



GIAK111

Mining hydraulic tunneling rig

The CVTJ45(B) mine safety model is specifically designed for small to medium-sized roadways, covering an area of up to 34m².



A reliable choice with high cost performance

The GIA K111 is a hydraulic tunneling rig equipped with a BUT28 square drill arm and a GIA O338 rock drill, designed to maximize your productivity with the lowest possible operating costs.

⊕ Main features

Suitable for small to medium-sized tunnel operations with a maximum coverage area of 34m. Its robust and durable design and versatile control system ensure extremely high stability and reliability while guaranteeing low operating costs. Easy to operate and maintain: simple to use and easy to maintain.



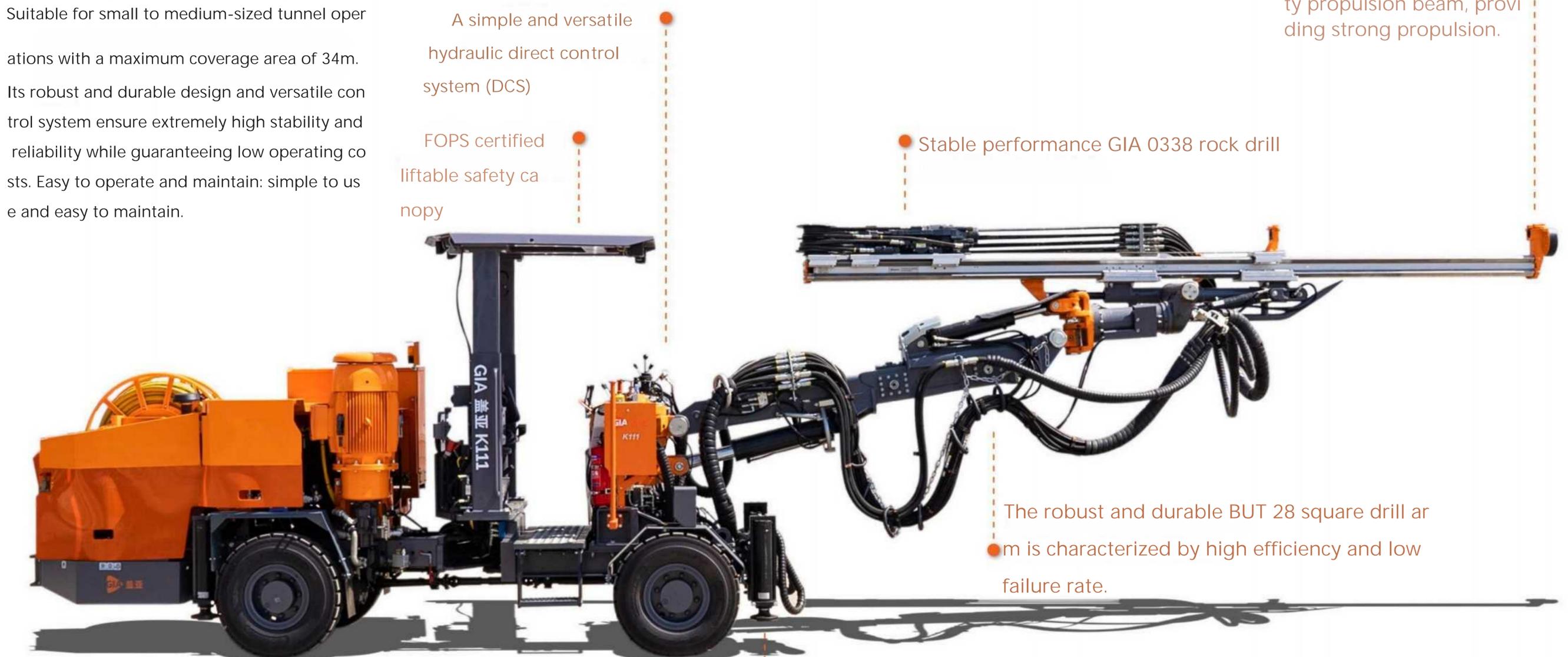
A highly competitive tunneling and rock drilling rig suitable for mining operations, especially for small to medium-sized underground tunnels.



Equipped with a robust and durable BUT28 square drill arm, its excellent stability and precise movement ensure rapid positioning, low drill rod wear, and high borehole straightness.



Maintenance is convenient and quick; all maintenance points on the machine are easily accessible.



A simple and versatile hydraulic direct control system (DCS)

FOPS certified liftable safety canopy

BMH2000 series heavy-duty propulsion beam, providing strong propulsion.

Stable performance GIA 0338 rock drill

The robust and durable BUT 28 square drill arm is characterized by high efficiency and low failure rate.

The robust and stable DC11 chassis is equipped with an environmentally friendly National IV emission standard engine.

Mature design helps you keep drilling non-stop; original spare parts ensure worry-free operation.



+GIA0338 rock drill

The GiAK11 is equipped with a GIA0338 rock drill, featuring a dual-buffer system for high efficiency and strong penetration, along with excellent drill rod economy. Its adjustable stroke settings adapt to various demonstration conditions, and the heavy-duty drill head easily handles the most demanding working conditions.



+Drilling system

A stable and reliable multi-functional drilling system ensures high-efficiency operation, including a hole-opening system, a hydraulically controlled drilling system, a rotary pressure control propulsion (RPCF) system with anti-jamming function, and a large-hole drilling device.



+control panel

It offers excellent visibility, a well-organized and clear control panel layout, and is equipped with LED work lights and driving lights to ensure safe operation.

Rock Drill GIA 0338

- Nuttress R38/T38
- From top of machine to center of rotation 88mm
- Diameter range 38-64mm
- Length (excluding nutt) 1008 mm
- Impact power 18kW
- Impact frequency 60Hz
- System pressure 230 bar
- Rotation system Independent slewing
- Rotation speed 0-340rpm
- Rotation torque (maximum) 1000Nm
- Lubrication air consumption 5 L/s (2 bar时)
- Weight 186.5 kg
- Noise level <116 dB (A)
- Propulsion and Tilting 360°
- Maximum Lifting Angle +65°/-30°
- Left/Right Arm Swing Angle of Drill Arm ±35°
- Centralized Lubrication Function of Drill Arm

Air System

- Electric Piston Air Compressor LE5
- Maximum Air Volume at 7 Bar LE5
- Pressure Gauge
- Air-Water Separator

Water System

- Hydraulically Driven Booster Pump Lowara 5SV11FO15T
- Maximum Flow Rate of Booster Pump/l/s 0.7-2.4
- Maximum Operating Pressure bar 25
- Minimum Inlet Pressure bar 2
- water pressure gauge
- Water flow

Propulsion Beam

BMH2000Series	BMH2831	BMH2837	BMH2843
Overall Length	4677mm	5287mm	5897mm
Drill Rod Length	3090mm	3700mm	4310mm
Dip Depth	2795mm	3405mm	4015mm
Weight (including rock drill)	505kg	530kg	565kg
Propulsion Force	15.0KN	15.0KN	15.0KN

Drill arm

- Drill arm BUT 28square arm
- Propulsion compensation 1250mm
- Drill arm extension 1250mm
- Parallel support 全方位
- Direct-controlled hydraulic control system, DCS18
- It has basic functions such as anti-jamming protection
- Water flow protection
- Switching between large and small holes
- Rock drill lubricant protection

Technical parameters

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Electrical System

- Total Installed Power..... 65.2KW
- Main Motor Power (50 Hz)..... 55 kW
- Voltage..... 380V
- Frequency..... 50Hz
- Starting Method..... Star/triangle
- Motor Thermal Overload Protection
- Impact Timer
- Digital Voltmeter/Ammeter Equipped in Main Control Box
- Main Motor Operating Timer
- 380V Sewage Pump Socket
- Phase Sequence Indicator
- Ground Fault Indicator
- Battery Charger
- Transformer..... 3.9 kVA
- Cable Reel (Inner/Outer Diameter)..... 660/1095mm

Hydraulic System

- Hydraulic pump, used for impact, positioning, and propulsion
- Hydraulic pump, used for rotation
- Pump no-load start
- Maximum system pressure..... 230 bar
- Hydraulic oil tank volume..... 124 L
- Low oil level indicator and stop operation
- Temperature gauge and switch located in the oil tank
- Filter accuracy..... 20 μm
- Oil filter indicator
- Stainless steel water-cooled hydraulic oil cooler
- Manual oil filling pump
- Mineral hydraulic oil

chassis

- Engine... Yuchai YCF3075 diesel engine, 55.8KW.
- Meets China IV emission standards
- Rated power..... 55.8 kW
- Torque (1300-1600 rpm) 310 Nm
- Rotating seat with seatbelt
- Articulated steering..... ±40° steering angle
- Four-wheel drive
- FOPScertified protective canopy
- Hydrostatic drive steering system
- Hydrostatic transmission
- Front axle..... DR20-23—V II (Q)
- Rear axle..... DR20-23—VIII (H)
- Front axle anti-slip self-locking differential
- Tires..... 8.25xR15
- Departure angle..... 13°
- Hydraulic front outriggers..... 2· expandable
- Hydraulic rear outriggers..... 2
- Service Brakes 2independent loops
- Emergency and Parking Brakes..... SAHR
- Fuel Tank Capacity..... 60 L
- Electrical System Voltage..... 24 V
- Battery..... 2x70 Ah
- Drive Lights (LE0) LED 8x24 W, 24V DC
- Work Light(LED)..... LED 4x50 W, 24V DC
- Centralized Lubrication System
- Exhaust Catalytic Converter/Muffler
- Firearms
- Level Gauge
- Maximum Climbing Capacity..... 1:4
- Horn, Signal Lights, and Reversing Warning System

Drill pipe

Dimensions		Minimum aperture
mm	R32-H35-R38	45
	R32-H35-T38	45
	R32-H35-T38 quick drill pipe	45
	SR35-H35-T38 quick drill pipe	45
	SR35-H35-T38 quick drill pipe	45
	SR35-H35-T38	45
	SR35-R39-T38	45
	R32-R39-T38	45
	SR35-R39-T38 quick drill pipe	45

Bracket tail

thread		Diameter	Length
mm	R38	38	435
	T38	38	435

Connecting sleeve

Thread		Diameter	Length
mm	R38	55	170
	T38	55	190

Rock Drilling System

- GiA 0338 rock drill, 18KW output power
- Large hole drilling device

Propulsion beam (optional)

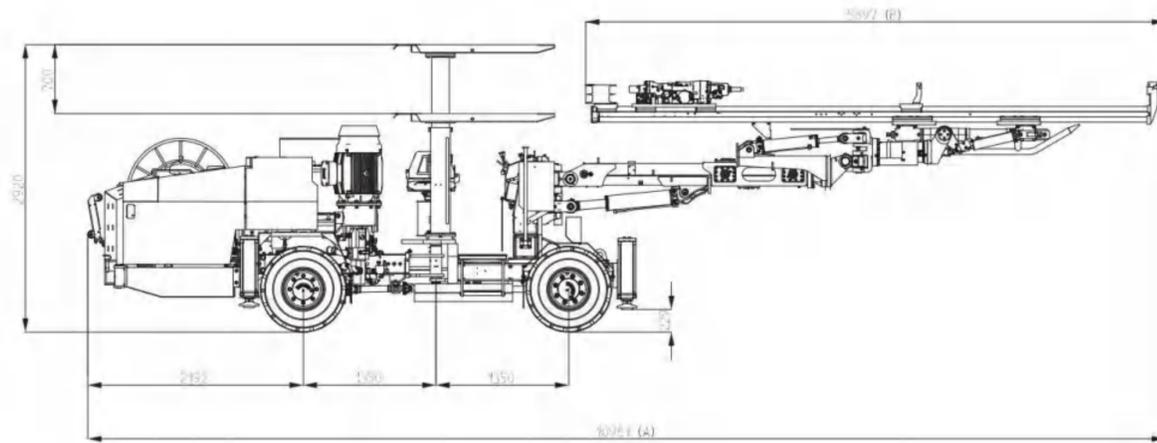
- Equipped with BMHT2000 series telescopic propulsion frame

BMHT 2000Series	BMHT 2X31/19	BMHT 2X37/22
Overall Length	3407/4607 mm	3707/5217 mm
Drill rod length		
Hole depth	1900/3090 mm	2200/3700 mm
Weight including rock drill	1624/2814 mm	1905/3405 mm
Thrust		
· Hole-mounted hydraulic hose support	610 kg	630 kg
	15 kN	15 kN

Technical parameters

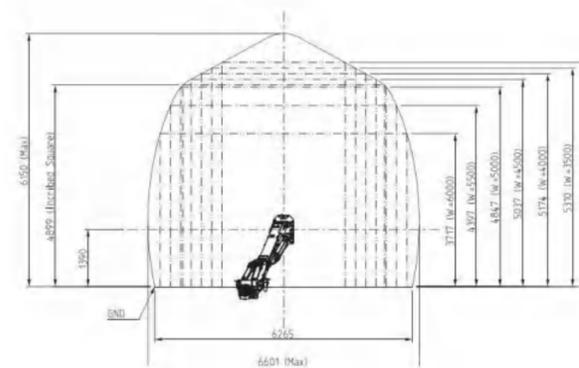
Technical parameters

Side view

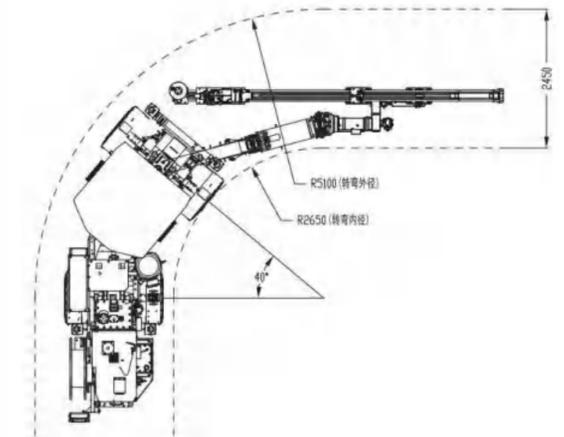


Coverage area

Coverage area 34m²



Turning radius



Equipment General Layout

Propulsion beam	A	B
BMH2831	974 1mm	4677mm
BMH2837	10351mm	5287mm
BMH2843	10961mm	5897mm

walking speed

km/h	On flat ground (rolling resistance coefficient 0.05)	>10
	At a 1:8 slope	>4.5

Size

mm	Width	2105
	Height, canopy raised/lowered	2220/2920
	Length when equipped with BMH2843 propeller beam	10961
	Ground clearance	≤229

weight

Total weight varies depending on the configuration.		
kg	Total weight	10500±500
	Drill arm end	6400
	Engine end	4100±500

Recommended cable specifications and lengths

Voltage, V	size, mm ²	diameter, mm ²	length, m
380	3x50+3G10	37-39	80

This recommendation is based on an ambient temperature of 40°C and an altitude of 2000 meters.

