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Fujian Aivyter Intelligent Equipment Co., Ltd

COMPANY PROFILE

Aivyter, established in 2009, and located in Fuzhou China, is a professional enterprise engaged in the R&D, production, sales and service of screw air compressor, drill jumbo, shotcrete manipulator and relative equipment for the engineering construction and mining.

After more than ten years of development, the shareholders have established three factories during this period, namely Fujian Aivyter Intelligent Equipment Co., Ltd., Fuzhou Tuowei Mechanical & Electrical Equipment Co., Ltd and Fujian Aivyter Compressor Co., Ltd. The annual output value is 300 million yuan. There are nearly 200 employees. Among them, there are 20 technical R&D personnel and 70 technicians in after-sales service team. 7 sales personnel in international business department.

Dedicated to strict quality control and thoughtful customer service, our experienced staff members are always available to discuss clients' requirements and ensure full customer satisfaction by supplying high-quality equipment. Aivyter company not only has its own import and export right and stable distributors worldwide, but also has a team of professional after sales and service. In addition, we have obtained CE, TUV, SGS, ISO certificates.

After long-term development, our company has established two well-known brands: Aivyter and TUOWEI.

In domestic market, our Aivyter brand of screw air compressors, drill jumbo and concrete spray manipulators are well-known in tunnel industry, textile industry and steel industry, with cooperation of China Railway Bureau Group Co., Ltd, and also formed a long-term strategic partnership with China Railway (the first) Bureau Group Co., Ltd to China Railway (the tenth) Bureau Group Co., Ltd.

In overseas market, our TUOWEI and Aivyter brand of equipment are widely used in various industries, like textile, steel, shipbuilding, mining, oil field, food, pharmacy, package, electronic, glasses, power, sand blasting, cement, tunnel, railway, municipal engineering. Selling well in all cities and provinces around China, our products are also exported to more than 70 countries and regions, such as, Russia, Thailand, Vietnam, Indonesia, South Africa, Tunisia, Saudi Arabia, Uzbekistan, Danmark, Poland, Mexico, Chile, Peru, India, Pakistan, Malaysia, Philippines, etc.

Our equipment gain wide praises at home and abroad. We also welcome OEM, ODM orders. As a supplier, Aivyter has its own factory, covers an area of 20,000 square meters. Whether selecting a current product from our catalog or seeking engineering assistance for your application, you can email or phone us about your sourcing requirements. We warmly welcome customers all over the world to establish cooperation and create a bright future with us together.

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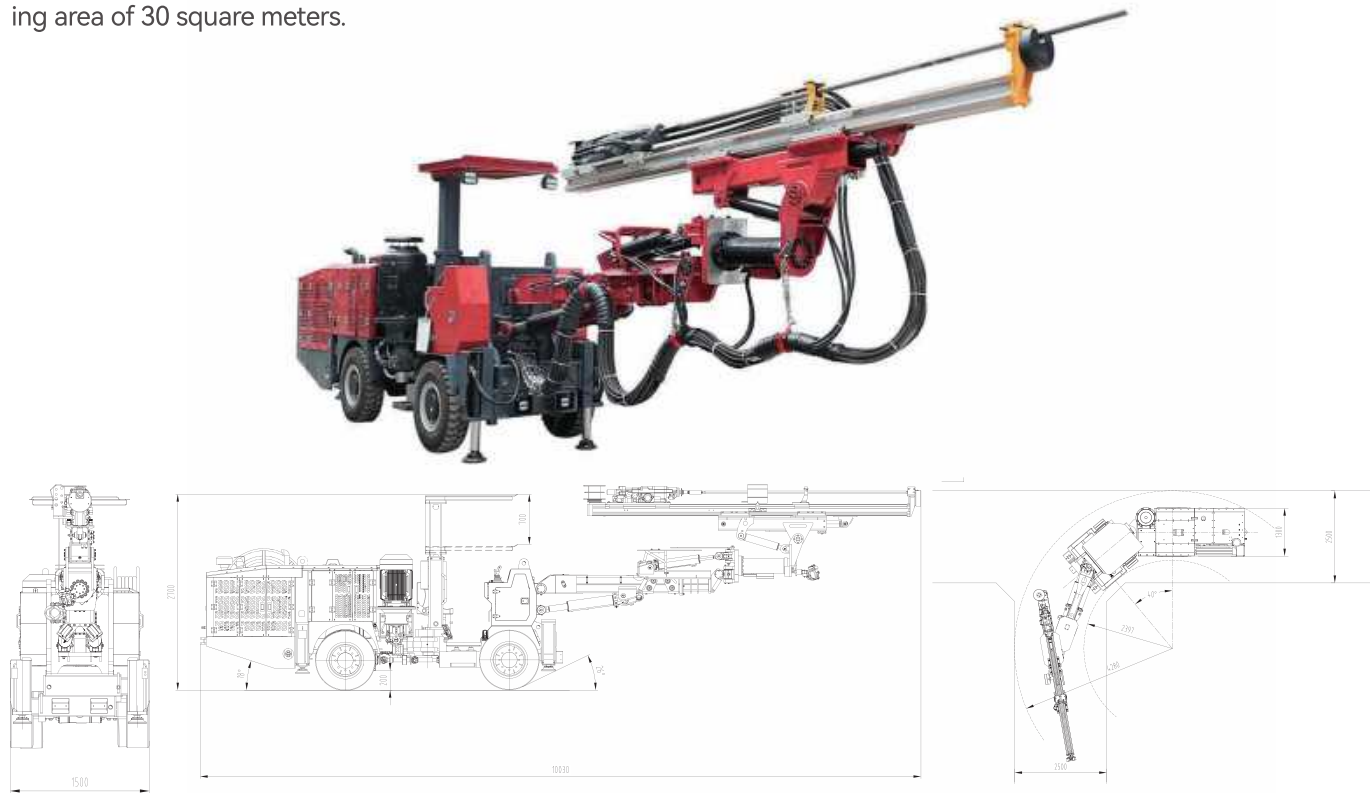
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Single Boom Drilling Jumbo - AZK125

Brief Introduction

It is mainly suitable for excavation operations in metal mines, underground tunnels of hydropower stations, culverts and other fields, especially for drilling blasting holes and anchor holes in narrow tunnels. The equipment adopts a hydraulic rock drilling system, which has advanced system, fast rock drilling speed and high work efficiency; the whole machine has a compact structure, is flexible and mobile, and is convenient for operation in a small space, with a maximum operating area of 30 square meters.



Rock Drill

The brand rock drill has the characteristics of super anti-bending ability, high drilling speed and low loss of drill tools, which effectively improves the adaptability of tunnel hole drilling.

Drill Arm

All-round parallel retractable drill arm, fast and accurate positioning; square structure, high strength and good shock absorption performance.

Electric System

Well-known electrical components such as Schneider and Siemens, with high reliability and long service life; equipped with protection and alarm functions, such as ground fault protection, phase sequence protection, motor overload protection and engine fault alarm.

Feed Beam

Light aluminum alloy beam, high efficiency anti-bending, anti-torsion and anti-fatigue performance, long service life. Unique single-layer hose reel, with reliable hose clamp structure, good hose tensioning performance, effectively improves hose life and reduces maintenance times.

Hydraulic System

The rock drilling operation is directly controlled by hydraulic, and auxiliary actions such as outriggers and lighting are electronically controlled, with simple pipelines and easy maintenance. The drilling system has anti-stuck drill, anti- empty drilling and automatic retraction functions, which effectively improves drilling efficiency and reduces loss of drilling tools.

Main Technical Parameters of AZK125

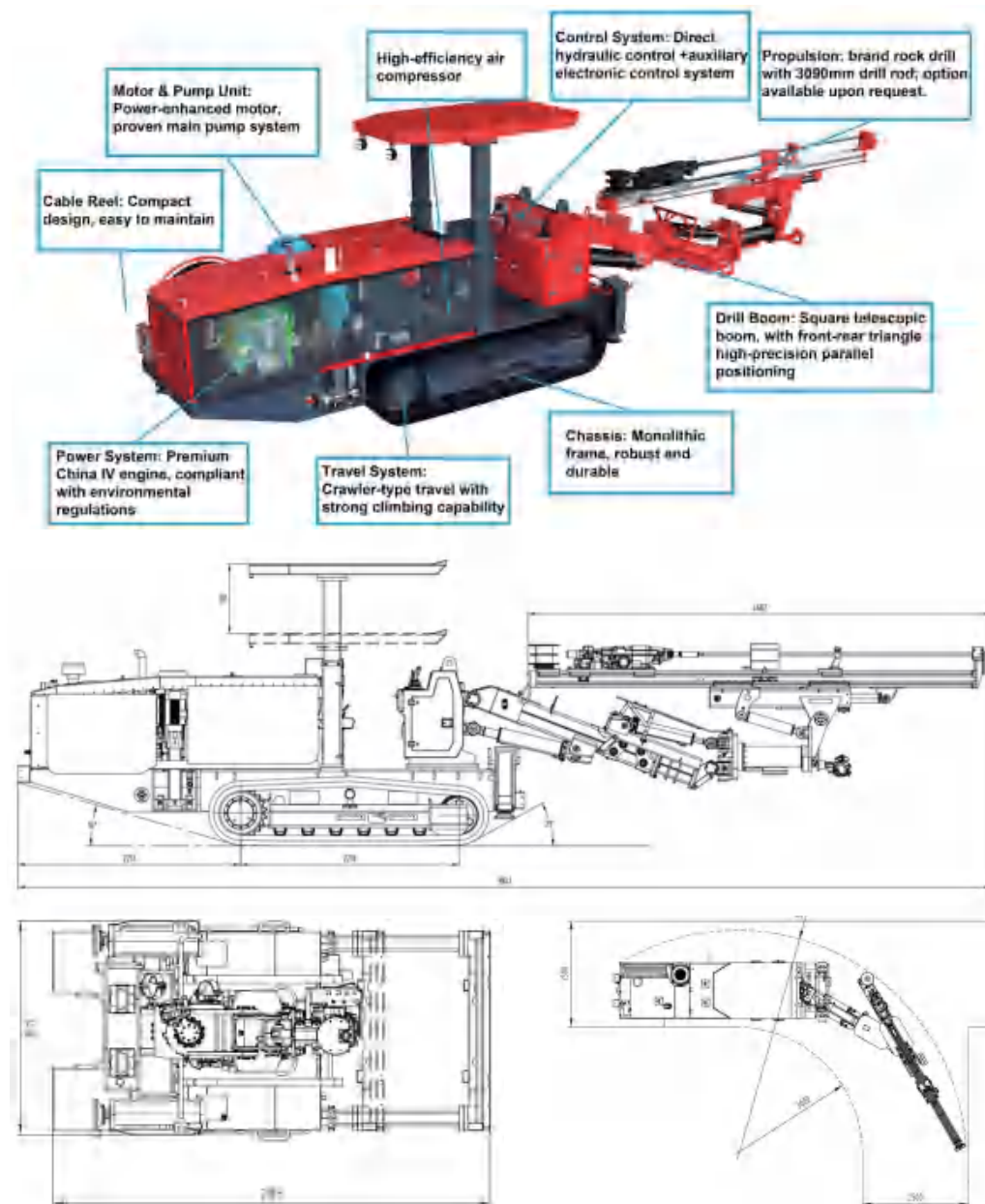
Item	Category		Technical parameters	
1	Basic parameters			
1.1	Equipment weight (kg)		11300	
1.2	External dimensions (mm) L x W x H		10030X1500X2000(2700)	
1.3	Maximum working area (width × height, mm)		6200×5430	
1.4	Turning radius (mm)		5200/7800	
1.5	Maximum coverage area (m²)		30	
1.6	Tunnel width * Height (m)		2.2x2.3	
2	Equipment Configuration			
2.1	Rock drill	Model	Standard AD380 (optional)	
		Brand	Aivyter	
		Working pressure (MPa)	18	
		Impact frequency (Hz)	60	
		Impact energy (J)	360	
		Maximum slewing torque (N·m)	410	
		Rotation speed (r/min)	180	
		Lubrication air consumption (at 3 bar) (L/s)	3.3	
		Water consumption (L/min)	30-50	
	Drill hole diameter (mm)	45		
2.2	Drill arm	Thruster compensation stroke (mm)	1500	
		Maintain parallelism throughout the process	Yes	
		Coverage area (m²)	24	
		Coverage width/height (mm)	5025/5000	
		Boom lifting angle	-43°/+52°	
		Boom swing angle	±30°	
2.3	Feed Beam	Total length of the propulsion beam (mm)	4740 (standard) / 5400	
		Maximum propulsion force (kN)	10	
		Drill rod length (mm)	3090 (standard) / 3700	
		Drilling depth per push (mm)	2830 (standard) / 3440	
		Flip angle	±360°	
		Rotation angle	-3°/+90°	
2.4	Chassis	Climbing ability (°)	±13	
		Engine	Manufacturer	Yuchai
			Power (kW)	55.8
			Maximum torque	310Nm/1600rpm
			Emission and noise standards	National IV
		Transmission system	Four-wheel drive	
		Walking speed (km/h)	Low speed 5 / High speed 9	
		Ground clearance (mm)	200	
		Steering system	Articulated steering	
		Steering angle (°)	±40	
		Wheelbase (mm)	2300	
2.5	Drilling hydraulic system	Hydraulic control method	Manual valve control	
		Motor power (kW)	55	
		Hydraulic oil tank volume (L)	180	
		Pressure oil and return oil accuracy (μm)	10	
2.6	Water system	Water pump power (kW)	3	
		Rated flow rate (L/min)	70	
		Water pressure (bar)	12	
		Ratedpressure(MPa)	1.2	
2.7	Electrical system	Major electrical component manufacturers	ABB/Siemens/Schneider	
		Voltage (V) / Frequency (Hz)	380/50	
		Startup method	Star delta	
		Safety protection system functions	Leakage protection, overload protection, short circuit protection	

Single Boom Drilling Jumbo - AZK125B

Brief Introduction

AZK125B is mainly designed for excavation and construction operations in metal mines, underground hydropower tunnels, culverts and other scenarios, and is especially suitable for drilling blast holes and rock bolt holes in narrow roadways.

The equipment is equipped with an advanced hydraulic rock drilling system, delivering high drilling speed and operational efficiency. With a compact structure and excellent maneuverability, it is well-suited for working in confined spaces, offering a maximum operating coverage of 30m².



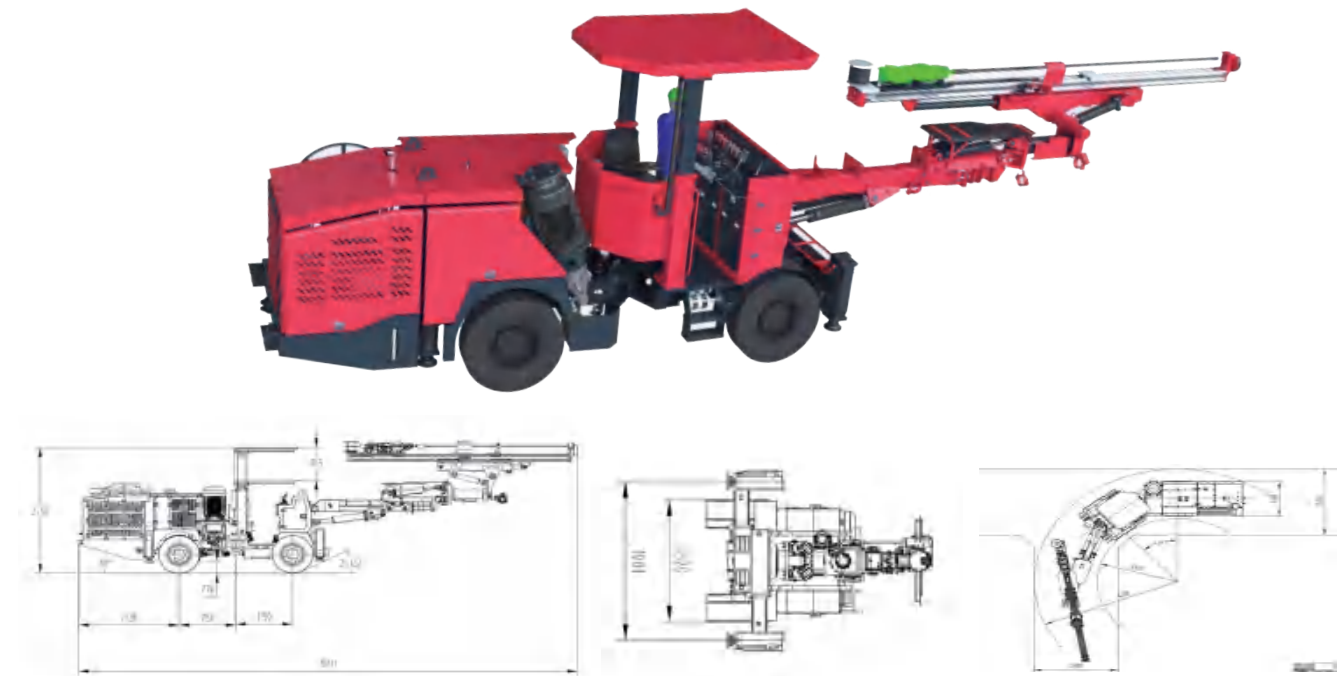
Main Technical Parameters of AZK125B

Item	Category		Technical parameters	
1	Basic parameters			
1.1	Equipment weight (kg)		10000	
1.2	Dimensions (mm) L x W x H		9400×1430×2170 (2870)	
1.3	Maximum operating range (width x height, mm)		5760×6116	
1.4	Turning radius (mm)		3000/5415	
1.5	Maximum coverage area (m²)		30	
1.6	Tunnel width * Height (m)		2.5X2.5	
2	Equipment Configuration			
2.1	Rock drill	Model	Standard RD19 (optional)	
		Brand	Well-known manufacturer	
		System pressure (bar)	200	
		Impact power (kW)	20	
		Impact energy (Hz)	380	
		Maximum rotation torque (N·m)	820	
		Rotation speed (r/min)	220	
		Lubrication air consumption (at 3bar) (L/s)	3.3	
		Water consumption (L/min)	30-50	
		Drilling diameter (mm)	φ45-φ115	
2.2	Drill arm	Thruster compensation stroke (mm)	1500	
		Parallel maintenance throughout the whole process	Yes	
		Coverage area (m²)	24	
		Coverage width/height (mm)	5025/5000	
		Boom lifting angle	-43° ~ +52°	
		Boom swing angle	±30°	
2.3	Feed Beam	Total length of propulsion beam (mm)	4740 (standard)/5400	
		Maximum propulsion force (kN)	15	
		Drill rod length (mm)	3090 (standard)/3700	
		Drilling depth per push (mm)	2830 (standard)/3440	
		Flip angle(°)	±360°	
		Pitch angle(°)	-3°~ +90°	
2.4	Chassis	Gradeability (°)	20	
		Engine	Manufacturer	Yuchai
			Power (kW)	55.8
			Maximum torque	310Nm/1600rpm
			Emission and noise standards	National IV (EURO IV)
		Transmission system		Tracked walking
		Travel speed (km/h)		0~15
		Ground clearance (mm)		220
		Steering system		Track steering
2.5	Drilling hydraulic system	Hydraulic control method	Manual valve control	
		Motor power (kW)	55	
		Hydraulic oil tank capacity (L)	180	
		Pressure oil and return oil accuracy (μm)	10	
2.6	Water system	Water pump power (kW)	3	
		Rated displacement (L/min)	52 (12bar)	
		Water outlet pressure (bar)	12	
		Minimum water inlet pressure (bar)	2	
2.7	Electrical system	Main electrical component manufacturer	Schneider	
		Voltage (V)/frequency (Hz)	380/50	
		Starting method	Star delta	
		Safety protection system function	Leakage protection, overload protection, short circuit protection	

Single Boom Drilling Jumbo - AZK135

Brief Introduction

The AZK135 rock drilling jumbo is primarily designed for underground development operations in metal mines such as gold, iron, and copper, as well as non-metallic mines including gypsum and phosphate. It is also suitable for hydropower projects, small tunnels, inclined shafts, and culverts. The machine is capable of drilling both blast-ing holes and anchor holes.



Rock Drill

Equipped with a well-known domestic brand rock drill as standard, with optional imported models available. It features excellent anti-bending capability, high drilling speed, and low tool consumption, significantly improving adaptability for contour hole drilling in tunneling applications.

Hydraulic System

The system replaces the traditional step-based drilling control (collaring and drilling stages) with stepless adjustment, greatly improving collaring performance. Impact power automatically adjusts according to feed force, reducing drill tool consumption. The use of non-electric proportional hydraulic valves simplifies maintenance and improves system reliability.

Powertrain System

Powered by a China Stage IV engine and equipped with four-wheel drive, the machine delivers strong gradeability and excellent traction in underground conditions. The braking system adopts a spring-applied, hydraulic-release design, ensuring high safety and reliability during operation.

Feed Beam

The feed beam features a lightweight yet heavy-duty aluminum alloy structure, offering outstanding resistance to bending, torsion, and fatigue, and ensuring a long service life. It is equipped with a highly compatible hose reel system and a reliable hose clamping structure, enhancing overall adaptability and operational stability.

Operator Cabin

The operator cabin features a liftable roof design, allowing the machine to adapt to tunnels of varying sizes and meet different operational requirements.

Electrical System

The electrical system is equipped with electrical components from internationally renowned brands such as Schneider Electric and Siemens, ensuring high reliability and a long service life. The system includes comprehensive protection and alarm functions, such as:

Ground fault protection	Phase sequence protection
Motor overload protection	Engine fault alarm

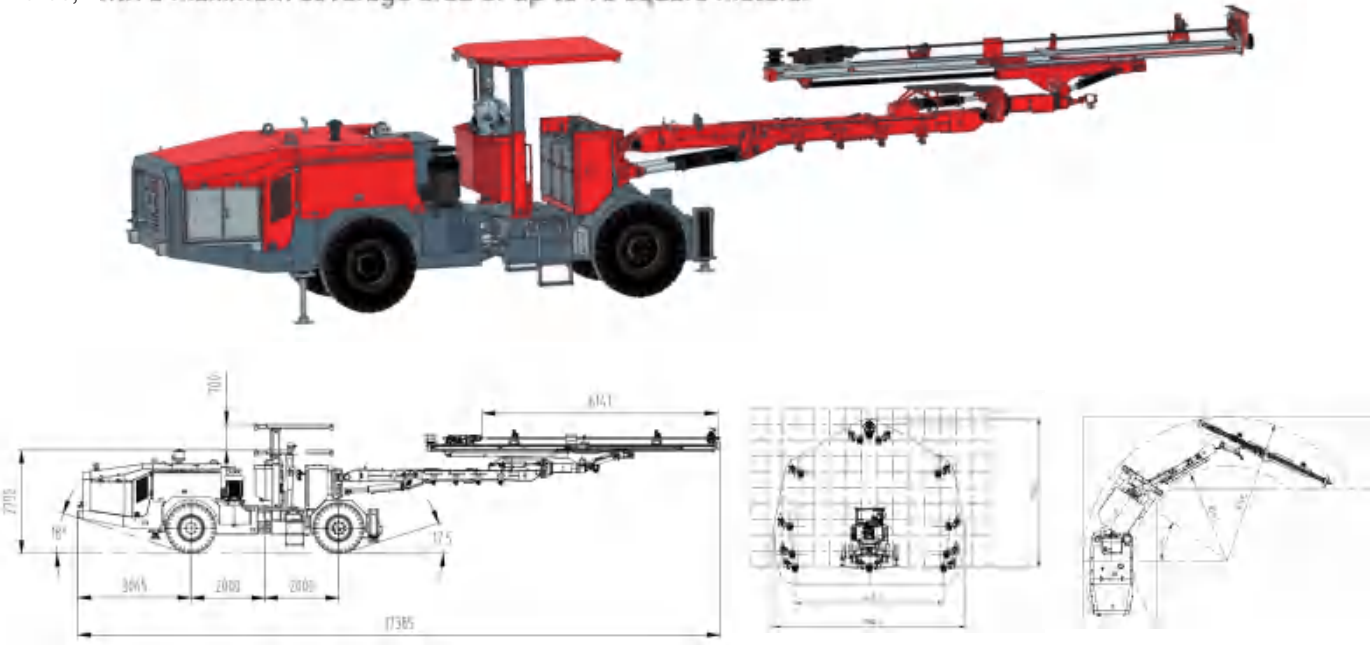
Main Technical Parameters of AZK135

NO.	Category		Technical parameters	
1	Basic parameters			
1.1	Equipment weight (kg)		13000	
1.2	External dimensions (mm) Length x Width x Height		11400×1750×2430(3130)	
1.3	Maximum working area (width × height, mm)		6600×6630	
1.4	Turning radius (mm)		2970/5180	
1.5	Maximum coverage area (m²)		35	
1.6	Tunnel width * Height (m)		3x3	
2	Equipment Configuration			
2.1	Rock drill	Model	Standard PD400 (optional)	
		Brand	Well-known manufacturer	
		System pressure (bar)	200	
		Impact power (kW)	20	
		Impact energy (J)	400	
		Maximum slewing torque (N·m)	820	
		Rotation speed (r/min)	220	
		Lubrication air consumption (at 3 bar) (L/s)	3.3	
		Water consumption (L/min)	70	
		Drill hole diameter (mm)	φ43-φ102	
2.2	Drill arm	Coverage area (m²)	35	
		Extension stroke (mm)	1250	
		Thruster compensation stroke (mm)	1250	
		Boom lifting angle(°)	+65° ~ -30°	
		Upper arm swing angle(°)	±40°	
		Automatic parallelism	Automatic parallelism	
2.3	Feed Beam	Total length of the beam (mm)	5437(Std.) / 5986	
		Maximum thrust (kN)	15	
		Drill pipe length (mm)	3700(Std.)/4310	
		Drilling depth per pass (mm)	3400(Std.)/4000	
		Flip angle(°)	±180°	
		Pitch angle(°)	-4° ~ 90°	
2.4	Chassis	Climbing ability (°)	15	
		Engine	Manufacturer	Yuchai
			Power (kW)	55
			Maximum torque	310Nm/1600rpm
			Emission level	National IV
		Transmission system		Four-wheel drive
		Walking speed (km/h)		0~15
		Ground clearance (mm)		260
		Steering system		Articulated steering
		Steering angle (°)		±38
Wheelbase (mm)		2800		
2.5	Hydraulic system	Hydraulic control method		Multi-way valve control
		Motor power (kW)		55
		Hydraulic oil tank volume (L)		240
		Pressure oil and return oil accuracy (μm)		10
2.6	Water system	Water pump power (kW)		3
		Rated displacement (L/min)		52 (12bar)
		Water pressure (bar)		12
		Minimum inlet pressure (bar)		2
2.7	Electrical system	Major electrical component manufacturers		ABB / Siemens / Schneider
		Voltage (V) / Frequency (Hz)		380/50
		Startup method		Star delta
		Safety protection system functions		Leakage protection, overload protection, short circuit protection

Single Boom Drilling Jumbo - AZD190

Brief Introduction

The AZD190 face rock drill jumbo is mainly suitable for the excavation of medium-sized tunnels and other underground engineering roadways and tunnels. It can drill blasting holes, anchor bolt holes, and slotting holes, with a maximum coverage area of up to 93 square meters.



Rock drill (drifter)

It comes standard with a domestically renowned brand rock drill, and imported rock drills are optional.

Drill arm

The drill arm maintains parallel positioning in all directions for rapid and accurate positioning; the cast hinge components paired with the square drill arm provide high rigidity, strength, and shock absorption; internal wear-resistant guide plates with directional planar orientation ensure surface contact sliding between the inner and outer sleeves during drill arm extension and retraction. Adjustable wear-resistant plate gaps guarantee smooth and accurate drill arm movement and a long service life.

Powertrain

Equipped with a National IV emission standard engine and four-wheel drive, the vehicle boasts strong climbing ability. Its braking system features spring brakes and hydraulic release, ensuring safety and reliability.

Feed Beam

Lightweight, heavy-duty aluminum alloy beams offer excellent resistance to bending, torsion, and fatigue, resulting in a long service life. Combined with a more versatile hose reel and a reliable clamp structure, it enhances product adaptability.

Hydraulic system

The traditional hole-opening and tunneling grading system has been upgraded to stepless adjustment, which significantly improves drilling performance. The impact force automatically adjusts according to changes in propulsion force, reducing drill bit wear. The proportional hydraulic valves are hydraulically controlled rather than electrically controlled, reducing potential failure points and making troubleshooting and maintenance easier.

Electrical system

It uses electrical components from internationally renowned brands such as Schneider Electric and Siemens, ensuring high reliability and a long service life; it is equipped with protection and alarm functions such as ground fault protection, phase sequence protection, motor overload protection, and engine fault alarm.

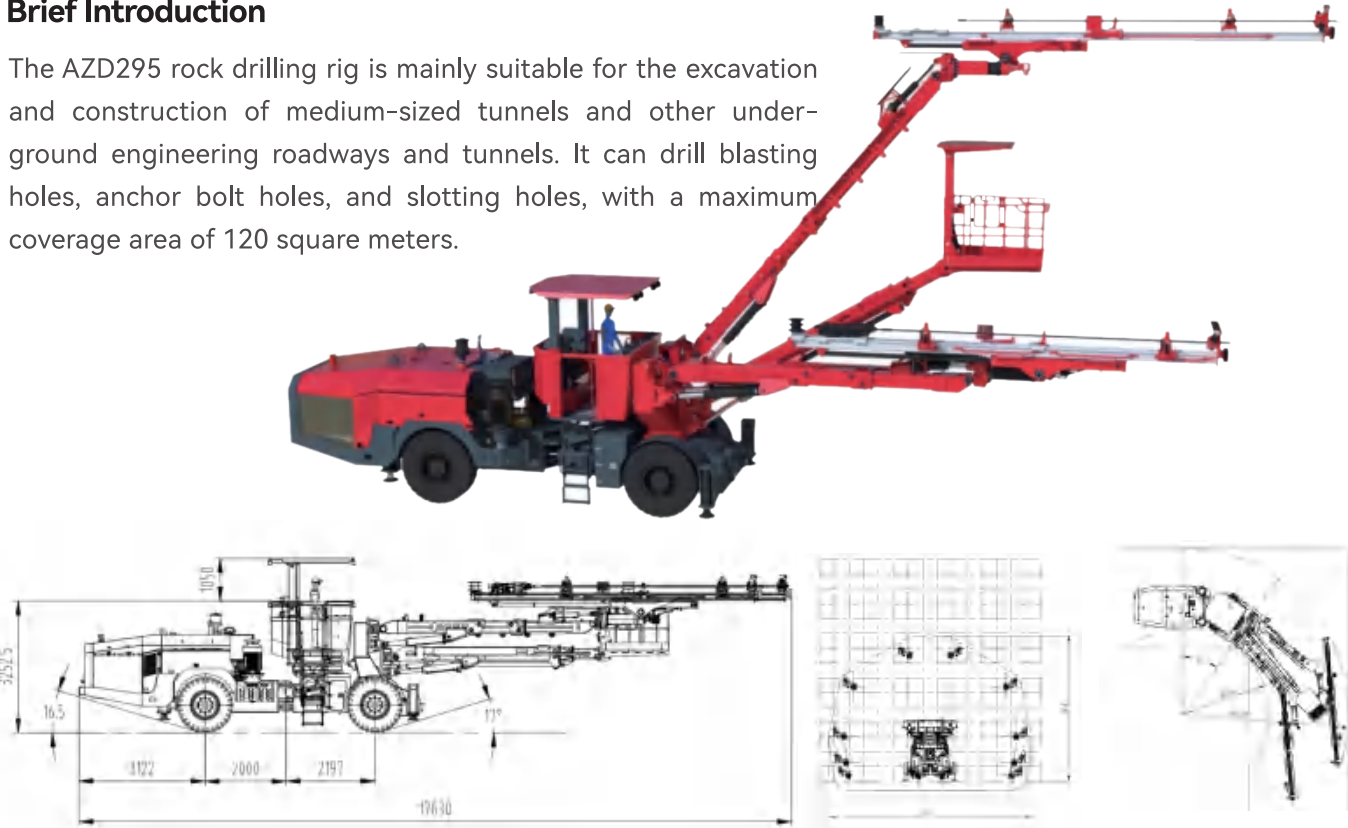
Main Technical Parameters of AZD190

NO.	Category		Technical parameters	
1	Basic parameters			
1.1	Equipment weight (kg)		23000	
1.2	External dimensions (mm) Length x Width x Height		17385X2380X2790 (3490)	
1.3	Maximum working area (width × height, mm)		11600 × 9345	
1.4	Turning radius (mm)		5193 / 7895	
1.5	Maximum coverage area (m²)		93	
1.6	Tunnel width * Height (m)		5X5	
2	Equipment Configuration			
2.1	Rock drill	Model	Standard PD400 (optional)	
		Brand	Well-known manufacturer	
		System pressure (bar)	200	
		Impact power (kW)	20	
		Impact energy (J)	400	
		Maximum slewing torque (N·m)	820	
		Rotational speed (r/min)	220	
		Lubrication air consumption (at 3 bar) (L/s)	3.3	
		Water consumption (L/min)	70	
	Drill hole diameter (mm)	φ43 -φ102		
2.2	Drill arm	Thruster compensation stroke (mm)	1800	
		Maintain parallelism throughout	Yes	
		Coverage area (m²)	93	
		Maximum coverage width/height (mm)	11600 × 9345	
		Boom lifting angle	- 30 ° — + 60 °	
		Upper arm swing angle	± 35 °	
2.3	Feed Beam	Total length of the beam (mm)	5400 (optional)	
		Maximum thrust (kN)	15	
		Drill pipe length (mm)	3700	
		Drilling depth per pass (mm)	3440	
		Flip angle	±1 8 0°	
		Pitch angle	-3 ° —+90°	
2.4	Chassis	Climbing ability (°)	15	
		Engine	Manufacturer	Yuchai
			Power (kW)	118
			Maximum torque	688 Nm / 1500rpm
			Emission level	National IV
		Transmission system		Four-wheel drive
		Walking speed (km/h)		0 ~ 15
		Ground clearance (mm)		325
		Steering system		Articulated steering
		Steering angle (°)		± 35
		Wheelbase (mm)		4000
2.5	Drilling hydraulic system	Hydraulic control method	Manual valve control	
		Motor power (kW)	55	
		Hydraulic oil tank volume (L)	400	
		Pressure oil and return oil accuracy (μm)	10	
2.6	Water system	Water pump power (kW)	3	
		Rated displacement (L/min)	52 (12 bar)	
		Water pressure (bar)	12	
		Minimum inlet pressure (bar)	2	
2.7	Electrical system	Major electrical component manufacturers	ABB/Siemens/ Schneider	
		Voltage (V) / Frequency (Hz)	380/50	
		Startup method	Star delta	
		Safety protection system functions	Leakage protection, overload protection, short circuit protection	

Double Booms Drilling Jumbo - AZD295

Brief Introduction

The AZD295 rock drilling rig is mainly suitable for the excavation and construction of medium-sized tunnels and other underground engineering roadways and tunnels. It can drill blasting holes, anchor bolt holes, and slotting holes, with a maximum coverage area of 120 square meters.



Rock drill (drifter)

It comes standard with a domestically renowned brand rock drill, and imported rock drills are optional.

Drill arm

The drill arm maintains parallel positioning in all directions for rapid and accurate positioning; the cast hinge components paired with the square drill arm provide high rigidity, strength, and shock absorption; internal wear-resistant guide plates with directional planar orientation ensure surface contact sliding between the inner and outer sleeves during drill arm extension and retraction. Adjustable wear-resistant plate gaps guarantee smooth and accurate drill arm movement and a long service life.

Powertrain

Equipped with a National IV emission standard engine and four-wheel drive, the vehicle boasts strong climbing ability. Its braking system features spring brakes and hydraulic release, ensuring safety and reliability.

Feed Beam

Lightweight, heavy-duty aluminum alloy beams offer excellent resistance to bending, torsion, and fatigue, resulting in a long service life. Combined with a more versatile hose reel and a reliable clamp structure, it enhances product adaptability.

Hydraulic system

The traditional hole-opening and tunneling grading system has been abandoned in favor of stepless adjustment, which greatly improves hole-opening performance; the impact automatically follows changes in propulsion force, resulting in less drill bit consumption; and the absence of electro-hydraulic proportional valves makes maintenance easier.

Electrical system

It uses electrical components from internationally renowned brands such as Schneider Electric and Siemens, ensuring high reliability and long service life; it is equipped with protection and alarm functions such as ground fault protection, phase sequence protection, motor overload protection, and engine fault alarm.

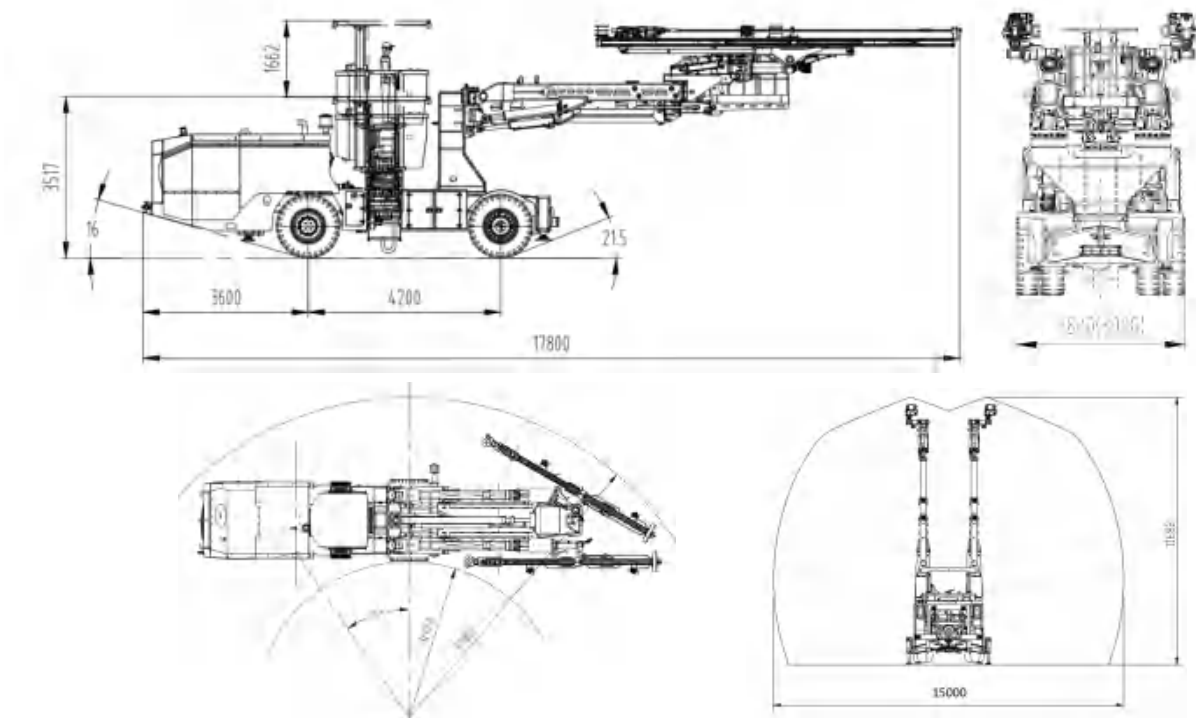
Main Technical Parameters of AZD295

NO.	Category		Technical parameters	
1	Basic parameters			
1.1	Equipment weight (kg)		35,000	
1.2	External dimensions (mm) Length x Width x Height		17630X2380X3250(3950)	
1.3	Maximum working area (width × height, mm)		13730X9850	
1.4	Turning radius (mm)		5350/10300	
1.5	Maximum coverage area (m ²)		120	
1.6	Lane width X height (m)		6X6	
2	Equipment Configuration			
2.1	Rock drill	Model	Standard PD400 (optional)	
		Brand	Well-known manufacturers	
		System pressure (bar)	200	
		Impact power (kW)	20	
		Impact energy (J)	400	
		Maximum slewing torque (N · m)	820	
		Rotational speed (r/min)	220	
		Lubrication air consumption (at 3 bar) (L/s)	3.3	
		Water consumption (L/min)	70	
2.2	Drill arm	Drill hole diameter (mm)	φ43 ~φ102	
		Thruster compensation stroke (mm)	1800	
		Maintain parallelism throughout	Yes	
		Coverage area (m ²)	93	
		Maximum coverage width/height (mm)	13730X9850	
		Boom lifting angle	- 30 ° — + 60 °	
2.3	Feed Beam	Upper arm swing angle	± 45 °	
		Total length of the beam (mm)	7000 (optional)	
		Maximum thrust (kN)	22.5	
		Drill pipe length (mm)	5525	
		Drilling depth per pass (mm)	5100	
		Flip angle	±180°	
2.4	Chassis	Pitch angle	-3 ° —+90°	
		Engine	Climbing ability (°)	15
			Manufacturer	Yuchai
			Power (kW)	140
			Maximum torque	832 Nm/1600rpm
		Emission and noise standards		National IV
		Transmission system		Four-wheel drive
		Walking speed (km/h)		0 ~ 15
		Ground clearance (mm)		325
		Steering system		Articulated steering
		Steering angle (°)		± 35
Wheelbase (mm)		4200		
2.5	Drilling hydraulic system	Hydraulic control method	Manual valve control	
		Motor power (kW)	55	
		Hydraulic oil tank volume (L)	400	
		Pressure oil and return oil accuracy (μm)	10	
2.6	Water system	Water pump power (kW)	3 * 2pcs	
		Rated displacement (L/min)	166	
		Minimum inlet pressure (bar)	2	
2.7	Electrical system	Major electrical component manufacturers	ABB/Siemens/ Schneider	
		Voltage (V) / Frequency (Hz)	380/50	
		Startup method	Star delta	
		Safety protection system functions	Leakage protection, overload protection, short circuit protection	

Double Booms Drilling Jumbo - AZD2120

Brief Introduction

The AZD2120 is a twin-arm excavation drilling jumbo specifically designed for multi-stage and full-face excavation methods, overcoming the shortcomings of traditional drilling jumbos that cannot simultaneously meet the needs of multiple excavation methods in a single tunnel. It possesses the capability to perform both multi-stage and full-face excavation, making the equipment more adaptable to a wider range of excavation methods and working conditions, thus redefining the value of multi-arm tunnel drilling jumbos.



Rock drill

It comes standard with a domestically renowned brand rock drill, and imported rock drills are optional.

Feed Beam

Lightweight, heavy-duty aluminum alloy beams offer excellent resistance to bending, torsion, and fatigue, resulting in a long service life. Combined with a more versatile hose reel and a reliable clamp structure, it enhances product adaptability.

Electrical system

It uses electrical components from internationally renowned brands such as Schneider Electric, ensuring high reliability and long service life; it is equipped with protection and alarm functions such as ground fault protection, phase sequence protection, motor overload protection, and engine fault alarm.

Hydraulic system

The traditional hole-opening and tunneling grading system has been abandoned in favor of stepless adjustment, which greatly improves hole-opening performance; the impact automatically follows changes in propulsion force, resulting in less drill bit consumption; and the absence of electro-hydraulic proportional valves makes maintenance easier.

Drill arm

The drill arm maintains parallel positioning in all directions for rapid and accurate positioning; the cast hinge components paired with the square drill arm provide high rigidity, strength, and shock absorption; internal wear-resistant guide plates with directional planar orientation ensure surface contact sliding between the inner and outer sleeves during drill arm extension and retraction. Adjustable wear-resistant plate gaps guarantee smooth and accurate drill arm movement and a long service life.



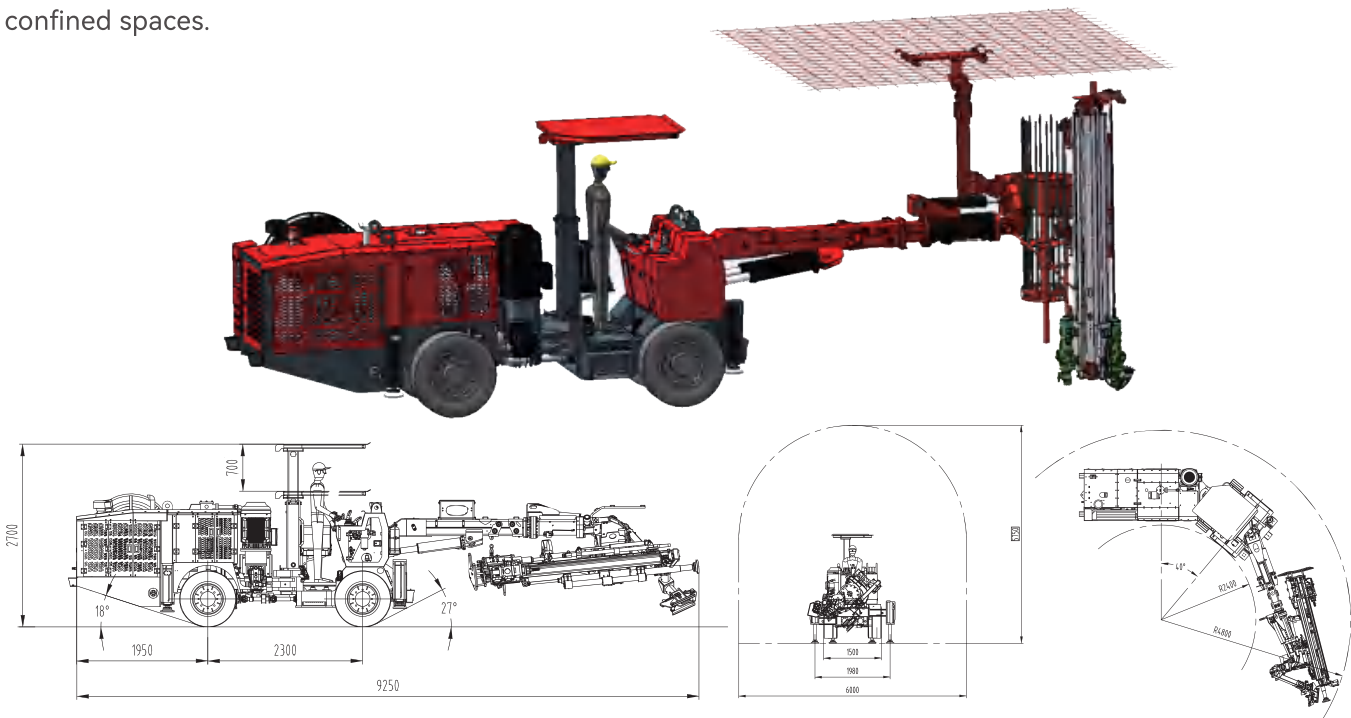
Main Technical Parameters of AZD2120

NO.	Category		Technical parameters	
1	Basic parameters			
1.1	Equipment weight (kg)		43,000	
1.2	External dimensions (mm) Length x Width x Height		17800X2800X3517(5176)	
1.3	Maximum working area (width × height, mm)		15,000 × 11,682	
1.4		Turning radius (mm)	5800/12000	
2		Equipment Configuration		
2.1	Rock drill	Model	Standard PD400×2 (optional)	
		Impact power (kW)	20	
2.2	Drill arm	Drill arm extension/retraction stroke (mm)	2500	
		Boom lifting angle	+65°/-30°	
		Upper arm swing angle	±45°	
		Maintain parallelism throughout	Yes	
2.3	Feed Beam	Total length of the beam (mm)	7000	
		Maximum thrust (kN)	22.5	
		Drill pipe length (mm)	5525	
		Drilling depth per pass (mm)	5100	
		Compensation stroke of the feed beam (mm)	2000	
		Flip angle	±180°	
		Swing angle	±45°	
		Drill hole diameter (mm)	φ43 -φ102	
2.4	Chassis	Engine	Manufacturer	Yuchai
			Power (kW)	140
			Emission level	National IV
			Maximum torque	832 Nm/1600rpm
		Walking speed (km/h)		0~ 15
		Climbing ability (°)		15
		Ground clearance (mm)		3 8 5
		Tire Model		14.00R24
	Motor power (kW) × quantity		55×2	
2.5	Gas system	Displacement (m³/min)		1.1
		Motor power KW		7.5
2.6	Water system	Water pump model		CDM10~14/Southern Pump Industry
		Water pump power (kW)		7.5
		Rated displacement (L/min)		166
2.7	Electrical system	Major electrical component brands		ABB/Siemens/ Schneider Electric
		Total input power (kW)		123
		Voltage (V) / Frequency (Hz)		380/50Hz
		Cable length and reel capacity		80
		Hydraulic oil tank volume (L)		500
		Pressure oil and return oil accuracy (μm)		10

Rock Bolting Rig - AZB125

Brief Introduction

The AZB125 mining hydraulic rock drill rig is mainly suitable for rock bolting operations such as system rock bolt holes and anchor bolt holes in low-lying, small-to-medium-sized underground roadways, tunnels, and culverts. The equipment adopts a hydraulic rock drilling system, which is advanced, has a fast drilling speed, and high work efficiency; the machine has a compact structure, is highly maneuverable, and convenient for operation in confined spaces.



Rock drill

Imported rock drills (optional) feature superior anti-bending capabilities, high drilling speed, and low drill bit wear, improving the adaptability of drilling side holes in tunnels.

Drill arm

It offers rapid and accurate positioning; its square structure provides high strength and excellent shock absorption.

Drilling system

It features anti-jamming, anti-dry drilling, and automatic retraction functions, effectively improving drilling efficiency and reducing drill bit wear.

Electrical system

It uses internationally renowned brand electrical components, ensuring high reliability and long service life; it is equipped with protection and alarm functions such as ground fault protection, phase sequence protection, motor overload protection, and engine fault alarm.

Anchor bolt head

It features high versatility, a high-strength ejector cylinder, high anchoring accuracy and production efficiency, and a height-adjustable anchor bolt magazine to store anchor bolts of different lengths, suitable for resin anchor bolts or pipe seam anchor bolts.

Hood

The vehicle hood features a full-coverage structure, providing safe and reliable protection for the power, transmission, hydraulic, and electrical systems.

Hydraulic system

The outriggers and ceiling light auxiliary functions are electronically controlled, with simplified piping and easy maintenance.

Driver's cab

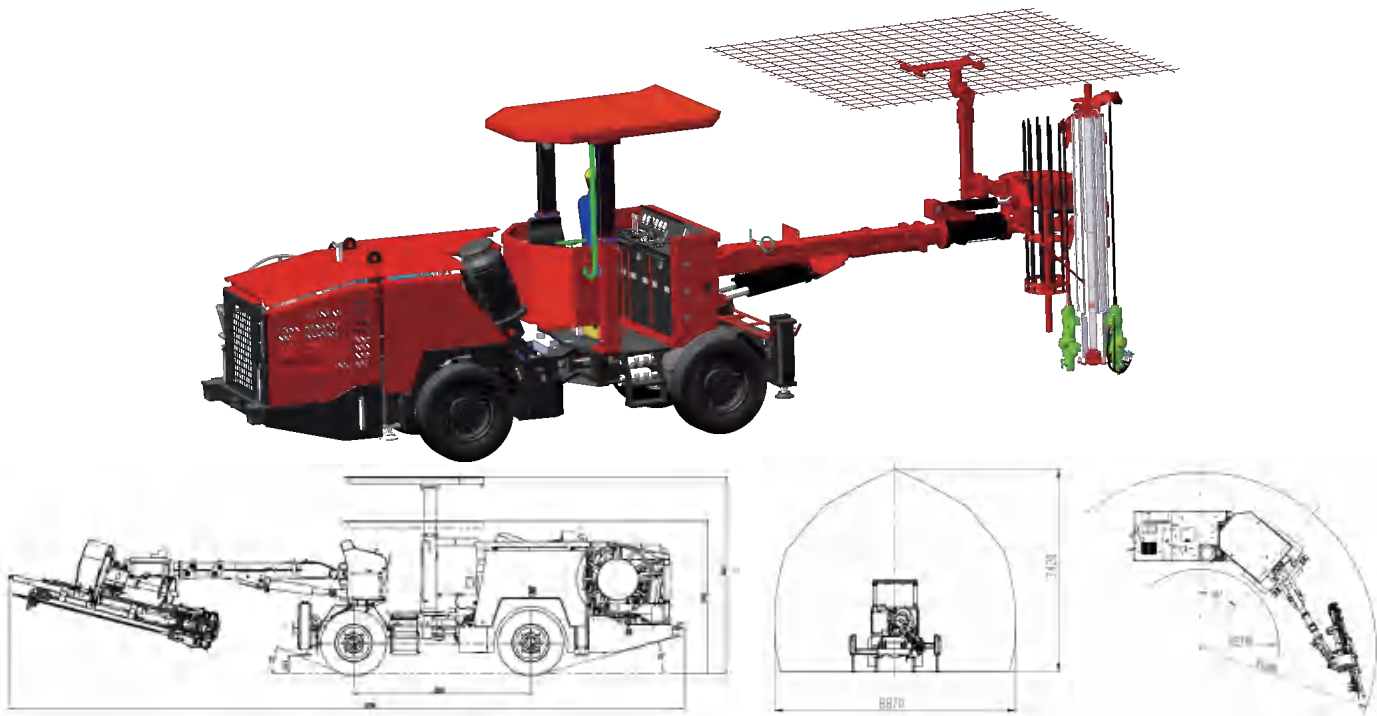
The cab roof can be raised and lowered to adapt to the needs of driving and operating in tunnels of different sizes.

Main Technical Parameters of AZB125

No.	Category		Technical parameters	
1	Basic parameters			
1.1	Equipment weight (kg)		11500	
1.2	External dimensions (mm) Length x Width x Height		9550×1600×2000(2700)	
1.3	Working area (width × height, mm)		6550×5850	
1.4	Minimum turning radius (mm)		2350/5350	
1.5	Minimum height of mine tunnel(mm)		2500	
2	Equipment Configuration		Optional configuration	
2.1	Rock drill	Model	HC25	Domestic brand alternatives
		Brand	Manufactured by well-known manufacturer	
		Impact pressure (bar)	110-150	
		Impact power (kW)	8	
		Impact frequency (Hz)	55-65	
		Maximum slewing torque (N·m)	401	
		Rotational speed (r/min)	300	
		Lubrication air consumption (L/min)	300 (2 bar)	
		Water consumption (L/min)	20-50	
	Drill hole diameter (mm)	32-51		
2.2	Drill arm	Quantity	1	
		Control method	Rear triangular cylinder + rotary cylinder + pitch cylinder positioning type	
		Telescopic stroke (mm)	900	
2.3	Anchor bolt assembly	Quantity	1	
		Total length of the device (mm)	2975/3355/3650/4165	
		Anchor bolt length (mm)	1525/1830/2135/2440	
		Drill pipe length (mm)	1870/2175/2475/2795	
		One-time drilling depth (mm)	1680/1980/2290/2550	
		Barrel volume (pcs)	10	
		Flip angle (°)	±180	
2.4	Chassis	Walking speed (km/h)		0~10
		Climbing ability(°)		15
		Ground clearance		≥220
		Front and rear wheelbase (mm)		2300
		Forward/Rear track (mm)		1500/1300
		Engine	Manufacturer	Yuchai
			Power (kW)	55
			Emission level	National IV
		Transmission system		Four-wheel drive
		Braking system		Wet dual-circuit emergency braking, mechanical parking brake
		Steering system		Articulated steering
		Fuel tank volume (L)		60
		2.5	Drilling hydraulic system	Hydraulic control method
Motor power (kW) × quantity				55×1
Main hydraulic oil pump manufacturer				PUSH
Main hydraulic pump rated pressure (bar)				250
Main hydraulic pump displacement (L/min)				100
Auxiliary hydraulic oil pump manufacturer				PUSH
Auxiliary hydraulic pump rated pressure (bar)				250
Auxiliary hydraulic pump displacement (L/min)				60
Hydraulic oil tank volume (L)				240
Pressure oil and return oil accuracy (μm)				10
2.6	Air system	Air compressor manufacturer		Aivyter
		Displacement (L/min) / Pressure (bar)		700/8
		Gas consumption (L/min)		300
2.7	Water system	Booster water pump manufacturer		Southern Pump Industry
		Booster pump power (kW)		3
		Rated displacement (m3/h)		5
		Minimum inlet pressure (bar)		2
		Rated pressure (bar)		12.4
		Water pressure (bar) during drilling work		15-25
2.8	Electrical system	Major electrical component manufacturer		ABB
		Motor power (kW) × quantity		55×1
		Total input power (kW)		63
		Voltage (V) / Frequency (Hz)		380/50
		Cable length and reel capacity		80m
		Startup method		Star delta
		Safety protection system functions		Leakage protection, overload protection, short circuit protection

Rock Bolting Rig - AZB135

The AZB135 mining hydraulic rock drill rig is mainly suitable for anchor bolt construction operations such as system anchor bolt holes and locking anchor bolt holes in small and medium-sized underground roadways, tunnels, and culverts. The equipment adopts a hydraulic rock drilling system, which is advanced, has a fast drilling speed, and high working efficiency; the whole machine has a compact structure, is highly maneuverable, and is convenient for operation in confined spaces.



Rock drill

Imported rock drills feature superior anti-bending capabilities, high drilling speeds, and low drill bit wear, effectively improving the adaptability of drilling side holes in tunnels.

Drill arm

It offers rapid and accurate positioning; its square structure provides high strength and excellent shock absorption.

Hydraulic system

The outriggers and ceiling light auxiliary functions are electrically controlled, with simplified piping and easy maintenance.

Electrical system

It uses internationally renowned brand electrical components, ensuring high reliability and long service life; it is equipped with protection and alarm functions such as ground fault protection, phase sequence protection, motor overload protection, and engine fault alarm.

Anchor bolt head

It features high versatility, a high-strength ejector cylinder, high anchoring accuracy and production efficiency, and a height-adjustable anchor bolt magazine to store anchor bolts of different lengths, suitable for resin anchor bolts or pipe seam anchor bolts.

Drilling system

It features anti-jamming, anti-dry drilling, and automatic retraction functions, effectively improving drilling efficiency and reducing drill bit wear.

Driver's cab

The cab roof can be raised and lowered to adapt to the needs of driving and operating in tunnels of different sizes.

Hood

The vehicle hood features a full-coverage structure, providing safe and reliable protection for the power, transmission, hydraulic, and electrical systems.

Main Technical Parameters of AZB135

No.	Category		Technical parameters		
1	Basic parameters				
1.1	Equipment weight (kg)		13500		
1.2	External dimensions (mm)Length×Width×Height		10700×1800×2400(3100)		
1.3	Working area (width × height, mm)		3500×3500-8800×7400		
1.4	Minimum turning radius (mm)		≤6200		
1.5	Minimum height of the mine shaft (mm)		3500		
2	Equipment Configuration		Optional configuration		
2.1	Rock drill	model	HC28 (optional) HC25		
		Brand	Manufactured by well-known manufacturer ---		
		Impact pressure (bar)	130-160 110-150		
		Impact power (kW)	10 8		
		Impact frequency (Hz)	47-53 55-65		
		Maximum slewing torque (N·m)	482 401		
		Rotational speed (r/min)	300 300		
		Lubrication air consumption (L/min)	300 (3 bar) 300 (2 bar)		
		Water consumption (L/min)	30-60 20-50		
		Drill hole diameter (mm)	32-64 32-51		
2.2	Drill arm	Quantity	1		
		Control method	Positioning structure adopting rear triangular hydraulic cylinder, slewing cylinder and pitch cylinder		
		Telescopic stroke (mm)	1250		
		Lifting angle (°)	+65 ~ -30		
		Swing angle (°)	±40		
2.3	Anchor bolt assembly	Quantity	1		
		Total length of the device (mm)	2975/3355/3650/4165		
		Anchor bolt length (mm)	1525/1830/2135/2440		
		Drill pipe length (mm)	1870/2175/2475/2795		
		Drilling depth per pass (mm)	1680/1980/2290/2550		
		Bar capacity (bars)	10		
		Flip angle (°)	±180		
2.4	Chassis	Walking speed (km/h)	18		
		Climbing ability (°)	15		
		Ground clearance	≥260		
		Front and rear wheelbase (mm)	2800		
		Front/rear track (mm)	1540/1540		
		Front/Rear tire model × Quantity	9-20×2/9-20×2		
		Engine	Manufacturer	YuChai	
			Power (kW)	60	
			Exhaust gas emission standards	Turbocharged, China III emission standard	
		Transmission system	Four-wheel hydraulic drive		
		Braking system	Wet dual-circuit emergency braking, mechanical parking brake		
		Steering system	Articulated steering		
		Fuel tank capacity (L)	60		
		2.5	Drilling hydraulic system	Hydraulic control method	Direct-acting multi-way valve control
Main hydraulic oil pump manufacturer	PUSH				
Rated pressure (bar) of the main hydraulic pump	310				
Main hydraulic pump displacement (L/min)	100				
Auxiliary hydraulic oil pump manufacturer	PUSH				
Auxiliary hydraulic pump rated pressure (bar)	310				
Auxiliary hydraulic pump displacement (L/min)	60				
Hydraulic oil tank volume (L)	240				
Pressure oil and return oil accuracy (μm)	10				
2.6	Air system	Air compressor manufacturers	Aivyter		
		Displacement (L/min) / Pressure (bar)	700/8		
		Gas consumption (L/min)	300		
2.7	Water system	Booster pump manufacturers	Southern Pump Industry		
		Booster pump power (kW)	3		
		Rated displacement (m3/h)	5		
		Minimum inlet pressure (bar)	2		
		Rated pressure (bar)	12.4		
		Water pressure (bar) during drilling	15-25		
2.8	Electrical system	Major electrical component manufacturers	ABB		
		Motor power (kW) × quantity	55×1		
		Total input power (kW)	63		
		Voltage (V) / Frequency (Hz)	380/50		
		Cable length and reel capacity	80m		
		Startup method	Star/Triangle		
		Safety protection system functions	Leakage protection, overload protection, short circuit protection		

Shotcrete Spraying Machine -- AWT20

Product Overview of Shotcrete Machine for Underground Mining

AWT20 shotcrete spraying machine is special designed for the spraying support operation of underground mining, water diversion tunnels, inclined shafts, etc. The maximum spraying volume can reach 20m³/h.

Main Features

- ◆ With robust and compact chassis, reduced turning radius and crab-mode that allow a major range of movements.
- ◆ Applying homogeneous shotcrete technique, ensures the required quality and layer thickness of concrete, as well as reducing rebound.
- ◆ The maximum vertical reach of the spraying arm is 8 meters.
- ◆ Automatic additive dosage: equipped with an automatic dosing device proportional to the concrete flow, ensuring spraying accuracy and quality.
- ◆ Easy to operate: thanks to the wireless proportional remote control, the spraying arm can achieve smooth movement.
- ◆ Easy maintenance and repair.
- ◆ On-board electric air compressor.

Main Parameters of AWT20 Shotcrete Spraying Machine

Chassis system

Engine	Diesel engine
Engine power	60 kW, Cummins
Driving speed	Low speed 0–5KW/h, high speed 0–15KW/h
Climbing ability	25°
Suspension swing angle	±8°, to make sure the chassis better adapt to uneven roads
Approach Angle	15°
Departure angle	15°
Steering	±40° (articulated steering)
Ground Clearance	300 mm
Whole machine weight	12.0 T
Overall dimensions	8000*2000*2450 mm (L*W*H)
Brake	Wet brake

Concrete pump

AWT–SPJ20 hydraulically driven piston concrete pump, automatic fast switching S–type pendulum valve, hopper equipped with vibrating screen and bottom–opening discharge gate	
Pumping capacity	4–20 m3/h
Maximum delivery pressure	8.0 Mpa
Maximum particle size of aggregate	20 mm
Diameter of concrete cylinder	160 mm
Master cylinder diameter × rod diameter × stroke	φ90×φ55×580
Feeding height	1290 mm

Electro–hydraulic power pack

Electric motor	37KW/1480rpm; Protection class: IP55
Hydraulic pump set	The latest optimized pumping system has stable and reliable performance. The main pump and valve group adopt international and domestic famous brand.

Shotcrete robotic arm

Maximum spray vertical height	8 m
Maximum horizontal spray width	13 m
Spray depth	2.5 m
Maximum arm angle	+65/–40°
Telescopic stroke	4 m

Air compressor

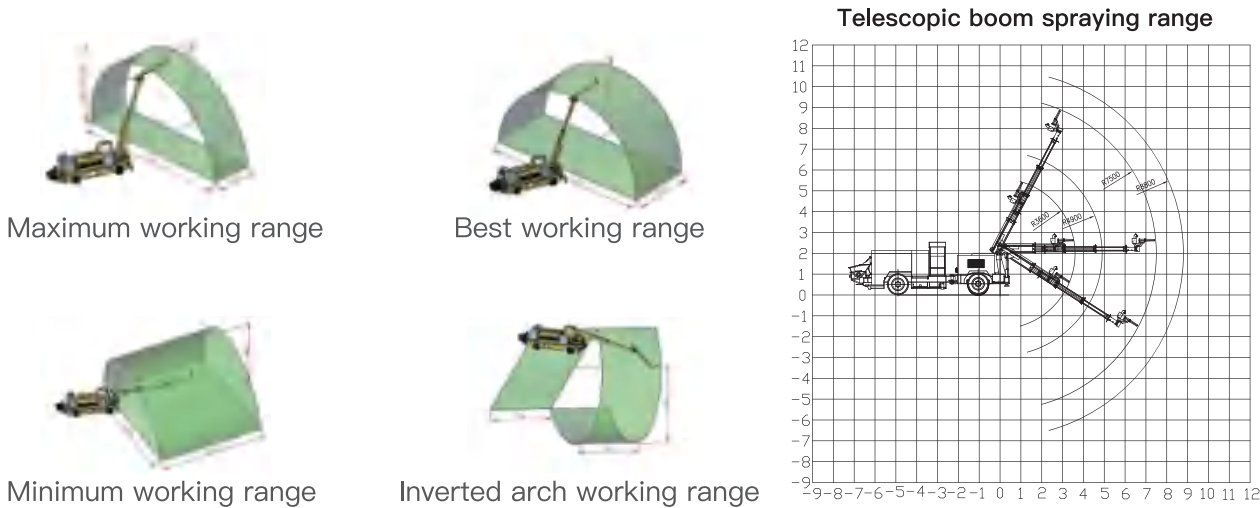
Maximum air flow	9.3 m3/min
Power of electric motor	45 kW
Pressure	0.6 Mpa

Cable reel

Cable length	80 m
Diameter	900 m

Accelerator

Accelerator tank	1×300L
Accelerator delivery pump	Hydraulic motor drive, electric proportional valve control



Concrete Spraying Machine -- AWT3016F

Main Features

- ◆ Highly cost-effective, stable and reliable.
- ◆ Advantage of boom: two-stage telescopic and two-stage slewing, with no blind spots in operation. Particularly competent for: small-scale working surfaces on single and double side walls, working surfaces with large invert volumes (without moving the vehicle), working surfaces on central deep ditch, working surfaces on foundation pit slope support, working surfaces on the side holes of civil air defense tunnel walls (can be turned back without moving the vehicle), working surfaces on the top support of horizontal tunnels/inclined shafts, and working surfaces on reverse tunnel portals.
- ◆ Hydraulic control: Electric load-sensitive proportional control multi-way valve, compared with other brands of switch valves, the action is more sensitive and smooth, without delay, the operation center point is stable, the spraying quality is more controllable, and the flatness is high. The speed of each arm movement can be steplessly adjusted and wirelessly remote controlled.
- ◆ Engineering chassis: four-wheel drive, four-wheel steering, with inclined and eight-way walking function, good passability.
- ◆ Upgrade the pumping system, optimize the pipeline combination, low pumping pressure, and wider adaptability to materials.
- ◆ The 1000L+500L dual accelerator barrel design is adopted to meet the needs of large-scale spraying construction at one time.

Main technical parameters

Chassis system	Internal combustion-hydraulic torque converter transmission, four-wheel drive, four-wheel steering
Engine	YUNNEI brand output power: 92KW/2400rpm
Transmission system	Hydraulic transmission system
Travel speed	Low speed gear 0-5km/h, high speed gear 0-15km/h
Climbing ability	40%(22°)
Minimum Ground Clearance	400mm
Suspension Swing Angle	±10°enables the chassis better adapt to uneven road surfaces
Steering	Hydraulic four-wheel steering, with diagonal and figure eight travel functions
Minimum Turning Radius	Inside 3500mm, outside 7300mm
Weight	17t
Overall Dimension	8970x2500x3500mm(LxWxH)

Concrete transfer pump	AWT-SPJ30 hydraulically driven piston concrete pump, automatic fast switching S-type pendulum valve, hopper equipped with vibrating screen and bottom-opening discharge gate
Pumping transfer capacity	30m3/h, 4-30m3, adjustable
Maximum conveying pressure	8MPa
Aggregate size	16mm

Electro-hydraulic power packs	
Electric motors	55KW/1480rpm; protection grade:IP54
Hydraulic pumps	Latest optimized pumping system, stable and reliable performance. Main pumps and valves adopt international and domestic famous brand.

Shotcrete robotic arm	The two-stage telescopic and two-stage rotating spraying arm is fully hydraulically controlled and the small arm is folded, so there is no blind spot in operation. It can be operated by both wired and wireless remote control, and the speed of each movement of the arm can be adjusted, with stepless speed regulation.
Maximum shotcrete height	16m
Maximum shotcrete width	30m
The farthest shotcrete distance	15m (front)
Minimum shotcrete tunnel height	4m
Maximum shotcrete depth	8m (below parking surface)
Pitch angle of small boom	-90° ~ +90°
Pitch angle of large boom	-30° ~ +65°
Two-stage telescoping	Two-stage telescopic boom
Large arm rotation	270°rotation
Small arm rotation	360°rotation, large and small arms can be folded by 0°

Double speed coagulant barrel	1000L+500L
Cable reel	Shotcrete piping and accessories
Hydraulic motor driven rewinding	Concrete pump outlet hinged pipe, DN125-100 reducer and DN90 delivery pipe, additive and compressed air injection device, and flow changer, etc.
Cable specification 3x35+1*16	

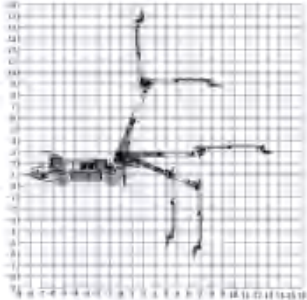
Accelerating coagulant transfer pump	
Hydraulic motor drive, electro-hydraulic proportional control	
Output capacity	30-1000L/h
Control	Realization of remote control and human-machine interface (display), both can control the specific flow

(Standard configuration)

High-pressure cleaning system, reversing camera, self suction pump for accelerator

- (1) High-pressure cleaning system: plunger-type high-pressure water pump, hydraulic motor drive, with cleaning hose and water gun
- (2) Reversing camera
- (3) Self suction pump for accelerator

Telescopic boom spraying range



Maximum working range

Best working range

Minimum working range

Inverted arch working range

Concrete Spraying Machine -- AWT3516N

Main Features

- ◆ Highly cost-effective, stable and reliable.
 - ◆ Advantage of boom: two-stage telescopic and two-stage slewing, with no blind spots in operation.
- Particularly competent for: small-scale working surfaces on single and double side walls, working surfaces with large invert volumes (without moving the vehicle), working surfaces on central deep ditch, working surfaces on foundation pit slope support, working surfaces on the side holes of civil air defense tunnel walls (can be turned back without moving the vehicle), working surfaces on the top support of horizontal tunnels/inclined shafts, and working surfaces on reverse tunnel portals.
- ◆ Hydraulic control: Electric load-sensitive proportional control multi-way valve, compared with other brands of switch valves, the action is more sensitive and smooth, without delay, the operation center point is stable, the spraying quality is more controllable, and the flatness is high. The speed of each arm movement can be steplessly adjusted and wirelessly remote controlled.
 - ◆ Engineering chassis: four-wheel drive, four-wheel steering, with inclined and eight-way walking function, good passability.
 - ◆ Upgrade the pumping system, optimize the pipeline combination, low pumping pressure, and wider adaptability to materials.
 - ◆ The 1000L+500L dual accelerator barrel design is adopted to meet the needs of large-scale spraying construction at one time.

Main technical parameters

Chassis system	Internal combustion-hydraulic torque converter transmission, four-wheel drive, four-wheel steering
Engine	YUNNEI brand output power: 92KW/2400rpm
Transmission system	Hydraulic transmission system
Travel speed	Low speed gear 0-5km/h, high speed gear 0-15km/h
Climbing ability	40%(22°)
Minimum Ground Clearance	400mm
Suspension Swing Angle	±10°enables the chassis better adapt to uneven road surfaces
Steering	Hydraulic four-wheel steering, with diagonal and figure eight travel functions
Minimum Turning Radius	Inside 3500mm, outside 7300mm
Weight	17t
Overall Dimension	8970x2500x3500mm(LxWxH)

Concrete transfer pump	AWT-SPJ30 hydraulically driven piston concrete pump, automatic fast switching S-type pendulum valve, hopper equipped with vibrating screen and bottom-opening discharge gate
Pumping transfer capacity	35m3/h, 4-35m3, adjustable
Maximum conveying pressure	8MPa
Aggregate size	16mm

Electro-hydraulic power packs	
Electric motors	55KW/1480rpm; protection grade:IP54
Hydraulic pumps	Latest optimized pumping system, stable and reliable performance. Main pumps and valves adopt international and domestic famous brand.

Shotcrete robotic arm	The two-stage telescopic and two-stage rotating spraying arm is fully hydraulically controlled and the small arm is folded, so there is no blind spot in operation. It can be operated by both wired and wireless remote control, and the speed of each movement of the arm can be adjusted, with stepless speed regulation.
Maximum shotcrete height	16m
Maximum shotcrete width	30m
The farthest shotcrete distance	15m (front)
Minimum shotcrete tunnel height	4m
Maximum shotcrete depth	8m (below parking surface)
Pitch angle of small boom	-90° ~ +90°
Pitch angle of large boom	-30° ~ +65°
Two-stage telescoping	Two-stage telescopic boom
Large arm rotation	270 Slewing
Small arm rotation	360°swing, large and small arms can be folded by 0°.

Double speed coagulant barrel	1000L+500L
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Cable reel - Hydraulic motor driven rewinding - Cable specification 3x35+1*16	Shotcrete piping and accessories Concrete pump outlet hinged pipe, DN125-100 reducer and DN90 delivery pipe, additive and compressed air injection device, and flow changer, etc.
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Accelerating coagulant transfer pump	
Hydraulic motor drive, electro-hydraulic proportional control	
Output capacity	30-1000L/h
Control	Realization of remote control and human-machine interface (display), both can control the specific flow

(Optional)

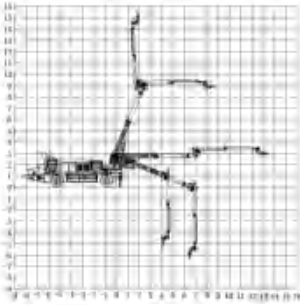
High-pressure cleaning system, reversing camera, self suction pump for accelerator

(1) High-pressure cleaning system: plunger-type high-pressure water pump, hydraulic motor drive, with cleaning hose and water gun

(2) Reversing camera

(3) Self suction pump for accelerator

Telescopic boom spraying range





Maximum working range



Best working range



Minimum working range



Inverted arch working range



23

24

Concrete Spraying Machine -- AWT4016N

Main Features

- ◆ Highly cost-effective, stable and reliable.
- ◆ Advantage of boom: two-stage telescopic and two-stage slewing, with no blind spots in operation. Particularly competent for: small-scale working surfaces on single and double side walls, working surfaces with large invert volumes (without moving the vehicle), working surfaces on central deep ditch, working surfaces on foundation pit slope support, working surfaces on the side holes of civil air defense tunnel walls (can be turned back without moving the vehicle), working surfaces on the top support of horizontal tunnels/inclined shafts, and working surfaces on reverse tunnel portals.
- ◆ Hydraulic control: electric load-sensitive proportional control multi-way valve, compared with other brands of switch valves, the action is more sensitive and smooth, without delay, the operation center point is stable, the spraying quality is more controllable, and the flatness is high. The speed of each arm movement can be steplessly adjusted and wirelessly remote controlled.
- ◆ Engineering chassis: four-wheel drive, four-wheel steering, with inclined and eight-way walking function, good passability.
- ◆ Upgrade the pumping system, optimize the pipeline combination, low pumping pressure, and wider adaptability to materials.
- ◆ The 1000L+500L dual accelerator barrel design is adopted to meet the needs of large-scale spraying construction at one time.

Main technical parameters

Chassis system	Internal combustion-hydraulic torque converter transmission, four-wheel drive, four-wheel steering
Engine	YUNNEI brand output power: 92KW/2400rpm
Transmission system	Hydraulic transmission system
Travel speed	Low speed gear 0-5km/h, high speed gear 0-15km/h
Climbing ability	40%(22°)
Minimum Ground Clearance	400mm
Suspension Swing Angle	±10°enables the chassis better adapt to uneven road surfaces
Steering	Hydraulic four-wheel steering, with diagonal and figure eight travel functions
Minimum Turning Radius	Inside 3500mm, outside 7300mm
Weight	17t
Overall Dimension	8970x2500x3500mm(LxWxH)

Concrete transfer pump	AWT-SPJ30 hydraulically driven piston concrete pump, automatic fast switching S-type pendulum valve, hopper equipped with vibrating screen and bottom-opening discharge gate
Pumping transfer capacity	40m3/h, 4-40m3, adjustable
Maximum conveying pressure	8MPa
Aggregate size	16mm

Electro-hydraulic power packs	
Electric motors	75KW/1480rpm; protection grade:IP54
Hydraulic pumps	Latest optimized pumping system, stable and reliable performance. Main pumps and valves adopt international and domestic famous brand.

Shotcrete robotic arm	The two-stage telescopic and two-stage rotating spraying arm is fully hydraulically controlled and the small arm is folded, so there is no blind spot in operation. It can be operated by both wired and wireless remote control, and the speed of each movement of the arm can be adjusted, with stepless speed regulation.
Maximum shotcrete height	16m
Maximum shotcrete width	30m
The farthest shotcrete distance	15m (front)
Minimum shotcrete tunnel height	4m
Maximum shotcrete depth	8m (below parking surface)
Pitch angle of small boom	-90° ~ +90°
Pitch angle of large boom	-30° ~ +65°
Two-stage telescoping	Two-stage telescopic boom
Large arm rotation	270°rotation
Small arm rotation	360°rotation, large and small arms can be folded by 0°

Double speed coagulant barrel	1000L+500L
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Cable reel	Shotcrete piping and accessories
- Hydraulic motor driven rewinding - Cable specification 3x50+1*16/25	Concrete pump outlet hinged pipe, DN125-100 reducer and DN90 delivery pipe, additive and compressed air injection device, and flow changer, etc.

Accelerating coagulant transfer pump	
Hydraulic motor drive, electro-hydraulic proportional control	
Output capacity	30-1000L/h
Control	Realization of remote control and human-machine interface (display), both can control the specific flow

(Optional)

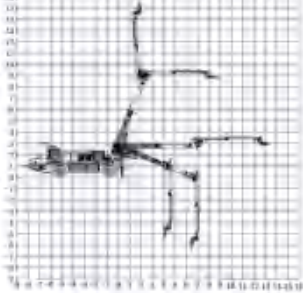
High-pressure cleaning system, reversing camera, self suction pump for accelerator

(1) High-pressure cleaning system: plunger-type high-pressure water pump, hydraulic motor drive, with cleaning hose and water gun

(2) Reversing camera

(3) Self suction pump for accelerator

Telescopic boom spraying range





Maximum working range



Best working range



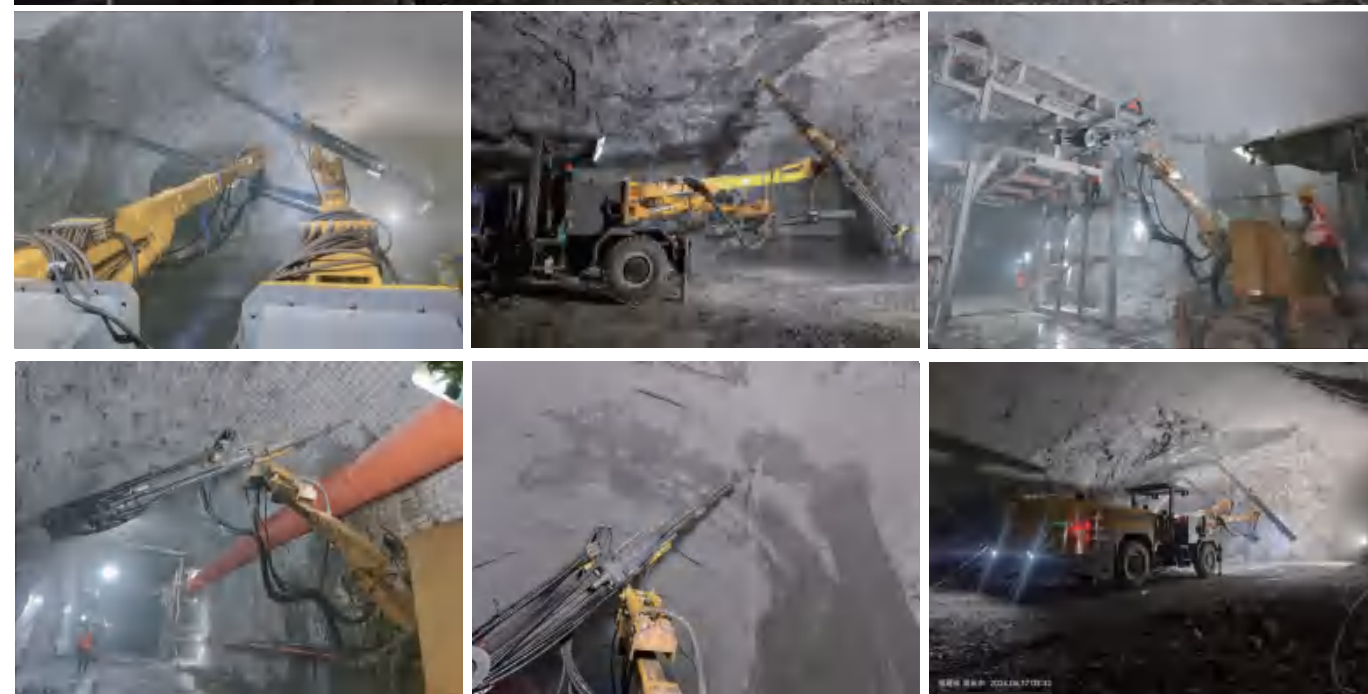
Minimum working range



Inverted arch working range



Drilling Jumbo Application Scenarios



Concrete Spraying Machine Application Scenarios



Portable Diesel Engine Drive Screw Air Compressor



Advantage

- Adopt two-stage compression air end
- Vibration isolation installation technology is adopted, which ensures stable operation.
- Equipped with brand diesel engines, such as Cummins, Yuchai, etc.
- Equipped with multiple automatic alarm systems, alarm and shutdown when high temperature occurs.
- Simple operation and easy maintenance.
- A lifting ring is installed on the top for safe lifting and transportation.



The air control system is simple and reliable. Inlet rate can be adjusted depending on the air consumption. The engine throttle can also be adjusted to save diesel fuel.

01

Intelligent microcomputer controls air compressor discharge pressure, exhaust gas temperature, engine speed, oil pressure, water temperature and fuel tank level. With auto alarm and shutdown protection.

02

Parts and components can be maintained within the accessible range which is convenient and easy.

03

Easy to move in rough terrain. Each compressor has lifting rings on the top for safe hoisting and transportation.

04

Basic Parameters

Single Stage Compression Portable Diesel Engine Drive Screw Air Compressor

Model	Capacity		Pressure		Diesel Brand	Diesel engine type	Weight	Dimensions
	m3/min	cfm	bar	psi			KGS	L*W*H mm
SYC-5/7	5	177	7	102	YUNNEI	42kW	1400	2200*1800*1800
SYC-6/7	6	212	7	102	CUMMINS	60kW	1400	2200*1800*1800
SYC-6/8	6	212	8	117	CUMMINS	60kW	1400	2200*1800*1800
SYC-7/7	7	247	7	102	CUMMINS	60kW	1400	2200*1800*1800
SYC-7/8	7	247	8	117	CUMMINS	60kW	1400	2700*1700*1800
SYC-7.5/7	7.5	265	7	102	CUMMINS	60kW	1400	2700*1700*1800
SYC-8/7	8	282	7	102	CUMMINS	74kW	1400	2700*1700*1800
SYC-8/8	8	282	8	117	CUMMINS	74kW	1400	2300*1800*1850
SYC-9/8	9	318	8	117	CUMMINS	74kW	1400	2300*1800*1850
SYC-10/7	10	353	7	102	CUMMINS	74kW	1400	2300*1800*1850
SYC-8.5/14	8.5	300	14	204	CUMMINS	119kW	1600	2500*1800*1850
SYC-10/10	10	353	10	146	CUMMINS	119kW	1600	2500*1800*1850
SYC-10/13	10	353	13	189	CUMMINS	119kW	1600	2500*1800*1850
SYC-13/10	13	459	10	146	CUMMINS	119kW	1600	2600*1800*2050
SYC-12/7	12	424	7	102	CUMMINS	119KW	1600	2600*1800*2050
SYC-12/10	12	424	10	146	CUMMINS	119kW	1600	2600*1800*2050
SYC-12/12	12	424	12	175	CUMMINS	119kW	1600	2600*1800*2050
SYC-12/13	12	424	13	189	CUMMINS	119kW	1600	2600*1800*2050
SYC-13/13	13	459	13	189	CUMMINS	119kW	1600	2600*1800*2050
SYC-17/7	17	600	7	102	CUMMINS	119kW	1600	2600*1800*2050
SYC-22/8	22	777	8	117	CUMMINS	179kW	1700	3500*2000*2050
SYC-15/13	15	530	13	189	CUMMINS	194kW	1600	2600*1760*2050
SYC-16/13	16	565	13	189	CUMMINS	194KW	1600	2600*1760*2050
SYC-13/17	13	459	17	248	CUMMINS	194kW	1600	2600*1760*2050
SYC-17/14.5	17	600	14.5	211	CUMMINS	194kW	1600	2600*1760*2050
SYC-20/13	20	706	13	189	CUMMINS	194kW	1700	3500*2000*2050
SYC-26/8	26	918	8	117	CUMMINS	194kW	4600	3300*2000*2250

Two Stage Compression Portable Diesel Engine Drive Screw Air Compressor

Model	Capacity		Pressure		Diesel Brand	Diesel engine type	Weight	Dimensions
	m3/min	cfm	bar	psi			KGS	L*W*H mm
SYC-17/17	17	600	17	248	CUMMINS	239kW	1700	3500*2000*2050
SYC-19/14.5	19	671	14.5	211	CUMMINS	239kW	1700	3500*2000*2050
SYC-18/17	18	636	17	248	CUMMINS	239kW	1700	3500*2000*2050
SYC-22/14	22	777	14	204	CUMMINS	239kW	4600	3300*2000*2250
SYC-26/10	26	918	10	146	CUMMINS	239kW	4600	3300*2000*2250
SYC-27/10	27	953	10	146	CUMMINS	239kW	4600	3300*2000*2250
SYC-30/10	30	1059	10	146	CUMMINS	264kW	5300	3350*2100*2250
SYC-19.5/19	19.5	689	19	277	CUMMINS	264kW	5300	3350*2100*2250
SYC-22/20	22	777	20	291	CUMMINS	264kW	3200	3500*2040*2200
SYC-26/20	26	918	20	291	CUMMINS	298kW	4900	4200*2100*1950
SYC-27/22	27	953	22	321	CUMMINS	335kW	4500	3600*2140*2100
SYC-26/25	26	918	35	364	CUMMINS	335kW	4500	3600*2140*2100
SYC-33/25	33	1165	25	364	CUMMINS	410kW	6700	3800*2200*2300
SYC-26/35	26	918	35	510	CUMMINS	410KW	5200	3800*2200*2300

Portable Electric Motor Driven Screw Air Compressor

MLGF31/7-165TB



MLGF38/7-200TB



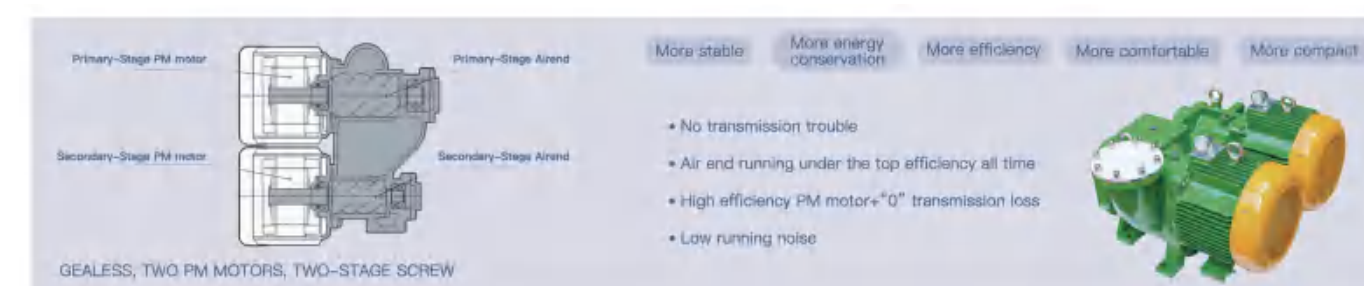
MLGF45/7-242TB



Technical Parameters

Model	MLGF31/7-165TB	MLGF38/7-200TB	MLGF45/7-242TB
Voltage	AC380V	AC380V	AC380V
Power	35-160KW	45-200KW	70-250KW
Current Range	85-325A	100-400A	130-480A
Speed Range	700-2500R/min	700-2300R/min	790-2250R/min
Air flow	9-35m ³ /min	10-45m ³ /min	12-55m ³ /min
Discharge Pressure	0.6-0.7Mpa	0.6-0.7Mpa	0.6-0.7Mpa
Motor Protection Level	IP54	IP54	IP54
Net Weight	4000KG	5000KG	6000KG
Dimensions	2913*1763*2300mm	3900*1930*2400mm	4000*1940*2400mm

Two Stages Compression Dual Permanent Magnet Motor Driven



More stable

No transmission trouble

- (1) No gearbox: The high-efficiency permanent magnet synchronous motor and the screw rotor adopt an embedded integrated connecting shaft structure, without coupling failure or broken gear danger.
- (2) No coupling: Two independent permanent magnet motors directly drive two airends without gear transmission, completely eliminating gear pitting.

More energy conservation

Running under the top efficiency all time

- (1) Independent permanent magnet motor drive, the whole process of intelligent control, through the control of exhaust pressure and interstage pressure, so that the air end in different speeds, different pressures, always running in the best interstage pressure point.
- (2) During operation, the respective optimum running speed is automatically calculated, and through the best matching and balancing of the compression ratio, the compressor is always in the optimum running state and obtains the best efficiency.

More efficiency

High efficiency PM motor + "0" transmission loss

- (1) A high-efficiency permanent magnet synchronous IP54 motor is equipped for excellent energy-saving performance.
- (2) At low frequency and low speed, the permanent magnet synchronous motor continuously maintains high efficiency.

More comfortable

Low running noise

No motor bearing noise, no gear meshing noise, no coupling transmission noise.

More compact

The permanent magnet motor is small in size, and the integrated structure saves space.

Tunnel Construction Axial Flow Fan



Main Features

·The high-efficiency rotor and stator blades are designed with fluid dynamics technology from Beihang University. The rotor impeller adopts a lightweight lead alloy die-casting process with high strength and wide adaptability, enabling long-term stable operation even under extreme working conditions.

Core components

·The VFD cabinet is an ABB authorized cabinet equipped with ABB dedicated frequency inverters for fan applications; the motor adopts Wande high-efficiency permanent magnet motor, which achieves virtually no demagnetization under normal use.

Performance advantages

·ABB frequency inverters are significantly superior to conventional domestic inverters. As the fan is a 24/7 year-round uninterrupted operation equipment, the anti-aging performance of ABB inverters for long-term operation is far better than domestic inverters of the same type (the reason for not choosing domestic inverters).

Intelligent operation & maintenance

- Equipped with IoT remote monitoring and start/stop functions, the power saving status can be checked in real time, and the energy saving effect is visible.
- The single-unit dual-impeller fan adopts a relay structure, which doubles the air pressure, greatly increases the air delivery distance, and its power saving effect is far better than traditional counter-rotating axial flow fans.

Technical Parameters

Model	Impeller diameter (mm)	Rated air pressure (Pa)	Rated air volume (m³ / min)	Maximum air volume (m³ / min)	Maximum wind pressure (Pa)	Motor power (kW)	Motor speed (rpm)
AWT14.0 (A) -110/12	1400	1100	3600	3800	2500	110	1500
AWT14.0 (A) -132/12	1400	1812	3090	4000	2718	132	1500
AWT14.0 (A) -160/12	1400	2500	2400	4200	2900	160	1500
AWT14.0 (A) -110/12×2	1400	2000	3600	3800	4800	110×2	1500
AWT14.0 (A) -132/12×2	1400	3300	3090	4000	5100	132×2	1500
AWT14.0 (A) -160/12×2	1400	4500	2400	4200	5300	160×2	1500

Working conditions

- 1.The ambient temperature shall not be lower than -40 °C and not higher than 40 °C;
- 2.Relative humidity not exceeding 95%;
- 3.No corrosive gases or liquids that would cause erosion to the ventilation fan;
- 4.No violent vibration.