

SANY 品质改变世界
Quality Changes the World

STAGE V
TIER 4 FINAL

SR125-V

ROTARY DRILLING RIG



Quality Changes the World

 **北京三一智造科技有限公司**
BEIJING SANY INTELLIGENT TECHNOLOGY CO., LTD.

Address: SANY Industry Park, Nankou Town, Changping District, Beijing, China
Service Hotline: +0086-4006-09-8318
E-mail: crd@sany.com.cn
Website: www.sanyglobal.com

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. Copyright 2020 @ SANY all rights reserved.



2023.4

BEIJING SANY INTELLIGENT TECHNOLOGY CO., LTD.



GROUP INTRODUCTION

SANY Group was founded in 1989. It is one of the global leading construction machinery manufacturer. SANY has established R&D and manufacturing companies in India, the United States, Germany and Brazil. Currently, the Group's business covers more than 100 countries and regions worldwide. SANY mainly produced concrete machinery, excavating & hoisting machinery, road construction & piling machinery, wind power equipment, port machinery, petroleum equipment, etc.

SANY's concrete machinery is the No.1 brand in the world. Large-tonnage hoisting machinery, crawler crane, piling machinery, excavating machinery, port machinery retaining its first position in China. In 2021, SANY sold more than 10,000 units of excavators worldwide, occupied more than 15% of market share. SANY Heavy industry was ranked No.468 in the global top 2,000 enterprise list, published by "Forbes" in 13th May, 2021. SANY took the second place among the world construction machinery industry.

1989

Started from scratch

Liang Wengen, Tang Xiuguo, MaoZhongwu and Yuan Jinhua founded Hunan Lianyuan Welding Material Factory in Lianyuan, Hunan province.



1994

Advanced into heavy machinery industry

Hunan Lianyuan Welding Material Factory is officially renamed to Hunan SANY Group Co., Ltd. and its headquarters officially moves to Changsha.



2003

A listed company

SANY Heavy Industry becomes the first heavy equipment manufacturer with sales exceeding 100 billion RMB in China.



2011

Recognized in a leading publication

SANY Heavy Industry enters the FTGlobal 500 ranking of the world's largest companies.



2012

Putzmeister made a member of SANY Group

SANY acquires leading German concrete machinery manufacturer Putzmeister.



2020

Sales exceeded 100 billion RMB

SANY Heavy Industry ranks first among heavy equipment manufacturers in China and second in the world.



2021

Ranking 468th in Forbes Global 2000

SANY Heavy Industry ranks first among heavy equipment manufacturers in China and second in the world.



Core Values

People of action need to identify their core beliefs and hold to them with integrity, even in the face of hardship. Organizations must also have strong beliefs and strong core values.

Mission

Quality changes the world

Vision

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

Operation principles

All for the customer
All from innovation

Enterprise ethics

Be just and faithful
Be thankful

BEIJING SANY INTELLIGENT TECHNOLOGY CO., LTD.

Beijing SANY Intelligent Technology Co., Ltd. was founded in 2003. As main part of SANY Group, Beijing SANY focus on pile foundation and underground construction machinery manufacturing. Digging into new technology development, forging new generation of construction technology, provide overall construction solution. Insisting to be the highest level of the whole industry. To provide more reliable, high efficiency, flexible and energy conservation of intelligent pilling experience.

In 2021, Beijing SANY factory was recognized as the first "Lighthouse Factory" in heavy machinery industry by the world economic forum. The smart plant equipped with 5G technology, increased the productivity by 85%, and reduced the producing period by 77%.



Confronted with growing demand and rising complexity in the multi-category and small-batch heavy machinery market, SANY Beijing deployed advanced human-machine collaboration automation. AI and IoT technologies to boost labour productivity by 85% and reduce production lead time by 77% from 30 to 7 days.

Asia continued
Sany Beijing



LIGHTHOUSE FACTORY



SR125-V

Maximized uptime is a top priority for you and for us. With common, trusted, high performing components like Cummins engines, Rexroth and Kawasaki motors and Kawasaki pumps will keep you running. With our powerful crowd cylinder or winch, you can easily drill through hard material to make the most of the day's work. Operators appreciate the easy to navigate and intuitive 10.4 inch touchscreen display and technicians like the ability to self diagnose issues with on-board diagnostics.

Designed to perform and built to endure, SANY backs all our drill rigs with the Industry's Strongest Standard Warranty of 2 years or 2,000 hours.

Fast winch speeds, and auto return to center get you back on the hole faster so that you can optimize productivity throughout the day. Top that off with the safety features blind side and backup cameras, cab protection screens, high visibility cab and counter-weight and swing alert lights.

Easy to transport so you can get the most out of the daylight , the SR125MV moves on a single truck and is ready to go to work when it arrives on site.



SR125-V is installed with the latest generation Stage-V & T4f Diesel engines set up with the low idle control able to improve efficiency and mitigate noise pollution.

The selected engine is the Cummins B4.5. It is an extremely powerful engine, it is efficient and flexible and finally helping the operator to easily deal with the most demanding jobs.

The hydraulic and electric systems design follows the path which had already been drawn for the SANY generation and therefore Nos. of components are reduced in order to minimize energy losses, to ease maintenance and finally improving reliability.

The all new rotary-head features a 15% increased torque output through SANY control system regulation and a very high transmission efficiency.

The electronic control of the hydraulic motor displacement brings advantages in terms of efficiency and effectiveness. When working in very hard rock the system provides all the torque available while adjust it at the minimum torque needed in case of easy soil.

Most important: when the drilling phase, the maximum possible speed is always used maximizing therefore the performance and the production rate.



FULLY LOADED IS THE NEW STANDARD



1. ELECTRICALLY CONTROLLED, POSITIVE FLOW HYDRAULIC SYSTEM



2. POWERFUL CUMMINS ENGINE



3. SECTIONAL MAST



4. 10.4" HD DISPLAY



5. CENTRALIZED LUBRICATION SYSTEM



6. AUTOMATIC DRILLING, DUMPING AND SHAKING THROUGH JOYSTICK



7. BACKUP AND RIGHT SIDE SAFETY CAMERA



8. FAST LIFT AND DECENT



THE SMOOTH, PRECISE CONTROL COMES STANDARD

SANY drill rigs have intelligent proportional controls that provide smooth, consistent operation. This provides operators tactile engagement with the soil conditions, allowing for more precise and efficient movements and faster cycle time.

In-display diagnostics provide immediate failure response, allowing technicians to quickly fix issues. Avoiding time-consuming mistakes creates long-term increases in uptime and productivity.

WELCOME TO THE COMFORT ZONE

With one of the most spacious cabs in the industry, operators find they have room to move. And moving is easy thanks to SANY's well-designed cab layout. Every control an operator needs is right there in front of them, including the push button start. Ergonomic joysticks and easy-to-reach pedals make smooth operation a breeze. From their temperature-controlled cab and elevated, air suspension cloth seat, operators can maintain comfort, high visibility and productivity throughout the work day. With on-board diagnostics, technicians can quickly assess and address issues. Nothing is over-engineered or complicated, either. Every SANY drill rig is simple to operate. Part of lowering the learning curve is increased familiarity across the drill rig family.

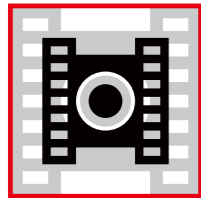
SAFETY

Safety is our top priority, so we've added driving alarms to alert workers before drill rig movement. Rear view and blind side cameras give the operator enhanced visibility of the surrounding area. The bright LED work light package.



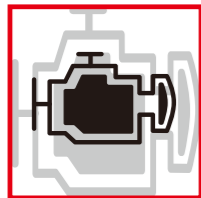
Technical Data

Undercarriage



Undercarriage	Metric	Imperial
Type	variable gauge, telescoping removable sides	
Overall width with retracted crawlers	2550 mm	100.4 in
Overall width with extended crawlers	3650 mm	143.7 in
Width of triple grouser track shoes	600 mm	23.6 in
Overall length of crawlers	4512 mm	177.6 in
Traction force	228 kN	51256 lbf
Travelling speed	2.8±0.5 km/h	1.74±0.3 mi/h

Engine



Engine	Metric	Imperial
Engine mode	Cummins B4.5	Cummins B4.5
Power rating	149 kW/2200rpm	200 HP/2200rpm
Engine conforms to Exhaust emission Standard	Stage V	Tier 4 final
Fuel tank capacity	415 L	110 US gal
AD Blue tank capacity	45 L	12 US gal

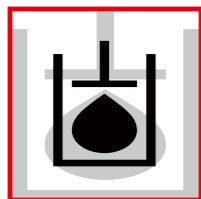
Winches



Main winch	Metric	Imperial
Rope layers	2	2
Line pull 1st layer	140 kN	31473 lbf
Rope diameter	24 mm	0.94 in
Rope speed 1st layer	80 m/min	262 ft/min

Auxiliary winch	Metric	Imperial
Rope layers	2	2
Line pull 1st layer	60 kN	13489 lbf
Rope diameter	14 mm	0.55 in
Rope speed 1st layer	75 m/min	246 ft/min

Hydraulic



Hydraulic system	Metric	Imperial
Main pumps flow	286×2 L/min	75.6 US gal/min
Hydraulic oil tank capacity	370 L	97.7 US gal

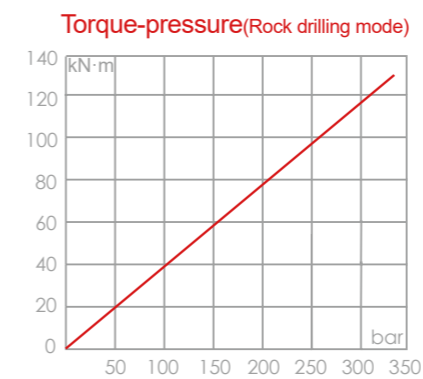
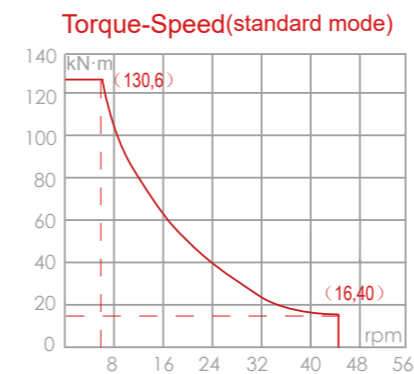
Crowd



Cylinder Crowd System	Metric	Imperial
Stroke	3700 mm	146 in
Crowd force pull down/up	160 kN	35969 lbf

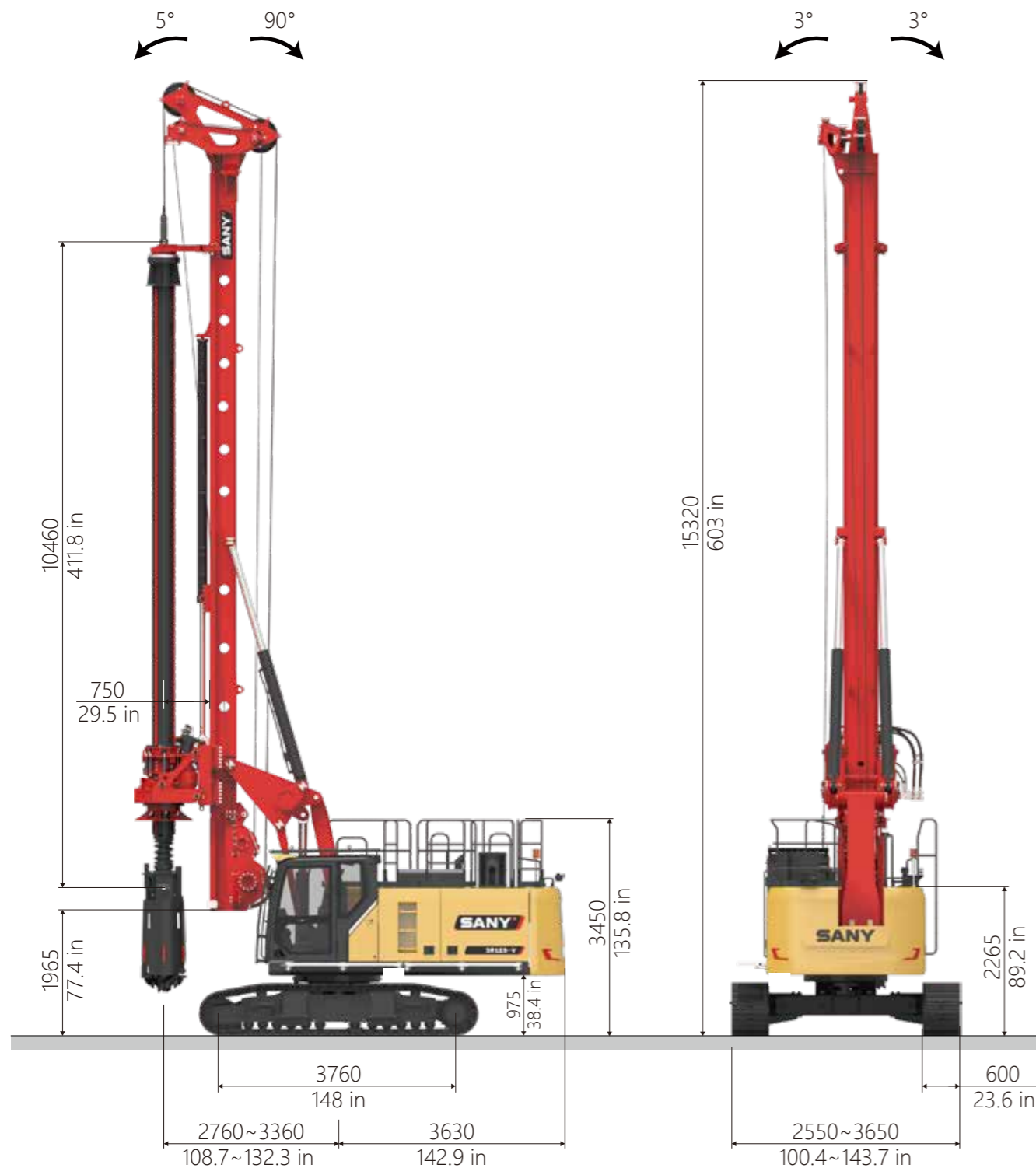
Rotary drive power	Metric	Imperial
Rated output torque	130 kN·m	95883 lbf×ft
Rotation speed	6~40 rpm	6~40 rpm
Weight	7760 kg	17108 lb

Rotary drive power



Large Diameter Piles

Cylinder Crowd System SR125-V Standard equipment

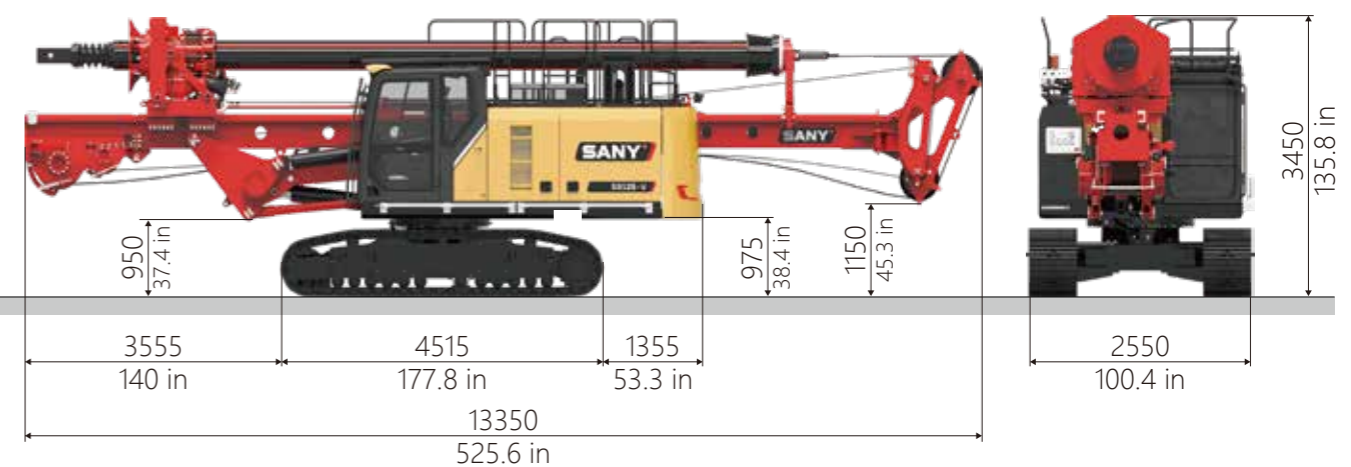


Large Diameter Piles	Metric	Imperial
Operating weight <i>kelly bar</i>	39 t	85980 lb
Max pile diameter	1500 mm	59.1 in
Working radius	2760~3360 mm	108.7~132.3 in
Tail swing radius	3630 mm	142.9 in
Max pile depth-friction kelly	41 m	134.5 ft
Max pile depth-locking kelly	31m	101.7 ft

Transport	Metric	Imperial
Transport weight <i>kelly bar 4×9</i>	35.6 t	78484.6 lb
Transport length <i>kelly bar 4×9</i>	13350 mm	533.5 in
Min transport length (mast dimension)	13350 mm	533.5 in
Transport width	2550 mm	100.4 in

Kelly bar type	Model	Drilling depth	Weight	Length	Height
Inter-locking kelly	Φ325×4×9 *	31 m 102 ft	3600 kg 7937 lb	10.6 m 34.8 ft	570 mm 22.4 in
Inter-locking kelly	Φ351×4×9	31 m 102 ft	4100 kg 9039 lb	10.6 m 34.8 ft	570 mm 22.4 in
Friction kelly	Φ325×4×9	32 m 105 ft	3400 kg 7496 lb	10.6 m 34.8 ft	570 mm 22.4 in
Friction kelly	Φ351×5×9	41 m 135 ft	4300 kg 9480 lb	10.6 m 34.8 ft	570 mm 22.4 in

Note: Drilling depth with bucket 1500 mm (59 in) long
* Standard option



Drawing are not to scale All technical data are purely indicative and subject to change without notice.

Low Head Room

Mast need to be special customized

Large Diameter Piles	Metric	Imperial
Operating weight <i>kelly bar</i>	35 t	77162 lb
Max pile diameter	1500 mm	59 in
Working radius	2760~3360 mm	108.7~132.3 in
Tail swing radius	3630 mm	142.9 in
Max pile depth-friction kelly	20 m	65.6 ft
Max pile depth-locking kelly	13 m	42.7 ft
Min operating height	8900 mm	350.4 in
Stroke	2600 mm	102.4 in
Pull up/down crowd force	160 kN	35969 lbf
Main winch line pull <i>1st layer</i>	140 kN	31473 lbf

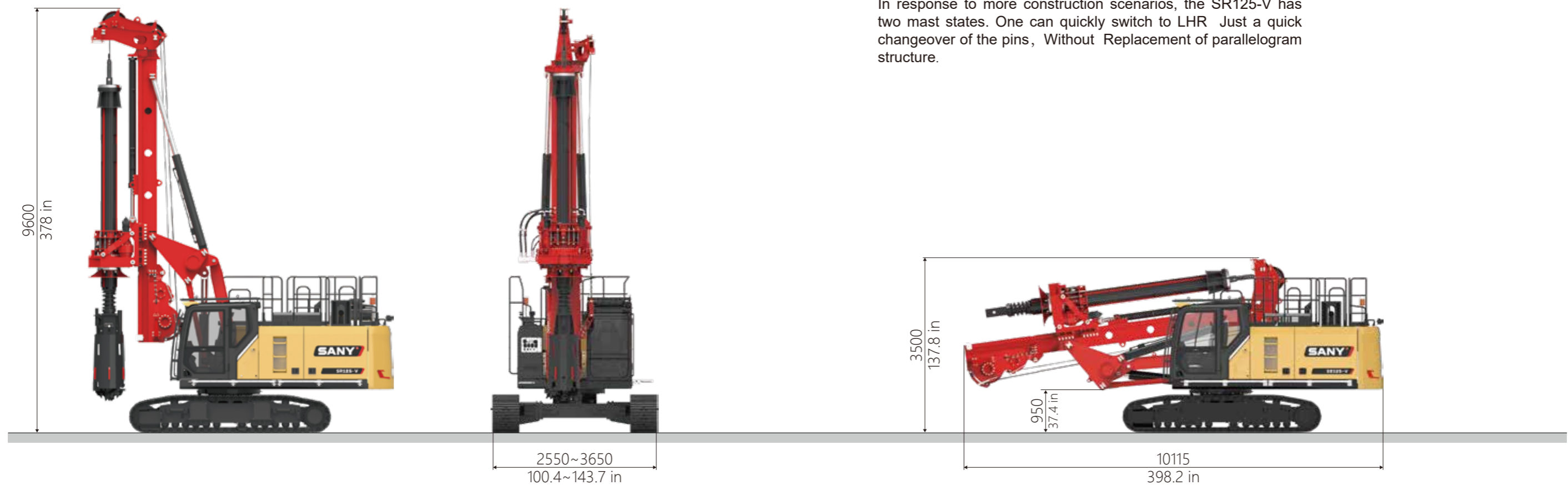
Low head room

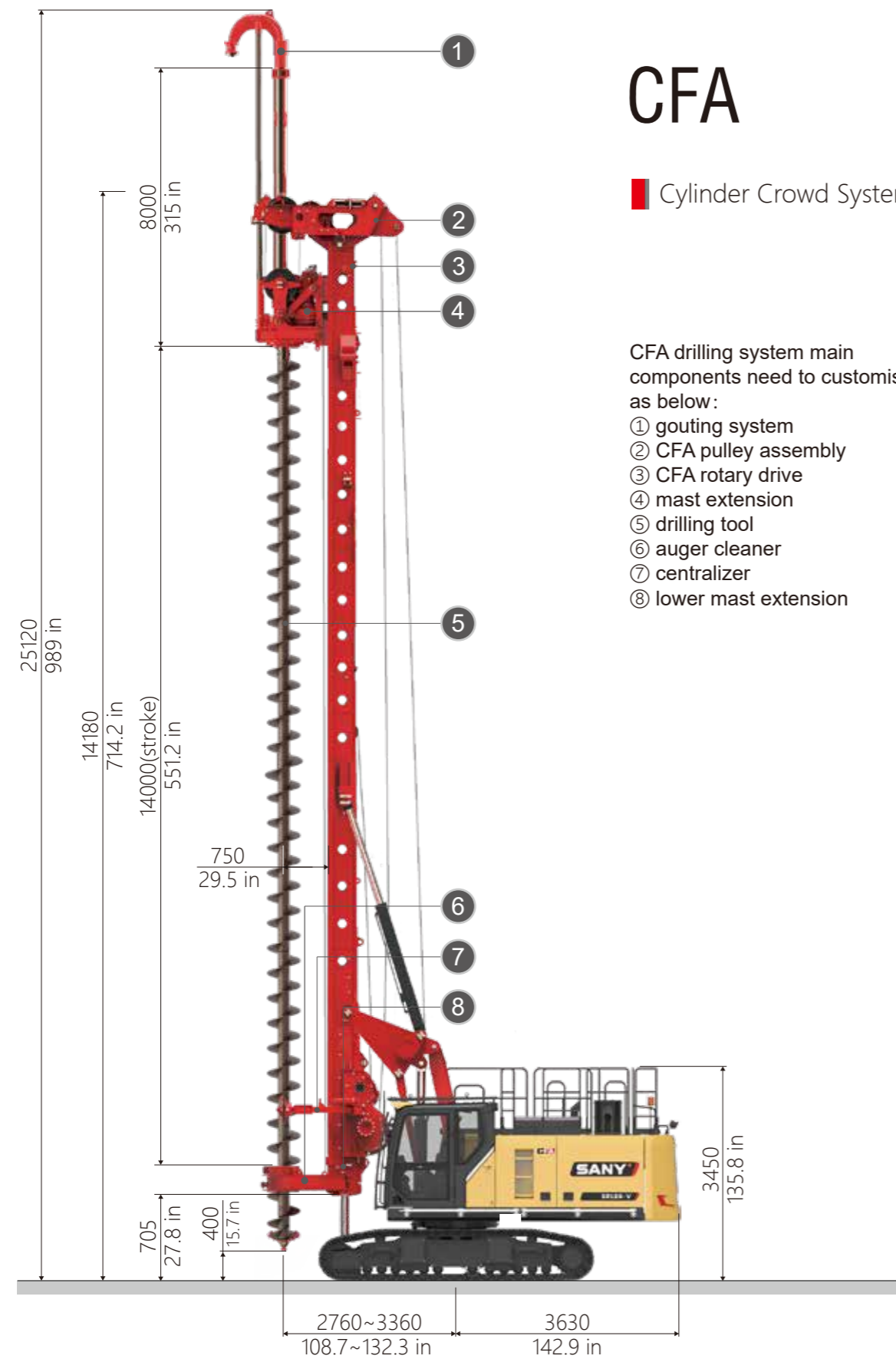
Kelly bar type	Model	Drilling depth	Weight	Length	Height
Friction kelly	Φ351×5×5	21 m 68.9 ft	2700 kg 5952 lb	6.6 m 21.6 ft	570 mm 22.4 in

Note: Drilling depth with bucket 1500 mm (59 in) long.

Transport	Metric	Imperial
Transport weight <i>kelly bar 5×5</i>	33 t	72753 lb
Transport length	10110 mm	398 in
Transport height	3450 mm	135.8 in
Transport width	2550 mm	100.4 in

In response to more construction scenarios, the SR125-V has two mast states. One can quickly switch to LHR. Just a quick changeover of the pins, Without Replacement of parallelogram structure.





CFA

Cylinder Crowd System

CFA drilling system main components need to be customized as follows:

- ① gouting system
- ② CFA pulley assembly
- ③ CFA rotary drive
- ④ mast extension
- ⑤ drilling tool
- ⑥ auger cleaner
- ⑦ centralizer
- ⑧ lower mast extension

CFA

CFA	Metric	Imperial
Operating weight kelly bar	37 t	88145 lb
Max pile diameter	900 mm	35.4 in
Max length of auger	14600 mm	574.8 in
Special sleeve extension length	8000 mm	315 in
Max pile depth	21.8 m	71.5 ft
Nominal extraction force	300 kN	67442.7 lbf

Transport	Standard	Extended Rathole
Transport weight	36 t	79366 lb
Transport length	14025 mm	552.2 in
Transport height	3450 mm	135.8 in
Transport width	2550 mm	100.4 in

Drawing are not to scale. All technical data are purely indicative and subject to change without notice.

Service Network/Parts Warehouses

● Parts Warehouses

▲ Service Network



SERVICE COMMITMENTS

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



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

Note

Note
