



# GIA Q7i

Intelligent Wheeled  
DTH Drill Rig

Hole diameter range: 110-229mm

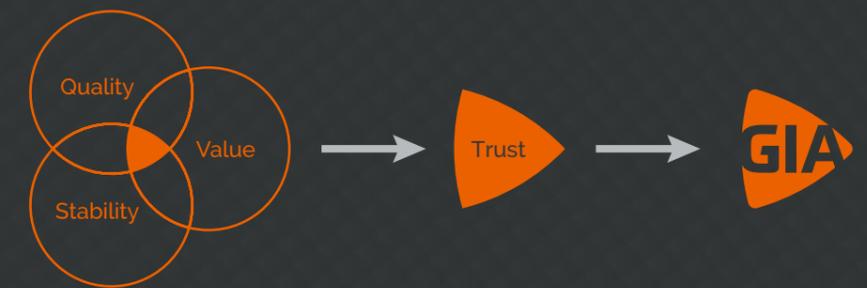


盖亚（南京）矿山设备有限公司  
GIA (Nanjing) Mining Equipment Co.,Ltd



## Brief Introduction

The GIA brand is designed to provide customers with the optimal cost per meter of drilling, achieving a unique unity of high quality, stability, and value, and becoming a trustworthy choice for customers.



## Premium Quality Accessible Price

The GIA Q7i Intelligent Wheeled DTH Drill Rig is developed by GIA's R&D team to meet the needs of the market. Inheriting Epiroc's over 150 years of mining innovation, it marks the gradual improvement of the GIA brand's product line from drilling tools to drill rigs, and it is an important step forward in Epiroc's multi-brand strategy in China.

## Wheeled Chassis. A Step Ahead. The Efficiency “Engine” for Open-Pit Mines



### + High Productivity

The GIA Q7i Intelligent Wheeled DTH Drill Rig is specifically designed and developed for large-diameter drilling and high productivity in open-pit mines.

- Equipped with a powerful 570kW@1900rpm engine, providing stable and efficient power output to meet various drilling requirements
- With an air volume and pressure up to 28.8m³/min@30bar, meeting the needs of efficient drilling with a hole diameter range of 110-229mm
- The dust collector features a filter area of 45.2m² with high dust removal efficiency and an eco-friendly working mode, easily handling various complex working conditions.
- Standard with a long beam feed system with 6m drill rods for higher productivity
- Standard with a new high-speed and high-torque rotary head, suitable for scraper application requirements (170rpm@4300Nm)
- Aluminum feed beam and hydraulic motor-driven feed system make drilling positioning more stable and flexible, improving drilling speed and accuracy
- Four-wheel hydraulic drive with limited-slip differential, suitable for different terrain conditions
- Dual-speed forward and reverse tramming, especially suitable for large platforms and long-distance relocation with high tramming efficiency



### + High Stability

Building on Epiroc's proven rock drilling heritage, the GIA Q7i with intelligent upgrades driven by real customer demand-delivering unmatched efficiency for your operations.

- Full-electric proportional control, standard single-hole automation, and temperature-controlled adaptive variable-speed cooling system
- 3m wide body and 4.04m wheelbase design, meeting a maximum climbing angle of 30% for more stable tramming and operation
- Standard with front and rear hydraulic outriggers for more stable drilling operations
- Lightweight design with a more stable center of gravity, capable of handling complex terrain conditions
- Equipped with speed alarm and steering angle interlocking alarm system



### + Easy Maintenance

- New powertrain layout is compact and intuitively accessible



### + Digitalization & Intelligence

- Equipped with single-hole automation function, reducing reliance on manual drilling operations, making it more efficient and intelligent
- Reverse alarm and audio-visual-light integrated alarm ensure safe construction
- Real-time monitoring for compressor lubrication system, features automatic protection and shutdown
- Standard with a high-performance industrial computer system, supporting future-proof scalability, and the possibilities of installing additional automated functions
- CAN communication integrated panel simplifies the equipment's circuit and supports functional upgrades

### Main Components

- Yuchai National III engine
- Joy two-stage screw air compressor
- Rod handling system
- Rod breakdown platform and manipulator
- Safety Cab (FOPS certified, equipped with heating & cooling air conditioning)
- Platform-type frame
- Hydrostatic power shift transmission
- Front drive axle and rear steering axle
- Dust collection system with pre-separator
- Electro-hydraulic control system
- Aluminum feed beam and hydraulic motor-driven feed system
- Hydraulic drilling LOGIC control system
- Front and rear dual hydraulic outriggers
- High-performance rotary head
- Real-time monitoring for compressor lubrication system, features automatic protection and shutdown.
- HDMI high-definition display
- iTiq data management platform
- Scraper application control function
- High-performance industrial computer, PLC, IO modules
- Feed compensation
- DTH hammer lubrication device (pneumatic)
- Thread lubrication system
- 2D digital angle gauge
- Reverse alarm
- Integrated sound, light, and electric alarm
- Mining-specific tires

### Engine

Yuchai YCK16, National III Emission Standard	Metric
Engine Rated Power	570 kW@1900 rpm

### Dust collector

Q7i	Metric
Filter Area	45.2 m²
Number of Filter Elements	32 pcs

### Hydraulic system

Hydraulic Oil Cooler	Metric
Max. operating Ambient Temperature	55 °C

### Fluid capacity

Hydraulic Oil Tank	380 L
Total Hydraulic System Capacity	600 L
Air Compressor Oil	110 L
Engine Oil	35 L
Engine, Cooling Water	83 L
Engine, Diesel Tank	800 L
Power Shift Transmission	2.5 L
Front Axle	27.5 L
Rear Axle	17.5 L
Lubricating Oil Tank (ECL)	20 L
Rotary Head	8.3 L

### Compressor

Joy GE835 Two-Stage Screw Air Compressor	Metric
Max. Working Pressure	30 bar
FAD Max. Air Flow	28.8m³/min@30bar

### Electrical system

Voltage	24 V
Batteries	2 x 12 V /220 Ah, 2 batteries
Electric Motor	28 V, 90 A
Work Lights (Front)	4 x 18 W
Work Lights (Rear)	2 x 18 W
Taillights	Position Lights, Turn Signals, Brake Lights
Work Lights (Side)	2 x 18 W
Work Lights (Feed Beam)	2 x 15 W
Work Light Type	LED

### Feed beam

Feed Beam Material	Aluminum Alloy
Feed Compensation	1150 mm
Max. Feed Rate	0.85 m/s
Max. Feed Force	45 kN
Max. Pulling Force	50 kN
Total Length	11600 mm
Feed Stroke	7540 mm

## Hole Diameter Range and Depth (recommended)

Hammer Size	Hole Diameter / Depth	
GIA Q7i	5", 6", 7", 8"	110-229mm
Maximum Drilling Depth with Hydraulic Automatic Rod Handling and Optional 6m Drill Rods		
GIA Q7i	Rods Ø 89-140mm (3.5"-5.5")	19.5m

## Down-the-Hole Hammer (to be ordered separately)

Hammer	EM5+, DHD 6 Gold Hammer, EM7, DHD380M Hammer
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## Rotary Head

Rotary Head Model	DRU8-68	DRU8-78
Rotary Head Connection Thread	API 3 1/2" REG, box	API 3 1/2" REG, box
Max. Rotational Speed	210 rpm	170 rpm
Max. Torque	5100 Nm	6400 Nm

## Max Trimming Speed

km/h	On Flat Ground (Rolling Resistance Coefficient 0.05)	Gear 1	>5
		Gear 2	>20
	On 1:8 Slope		>5

## Chassis

Four-Wheel Drive	
Hydrostatic Drive Steering System	
Hydrostatic Transmission	
Steering Angle	33°
Min Turning Radius	9.3 m
Front Axle (with Limited-Slip Differential)	DR70
Rear Axle (with Limited-Slip Differential)	ZR50
Tires	12.00-24
Departure Angle	20°
Approach Angle	20°
Front Hydraulic Outriggers	2 pcs
Rear Hydraulic Outriggers	2 pcs
Service Brake	2 Independent Circuits
Emergency and Parking Brake	Wet Multi-Disc Brake
Maximum Climbing Capacity	30%

## Optional Components and Functions

### Main Frame

- Automatic leveling of the equipment platform
- Cold weather kit below -25°C
- Water mist system with water pump and 150L+150L water tanks
- Extreme cold start device
- Centralized Lubrication System (CLS)
- Pulsed self-cleaning pre-filter
- Hood top guardrail
- Tire pressure monitoring

### Hydraulic Oil

- 32# Arctic Hydraulic Oil
- 68# Arctic Hydraulic Oil

### Air Compressor Oil

- 32# Compressor Oil
- 68# Compressor Oil

### Feed Beam

- Kit for 89mm-140mm drill pipes
- Wide-type feed beam support feet

### Digital Intelligent Control

- Precision drilling
- 360-degree surround view
- Equipment posture safety alarm
- Single-hole automation
- Rental control module

This software features the GIA trademark in the form shown below.





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