



Rotary Drilling Rig	Metric	Imperial	
Pile			
Max. drilling diameter	3000 mm	118 in	
Max. drilling depth ①	116/95 m	381/312 ft	
Rotary drive			
Rated output torque	505 kN·m	372469 lbf×ft	
Rotation speed	5~22 rpm	5~22 rpm	
Crowd system			
Crowd force	420 kN	94420 lbf	
Line pull	420 kN	94420 lbf	
Stroke ②	10000/21000 mm	394/827 in	
Main winch			
Lifting capacity	560 kN	125893 lbf	
Wire rope diameter	40 mm	1.57 in	
Max. line speed	60 m/min	197 ft/min	
Auxiliary winch			
Lifting capacity	105 kN	23604 lbf	
Wire rope diameter	22 mm	0.87 in	
Max. line speed	80 m/min	262 ft/min	
Mast inclination			
Forward/backward	90/15 °	90/15 °	
Lateral	±3°	±3°	
Main chassis			
Engine model 3	TAD1385VE	TAD1385VE	
Engine power ISO 3046-1	405 kW/1900 rpm	543 HP/1900 rpm	
Emission regulation	EEC 97/68 EC	EPA/CARB	
	Stage V/Tier4 final		
Fuel tank capacity	690 L	182 US gal	
AD Blue tank cpacity	45 L	12 US gal	
Extension width	3600-4900 mm	142-193 in	
Track shoe width	800 mm	32 in	
Swing radius	4910 mm	193 in	
Overall machine			
Overall height	30740 mm	1210 in	
Operating weight	178000 kg	392423 lb	
Transport width	3600 mm	142 in	
Transport height	3805 mm	150 in	
Transport Length	20550 mm	809 in	

①: Friction kelly /inter-locking kelly ③: VOLVO ②: the standard crowd stroke 10000 mm

K	elly bar	Weight	Depth	Option
Inter-locking kelly	Ф580×3×20	19000 kg	54 m	
		41888 lb	187 ft	_
	Ф580×4×20	21200 kg	72 m	
		46738 lb	236 ft	_
	Ф580×4×21	22300 kg	76 m	Standard
		49163 lb	249 ft	
	Ф580×5×21	24800 kg	95 m	
		54675 lb	312 ft	
Friction kelly	Ф580×6×20	22500 kg	110 m	3
		49604 lb	361 ft	
	Ф580×6×21	23600 kg	116 m	3
		52029 lb	381 ft	

Note: Drilling depth with bucket 800 mm long ③: Max. drilling diameter Φ3000 mm / 118 in

## **INTELLIGENT PILOT, FLAGSHIP MODEL**

SR505-S is a large-scale rotary drilling rig suitable for large pile foundation constructions in hard layers such as cross-river/cross-sea bridge, high speed railway and highway, featured with strong drilling capacity in hard rock and large construction capacity.

Efficient construction: imported engine with high power and large displacement can realize real-time power distribution and efficient power output. Main winch with large reserve of line pull, large mechanical structure with high stability and reliability, rotary drive with high torque, enable high drilling efficiency and fast hole formation. Flexible anti-vibration crowd system ensures strong rock drilling ability. Winch crowd system: multi-stroke and high torque. The crowd stroke can be freely selected between full stroke and half stroke, suitable for various layers and working conditions. Rotary drive with three groups of motors and reducers can realize high torque and high speed output. Quick removal and installation: the pioneering self-disassembly technology on supporting trestle pin and rotary drive in the industry, which increases the disassembly efficiency by 5 times and makes the whole machine more convenient to transfer.

Intelligent control: advanced technology of auto soil dumping, intelligent drilling, auto drilling, etc., enable intelligent and efficient control of the whole machine.

New experience: new industrial design, new system. The overall design is grand and magnificent, with comfortable operating experience taken into consideration; full electric control hydraulic positive control system, ensures efficient construction and fast response.

Convenient maintenance: double walking boards, double climbing ladders, single-side arrangement of filter elements, central lubrication system, facilitate maintenance.



