

Specialist in underground engineering equipment

Leading enterprise in comprehensive field of underground engineering

Supplier of complete underground engineering solutions



# SWDM450V

## MULTIFUNCTIONAL ROTARY DRILLING RIG

- ◆ Max. Pile Diameter: 3500mm
- ◆ Operating Weight: 159t
- ◆ Rated Power: 448kW@2100rpm

### ▶ Performances and Features

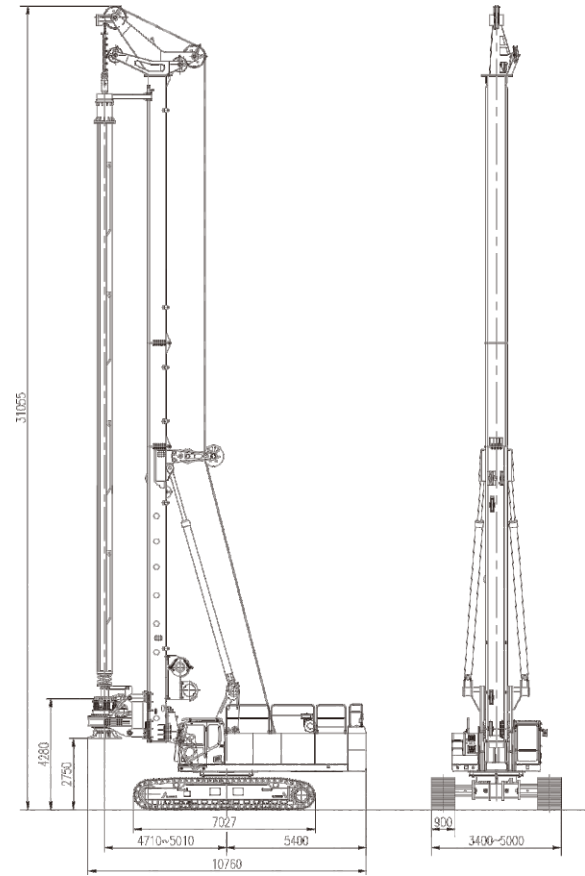
- ◆ **Heavy-duty chassis**  
Obtained PCT patent, the chassis has wider extension & retraction range. No exceeded width for transportation, working is more stable.
- ◆ **Rock-Drilling Specialist**  
Large power high-pressure common-rail diesel engine provides robust power. Adopted special vibration-proof technology and the high-strength drill mast, it transmits super large torque. The machine has the super ability of rock-drilling.
- ◆ **Economical and Efficient**  
There' s no need to disassemble crowd steel rope when changing worksites, and the preparation time is shorten by 30%; Higher working efficiency is provided with the fast extraction function of rotary head. Laid with one single layer on the large-diameter roller in the condition of full drilling depth, the main winch steel rope has long service life.
- ◆ **Easy Maintenance**  
Standard configuration of centralized lubrication with regular grease injection provides convenient service.
- ◆ **Safe Working**  
strengthened rotary head, high-intensity mast and big tri-angle luffing mechanism makes the machine durable and reliable; Good working safety is also ensured by multi-angle surveillance cameras and sound and light alarms.
- ◆ **Intelligent Control**  
Alarms are sent out by the failure self-diagnosis system; the operation parameters are displayed in real-time; The solenoid handle controls the drilling in fixed speed; the drill mast is erected and lowered by one-key pressing. Bottom protection is equipped for the Kelly, making the operation easy; Sunward Auspicious Cloud APP provides synchronous data transmission and real-time machine monitoring.



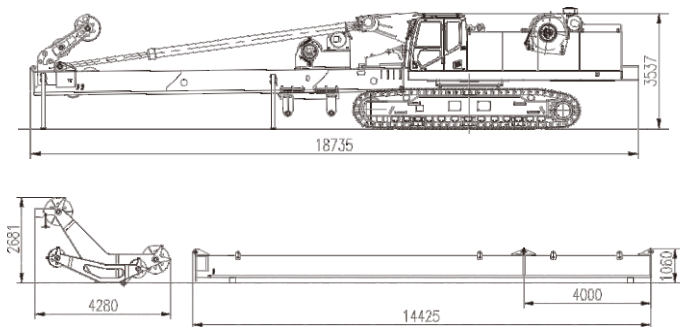
## ► Technical parameters

ITEM		UNIT	SWDM450V
Drilling	Max. Pile Diameter	mm	3500
	Max. Pile Depth	m	108/72
Engine	Brand		Cummins
	Model		QSX15-C600
	Rated Power	kW@rpm	448@2100
Rotary Head	Max. Torque	kN.m	450
	Rotation Speed	rpm	6~25
Main Winch	Max. Line Pull	kN	490
	Max. Line Speed	m/min	70
	Rope Diameter	mm	40
Crowd System	Max. Pressure	kN	420
	Max. Line Pull	kN	420
	Max. Stroke	mm	8000
Auxiliary Winch	Max. Line Pull	kN	110
	Max. Line Speed	m/min	65
	Rope Diameter	mm	24
Drill Mast	Lateral Inclination	°	±4
	Forward & Rearward Inclination	°	90/15
Chassis	Crawler Width	mm	900
	Track Retraction and Extension Width	mm	3400~5000
	Chassis Length	mm	7027
Overall Machine	Working Height	mm	31055
	Operating Weight	t	159

Working state (unit: mm)



Transportation status (unit: mm)



## ■ Drill pipe parameters

Model	Friction Kelly Bar	Hole depth (m)	Drill pipe weight (kg)	Configuration	Model	Interlocking Kelly Bar	Hole depth (m)	Drill pipe weight (kg)	Configuration
SWDM450V	580-6X20m	108	22560		SWDM450V	580-4X20m	72	21430	Standard
	580-6X18m	98	20608			580-4X18m	64	19515	
	580-6X16m	88	18647			580-4X16m	56	17589	

※Drill pipes of other specifications can be customized.

Operation & Maintenance Manual should be read carefully before the machine is put into service. Sunward improves products continuously, and reserves the right to make any modification or amendment of that without any notice. This sample is only for reference.

