

Uni-roc



LISTED COMPANY ON THE BEIJING STOCK EXCHANGE OF CHINA

PRODUCT CATALOG

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2025/07



MAKING TUNNELING AND MINING

SAFER, MORE ECONOMICAL, MORE EFFICIENT, AND ENVIRONMENTALLY FRIENDLY



MAKING TUNNELING AND MINING SAFER, MORE ECONOMICAL
MORE EFFICIENT, AND ENVIRONMENTALLY FRIENDLY



Uniroc

« COMPANY PROFILE

- ◎ CHINESE A-SHARE LISTED COMPANY (stock code: 835174)
- ◎ National level "SPECIALIZED, REFINED, UNIQUE AND NEW" enterprise
- ◎ National Manufacturing "SINGLE CHAMPION" Enterprise in China
- ◎ PARTICIPATING UNITS OF THE STANDARD for Railway Large Construction Machinery - Tunnel face drill rigs in China
- ◎ Servicing **OVER 5000 PROJECTS** worldwide



Manufacturing Capability

- Equipped with 36,000m² high-standard industrial workshops
- Advanced production facilities
- Standardized production processes
- Delivering reliable, high-quality products

《 BUSINESS AREA

We have served over 5,000 projects globally, helping clients to achieve mechanization to replace labor, automation to reduce labor and intelligent unmanned operations.



Mining



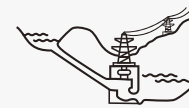
Tunneling



Irrigation
Engineering



Underground
Cavern



Hydropower
Station

《 SERVICES

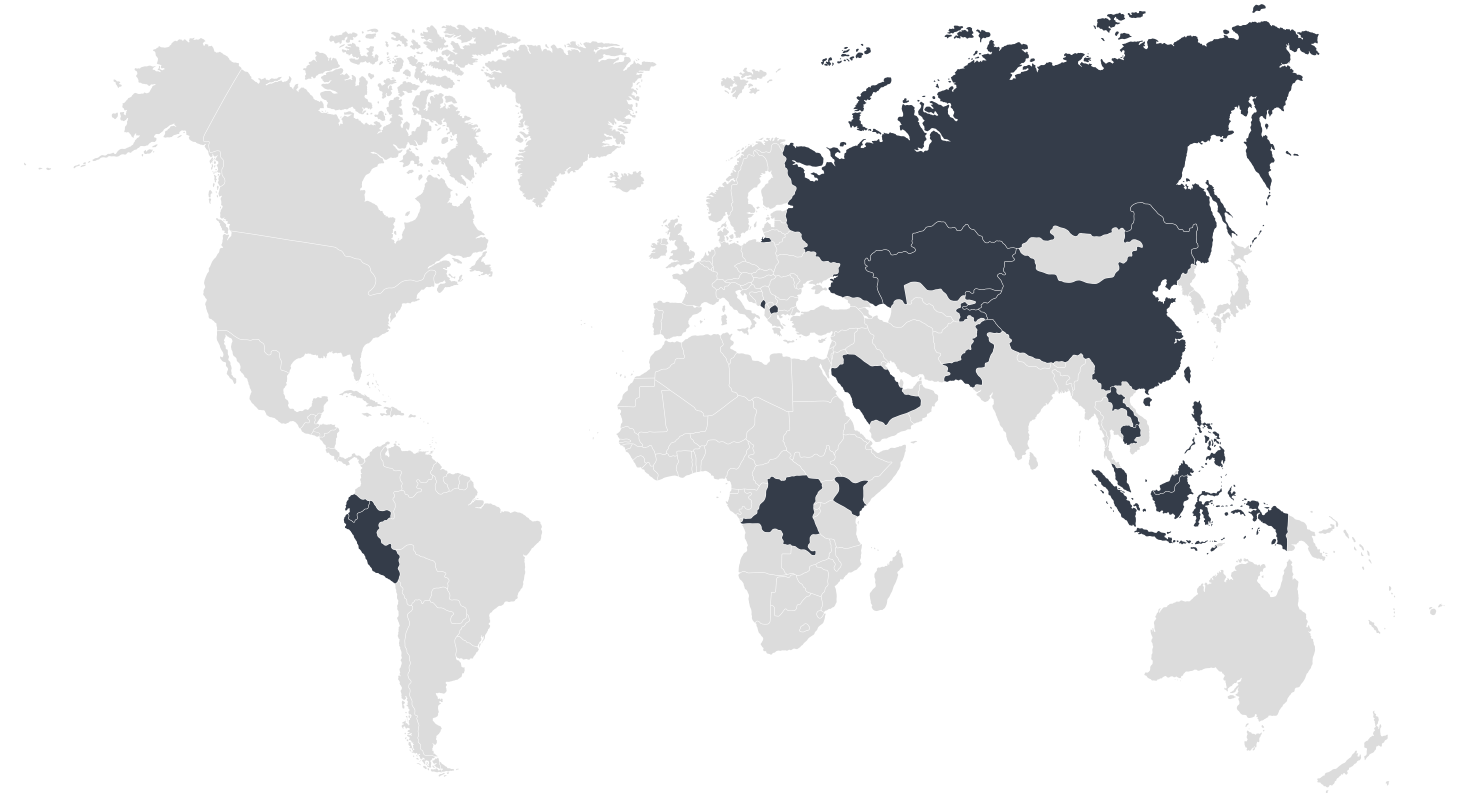
Genuine Parts Supply



Operator Training Programs

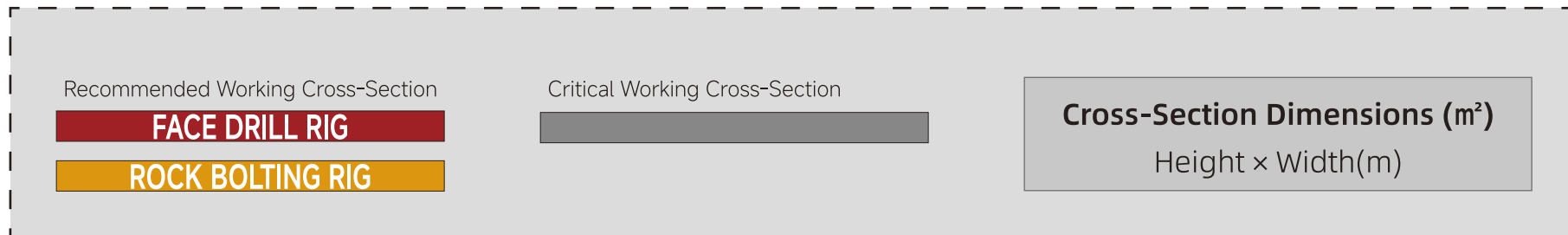


Remanufacturing & Overhaul Services



《 COOPERATIVE PARTNER





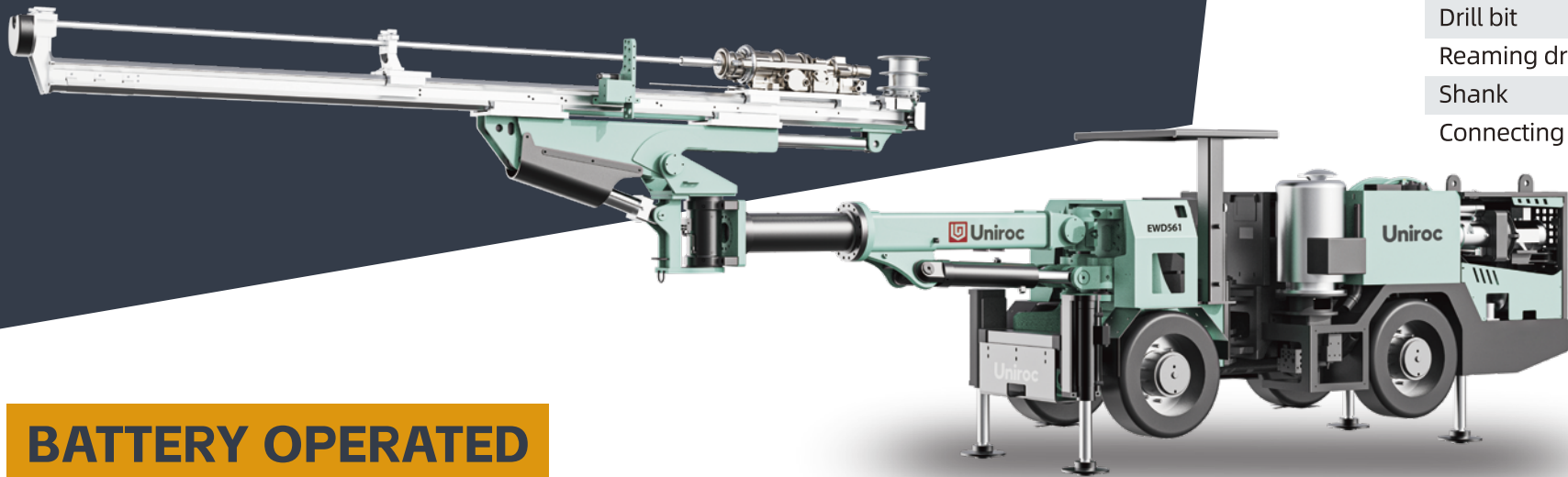
FACE DRILL RIG EWD561

SCOPE OF APPLICATION

Suitable for excavation drilling and anchor rod drilling operations in mining tunnels, pumped storage power stations, hydropower stations, and irrigation tunnels of reservoirs ranging from 4m² to 20 m².

MAIN FEATURES

- ◆ Compact size, minimum 1.9x1.9m working section;
- ◆ Fast drilling speed, equipped with 18kW rock drills, up to 3m/min;
- ◆ Remote control operation, simple and easy to learn, safe operation,
- ◆ Lithium power instead of diesel power, zero carbon emission, lownoise and low heat generation.



BATTERY OPERATED

ZERO EMISSION

MORE ECONOMICAL

THE MAIN TECHNICAL PARAMETERS

MACHINE PARAMETERS	
Overall dimensions	8500×1300×1600/2100mm
Weight	8500kg
Max. travel speed	5km/h
Max. gradeability	15°
Min. ground clearance	230mm
Turning radius	4900(Outer)/2250(inner)mm
Wheelbase	2000mm
Minimum coverage area	1.9×1.9m
Recommended scope of operation	2.2×2.2-3.6×3.6m

ROCK DRILL	
Model	U1838ME
Rated impact power	18kW
Applicable hole diameter	41-89mm
Max. impact pressure	230bar
Max. output torque	1000Nm

ELECTRICAL SYSTEM	
Total installed power	62kW
Main motor	55kW
Operating voltage	380/660V
Frequency	50Hz

DRILLING TOOLS	
Drill rod	T38-H35-R32-3700
Drill bit	R32-Φ45
Reaming drill bit	R32-Φ89
Shank	T38
Connecting sleeve	T38-T38-190

AIR SUPPLY SYSTEM	
Flow rate	410L/min
Working pressure	8bar

WATER SUPPLY SYSTEM	
Flow rate	25~80L/min
Working pressure	8~12bar

CHASSIS	
Lithium iron phosphate battery	1×38kW·h@100A·h
Permanent magnet motor	50kW ×1

FEED BEAM			
	Standard Type A	Optional Type B	Optional Type C
Total length	5262mm	4658mm	4168mm
Drill rod length	3700mm	3090mm	2600mm
Drilling depth	3400mm	2800mm	2300mm
Weight, incl. drill	610kg	570kg	540kg
Feed force	7~15kN	7~15kN	7~15kN

FACE DRILL RIG WD561

SCOPE OF APPLICATION

Suitable for excavation drilling and anchor rod drilling operations in mining tunnels, pumped storage power stations, hydropower stations, and irrigation tunnels of reservoirs ranging from 4m² to 20m².

MAIN FEATURES

- ◆ Compact size, minimum 1.9x1.9m working section;
- ◆ Fast drilling speed, equipped with 18kW rock drills, up to 3m/min;
- ◆ Remote control operation, simple and easy to learn, safe operation.



THE MAIN TECHNICAL PARAMETERS

MACHINE PARAMETERS

Overall dimensions	8500×1300×1600/2100mm
Weight	8500kg
Max. travel speed	5km/h
Max. gradeability	15°
Min. ground clearance	230mm
Turning radius	4900(Outer)/2250(inner)mm
Wheelbase	2000mm
Minimum coverage area	1.9×1.9m
Recommended scope of operation	2.2×2.2-3.6×3.6m

ROCK DRILL

Model	U1838ME
Rated impact power	18kW
Applicable hole diameter	41-89mm
Max. impact pressure	230bar
Max. output torque	1000Nm

ELECTRICAL SYSTEM

Total installed power	62kW
Main motor	55kW
Operating voltage	380/660V
Frequency	50Hz

WATER SUPPLY SYSTEM

Flow rate	25~80L/min
Working pressure	8~12bar

AIR SUPPLY SYSTEM

Flow rate	410L/min
Working pressure	8bar

FEED BEAM

	Standard Type A	Optional Type B	Optional Type C
Total length	5262mm	4658mm	4168mm
Drill rod length	3700mm	3090mm	2600mm
Drilling depth	3400mm	2800mm	2300mm
Weight, incl. drill	610kg	570kg	540kg
Feed force	7~15kN	7~15kN	7~15kN

DRILLING TOOLS

Drill rod	T38-H35-R32-3700
Drill bit	R32-Φ45
Reaming drill bit	R32-Φ89
Shank	T38
Connecting sleeve	T38-T38-190

FACE DRILL RIG WD581-Mini

SCOPE OF APPLICATION

Suitable for excavation drilling and anchor rod drilling operations in mining tunnels, pumped storage power stations, hydropower stations, and irrigation tunnels of reservoirs ranging from 8m² to 28m².

MAIN FEATURES

- Combination design of long-range telescoping feed beam and boom enables superior operational flexibility;
- Modular split design of carrier and frame enables easier disassembly for mine access;
- Rapid drill arm positioning with automated drilling function ensures high operational efficiency;
- Remote control operation, easy to learn, to ensure the safety of personnel operations;
- Rationalised design and convenient maintenance.



THE MAIN TECHNICAL PARAMETERS

MACHINE PARAMETERS

Overall dimensions	9000×1600(Front)/1300(Back)×1725/2225mm
Weight	9800kg
Max. travel speed	8km/h
Max. gradeability	15°
Min. ground clearance	230mm
Turning radius	4900(Outer)/2150(inner)mm
Wheelbase	2000mm
Minimum coverage area	2.8×2.8m
Recommended scope of operation	3.2×3.2-4.5×4.5m

ROCK DRILL

Model	U1838ME
Rated impact power	18kW
Applicable hole diameter	41-89mm
Max. impact pressure	230bar
Max. output torque	1000Nm

ELECTRICAL SYSTEM

Total installed power	62kW
Main motor	55kW
Operating voltage	380/660V
Frequency	50Hz

WATER SUPPLY SYSTEM

Flow rate	25~80L/min
Working pressure	8~12bar

AIR SUPPLY SYSTEM

Flow rate	410L/min
Working pressure	8bar

FEED BEAM

	Standard Type A	Optional Type B	Optional Type C
Total length	5873mm	5262mm	4658mm
Drill rod length	4305mm	3700mm	3090mm
Drilling depth	4000mm	3400mm	2800mm
Weight, incl. drill	640kg	610kg	570kg
Feed force	7~15kN	7~15kN	7~15kN

DRILLING TOOLS

Drill rod	T38-H35-R32-4305
Drill bit	R32-Φ45
Reaming drill bit	R32-Φ89
Shank	T38
Connecting sleeve	T38-T38-190

FACE DRILL RIG WD581

SCOPE OF APPLICATION

Suitable for excavation drilling and anchor rod drilling operations in mining tunnels, pumped storage power stations, hydropower stations, and irrigation tunnels of reservoirs ranging from 10m² to 35m².

MAIN FEATURES

- ◆ **CONVENIENCY:** Electronic proportional hydraulic control, more convenient, flexible and accurate drilling positioning;
- ◆ **HIGH EFFICIENCY:** With functions of automatic drilling, retraction, anti-jamming and stopping impact, which effectively improve the service life of drilling;
- ◆ **DIGITAL:** Digitally record data such as drilling quantity and depth;
- ◆ **SAFETY:** Equipped with self-diagnosis and safety voice alarm system, real time monitoring and fault detection.



THE MAIN TECHNICAL PARAMETERS

MACHINE PARAMETERS	
Overall dimensions	11700×1800×2100/2900mm
Weight	13600kg
Max. travel speed	15km/h
Max. gradeability	15°
Min. ground clearance	265mm
Turning radius	5600(Outer)/3150(inner)mm
Wheelbase	2000mm
Minimum coverage area	3.2×3.2m
Recommended scope of operation	3.6×3.6m-5.5×5.5m

ROCK DRILL	
Model	U1838ME
Rated impact power	18kW
Applicable hole diameter	41-89mm
Max. impact pressure	230bar
Max. output torque	1000Nm

WATER SUPPLY SYSTEM	
Flow rate	25~80L/min
Working pressure	8~12bar

AIR SUPPLY SYSTEM	
Flow rate	410L/min
Working pressure	8bar

FEED BEAM			
	Standard Type A	Optional Type B	Optional Type C
Total length	5873mm	5262mm	4658mm
Drill rod length	4305mm	3700mm	3090mm
Drilling depth	4000mm	3400mm	2800mm
Weight, incl. drill	640kg	610kg	570kg
Feed force	7~15kN	7~15kN	7~15kN

ELECTRICAL SYSTEM	
Total installed power	62kW
Main motor	55kW
Operating voltage	380/660V
Frequency	50Hz

DRILLING TOOLS	
Drill rod	T38-H35-R32-4305
Drill bit	R32-Φ45
Reaming drill bit	R32-Φ89
Shank	T38
Connecting sleeve	T38-T38-190

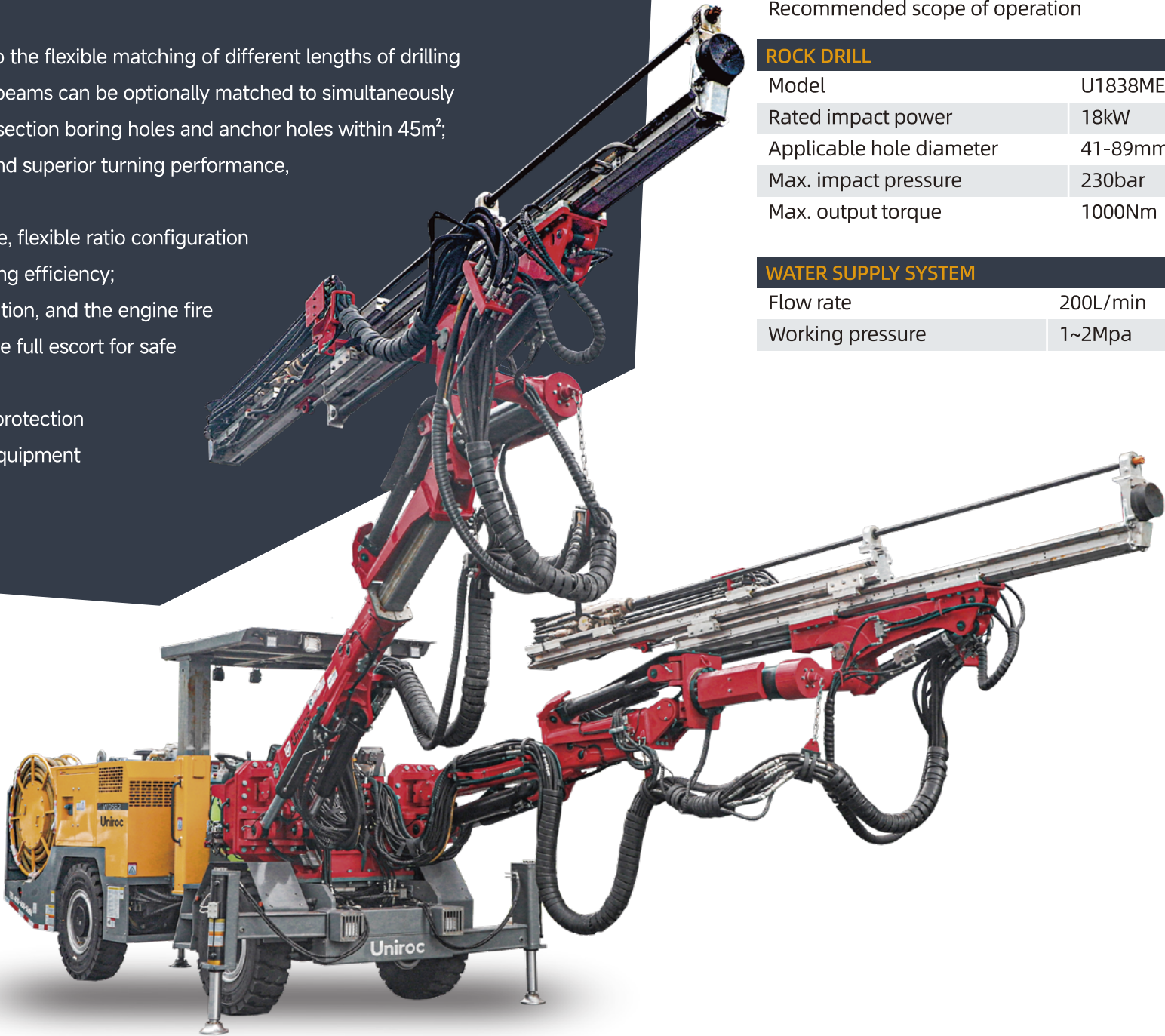
FACE DRILL RIG WD582

SCOPE OF APPLICATION

Suitable for excavation drilling and anchor rod drilling operations in mining tunnels, pumped storage power stations, hydropower stations, and irrigation tunnels of reservoirs ranging from 13m² to 51m².

MAIN FEATURES

- ◆ Double-layer feed configuration, adapting to the flexible matching of different lengths of drilling rods, and other specifications of propelling beams can be optionally matched to simultaneously meet the operation of medium-sized cross-section boring holes and anchor holes within 45m²;
- ◆ Articulated chassis, compact body design and superior turning performance, more flexible turnaround;
- ◆ Intelligent man-machine interactive interface, flexible ratio configuration of rock drilling parameters, maximizing drilling efficiency;
- ◆ The cab complies with FOPS/ROPS certification, and the engine fire extinguishing system is configured to provide full escort for safe operation;
- ◆ All aspects of the rock drill and drilling tool protection procedures, stable drilling control system, equipment function is more powerful.



THE MAIN TECHNICAL PARAMETERS

MACHINE PARAMETERS

Overall dimensions	11600×2000×2200/3000mm
Weight	21500kg
Max. travel speed	12km/h
Max. gradeability	15°
Min. ground clearance	230mm
Turning radius	6500(Outer)/3200(inner)mm
Wheelbase	3050mm
Minimum coverage area	3.6×3.6m
Recommended scope of operation	4.5×4.5-7.5(W)×6(H)m

ROCK DRILL

Model	U1838ME
Rated impact power	18kW
Applicable hole diameter	41-89mm
Max. impact pressure	230bar
Max. output torque	1000Nm

WATER SUPPLY SYSTEM

Flow rate	200L/min
Working pressure	1~2Mpa

ELECTRICAL SYSTEM

Total installed power	127kW
Main motor	55kW ×2
Operating voltage	380/660V
Frequency	50Hz

AIR SUPPLY SYSTEM

Flow rate	1080L/min
Working pressure	8bar

FEED BEAM

Total length	4010(Min)/5840(Max)mm
Drill rod length	2500~4305mm
Drilling depth	2195(Min)/4000(Max)mm
Weight, incl. drill	640kg
Feed force	7~15kN

DRILLING TOOLS

Drill rod	T38-H35-R32-4305
Drill bit	R32-Φ45
Reaming drill bit	R32-Φ89
Shank	T38
Connecting sleeve	T38-T38-190

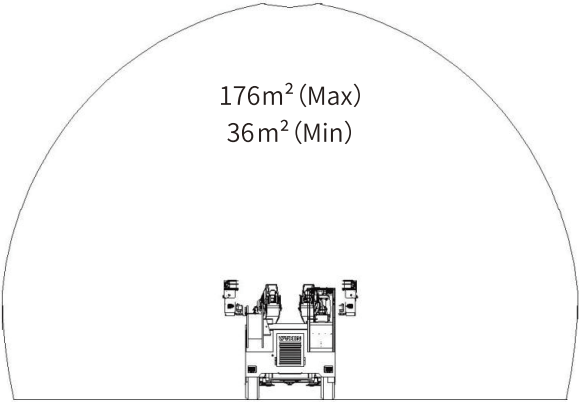
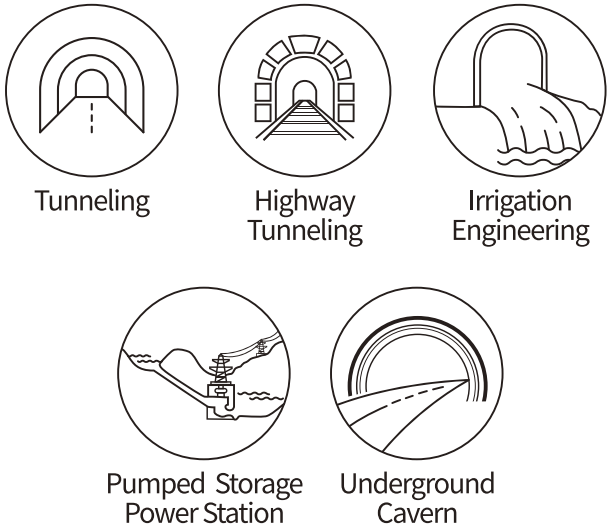


FACE DRILL RIG WD200E

MAIN FEATURES

- ◆ **STRONG SECTION ADAPTABILITY:** The first curved arm structure with a large operating range can adapt to multi section construction and achieve inverted arch excavation, overcoming the difficulty of traditional rock drilling rigs not being able to achieve inverted arch construction;
- ◆ **STRONG ADAPTABILITY OF CONSTRUCTION METHOD:** With a curved arm structure, the arm frame can operate below the horizontal line, which can meet the needs of two step and three step up, middle, and down step operations;
- ◆ **STRONG PERSONNEL ADAPTABILITY:** remote control operation, simple and easy to learn, can observe drilling conditions up close, effectively control over excavation and under excavation; The whole vehicle has a short length, flexible maneuverability, and low driving difficulty;
- ◆ **EFFICIENT AND ENERGY-SAVING:** The drilling speed of a single hole is 5-6 times that of an artificial air drill, greatly improving drilling efficiency;
- ◆ **EASY TO OPERATE:** Controlled by a computer, the arm can achieve self balancing operation and display the angle of the advancing beam, effectively controlling the excavation shape and over excavation.

SCOPE OF APPLICATION



BENCH CUT METHOD



INVERT ARCH CONSTRUCTION



MAKING TUNNELING AND MINING SAFER, MORE ECONOMICAL
MORE EFFICIENT, AND ENVIRONMENTALLY FRIENDLY

THE MAIN TECHNICAL PARAMETERS

MACHINE PARAMETERS

Overall Dimensions	9550×2480×3610mm
Weight	28500kg
Max. Travel Speed	15km/h
Max. Gradeability	26%
Min. Ground Clearance	425mm
Diesel Engine Power	96kW

ROCK DRILL

Model	U1838ME
Rated impact power	18kW
Applicable hole diameter	41-89mm
Max. impact pressure	230bar
Max. output torque	1000Nm

WATER SUPPLY SYSTEM

Flow Rate	12m³/h
Working Air Pressure	12~16bar
Water Pump Power	7.5kW

ELECTRICAL SYSTEM

Total Installed Power	125kW
Operating Voltage/Frequency	380V/50Hz
Cable Length	80m

WORKING RANGE (H×W)

Max. tunneling capacity	11000×16000mm
Min. tunneling capacity	6000×6000mm
Max. anchor support	14000×24000mm

AIR SUPPLY SYSTEM

Flow Rate	1.08m³/min
Working Air Pressure	8bar
Air Compressor Power	7.5kW

FEED BEAM

Configuration Type	Standard Type A	Optional Type B	Optional Type C
Drill Rod Length	4915mm	5525mm	4305mm
Feed Beam Length	6506mm	7136mm	5872mm
Max. Drilling Depth	4640mm	5250mm	4030mm



FACE DRILL RIG WD632DS

SCOPE OF APPLICATION

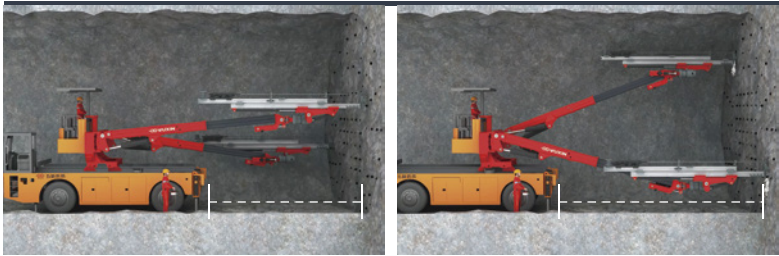
Suitable for drilling and rock bolting operations in highway/railway tunnels (36m²-145m²), pumped storage power stations,hydropower stations, and underground caverns.



SMALL SPACE OCCUPATION



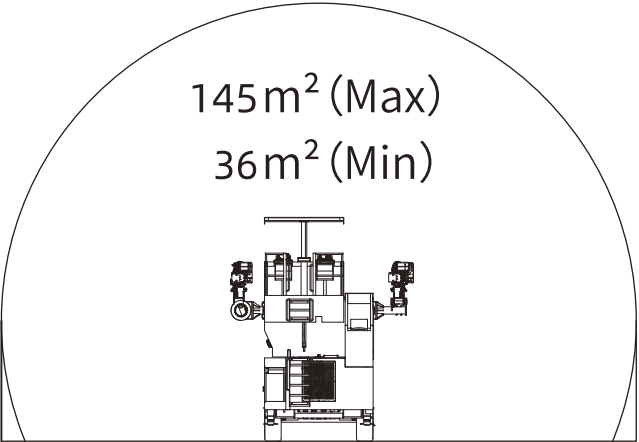
SLIDING STRUCTURE



MAKING TUNNELING AND MINING SAFER, MORE ECONOMICAL
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MAIN FEATURES

- ◆ Pioneering sliding-arm boom structure enables multi-section construction (inclined shafts, adits, pilot tunnels, etc.) with excellent cross-section adaptability.
- ◆ Remote-controlled operation with intuitive learning curve, allowing close observation of sidewall and arch roof drilling for effective overbreak/underbreak control.
- ◆ Single-hole drilling speed 5-6 times faster than manual drilling, significantly improving efficiency.



SCOPE OF APPLICATION



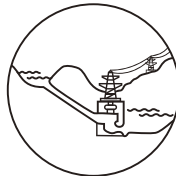
Highway Tunneling



Tunneling



Irrigation Engineering



Pumped Storage Power Station



Underground Cavern

THE MAIN TECHNICAL PARAMETERS

MACHINE PARAMETERS

Overall Dimensions	10300×2520×3500mm
Weight	30210kg
Max. Gradeability	26%
Max. Travel Speed	10km/h
Min. Ground Clearance	380mm
Diesel Engine Power	96kW

ROCK DRILL

Model	U1838ME
Rated impact power	18kW
Applicable hole diameter	41-89mm
Max. impact pressure	230bar
Max. output torque	1000Nm

AIR SUPPLY SYSTEM

Flow Rate	1.08m ³ /min
Working Air Pressure	8bar
Air Compressor Power	7.5kW

WORKING RANGE (H×W)

Max. tunneling capacity	10000×14500mm
Min. tunneling capacity	6000×6000mm
Max. anchor support	15000×22000mm

WATER SUPPLY SYSTEM

Flow Rate	12m ³ /h
Working Water Pressure	12~16bar
Water Pump Power	7.5kW

ELECTRICAL SYSTEM

Total Installed Power	125kW
Operating Voltage/Frequency	380V/50Hz
Cable Length	80m

FEED BEAM

Configuration Type	Standard Type A	Optional Type B	Optional Type C
Drill Rod Length	4915mm	5525mm	4305mm
Feed Beam Length	6506mm	7136mm	5872mm
Max. Drilling Depth	4640mm	5250mm	4030mm

ROD COUPLING SYSTEM

Maximum drilling depth with rod extension	12m
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MAKING TUNNELING AND MINING SAFER, MORE ECONOMICAL
MORE EFFICIENT, AND ENVIRONMENTALLY FRIENDLY

FACE DRILL RIG WD632



THE MAIN TECHNICAL PARAMETERS

MACHINE PARAMETERS	
Machine Weight	37500kg
Overall Dimensions	16350×2880×3400mm
Turning Radius	Outer 10200mm / Inner 5200mm
Max. Gradeability	26%
Travel Speed	15km/h
Engine Power	129kW

WORKING PLATFORM	
Max. Working Range (H×W)	10000×15800mm
Min. Working Range (H×W)	6000×6000mm

ROCK DRILL	
Model	U1838ME
Rated impact power	18kW
Applicable hole diameter	41-89mm
Max. impact pressure	230bar
Max. output torque	1000Nm

WATER SYSTEM	
Rated Water Flow	12m³/h
Water Pump Power	7.5kW
Rated Pressure	12~16bar

AIR SYSTEM	
Rated Air Flow	1.08m³/min
Air Compressor Power	7.5kW
Rated Pressure	8bar

FEED BEAM			
Configuration Type	Standard Type A	Optional Type B	Optional Type C
Drill Rod Length	4915mm	5525mm	4305mm
Feed Beam Length	6506mm	7136mm	5872mm
Max. Drilling Depth	4640mm	5250mm	4030mm

SCOPE OF APPLICATION

Underground Mining

Tunneling

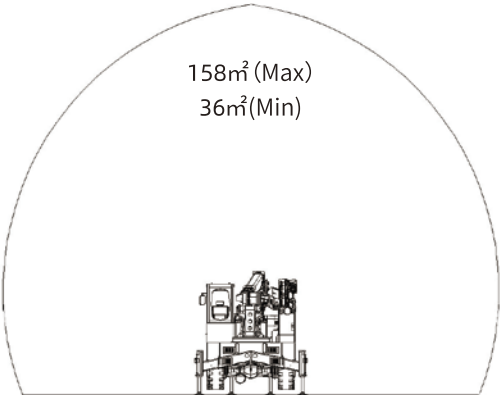
Highway Tunneling

Irrigation Engineering

Pumped Storage Power Station

MAIN FEATURES

- ◆ Fitted with electric proportional control system;
- ◆ Equipped with computerized guidance system;
- ◆ Self-adaptive pressure value when drilling, automatic anti-jamming reduces the consumption of Drilling tools;
- ◆ With water mist flushing system and blowing device to effectively remove stone slag in the hole.



Face drill rig (Double-boom series) Configuration List Note: '●' is standard / '○' is optional / '-' is not configured

Product name Model	Face drill rig WD622	Face drill rig WD632 (L1)	Face drill rig WD632 (L2)
Information management system (Construction data recording/storage/upload)	-	●	●
Drilling plan visualization system	-	●	●
Auto-hole detection & drilling	-	-	●
3D contour scanning	-	-	○
Angle function	-	●	●
Maintenance platform arm	○	○	○
Rod connecting device	○	○	○

A wireless remote controller can be added for special requirements

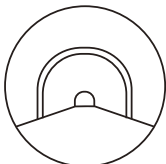
FACE DRILL RIG
WD633



THE MAIN TECHNICAL PARAMETERS

MACHINE PARAMETERS		ROCK DRILL	
Machine Weight	47000kg	Model	U1838ME
Overall Dimensions	17060×3250×3700mm	Rated impact power	18kW
Working Range (W×H)	16000×11000mm	Applicable hole diameter	41-89mm
Max. Gradeability	26%	Max. impact pressure	230bar
Travel Speed	15km/h	Max. output torque	1000Nm
Engine Power	162kW		
WATER SYSTEM		AIR SYSTEM	
Rated Water Flow	333L/min	Working Air Flow	1.97m³/min
Rated Pressure	10bar	Air Compressor Power	11kW
Water Pump Power	11kW	Rated Pressure	8bar
		WORKING RANGE	
		Max. Working Range (H×W)	11000×16000mm
		Min. Working Range (H×W)	6000×6000mm
FEED BEAM			
Configuration Type	Standard Type A	Optional Type B	Optional Type C
Drill Rod Length	4915mm	5525mm	4305mm
Feed Beam Length	6506mm	7136mm	5872mm
Max. Drilling Depth	4640mm	5250mm	4030mm

SCOPE OF APPLICATION



Underground Mining



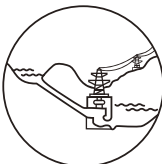
Tunneling



Highway Tunneling



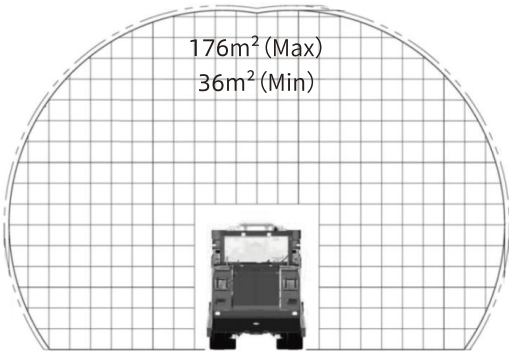
Irrigation Engineering



Pumped Storage Power Station

MAIN FEATURES

- ◆ **ACCURACY:** Fully computer-controlled drilling system, automatic positioning and hole drilling, precise control of propulsion beam angle and hole depth, and small over-excavation;
- ◆ **SAFETY:** The worker safely far away from the working area;
- ◆ **HIGH EFFICIENCY:** Automatic drilling, automatic anti-jamming, fast drilling speed in a single hole, improving construction progress;
- ◆ **ERGONOMIC DESIGN:** Fullyenclosed cab, ergonomic design for operation, reducing noise and dust injury.



Face drill rig (Three-boom series) Configuration List Note: '●' is standard / '○' is optional / '-' is not configured

Product name Model	Face drill rig WD623	Face drill rig WD633 (L1)	Face drill rig WD633 (L2)
Information management system (Construction data recording/storage/upload)	-	●	●
Drilling plan visualization system	-	●	●
Auto-hole detection & drilling	-	-	●
3D contour scanning	-	-	○
Angle function	-	●	●
Maintenance platform arm	○	○	○
Rod connecting device	○	○	○

A wireless remote controller can be added for special requirements

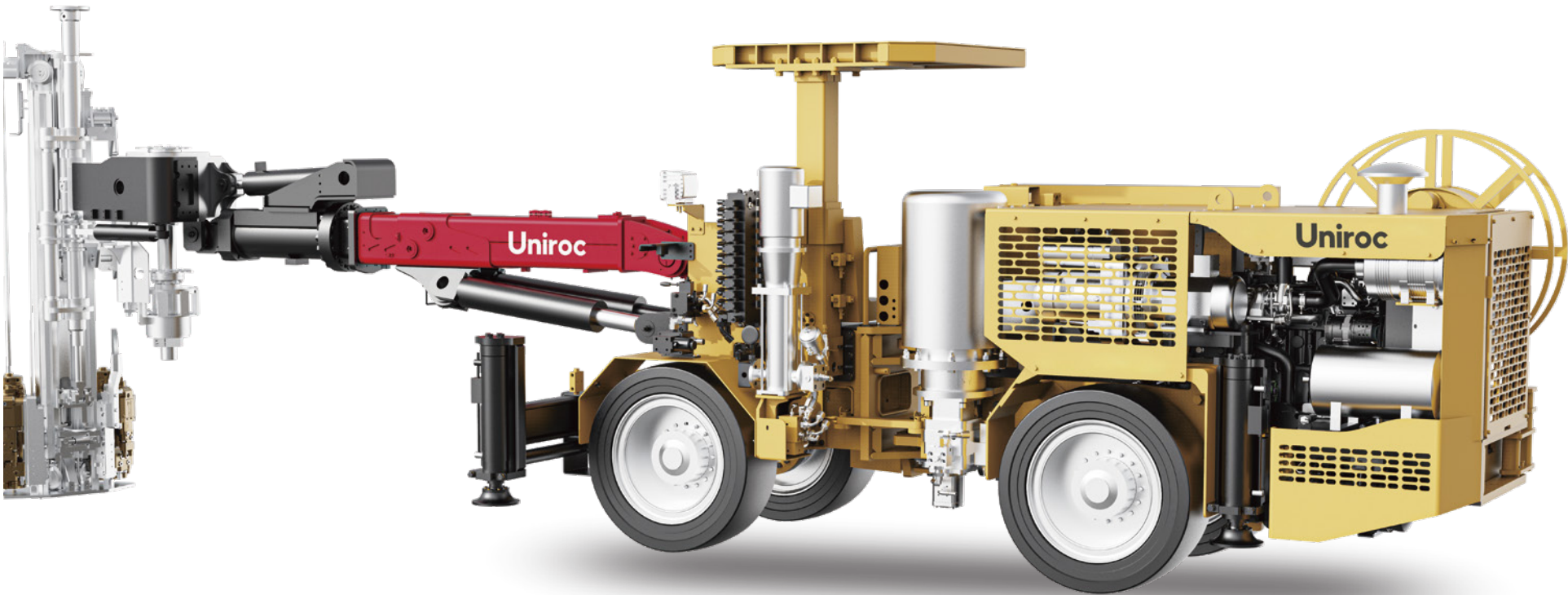
ROCK BOLTING RIG MT551

SCOPE OF APPLICATION

Suitable for anchor rod support operations in non coal mines and water conservancy and hydropower tunnels of 7m²-30m².

MAIN FEATURES

- ◆ Compact dimensions, capable of operating in spaces as small as 2.6×2.6m;
- ◆ Equipped with a 15kW rock drill, delivering high-speed drilling performance;
- ◆ Modular split design enables easier disassembly for mine access;
- ◆ Automatic drilling and anti-jamming functions to extend tool life.



THE MAIN TECHNICAL PARAMETERS

MACHINE PARAMETERS	
Overall dimensions	8100×1300×1950/2250mm
Weight	10000kg
Max. travel speed	8km/h
Max. gradeability	15°
Min. ground clearance	230mm
Turning radius	5600(Outer)/2300(inner)mm
Wheelbase	2000mm
Minimum coverage area	2.6×2.6m
Recommended scope of operation	2.8×2.8-4.5×4.5m
Magazine capacity	5 bolts
Bolting Type	Resin anchor bolts & Split-Set

FEED BEAM			
	Type A	Type B	Type C
Total length	1500mm	1800mm	2000mm
Bolt length	2400mm	2700mm	3000mm
Drill rod length	1760mm	2060mm	2360mm
Drilling depth	1600mm	1900mm	2150mm
Weight, incl. drill	610kg	630kg	660kg
Feed force	6~9kN	6~9kN	6~9kN

ELECTRICAL SYSTEM	
Total installed power	62kW
Main motor	55kW
Operating voltage	380/660V
Frequency	50Hz

WATER SUPPLY SYSTEM	
Flow rate	25~80L/min
Working pressure	8~12bar

AIR SUPPLY SYSTEM	
Flow rate	410L/min
Working pressure	8bar

ROCK DRILL	
Model	U1528
Rated impact power	15kW
Applicable hole diameter	32-64mm
Max. impact pressure	200bar
Max. output torque	980Nm

ROCK BOLTING RIG MT571

SCOPE OF APPLICATION

Suitable for anchor rod support operations in non coal mines and water conservancy and hydropower tunnels of 10m²~36m².

MAIN FEATURES

- ◆ Remote control electric proportional operating system, simple operation, easy to learn and understand, safe and reliable, accurate positioning;
- ◆ Universal modular chassis design, easy for equipment maintenance and management;
- ◆ Equipped with dual functions of resin and pipe seam anchor construction, one machine can be used for two purposes;
- ◆ Automatic drilling, automatic card braze release and other functions, improve the life of drilling tools;
- ◆ With fault self-diagnosis and safety voice alarm system.

THE MAIN TECHNICAL PARAMETERS

MACHINE PARAMETERS

Overall dimensions	10300×1800×2100/2900mm
Weight	13800kg
Max. travel speed	15km/h
Max. gradeability	15°
Min. ground clearance	255mm
Turning radius	5800(Outer)/3150(inner)mm
Wheelbase	2800mm
Minimum coverage area	3.2×3.2m
Recommended scope of operation	3.6×3.6-5.5×5.5m
Magazine capacity	10 bolts
Bolting Type	Resin anchor bolts & Split-Set

FEED BEAM

	Type A	Type B
Total length	2950mm	3150mm
Bolt length	1800mm	2000mm
Drill rod length	2175mm	2375mm
Drilling depth	1950mm	2150mm
Weight, incl. drill	630kg	650kg
Feed force	6~9kN	6~9kN

ELECTRICAL SYSTEM

Total installed power	62kW
Main motor	55kW
Operating voltage	380/660V
Frequency	50Hz

WATER SUPPLY SYSTEM

Flow rate	25~80L/min
Working pressure	8~12bar

AIR SUPPLY SYSTEM

Flow rate	410L/min
Working pressure	8bar

ROCK DRILL

Model	U0825
Rated impact power	8kW
Applicable hole diameter	32-55mm
Max. impact pressure	150bar
Max. output torque	401bar



FACE DRILL RIG WD100E

 SCOPE OF APPLICATION

Suitable for 36m²-148m² railway, road, pumped storage power station, hydropower station, underground cavern, tunnel (tunneling) anchor holes and boring operations.

 MAIN FEATURES

- ◆ **STRONG ADAPTABILITY OF CONSTRUCTION SECTION:** the first curved boom structure in China, the whole machine is small in size, which can meet the needs of most section types of construction in tunnels and tunneling, especially for pumped storage power station and hydroelectric power station tunneling, which can cover all tunnel section types of anchoring and digging operations;
- ◆ **STRONG ADAPTABILITY OF WORKING CONDITLONS:** slope and turning section can be adapted, especially for the operation of hydropower tunnel group, it can meet the pass-ability of all turning sections;
- ◆ **STRONG ADAPTABILITY OF WORKING METHOD:** the curved arm jib can work below the horizontal plane, which can meet the excavation of upward arch; it can meet the operation of anchor hole and boring hole of tunnels and tunnels, and the operation of overreach small conduit construction;
- ◆ **STRONG ADAPTABILITY OF PERSONNEL:** remote control operation, simple and easy to learn, the wind driller can quickly get started, and can observe the drilling situation from a close distance.
- ◆ **EFFICIENT ANCHOR BOLT INSTALLATION:** it can meet the construction operation of tunnel and tunnelling system anchor, locking foot anchor, and overrun small conduit hole; it can be equipped with optional jointing device to meet the operation of anchor hole of 12m hole depth;



 THE MAIN TECHNICAL PARAMETERS

MACHINE PARAMETERS

Overall dimensions	8310×2480×3400mm
Weight	15600kg
Max. travel speed	15km/h
Max. gradeability	15°
Min. ground clearance	300mm
Engine power	66kW

WORKING RANGE (H×W)

Max. tunneling capacity	11000×14000mm
Min. tunneling capacity	6000×6000mm
Max. anchor support	14000×22000mm

AIR SUPPLY SYSTEM

Flow rate	0.8m³/min
Working pressure	8bar
Air compressor power	5.5kW

WATER SUPPLY SYSTEM

Flow rate	5m³/h
Working pressure	0.8-1.5MPa
Water pump power	3kW

ROCK DRILL

Model	U1838ME
Rated impact power	18kW
Applicable hole diameter	41-89mm
Max. impact pressure	230bar
Max. output torque	1000Nm

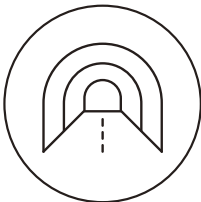
ELECTRICAL SYSTEM

Total installed power	63.5kW
Operating voltage/frequency	380V/50Hz
Cable length	100m

FEED BEAM

	Standard Type A	Optional Type B	Optional Type C
Drill rod length	4915mm	5525mm	4305mm
Feed beam length	6506mm	7136mm	5872mm
Maximum drilling depth	4640mm	5250mm	4030mm

 SCOPE OF APPLICATION



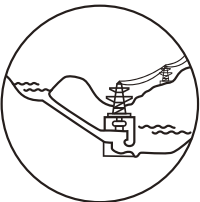
Tunneling



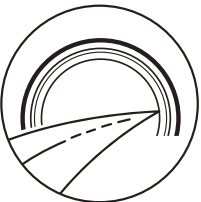
Highway Tunneling



Irrigation Engineering



Pumped Storage Power Station



Underground Cavern

PLATFORM LIFTER HLG312M



SCOPE OF APPLICATION

Integrating various high-altitude operation functions such as arch installation, steel mesh laying, and explosive charging, it is suitable for multi arch prefabrication and segmentation, multi arch prefabrication and folding, single arch folding, locking anchor rod, system anchor rod, super front anchor rod and other operation schemes of highways and railways using full section method and step method.

MAIN FEATURES

- ◆ **SAFETY:** Equipped with three robotic arms and three working platforms, prefabricated arches are installed to effectively prevent falling rocks and improve operational safety;
- ◆ **EFFICIENT:** With the configuration of anchor arms, the construction of locking foot anchor rods, system anchor rods, and advanced small conduits can be carried out upon completion of the erection, reducing equipment rotation time and improving operational efficiency;
- ◆ **MULTIFUNCTIONAL:** Equipped with hole cleaning function, the super large work platform can accommodate 6-8 people at the same time, and can quickly complete the loading of drugs;
- ◆ **SAVE MANPOWER:** Only 4 people are needed to complete the installation of arches and the laying of steel mesh, saving 3-4 people in labor investment;
- ◆ **CONVENIENT:** Dual power operation system, free switching of oil and electricity modes, external air connection, and optional air compressor according to altitude to complete hole cleaning operation on your own.

THE MAIN TECHNICAL PARAMETERS

PARAMETER OF THE MACHINE		SIDE ARM	
Machine Weight	35500kg	Max. Load Capacity	1000kg
Overall Dimensions	9400×3500×3550mm	Max. Lifting Height	12m
Max. Working Cross-section (Width×Height)	18000×12000mm	Max. Width	18m
Max. Travel Speed	12.5km/h	Telescopic Stages	2-stage
Max. Gradeability	26%		
Min. Ground Clearance	400mm	BOLT SYSTEM	
Main Motor Power	55kW	Single Rod Drilling Depth	4m
MAIN WORKING ARM		Applicable Drilling Diameter	41~89mm
Max. Load Capacity per Arm	3000kg	Rated Impact Power	18kW
Lifting Working Width	±4m	Impact Frequency	60Hz
Max. Lifting Height	12m	Impact Pressure	21MPa
Control Method	Hydraulic Control		

SHOTCRETE MACHINE WHP38H

MAIN FEATURES

- ◆ Flexible movement of the manipulator, construction without dead angle, large working range;
- ◆ Adopting mechanical four-wheel drive, front wheel steering, abundant power, maximum climbing capacity of 46%;
- ◆ Seventh-generation new boom, through 10 million times of fatigue damage test, the boom is more durable;
- ◆ Comprehensively improve the protection level of hydraulic system and electrical system, the stability of the equipment is greatly improved;
- ◆ Equipped with oil-electricity dual power system, electric power drive for normal construction, and diesel power for emergency work in case of power failure;
- ◆ Air compressor can be selected according to the altitude.



SCOPE OF APPLICATION

It is suitable for spray anchor support operations in road and railway tunnels, pumped storage power stations, hydroelectric power stations, reservoir irrigation holes and underground caves and reservoirs.

THE MAIN TECHNICAL PARAMETERS

PARAMETER OF THE MACHINE	
Overall Dimensions (including pump pipes)	8350×2700×3380mm
Rated Power of Diesel Engine	96kW
Total Motor Power (Hydraulic System + Electrical System)	67kW
Turning Radius (Outer Radius, Inner Radius)	9000mm
Total Weight	14400kg
PUMPING SYSTEM	
Theoretical Spraying Capacity	38m³/h
Maximum Travel Speed	23MPa
Delivery Pipe Diameter (Steel Pipe, Hose)	φ125~φ80mm variable diameter
Maximum Aggregate Size for Spraying	16mm
Concrete Outlet Pressure	12MPa
WORKING ARM COVERAGE	
Maximum Working Section Range (Height×Width×Extension)	15×24×12m
Minimum Working Section Range (Height×Width×Extension)	5×5×7.4m

TRAVEL SYSTEM	
Drive Type	4-wheel drive
Maximum Travel Speed	25km/h
Braking Distance	5m
Maximum Gradeability	46%
Minimum Ground Clearance	420mm
AIR COMPRESSOR SYSTEM (OPTIONAL)	
Working Exhaust Pressure	6bar
Working Air Volume	22m³/min
Motor Power	90kW
BOOM SYSTEM	
Maximum Spraying Height	15m
Maximum Spraying Width	24m
Minimum Spraying Tunnel Height	5m
Maximum Working Depth	6m
ACCELERATOR SYSTEM	
Accelerator System Pressure	20bar
Accelerator Tank Capacity	2000L

INTELLIGENT DIGITAL POURING LINING TROLLEY ST12

SCOPE OF APPLICATION

Suitable for intelligent lining and pouring of road and railway tunnels, pumped storage power stations, hydropower stations, reservoir irrigation holes and underground caves and reservoirs.

MAIN FEATURES

- ◆ High structural strength, simplicity, large space at the top, sides and bottom, improving the working environment, increasing the ventilation cross-section area and facilitating the passage of engineering vehicles;
- ◆ Simple operation, effectively reduce the labour intensity of workers and reduce the number of operators;
- ◆ Adopting concrete layered placing machine effectively improves the pouring quality of the second lining concrete, saves the pouring time, improves the efficiency, and reduces the construction cost and safety risk;
- ◆ Equipped with information-based monitoring system, real-time detection of data such as pouring position and pouring square volume in the trolley bins to achieve a controllable and traceable process.



DIGITAL POURING SYSTEM

INFORMATION MONITORING SYSTEM

- ◆ It is equipped with functions such as arch anti-void warning, arch anti-over pressure warning, video monitoring and report generation;
- ◆ It can preset the pouring scheme according to the construction experience and on-site construction situation through the interactive editable interface, and modify the process and parameters of pouring, vibration and other modules in real time to solidify the data and achieve standardized construction;
- ◆ Equipped with the information management system of tunnel equipment, it can realize the inspection of the sequence and position of the construction of the trolley into the silo, the amount of poured square, the flow rate of the corresponding pouring port, the fullness of the vault, the pressure of the vault and other data, and all the inspection information can be uploaded and stored, so that the process can be controlled and traced.

VIBRATION SYSTEM

- ◆ The operator can control the continuous vibration time, interval time and vibration times through PLC programme;
- ◆ The vibrating system can be designed as single action or group linkage according to the demand, and can be operated by optional wireless remote control;
- ◆ The deep part of the concrete in the arch is fully vibrated, achieving full coverage of vibration in the ring direction, longitudinal direction and thickness direction, effectively improving the strength and compactness of concrete.

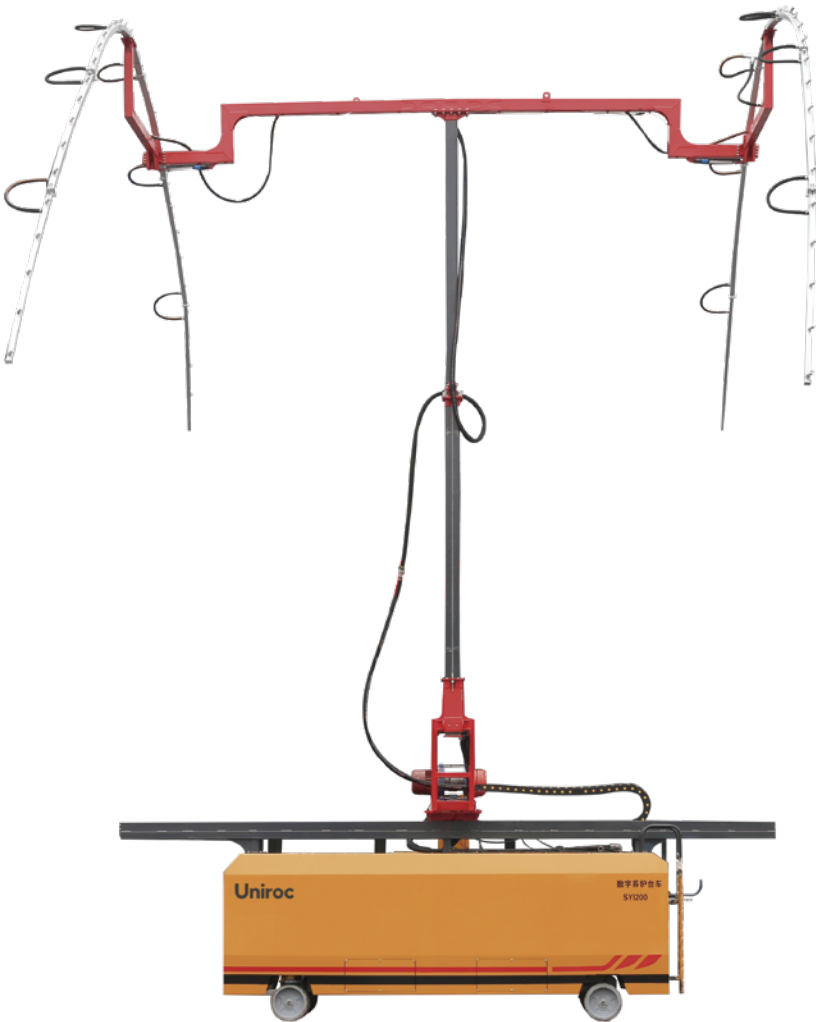
FABRICATION SYSTEM

- ◆ The use of layered concrete placing machine effectively improves the solid quality and appearance quality of the second lining concrete pouring, reduces the pipe changing construction process, reduces the labour intensity, reduces the number of operators, saves the pouring time, improves the efficiency, and reduces the construction cost and safety risk.

DIGITAL MAINTENANCE TROLLEY SY1200

SCOPE OF APPLICATION

Suitable for concrete curing after secondary lining in tunnels of double track railways, double track highways, and third track highways.



MAIN FEATURES

- ◆ **UNMANNED:** unattended automatic maintenance, simple operation, reducing labour costs;
- ◆ **SAFETY:** independent maintenance running track, walking smoothly, reducing safety risks;
- ◆ **ECONOMY:** the equipment can be applied to different sections, realizing repeated use in multiple sites and saving equipment investment costs;
- ◆ **ENERGY SAVING:** 1 time second lining concrete curing water is not more than 1m³, reduce water costs.

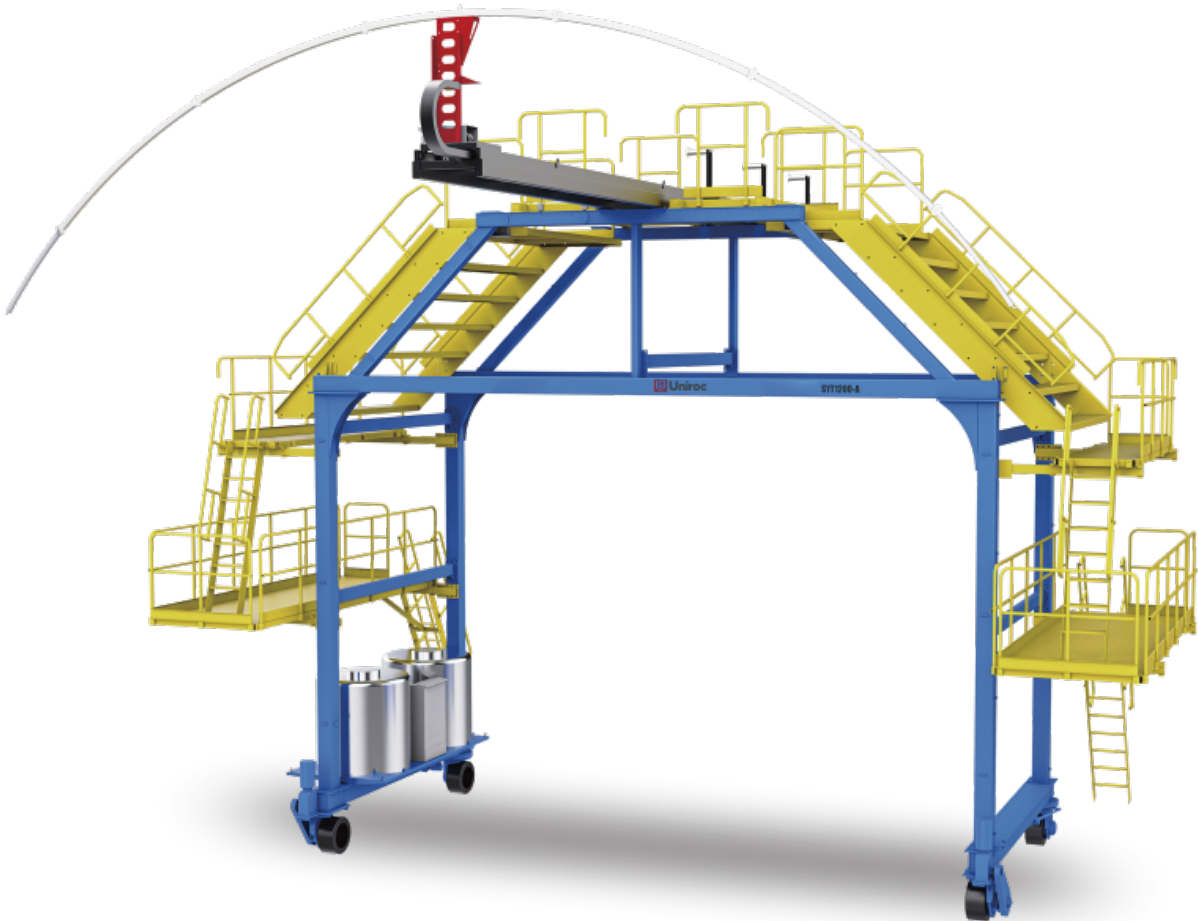
THE MAIN TECHNICAL PARAMETERS

PARAMETERS OF THE MACHAINE	
Overall dimensions (L×W×H)	11870×2510×6430mm
Total weight	3500kg
Maintenance length	12m
Maintenance range (width)	Double and triple lane road/railway (can be customized according to section)
Maintenance speed	8m/min (variable frequency adjustable)
Total working power	13kW
Drive steering form	Two-wheel drive with steering
Minimum ground clearance	158mm
Wheelbase	3400mm
Tank volume	2×1m ³
Driving mode	Electric motor driven hydraulic power pack
Travel of maintenance trolley	6010mm
External power supply	380V
External hose diameter	Φ25mm
TEMPERATURE CONTROL SYSTEM (OPTIONAL)	
Heating power	12×4kW
Temperature control range	<60°C
Temperature control	Temperature controlTemperature drop 2°C/h
Tank heat preservation efficiency	According to the concrete surface temperature adjustment of water temperature <15°C
INFORMATION DETECTION SYSTEM (OPTIONAL)	
Recording, storage and transmission of maintenance data	YES
Concrete surface temperature measurement records	YES
Record of water temperature detection	YES
Curing position setting	YES

BENCH MAINTENANCE TROLLEY SYT12

MAIN FEATURES

- ◆ **UNMANNED:** unattended automatic maintenance, simple operation, reducing labour costs;
- ◆ **SAFETY:** independent maintenance running track, walking smoothly, reducing safety risks;
- ◆ **ECONOMY:** can be reused on multiple construction sites, saving equipment investment costs;
- ◆ **ENERGY SAVING:** can be used as a work platform for secondary lining concrete surface maintenance, radar detection, secondary lining impact detection, etc.



SCOPE OF APPLICATION

Suitable for concrete curing after secondary lining in tunnels of double track railways, double track highways, single track railways, and triple track highways.

THE MAIN TECHNICAL PARAMETERS

PARAMETERS OF THE MACHAINE	
Maintenance range (length)	12000mm
Maintenance range (width)	12000~13000mm (Can be customized according to section)
Maintenance range (height)	9750~10000mm (Can be customized according to section)
Total weight	8800kg
Maintenance speed	8m/min (Variable frequency adjustable)
Travel of maintenance trolley	12000mm
Left and right wheelbase	8200mm
Front and rear wheelbase	3500mm
Water tank volume	2×1m ³
Drive steering form	Front wheel steering + rear wheel drive
External power supply	380V
External hose diameter	Φ25mm
TEMPERATURE CONTROL SYSTEM (OPTIONAL)	
Temperature control system (optional)	12×4kW
Temperature control range	<60°C
Temperature control	Temperature drop 2°C/h
Tank heat preservation efficiency	According to the concrete surface temperature adjustment of water temperature <15°C
INFORMATION DETECTION SYSTEM (OPTIONAL)	
Recording, storage and transmission of maintenance data	YES
Concrete surface temperature measurement records	YES
Record of water temperature detection	YES
Curing position setting	YES

APPLICATION

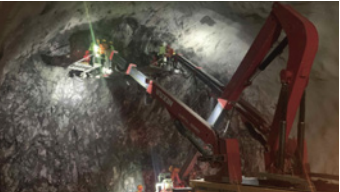
PLATFORM LIFTER



Jakarta-Bandung High-Speed Railway (Indonesia)
Underside Beam Tunnel



Jiumian Expressway
Baima Tunnel



Hangzhou-Wenzhou Expressway
Xianju Tunnel



Luqiao Expressway

ROCK BOLTING RING



Cambodia
Upper Stung Tatay Hydropower Station



Jingning Pumped Storage Power Station Project



Malaysia
East Coast Rail Link (ECRL) Project



Shenyang-Baishan High-Speed Railway
Shangshan Tunnel

DIGITAL POURING LINING TROLLEY



North Macedonia
KO Expressway Project



Puqing Expressway
Lingding Tunnel



Xi'an-Ankang High-Speed Railway
Qinling Jiutianshan Tunnel



Xi'an-Shiyan High-Speed Railway
Tianzhushan No.1 Tunnel



Xi'an-Ankang High-Speed Railway
Zhaojiashan Tunnel



Chongqing-Hunan High-Speed Railway
Zhangjiashan Tunnel



Sichuan-Tibet Railway
Yigong Tunnel



Sichuan-Tibet Railway
Yigong Tunnel

MAKING TUNNELING AND MINING SAFER, MORE ECONOMICAL
MORE EFFICIENT, AND ENVIRONMENTALLY FRIENDLY

FACE DRILL RIG



Nayong-Qinglong Expressway



Wuxi-Yunyang-Kaizhou Expressway
Luyang Tunnel



Zhenba-Guang'an Expressway



Zhejiang Tiantai Pumped Storage Power Station



Wuwei-Xianyang Expressway



Yichang-Enshi Expressway



Sichuan-Tibet Railway
Yingjinshan No.1 Tunnel



Mengla-Dahuyou Expressway
Banluo Tunnel



Baoji-Pingwu Expressway
Qinling Tiantai Mountain Extra-long Tunnel



Yangtze River-Han River Water Diversion Project
Water Conveyance Tunnel



Leshan-Hanzhong Expressway
Grand Canyon Tunnel



Chongqing-Guizhou Expressway Parallel Line

SHOTCRETE MACHINE



Naying-Baga Highway
Buran Tunnel



Wushi-Weiwei Expressway
Tianshan Shengli Tunnel



Baotou-Yinchuan High-Speed Railway
Gandur Mountain Tunnel



Xi'an-Ankang High-Speed Railway



Wuxue-Yuxi Expressway
Yangjialing Tunnel



Suiichuan-Dahe Expressway
Hongxing Tunnel



Pingliang-Qingyang Railway
Fujiaping Tunnel



Liaoning Xingcheng Pumped Storage Power Station
Water Conveyance and Power

DIGITAL MAINTENANCE TROLLEY



Yan'an-Yulin High-Speed Railway
Wenanyi Tunnel



Chizhou-Huangshan High-Speed Railway
Tiesiling Tunnel



Yulin-Cenxi Railway



Shanghai-Chongqing-Chengdu Railway
Pengbaoshan Tunnel