

## TOP-HAMMER SURFACE DRILLING RIG

- Top-hammer Surface Drilling Rig is designed aCording to the operating conditions of small and medium-sized quarries and small open-pit mines,and is mainly used for drilling hard and medium-hard (F10 and above) rocks.
- ◆ It can be used for rock blasting and drilling in the construction of quarries, civil works, road projects, open-pit mines and hydropower plant, etc.
  - ◆ This product is equipped with a high-efficiency hydraulic rock drill, with fast drilling rate, low energy consumption, flexible maneuverability and strong gradeability. It can be used for drilling operations in complex terrain.



### Low operating costs

- ◆ The high-power hydraulic rock drill with reverse drilling function minimizes the probability of sticking.
- ◆ The intelligent identification of rock stratum attributes prevents sticking and idle drilling, extending the service life of drilling tools.
- ◆ The reasonable power matching of rock drill-air compressor-engine further reduces fuel consumption.
- ◆ Constant power control.
- ◆ Self-adaptation of operation status.

### Good adaptability to working conditions

- ◆ Dual operation mode, one-click switching between economic and intensive mode.
- ◆ Small and flexible body with compact structure, strong gradeability and good terrain adaptability.
- ◆ Folding arm structure with large coverage area in single positioning.
- ◆ Meeting the drilling requirements of vertical, inclined and horizontal blasting holes.

### High reliability

- ◆ Core components of international famous brands are selected, and the system design is reasonably matched.
- ◆ The product has withstood the tests of high temperature of 45°C in Laos, high altitude of 4,500m in Qinghai Province, China, and extreme low temperature of -30°C in Inner Mongolia, China.
- ◆ The cold-drawing structure steel propulsion beam with double-sided guide rails is adopted, with high strength and good pilot accuracy.

### More intelligent

- ◆ The intelligent monitoring system displays real-time operation parameters and maintenance tips.
- ◆ The self-diagnosis fault system displays code prompt and provides quick solution.
- ◆ The intelligent common-bottom control system accurately control the drilling angle and depth.
- ◆ The self-adaptive drilling to rock strata reduces the sticking and the loss of drilling tools.
- ◆ Sunward Cloud, the IoT control system, provides synchronous data transmission on APP and displays real-time construction progress.
- ◆ Path planning, hole sequence planning, graphic guidance, and fast positioning.

### Safety and environmental protection

- ◆ Cab with ROPS & FOPS certification.
- ◆ Interlocking of operation and adjustment mode.
- ◆ Automatic fire extinguishing system.
- ◆ Dry dedusting covering large filtration area.

Item		SWDH102S		SWDH115S	
Main parameters					
Hole diameter	mm	76-115		89-127	
Rod	-	T45/T51		T51	
Tube length	mm	3660		3660	
Maximum hole depth	m	24		24	
Dust collector	-	Dry dust removal		Dry dust removal	
Hydraulic rock drill					
Model	-	HC150E		HC160Q	
Impact power	kW	21		21	
Slewing torque	Nm	994		1612	
Slewing speed	rpm	0-129		0-130	
Air compressor					
Working pressure	bar	10		10	
FAD	m³/min	10		12.8	
Engine					
Brand	-	CUMMINS	CAT	CUMMINS	
Model	-	QSC8.3-C240	C7.1	QSL8.9-C325	
Power rating	kW/rpm	179/2200	168/2200	242/2100	
Fuel tank volume	L	450		590	
Feed system					
Total length	mm	7300		7300	
Feed extension	mm	1200		1200	
Pitch angle	°	140		140	
Turning angle	°	-20-90		-20-90	
Feed force	kN	30		30	
Drill boom					
Type	-	Folding boom		Folding boom	
Lifting angle	°	70~-10		70~-10	
Folding angle	°	65-165		65-165	
Swing angle	°	20~-30		20~-30	
Carrier					
Tramming speed	km/h	3.8		3.2	
Traction force	kN	110		110	
Gradeability	°	25		25	
Track oscillation	°	±10		±10	
Ground clearance	mm	400		400	
Dimension					
Weight	kg	15000		16500	
L × W × H (work)	m	9.2×2.6×8.6		9.5×2.6×8.6	
L × W × H (Transportation)	m	11.2×2.6×3.5		12×2.6×3.5	