



BEIJING SANY INTELLIGENT TECHNOLOGY CO., LTD.

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Postal Code: 102202

After-sales Service Hotline: 0086-400-609-8318

This manual strives to be comprehensive and detailed based on existing information. Considering the continuous technological progress and updates of Beijing Sany Intelligent Technology Co., Ltd., modifications and adjustments to product technical parameters and configurations are made from time to time. Therefore, this product manual is for reference only. The actual appearance, configuration, and technical parameters of specific models are subject to the actual models sold by the dealer.

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SR175M

ROTARY DRILLING RIG



**NEW
POWER**



**MORE
ENERGY-SAVING**



**NEW
TECHNOLOGY**



**MORE
RELIABLE**



**NEW
EXPERIENCE**



**MORE
INTELLIGENT**

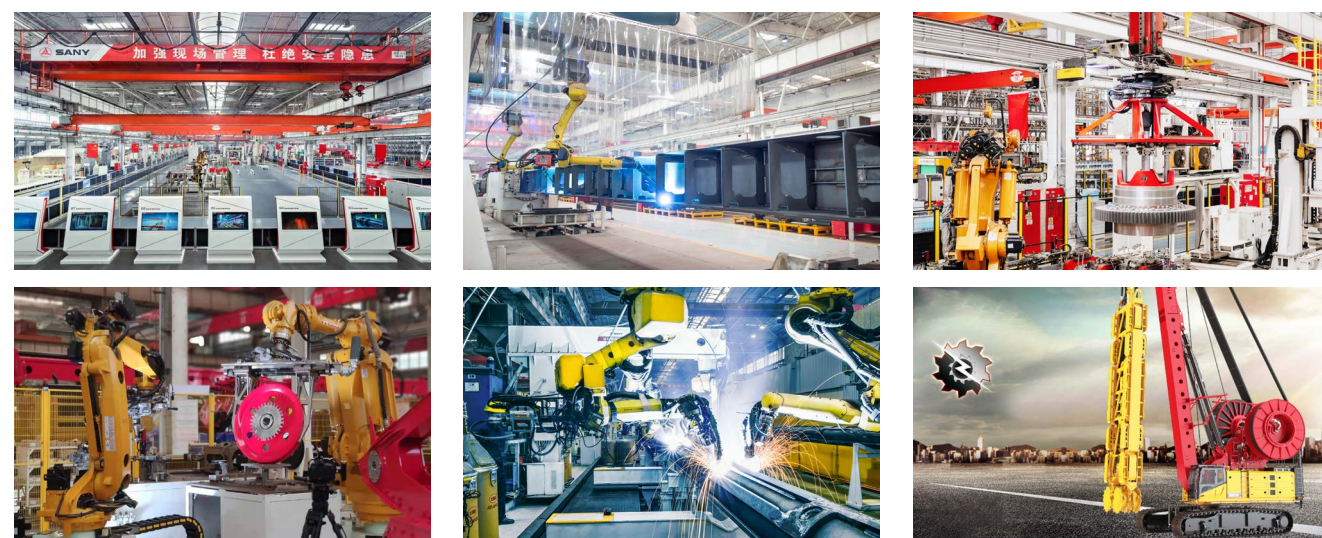
QUALITY CHANGES THE WORLD

www.sanygroup.com

BEIJING SANY INTELLIGENT TECHNOLOGY CO., LTD.

Beijing Sany Intelligent Technology Co., Ltd, as a key piling foundation and underground construction equipment manufacturer built by Sany Group, is deeply engaged in technology innovation and devotes itself to creating a new generation of foundation construction techniques and overall solutions; insists on casting industry benchmarks with craftsmanship, and provides customers around the world with one-stop experience with reliable quality, convenience, efficiency, flexibility and energy saving.

In September 2021, Beijing Piling Machinery Plant was honored by the World Economic Forum as the first "lighthouse factory" in the heavy machinery industry, designing 12 production lines with an automation rate of 83%. Workshop robots realized flexible welding, using machine vision and industrial robot assembly, production efficiency and product quality have been greatly improved, to achieve customers' personalized customization needs.



Vision

Build first-class enterprises
Foster first-class talents
Make first-class contributions

Mission

Quality changes the world

Enterprise ethics

Be just and faithful
Be thankful

Operation principles

All for the customer
All from innovation

SANY GROUP

Founded in 1989, Sany Group is mainly engaged in the equipment manufacturing industry, and its products include: concrete machinery, excavating machinery, lifting machinery, road construction machinery, piling machinery, wind power equipment, port machinery, petroleum equipment, coal equipment, aerial working machinery, etc. At present, Sany concrete machinery is steadily ranked as the No. 1 brand in the world; excavating machinery has been the consecutive global sales champion since 2020, and has been the consecutive sales champion in the domestic market for many years; large-tonnage cranes, crawler cranes, piling machinery, coal excavation machinery, and port machinery are steadily ranked No. 1 in China.

Sany Group has industrial parks in Changsha, Beijing, Shanghai, Shenyang, Kunshan, Zhuhai, Chongqing, Xi'an and Urumqi, etc. Among them, Beijing Piling Machinery Plant and Changsha No. 18 Plant have been selected by the World Economic Forum as part of the Global Lighthouse Factory Network, which are the only two lighthouse factories in the global heavy industry. Sany Group also has R&D and manufacturing centers in the U.S., Germany, India, Brazil, and Indonesia, with its business covering the whole world, and its products have been exported to more than 150 countries and regions.

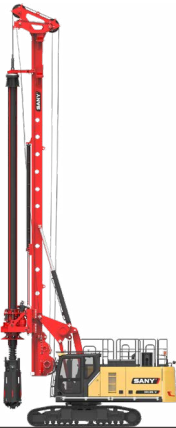




DEEPER
FOR HIGHER


Sany rotary drilling rigs integrate the latest design concepts and technological achievements, aiming to provide users with safer, more reliable and more efficient construction solutions, especially suitable for large infrastructure pile foundation projects, such as highways, high-speed railways, high-rise buildings, bridges, oil drilling, river support, etc., which can significantly improve the construction efficiency, reduce the cost, and at the same time reduce the impact on the environment.

Multi-functional



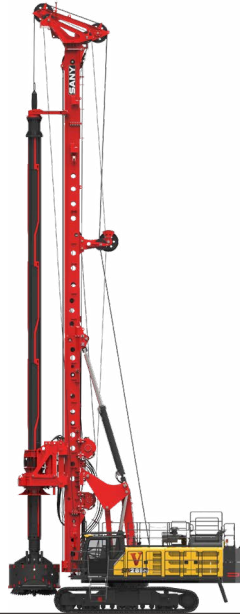
SR125

Max. drilling dia.: 1500 mm
Max. drilling depth: 41/31 m



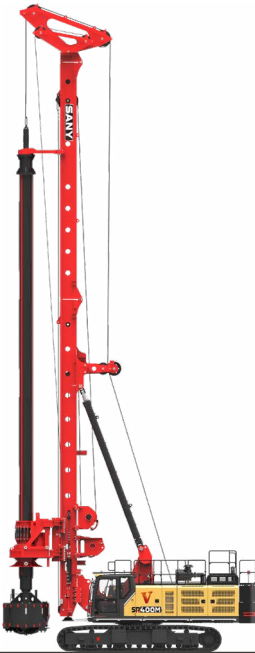
SR175M

Max. drilling dia.: 1500 mm
Max. drilling depth: 61/58 m



SR285M

Max. drilling dia.: 2200 mm
Max. drilling depth: 94/61 m



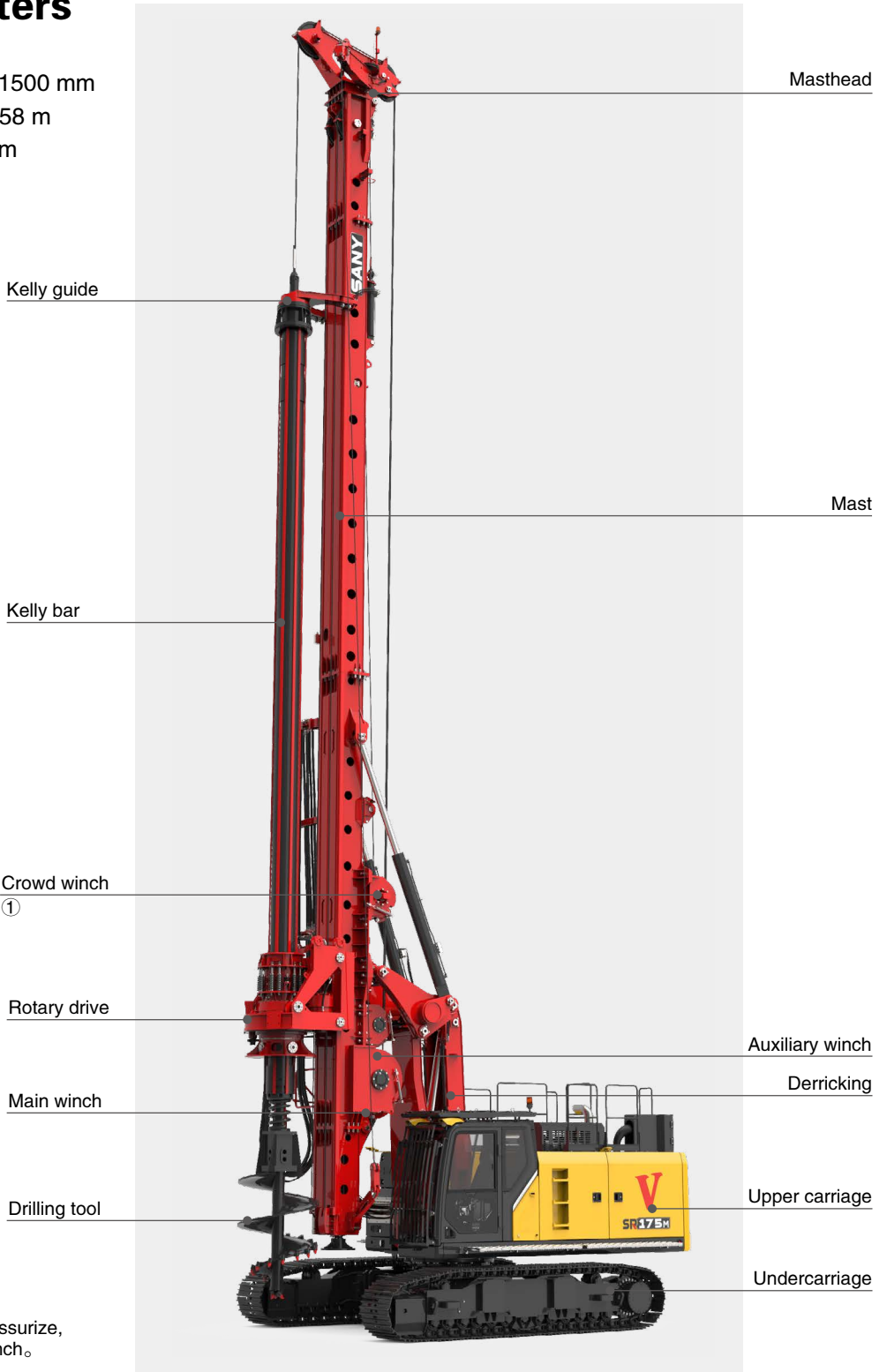
SR400M

Max. drilling dia. 2500 mm
Max. drilling depth: 103/86 m

SR175M Rotary drilling rig

Main parameters

- >> Max. drilling diameter: 1500 mm
- >> Max. drilling depth: 61/58 m
- >> Max. torque: 185 kN · m
- >> Overall height: 20.5 m
- >> Engine: B6.7/209 kW



Note: there are two ways to pressurize, namely crowd cylinder crowd winch.

Product features



Safe and comfortable cab

- >> Front/top guardrails, with the enhanced top guard
- >> ROPS-certified
- >> Seat belt alarm
- >> Safety hammer and fire extinguisher in cab
- >> Large sunroof and roof wiper
- >> Long front window wiper with double arms
- >> High-efficiency air-conditioning
- >> Extensively insulated to minimise noise
- >> Air suspension driver's seat with a high seat backrest and individual adjustment options



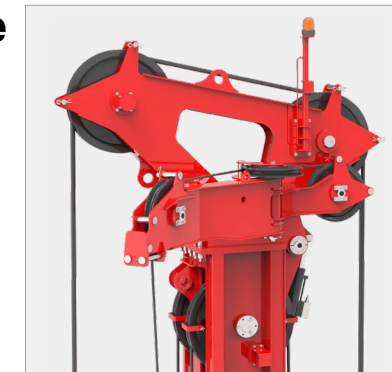
SANY-ADMS Intelligent control system

- >> 12.8-inch high-definition touch screen
- >> EPAD panel
- >> Friendly UI operation interface
- >> Digital analog display for locking device
- >> L3 level intelligent construction assistance
- >> Grouting construction management system
- >> Bluetooth
- >> MySANY digital housekeeper, providing online customer service, one-key call, spare parts query, equipment monitoring, operation statistics and other functions



Easy to disassemble and transport

- >> Automatic upper mast folding and unfolding
- >> Masthead automatic folding
- >> Masthead can be folded when transported, reducing the transportation length
- >> Transport with kelly bar
- >> Kelly bar fixed firmly, easy to disassemble



Power with high performance

- >> Euro 5/Tier 4f dual certification
- >> Electronically controlled silicone oil clutch fan, more energy-saving
- >> Low noise and low fuel consumption
- >> Non-sensory regeneration, easy to operate
- >> More convenient service outlets



Intelligent operation

- >> Auto-freefall
- >> Auto shaking-off debris
- >> One-touch shaking-off debris
- >> Intelligent drilling
- >> Intelligent crowding
- >> One-way spin-off



Product features



All-round safety protection

- >> Safety hammer and fire extinguisher in cab
- >> Delayed shutdown of headlights
- >> Emergency stop switch around the machine body
- >> Sound and light alarm for slewing and traveling
- >> Hydraulic oil leakage and low level alarm
- >> 360° Surround View Monitoring
- >> Top aviation warning light
- >> Chassis level monitoring and warning
- >> Derricking monitoring and alarm

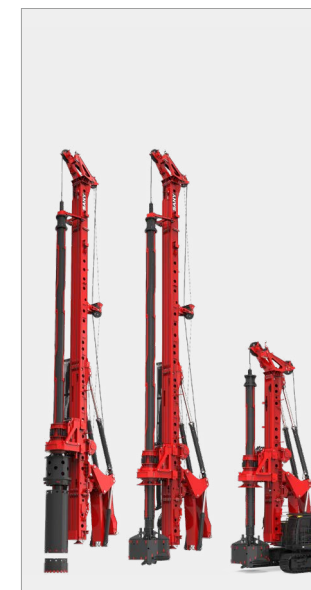


Emergency stop switch around the machine



Modular design of mast

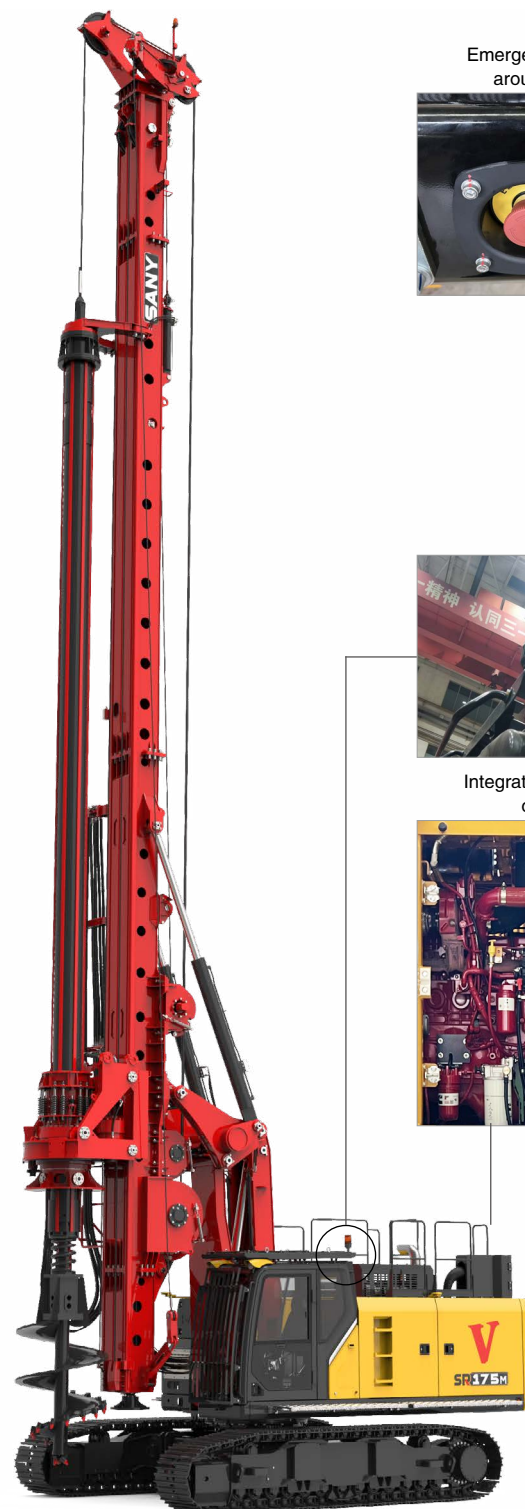
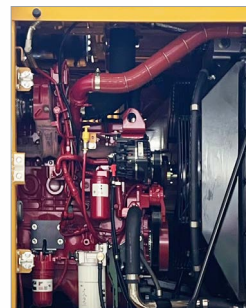
- >> Super large hole construction can be realized
- >> Low headroom construction can be achieved
- >> Foldable mast to realize minimum transport length



Seat belt alarm

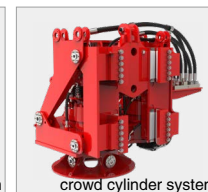
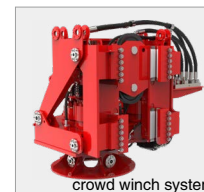


Integrated arrangement of filter elements



Powerful rotary drive

- >> Multi-gear control for efficient drilling in different formations
- >> Triple buffer to reduce construction impact
- >> Deep hole drilling motor protection technology
- >> Long guide design, high drilling verticality
- >> Multiple soil dumping modes to improve efficiency
- >> Standard spin-off reduces, max. speed 100 rpm
- >> Crowd winch or crowd cylinder to be choice



New generation Kelly bar

- >> High strength steel pipe material
- >> Upgraded structural, improving quality
- >> 100% robot auto welding on key welds
- >> 100% flaw detection on key welds, zero defects



Multiple customization options

- >> Multiple configurations to meet personalized customization
- >> Recommend the best construction plan to maximize the return on investment



Technical parameters



	Rotary drive	Unit	Standard	Spin off
	Rated output torque	kN·m	185	185
	Max. rotation speed	rpm	31	100
	Crowd system		Crowd winch	Crowd cylinder
	Max. crowed force push	kN	240 (nominal)	200
	Max. crowed force pull	kN	240 (nominal)	140
	Stroke	mm	15000	5200
	Rope diameter	mm	20	/
	Standard mode speed (push/pull)	m/min	7	4.5/9.5
	Fast mode speed (push/pull)	m/min	21	/
	Main winch		M6/L3/T5	
	Line pull	kN	185	
	Rope diameter	mm	28	
	Max. line speed	m/min	75	
	Auxiliary winch		M6/L3/T5	
	Line pull	kN	80	
	Rope diameter	mm	16	
	Max. line speed	m/min	75	
	Chassis			
	Engine model	/	Cummins B6.7	
	Engine power	kW/rpm	209/2000	
	Emission	/	Stage V/Tier 4 final	
	Fuel tank/AD blue tank capacity	L	380 L/46 L	
	Sound pressure level in the cabin	dB	LPA 75	
	Sound power level	dB	LPw 113	
	Hydraulic pressure	bar	343	
	Hydraulic oil tank capacity	L	450	
	Crawler width (extension)	mm	3000~4000	
	Track shoe width	mm	700	
	Tail radius	mm	3985	
	Traction force	kN	305	

	Kelly bar	Model	Weight(kg)	Depth(m)	S/O	Remark
	Interlocking	Φ406×4×9	5820	30	Standard	①
	Interlocking	Φ406×4×11	7220	38	Option	
	Interlocking	Φ406×4×13	8410	46.5	Option	
	Interlocking	Φ406×5×13.5	8710	61	Custormize	America version
	Friction	Φ406×5×12.5	7700	55.5	Standard	②
	Friction	Φ406×5×13	8100	58	Option	

Note:
※ Standard kelly bar needs to choose one from ① and ②.

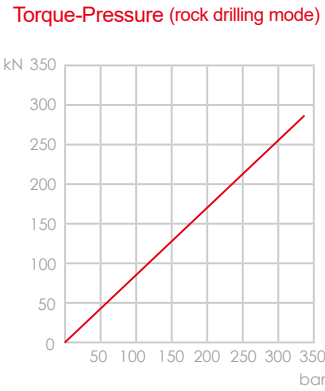
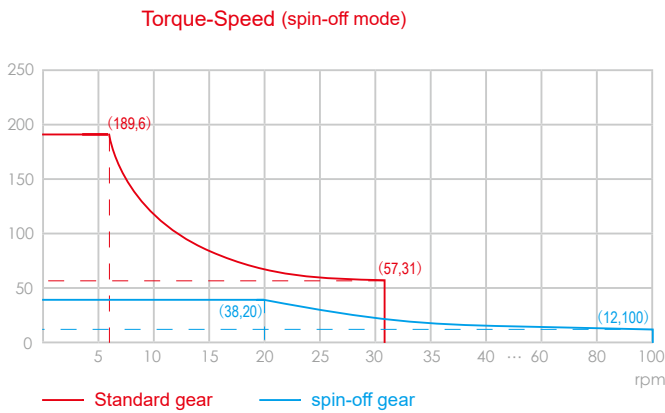
Technical parameters



Crowd cylinder configuration




Crowd winch configuration



Machine dimensions

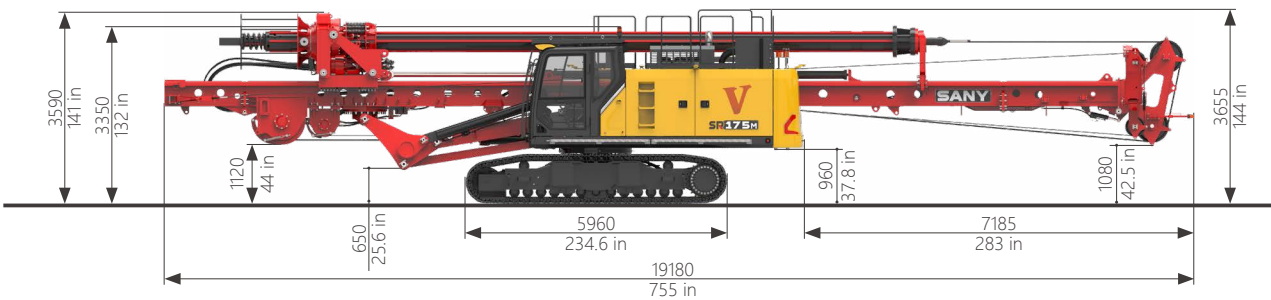


	Drilling configuration	Unit	Crowd winch		Crowd cylinder
			1000(casing)	1300(nocasing)	1500
	Max. drilling diameter	mm	1000(casing)	1300(nocasing)	1500
	Max. drilling depth (inter-locking)	m	61		61
	Max. drilling depth (friction)	m	58		58
	Stroke	mm	15000		5200
	Mast	/	Standard mast		Standard mast
	Remark	/	/		/

Transport dimensions

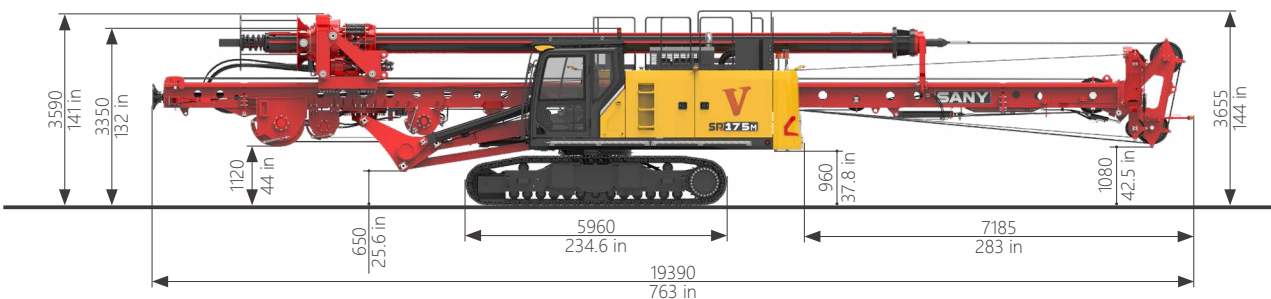
Crowd cylinder configuration A

G = 61 t



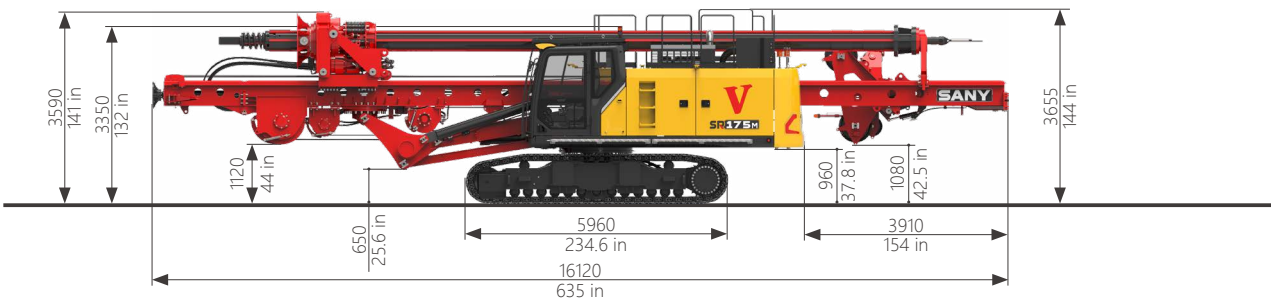
Crowd winch configuration A

G = 61 t



Crowd winch configuration B

G = 61 t

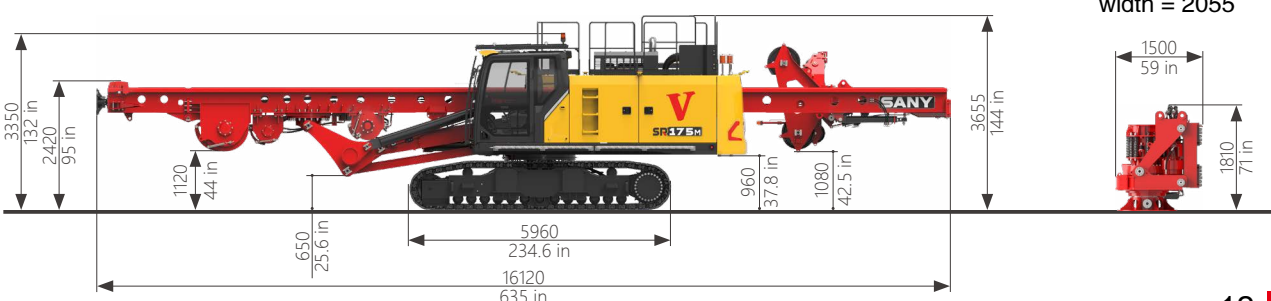


Crowd winch configuration C

G = 48 t

G = 4 t

width = 2055



Construction Cases



No matter what kind of terrain environment, SANY rotary drilling rigs can work easily.

With characteristics of wide application, high construction efficiency, stable performance, excellent service, environmental protection and energy saving, SANY rotary drilling rigs are widely used in pile foundation of civil engineering, high-speed rail, highway, bridge, airport, water conservancy and hydropower engineering, etc. No matter in city, desert, snow, mountain or river, with suitable drilling head and construction method, all construction issues can be resolved easily by SANY rotary drilling rigs.



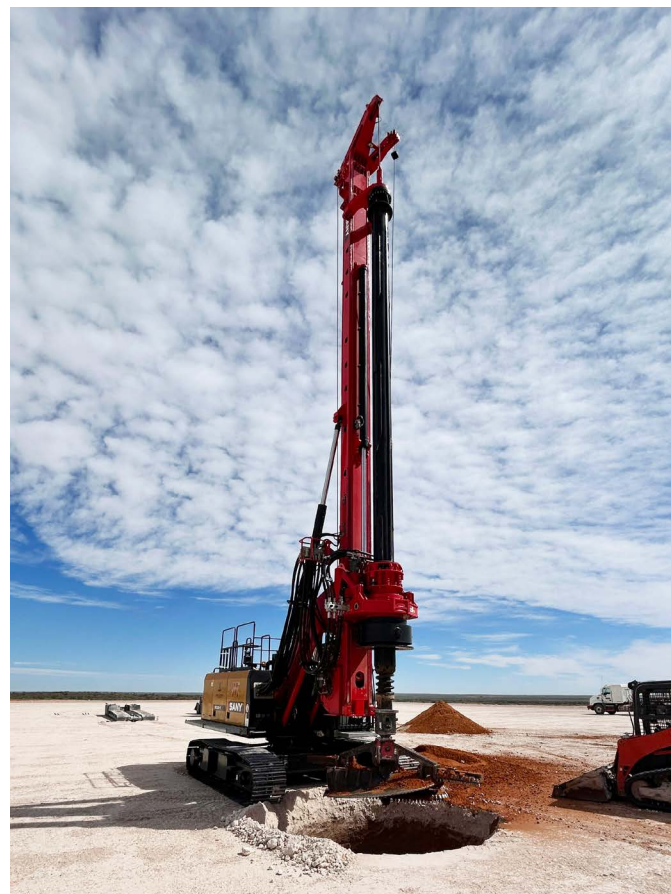
Turkey newspaper reported SANY two SR285R rotary drilling rigs



SR175-S in Hubei province, China



SR285MV is working in Turkey



SR125-V were drilling in the US with Φ 3m short auger



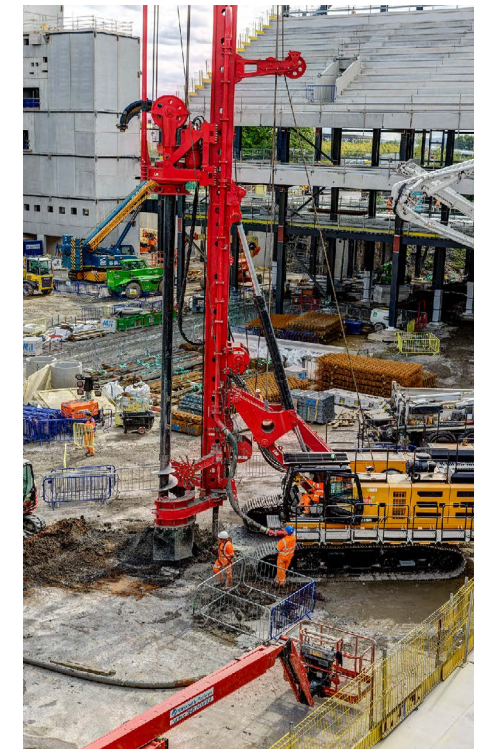
SR285MV in China with low headroom



SR285MV in Turkey with short auger and long casing



SR285MV under casing construction



SR235MV in Manchester, UK with CFA



SR125-V in the US with bailing bucket



SR285R in Yunnan, China with long auger



SR400M in Turkey with casing adapter

Service Network/Parts Warehouses

- Parts Warehouses
- ▲ Service Network



Quality Changes The World Service Create Value

Each new machine is equipped with: operation and maintenance manual, spare parts book, conventional spare parts & common tools (spare parts & tools are subject to the actual situation of each region).

Impeccable after-sales service guarantee. New machine delivery: SANY service engineer will carry out the machine assembly & debugging, operator training. Customer will be served with 7×24 service when scanning QR code and downloading GCP App. the service team will conduct a routine inspection for the equipment every two months under warranty to know the working conditions and information of the equipment. Every year, SANY will promote a service trip to carry out a comprehensive inspection of the equipment, eliminate hidden trouble of the equipment, customers will be provided with a perfect maintenance plan.

Global service network SANY has established 780 service stations in 102 countries around the world, with 400 Chinese service staff, 2,000 agents, 500 local service staff and 1,100 service vehicles.

Global service network. There are more than 40 parts warehouses around the world, up to 1.1 billion parts in the warehouse.

Quality Changes The World Service Create Value



Global Customer Support Hotline :
0086-4006-09-8318
Global Customer Support Email :
crd@sany.com.cn
