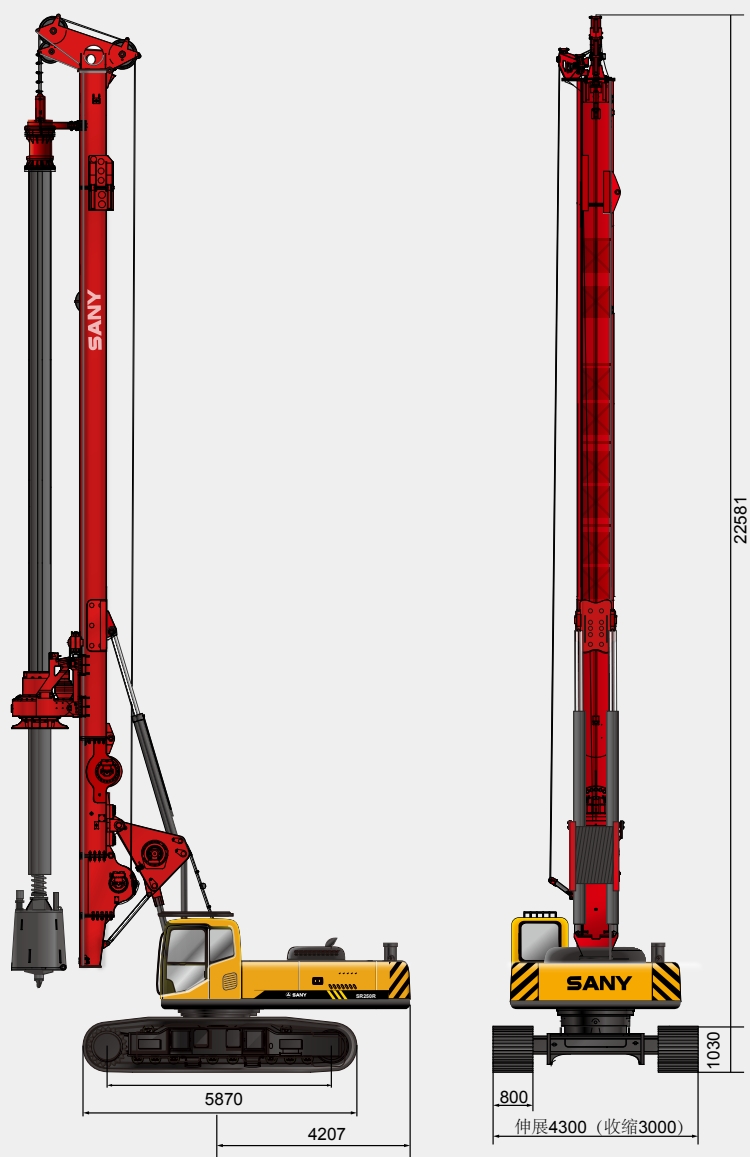
Chassis model		CAT336D	SY460R
Chassis length	mm	7,135	7,035
Extended width	mm	4,300	4,490
Track shoe width	mm	800	800
Swing radius (foreside/backside)	mm	5,060\4,365	5,060/3,900
Transport width	mm	3,000	3,190
Transport height	mm	3,425	3,520
Traction force	kN	510	510

◆ Standard equipment/Optional equipment

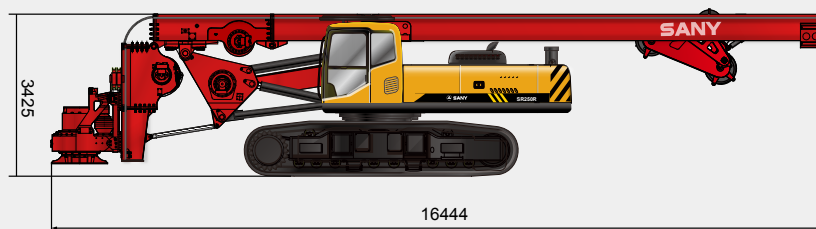
Mast verticality measuring	●	Mast sideward limiters	●
Slew angle measuring	●	Display monitor	●
Drilling depth real time measuring	●	Fault displaying function	●
Main winch pull measuring	●	Main winch lighting	●
Oil pressure measuring device	●	Pile lighting	●
GPS/GPRS data transmission	●	Air-conditioner	●
Engine diagnostic system	●	Radio	●
PLC control module	●	Crowding protection device	●
Manual mast adjusting device	●	Luffing angle measuring	□
Auto mast verticality adjusting function	●	Crowd force measuring	□
Main winch floating control	●	Rotary drive torque measuring	□
Electric control diesel pump	●	Rotary drive speed measuring	□
Auto idle model	●	Mast raising/lowering remote controller	□
All directional gradienter	●	Slurry adding remote controller	□
Cab collision protection	●	Emergency stop switch	□
Electric protection module	●	Main winch camera monitor	□
Main winch bottom-touching protection	●	Anemometer	□
Slew siren	●	Caution light	□
Aux. winch protection device.	●	Radar slew protection system	□

● Standard □ Optional

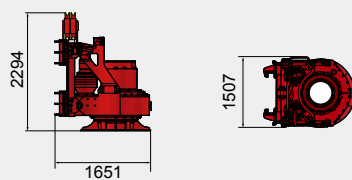
◆ Working dimensions



◆ Transport dimensions (rotary drive assembly)



◆ Rotary drive



SR280RII ROTARY DRILLING RIG

◆ Integrated parameter

SR280RII		
Main performances	Unit	Parameters
Overall height	mm	22,351
Operating weight	kg	78,000
Max. pile diameter	mm	2,500
Max. pile depth(friction Kelly/inter-locking Kelly)	m	84/56
Rotary Drive		
Max. output torque	kN.m	280
Speed of rotation	rpm	6.9-23
High speed spin off	rpm	/
Crowd system		
Crowd force	kN	210
Stroke	mm	6,000
Main winch		
Line pull(1st layer)	kN	300
Rope diameter	mm	36
Max. line speed	m/min	65
Auxiliary winch		
Line pull(1st layer)	kN	90
Rope diameter	mm	20
Max. line speed	m/min	70
Mast inclination		
Forward	°	5
Lateral	°	±6

◆ Main parameter

Base engine	CAT C9HHP
Engine power	261(350)kW(HP) @1800rpm
Rated output	/
Fuel	Diesel oil (JIS Type 2)
Emission regulation	EU stage III/EPA Tier 3
No. of cylinder-bore x stroke	6-112mm ×149mm 6-4.4in×5.9 in
Engine displacement	8.8L/537in3

◆ Chassis parameter

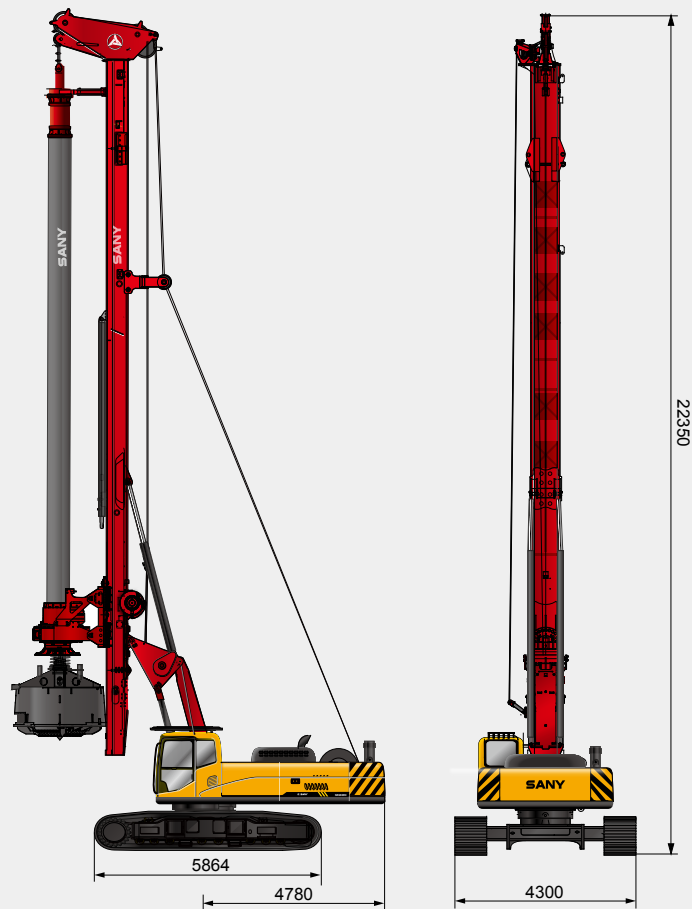
Chassis model	CAT336D
Chassis length	mm 7,715
Extended width	mm 4,300
Track shoe width	mm 800
Swing radius (foreside/backside)	mm 5,060/3,900
Transport width	mm 3,000
Transport height	mm 3,587
Traction force	kN 510

◆ Standard equipment/Optional equipment

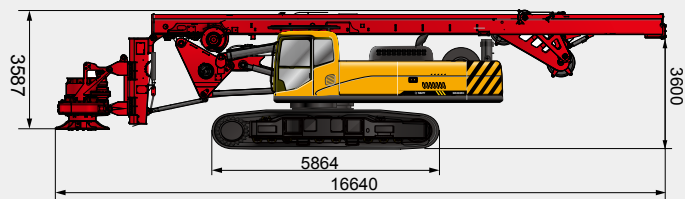
Mast verticality measuring	●	Mast sideward limiters	●
Slew angle measuring	●	Display monitor	●
Drilling depth real time measuring	●	Fault displaying function	●
Main winch pull measuring	●	Main winch lighting	●
Oil pressure measuring device	●	Pile lighting	●
GPS/GPRS data transmission	●	Air-conditioner	●
Engine diagnostic system	●	Radio	●
PLC control module	●	Crowding protection device	●
Manual mast adjusting device	●	Luffing angle measuring	□
Auto mast verticality adjusting function	●	Crowd force measuring	□
Main winch floating control	●	Rotary drive torque measuring	□
Electric control diesel pump	●	Rotary drive speed measuring	□
Auto idle model	●	Mast raising/lowering remote controller	□
All directional gradienter	●	Slurry adding remote controller	□
Cab collision protection	●	Emergency stop switch	□
Electric protection module	●	Main winch camera monitor	□
Main winch bottom-touching protection	●	Anemometer	□
Slew siren	●	Caution light	□
Aux. winch protection device.	●	Radar slew protection system	□

● Standard □ Optional

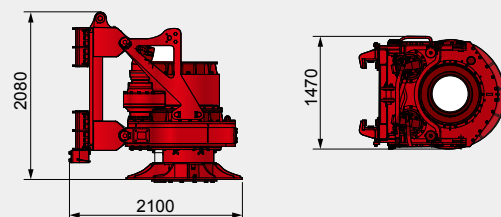
◆ Working dimensions



◆ Transport dimensions (rotary drive assembly)



◆ Rotary drive



Item	Unit	Low-speed gear	Standard gear	Torque limited gear
Speed of rotary drive rotation	rpm	6.9	6.9~23	6.9~23
Max. output of rotary drive	kN·m	280	280	150/220

SR360II ROTARY DRILLING RIG

◆ Integrated parameter

SR360II		
Main performances	Unit	Parameters
Overall height	mm	23,810
Operating weight	kg	106,000
Max. pile diameter	mm	2,500
Max. pile depth(friction Kelly/inter-locking Kelly)	m	90/-
Rotary Drive		
Max. output torque	kN.m	360
Speed of rotation	rpm	5.6-28
High speed spin off	rpm	/
Crowd system		
Crowd force	kN	250
Stroke	mm	8,000
Main winch		
Line pull(1st layer)	kN	350
Rope diameter	mm	36
Max. line speed	m/min	44
Auxiliary winch		
Line pull(1st layer)	kN	90
Rope diameter	mm	20
Max. line speed	m/min	70
Mast inclination		
Forward	°	15
Lateral	°	±6

◆ Main parameter

Base engine	CAT C-13
Engine power	305kW (HP) @ 1800rpm
Rated output	/
Fuel	Diesel Oil
Emission regulation	EU stage III/EPA Tier 3
No. of cylinder-bore x stroke	/
Engine displacement	12.5L/928in3

◆ Chassis parameter

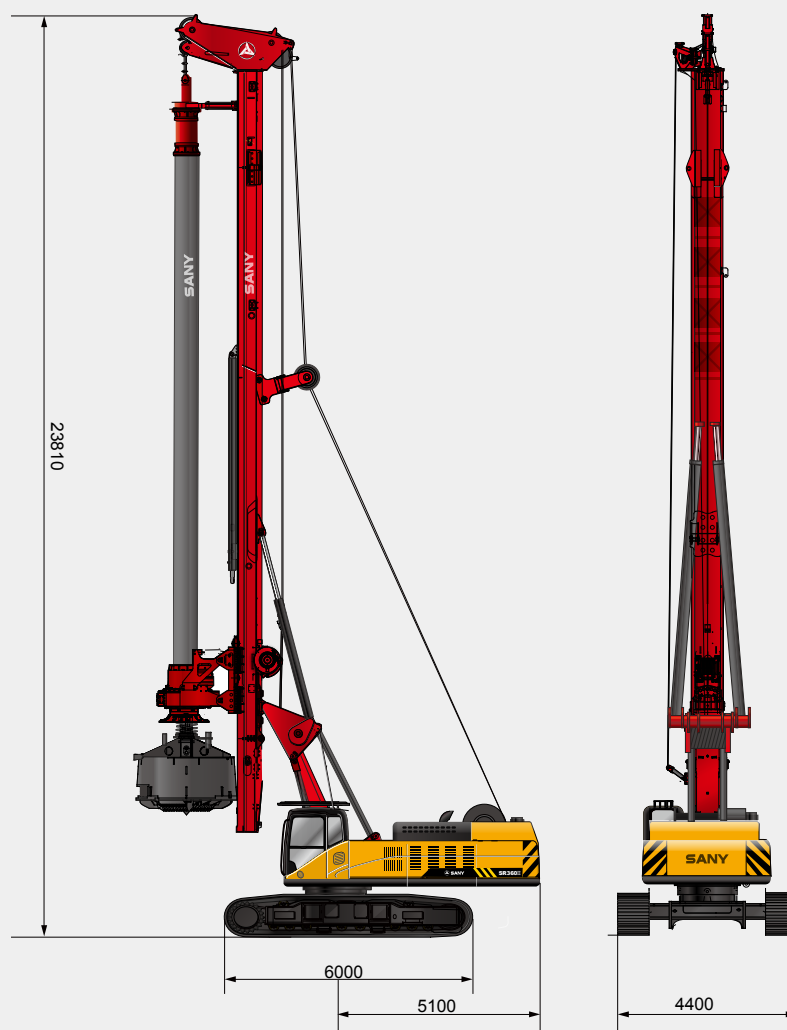
Chassis model	CAT345D
Chassis length	mm 8,082
Extended width	mm 4,400
Track shoe width	mm 800
Swing radius (foreside/backside)	mm /
Transport width	mm 3,000
Transport height	mm 3,627
Traction force	kN 700

◆ Standard equipment/Optional equipment

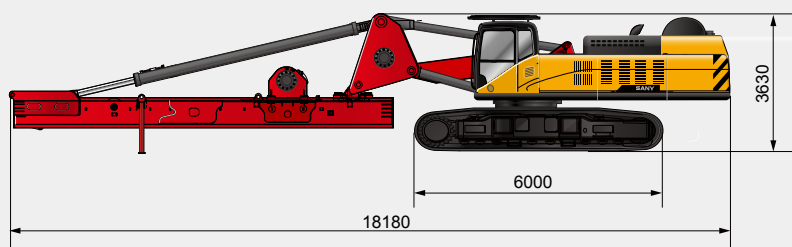
Mast verticality measuring	●	Mast sideward limiters	●
Slew angle measuring	●	Display monitor	●
Drilling depth real time measuring	●	Fault displaying function	●
Main winch pull measuring	●	Main winch lighting	●
Oil pressure measuring device	●	Pile lighting	●
GPS/GPRS data transmission	●	Air-conditioner	●
Engine diagnostic system	●	Radio	●
PLC control module	●	Crowding protection device	●
Manual mast adjusting device	●	Luffing angle measuring	□
Auto mast verticality adjusting function	●	Crowd force measuring	□
Main winch floating control	●	Rotary drive torque measuring	□
Electric control diesel pump	●	Rotary drive speed measuring	□
Auto idle model	●	Mast raising/lowering remote controller	□
All directional gradienter	●	Slurry adding remote controller	□
Cab collision protection	●	Emergency stop switch	□
Electric protection module	●	Main winch camera monitor	□
Main winch bottom-touching protection	●	Anemometer	□
Slew siren	●	Caution light	□
Aux. winch protection device.	●	Radar slew protection system	□

● Standard □ Optional

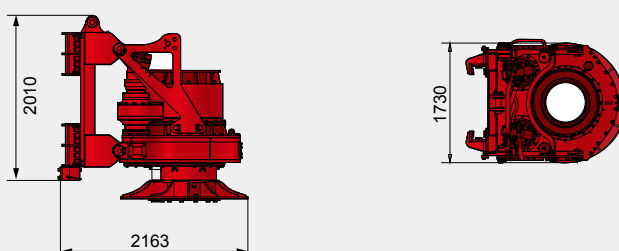
◆ Working dimensions



◆ Transport dimensions (rotary drive assembly)



◆ Rotary drive



SR420II ROTARY DRILLING RIG

◆ Integrated parameter

SR420II		
Main performances	Unit	Parameters
Overall height	mm	28,457
Operating weight	kg	148,000
Max. pile diameter	mm	3000
Max. pile depth(friction Kelly/inter-locking Kelly)	m	110
Rotary Drive		
Max. output torque	kN.m	420
Speed of rotation	rpm	5~20
High speed spin off	rpm	/
Crowd system		
Crowd force	kN	345
Stroke	mm	8,000
Main winch		
Line pull(1st layer)	kN	510
Rope diameter	mm	40
Max. line speed	m/min	46
Auxiliary winch		
Line pull(1st layer)	kN	90
Rope diameter	mm	20
Max. line speed	m/min	94
Mast inclination		
Forward	°	5
Lateral	°	±3

◆ Main parameter

Base engine	CAT C-15
Engine power	355kW/1800rpm
Rated output	/
Fuel	Diesel oil
Emission regulation	EU stage III/EPA Tier 3
No. of cylinder-bore x stroke	/
Engine displacement	15.2L/928in3

◆ Chassis parameter

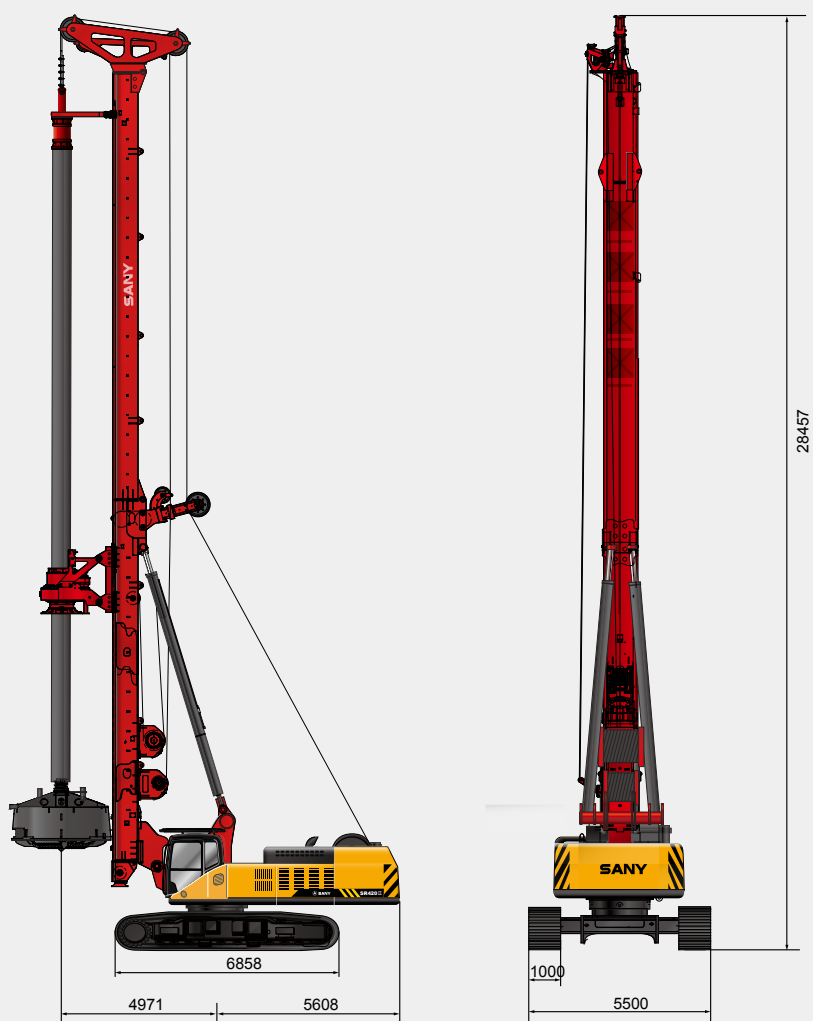
Chassis model		CAT374D
Chassis length	mm	7,932
Extended width	mm	5,500
Track shoe width	mm	1,000
Swing radius (foreside/backside)	mm	/
Transport width	mm	3,900
Transport height	mm	3,773
Traction force	kN	896

◆ Standard equipment/Optional equipment

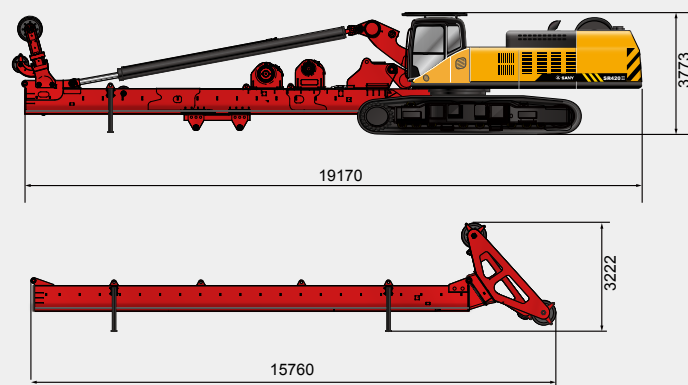
Mast verticality measuring	●	Mast sideward limiters	●
Slew angle measuring	●	Display monitor	●
Drilling depth real time measuring	●	Fault displaying function	●
Main winch pull measuring	●	Main winch lighting	●
Oil pressure measuring device	●	Pile lighting	●
GPS/GPRS data transmission	●	Air-conditioner	●
Engine diagnostic system	●	Radio	●
PLC control module	●	Crowding protection device	●
Manual mast adjusting device	●	Luffing angle measuring	□
Auto mast verticality adjusting function	●	Crowd force measuring	□
Main winch floating control	●	Rotary drive torque measuring	□
Electric control diesel pump	●	Rotary drive speed measuring	□
Auto idle model	●	Mast raising/lowering remote controller	□
All directional gradienter	●	Slurry adding remote controller	□
Cab collision protection	●	Emergency stop switch	□
Electric protection module	●	Main winch camera monitor	□
Main winch bottom-touching protection	●	Anemometer	□
Slew siren	●	Caution light	□
Aux. winch protection device.	●	Radar slew protection system	□

● Standard □ Optional

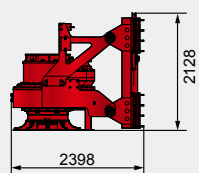
◆ Working dimensions



◆ Transport dimensions (rotary drive assembly)



◆ Rotary drive



SR460 ROTARY DRILLING RIG

◆ Integrated parameter

SR460		
Main performances	Unit	Parameters
Overall height	mm	32,410
Operating weight	kg	198,000
Max. pile diameter	mm	3500
Max. pile depth(friction Kelly/inter-locking Kelly)	m	120
Rotary Drive		
Max. output torque	kN.m	470
Speed of rotation	rpm	5~20
High speed spin off	rpm	/
Crowd system		
Crowd force	kN	270
Stroke	mm	8,000
Main winch		
Line pull(1st layer)	kN	600
Rope diameter	mm	46
Max. line speed	m/min	45
Auxiliary winch		
Line pull(1st layer)	kN	140
Rope diameter	mm	28
Max. line speed	m/min	64
Mast inclination		
Forward	°	4
Lateral	°	±3

◆ Main parameter

Base engine	CAT C-18
Engine power	kW (HP) 412@1800rpm
Rated output	/
Fuel	Diesel oil (JIS 2)
Emission regulation	EU stage III/EPA Tier 3
No. of cylinder-bore x stroke	/
Engine displacement	18L/1098in3

◆ Chassis parameter

Chassis model	CAT385C
Chassis length	mm 9982
Extended width	mm 6300
Track shoe width	mm 1000
Swing radius (foreside/backside)	mm /
Transport width	mm 3500
Transport height	mm 3926
Traction force	kN 1025

◆ Standard equipment/Optional equipment

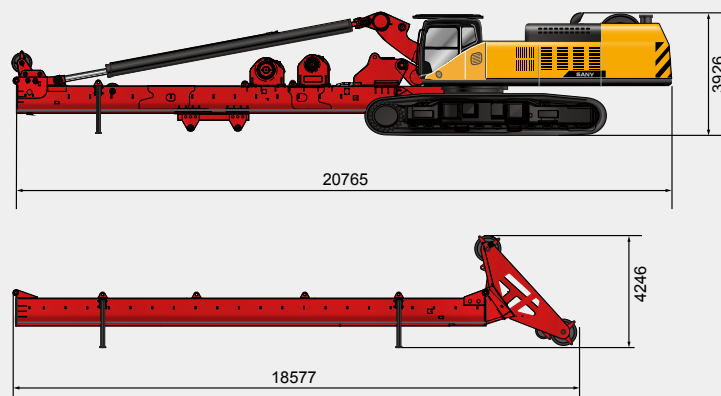
Mast verticality measuring	●	Mast sideward limiters	●
Slew angle measuring	●	Display monitor	●
Drilling depth real time measuring	●	Fault displaying function	●
Main winch pull measuring	●	Main winch lighting	●
Oil pressure measuring device	●	Pile lighting	●
GPS/GPRS data transmission	●	Air-conditioner	●
Engine diagnostic system	●	Radio	●
PLC control module	●	Crowding protection device	●
Manual mast adjusting device	●	Luffing angle measuring	□
Auto mast verticality adjusting function	●	Crowd force measuring	□
Main winch floating control	●	Rotary drive torque measuring	□
Electric control diesel pump	●	Rotary drive speed measuring	□
Auto idle model	●	Mast raising/lowering remote controller	□
All directional gradienter	●	Slurry adding remote controller	□
Cab collision protection	●	Emergency stop switch	□
Electric protection module	●	Main winch camera monitor	□
Main winch bottom-touching protection	●	Anemometer	□
Slew siren	●	Caution light	□
Aux. winch protection device.	●	Radar slew protection system	□

● Standard □ Optional

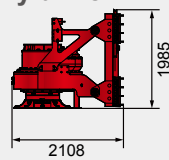
◆ Working dimensions



◆ Transport dimensions (rotary drive assembly)



◆ Rotary drive



Service Network/Parts warehouses

- Parts warehouses
- ⚓ Service Network



SERVICE COMMITMENTS



One machine one parts manual.
Global service inspection patrolling is carried out every season.

One month's special service for new machine, including new machine assembling, commissioning, delivery inspection and operator training.

Professional training for oversea clients holds in China twice a year.

Provide service cards and service stickers, set up Global Customer Support Hotline and Global Customer Support Email.

At present, the sales and service system has been established in 30 countries.
280 overseas customer support engineers are working overseas.

Set up 22 oversea parts warehouses, with more than 3,000 kinds of spare parts can be selected by customers.

Global Customer Support Hotline :
0086-10-80706787
Global Customer Support Email :
rigservice@sany.com.cn

Always with you wherever you are.



INNOVATION HISTORY OF SANY DRILLING RIG

2003

First heavy power hydraulic rotary drilling rig, it broke the technology blockade of the developed country.

2004

Sany SR220C rotary drilling rig piled the first borehole at the construction of the National Stadium "Bird's Nest".

2005

In 2004 and 2005, Beijing Sany passed ISO 9001 and CE certifications and became the first Chinese rotary drilling rig manufacturer to obtain such certifications.

2006

Beijing Sany became the biggest rotary drilling rig manufacturer and supplier in Asia.

2007

With Sany SR220R rotary drilling rig rolling off the production line, Beijing Sany became the first rock drilling rig manufacturer in China.

2008

SR360 was developed independently and Beijing Sany became one of the top level rotary drilling rig manufacturers around the world.

2009

The successful developing of SR420 rotary drilling rig completely changed the pile foundation designing in China, and signified the rotary drilling rig manufacturing in China steps from "Made in China" to "Created in China".

2010

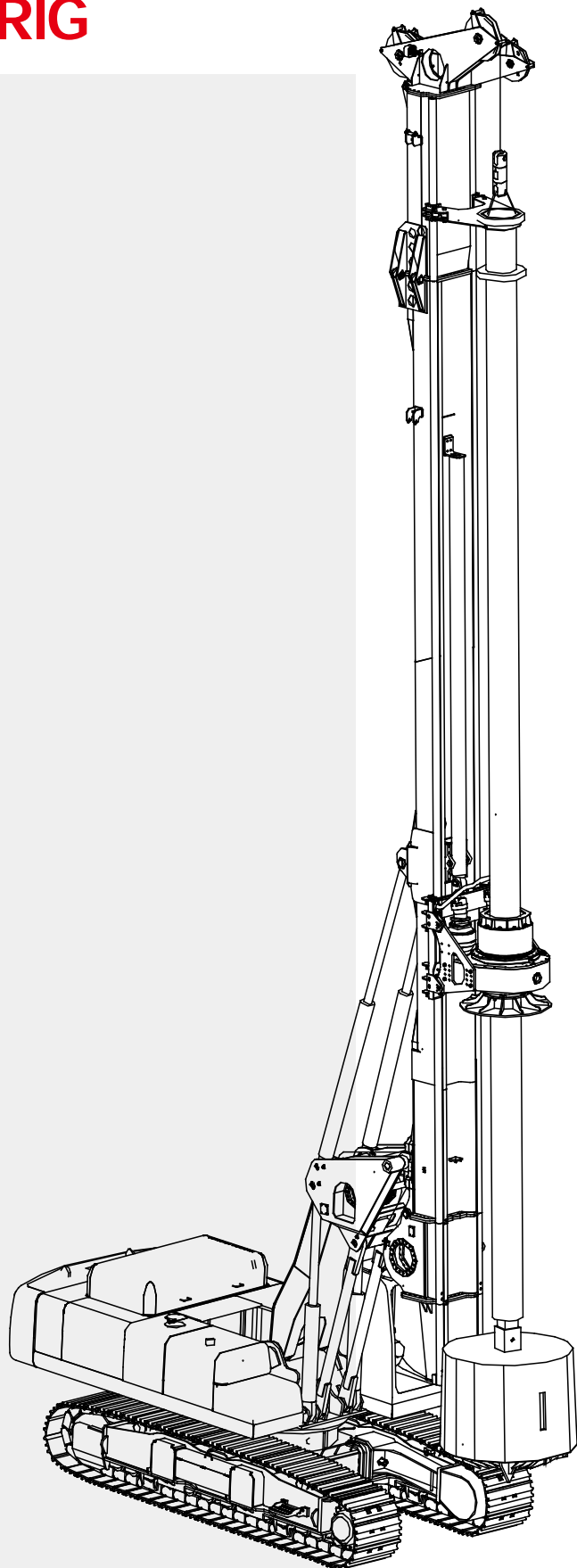
Beijing Sany has developed and sold more than 1500 units of rotary drilling rig, ranking the first in China again. And the record is being updated time to time.

2011

In 2011, Beijing Sany's international sales revenue was trebled compared with 2010. With wide application range, high working efficiency, stable performance, perfect customer support, energy saving and environment-friendly, Sany SR-series rotary drilling rig has become the most famous and favorable brand in the world.

2012

The record is being broken. Please be waiting with anticipation.



Main products of Beijing Sany

Hydraulic Rotary Drilling Rig



SR150C

Max.Drilling Depth:55m
Max.Drilling Dia:1500mm



SR200C

Max.Drilling Depth:58m
Max.Drilling Dia:1800mm



SR200 II

Max.Drilling Depth:59m
Max.Drilling Dia:1800mm



SR220C

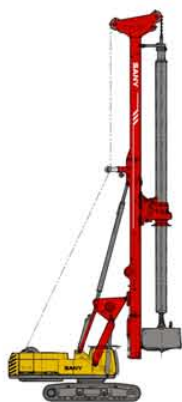
Max.Drilling Depth:66m
Max.Drilling Dia:2300mm



SR250

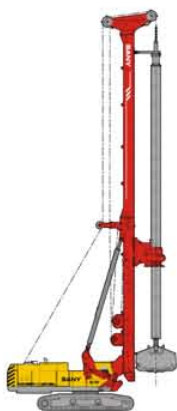
Max.Drilling Depth:70m
Max.Drilling Dia:2300mm

Winch Crowded Rotary Drilling Rig



SR360 II

Max.Drilling Depth:90m
Max.Drilling Dia:2500mm



SR420 II

Max.Drilling Depth:110m
Max.Drilling Dia:3000mm



SR460

Max.Drilling Depth:120m
Max.Drilling Dia:3500mm



SR250R

Max.Drilling Depth:70m
Max.Drilling Dia:2300mm



SR280R II

Max.Drilling Depth:84m
Max.Drilling Dia:2500mm

Rotary Drilling Rig With CFA System



SR150M

Max.Drilling Depth:17m
Max.Drilling Dia:750mm



SR200M

Max.Drilling Depth:20m
Max.Drilling Dia:800mm



SR250M

Max.Drilling Depth:23m
Max.Drilling Dia:800mm



SR280M

Max.Drilling Depth:24m
Max.Drilling Dia:800mm