

# **BD Drill**

## ***UNDERGROUND DRILLING AIR-LEG AND HAND-HELD ROCK DRILLS***

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## Top Hammer Air Leg and Small Hole Drilling Tools

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## ABOUT US

### Black Diamond Drilling Services Australia Pty Ltd



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**1000**  
EMPLOYEES



**300,000**  
M<sup>2</sup> OF  
FACTORY



#### ANNUAL PRODUCTION

***DTH hammer: over 20,000 units***

***Maximum size for hammer: 609mm(24")***

***Drill bit: 250,000 pcs***

***Maximum size for drill bit: 1000mm(39-1/3")***

***30 days for production on any quantity***



Black Diamond Drilling Services Australia Pty Ltd known as "BD DRILL" is a privately owned Australian Company which services the Mineral exploration, Mining, Water well and Geotechnical sectors of the drilling industry.

BD DRILL is a subsidiary of Changsha Heijingang Industrial Ltd. Co., the head office is located in Perth, Western Australia and supports regions in Australia and the overseas market.

BD DRILL has established a reputation for outstanding commitment to product quality, innovation and most importantly customer service. Our extensive product range covers DTH equipment (conventional, reverse circulation, bits, strings and rigs), Top hammer and a comprehensive selection of various drilling products (diamond bit, drag bit, tricone bits, drilling grease and other consumables.)

# RECOMMENDED SAFETY PROCEDURES

The mining industry continues to demand even higher levels of safety and productivity. In order to meet these requirements, we work continuously to develop even safer products and to produce comprehensive manuals enabling safer and effective use of our products.



## IT'S ALL ABOUT EVERYONE'S HEALTH

Helping you to ensure a safer workplace and healthier workforce is of the utmost importance to us. The well-being of any person coming into contact with our equipment is paramount. Therefore, we strive to identify and assess potential risk factors that could threaten the health of you and your employees. All the products in our catalogue are designed to meet safety requirements.

## DRESS RIGHT FROM HEAD TO TOE

You must always wear appropriate personal protective equipment (PPE). This is what we strongly recommend, to help avoid injury:

- Safety helmet
- Hearing protection
- Safety glasses
- Protective high visibility clothing
- Respiratory protection
- Safety boots
- Any site-specific PPE as required.

## BE AWARE OF ALL SAFETY PROCEDURES

We ask that you start by obeying all instructions given. Never work under an unsupported rood or close to potential pinch point locations. Beware of the potential hazards of a loose roof and ribs and scale down roof ribs prior to bolting. It is important to bolt early in the mining process – as soon is safely and practically possible.

Safe work procedures should incorporate inspection before the machine operates and also through regular monitoring based upon mining conditions, safety and management systems. Workers should be provided with safety information, instruction and training on transportation, installation, operational care and disposal of drilling tools.

## MAKE A RISK ANALYSIS BEFORE YOU START

Pay attention to safety when planning all of your work. Before you start, always take your time to go through all operations. Identify any potential risks and take appropriate measures to avoid them. If necessary, seek expert advice on how to help minimize risks. Finally, make sure that you have the right resources to perform all tasks in the safest manner possible.

Please check [www.safeworkaustralia.gov.au](http://www.safeworkaustralia.gov.au) or [www.canada.ca/en/services/jobs/workplace/health-safety.html](http://www.canada.ca/en/services/jobs/workplace/health-safety.html) for more information.

## Air-leg Rock Drills

Black Diamond Drilling manufactures and supplies world class Air Leg Rock Drills. Using the latest manufacturing equipment and techniques ensures that our products are high strength and wear resistant. The result is an efficient and cost-effective drilling solution.

## BD-YT28 Air-Leg Rock Drill

### Product Information

The BD-YT28 Air Leg Rock Drill is a product that adopts all the latest design technology. It is an efficient, energy saving rock drill.

The BD-YT28 Air Leg rock drill has lower noise, higher durability, faster speeds and a lower failure rate than other comparable drills.



### Features Include

- Centralised operating system, flexible startup, combination of pneumatics and water, ease of use and straightforward maintenance procedures.
- Low noise, low vibration, energy efficient, high durability and reliability.
- A clear oiler reservoir enables easy oil level observation.

### BD-YT28 Air Leg Rock Drill Parameters

Parameter	Imperial	Metric
Shank (hex x Length)	7/8" x 4 1/4"	22mm x 108mm
Weight	≈57lb	≈26kg
Length	2' 2"	659mm
Cylinder Diameter	Φ 3 9/64"	Φ 80mm
Piston Stroke	2 23/64"	60mm
Air Consumption	≤ 14.5 gal/s	≤ 55 l/s
Impact Frequency	≥ 35 Hz	≥ 35 Hz
Impact Strength	≥ 46.4 ftlb	≥ 63 J
Drilling Speed	≥ 15 3/4 inch/min	≥ 400mm/min
Drilling Diameter	Φ 1 11/32" ~ 1 25/32"	Φ 34~45mm
Drilling Depth	16' 4 27/32"	5m

# BD-YT29A Air-Leg Rock Drill



## Product Information

The BD-YT29A Air Leg Rock Drill is a product that adopts all the latest design technology.

It is an efficient, energy saving rock drill.

The BD-YT29A Air Leg rock drill has lower noise, higher durability, faster speeds and a lower failure rate than other comparable drills.

## Features Include

- Centralised operating system, flexible startup, combination of pneumatics and water, ease of use and straightforward maintenance procedures.
- Excellent ability in washing blast holes. A clear oiler reservoir enables easy oil level observation.

## Scope of Application

The BD-YT29A Air Leg Rock Drill is suitable for horizontal drilling or sloping blast hole in solid hard rock as well as vertical bolt holes in the roof. Diameter of blast holes is 35-45mm and the effective depth of the hole can reach 5m.

## BD-YT29A Air Leg Rock Drill Parameters

Parameter	Imperial	Metric
Shank (hex x Length)	7/8" x 4 1/4"	22mm x 108mm
Weight	≈60lb	≈27kg
Length	2' 2"	659mm
Cylinder Diameter	Φ 3 7/32"	Φ 82mm
Piston Stroke	2 23/64"	60mm
Air Consumption	≤ 17 gal/s	≤ 65 l/s
Impact Frequency	≥ 37 Hz	≥ 37 Hz
Impact Strength	≥ 51 ftlb	≥ 69 J
Drilling Speed	≥ 18 11/16 inch/min	≥ 475mm/min
Drilling Diameter	Φ 1 3/8 ~ 1 25/32"	Φ 35~45mm
Drilling Depth	16' 4 27/32"	5m

# BD-YT24 Air-Leg Rock Drill



## Product Information

The BD-YT24 Air Leg Rock Drill is a product that adopts all the latest design technology. It is an efficient, energy saving rock drill.

The BD-YT24 Air Leg rock drill has lower noise, higher durability, faster speeds and a lower failure rate than other comparable drills.

## Features Include

- Centralised operating system, flexible startup, combination of pneumatics and water, ease of use and straightforward maintenance procedures.
- Excellent ability in washing blast holes. A clear oiler reservoir enables easy oil level observation.

## Scope of Application

The BD-YT24 Air Leg Rock Drill is suitable for horizontal drilling or sloping blast hole in medium hard or solid hard rock.

## BD-YT24 Air Leg Rock Drill Parameters

Parameter	Imperial	Metric
Shank (hex x Length)	7/8" x 4 1/4"	22mm x 108mm
Weight	≈53lb	≈24kg
Length	2' 2 9/16"	675mm
Cylinder Diameter	Φ 2 3/4"	Φ 70mm
Piston Stroke	2 3/4"	70mm
Air Consumption	≤ 14 gal/s	≤ 53 l/s
Impact Frequency	≥ 29 Hz	≥ 29 Hz
Impact Strength	≥ 42 ftlb	≥ 58 J
Drilling Speed	≥ 14 3/16 inch/min	≥ 360mm/min
Drilling Diameter	Φ 1 11/32 ~ 1 21/32"	Φ 34~42mm
Drilling Depth	16' 4 27/32"	5m

## BD-YT23 Air-Leg Rock Drill



### Product Information

The BD-YT23 Air Leg Rock Drill is a product that adopts all the latest design technology.

Including combination of pneumatics and water, rapid telescopic air leg and pressure regulation.

It is an efficient, energy saving rock drill. The BD-YT24 Air Leg rock drill has lower noise, higher durability, faster speeds and a lower failure rate than other comparable drills.

### Features Include

- Centralised operating system, flexible startup, combination of pneumatics and water, ease of use and straightforward maintenance procedures.
- Excellent ability in washing blast holes. A clear oiler reservoir enables easy oil level observation.

### Scope of Application

The BD-YT23 Air Leg Rock Drill is mainly used in underground coal mining and earthworks. It can be used to drill horizontal or sloping blast holes on medium and hard stone and bolt holes on the roof. The diameter of blast holes is 34-42mm and the effective depth of 5m.

### BD-YT23 Air Leg Rock Drill Parameters

Parameter	Imperial	Metric
Shank (hex x Length)	7/8" x 4 1/4"	22mm x 108mm
Weight	≈53lb	≈24kg
Length	2' 23/32"	628mm
Cylinder Diameter	Φ 3"	Φ 76mm
Piston Stroke	2 5/32"	55mm
Air Consumption	≤ 14 gal/s	≤ 54 l/s
Impact Frequency	≥ 36 Hz	≥ 36 Hz
Impact Strength	≥ 42 ftlb	≥ 59 J
Drilling Speed	≥ 13 3/8 inch/min	≥ 340mm/min
Drilling Diameter	Φ 1 11/32 ~ 1 21/32"	Φ 34~42mm
Drilling Depth	16' 4 27/32"	5m



## Hand-held Rock Drills

Black Diamond Drilling manufactures and supplies world class Hand-held Rock Drills. Using the latest manufacturing equipment and techniques ensures that our products are high strength and wear resistant. The result is an efficient and cost-effective drilling solution.

### BD-YO18 Hand-held Rock Drill

#### Product Information

The BD-YO18 Hand-Held Rock Drill is suitable for dry drilling. It is predominantly used in drilling split holes and breaking holes on quarry and underground mine site applications. It can also be used for horizontal drilling and sloping blast hole works.



#### Features Include

Light weight, low air consumption, efficient to run and easy to operate. The BD-YO18 is the lightest hand-held rock drill in our range.

#### BD-YO18 Hand-held Rock Drill Parameters

Parameter	Imperial	Metric
Shank (hex x Length)	7/8" x 4 1/4"	22mm x 108mm
Weight	≈40lb	≈18kg
Length	1' 9 11/16"	550mm
Cylinder Diameter	Φ 2 9/32"	Φ 58mm
Piston Stroke	1 31/32"	50mm
Air Consumption	≤ 6 gal/s	≤ 23 l/s
Air Pressure	0.4~0.5 MPa	0.4~0.5 MPa
Impact Frequency	≤ 23 Hz	≤ 23 Hz
Drilling Speed	≥ 4 23/32 inch/min	≥ 120mm/min
Drilling Diameter	Φ 1 11/32" ~ 1 21/32"	Φ 34~42mm
Drilling Depth	5' – 6' 6"	1.5-2m

## BD-YO20 Hand-held Rock Drill



### Product Information

The BD-YO20 Hand-Held Rock Drill is suitable for dry drilling. It is predominantly used in drilling split holes and breaking holes on quarry and underground mine site applications. It can also be used for horizontal drilling and sloping blast hole works.

### Features Include

Light weight, low air consumption, efficient to run and easy to operate.

### BD-YO20 Hand-held Rock Drill Parameters

Parameter	Imperial	Metric
Shank (hex x Length)	7/8" x 4 1/4"	22mm x 108mm
Weight	≈45lb	≈20.5kg
Length	1' 10"	550mm
Cylinder Diameter	Φ 2 31/64"	Φ 63mm
Piston Stroke	2 11/64"	55mm
Air Consumption	≤ 6 gal/s	≤ 23 l/s
Air Pressure	0.4~0.5 MPa	0.4~0.5 MPa
Impact Frequency	≤ 33 Hz	≤ 33 Hz
Drilling Speed	≥ 5 29/32 inch/min	≥ 120mm/min
Drilling Diameter	Φ 1 11/32" ~ 1 21/32"	Φ 34~42mm
Drilling Depth	9' 10 7/64"	3m

# BD-Y24 Hand-held Rock Drill



## Product Information

The BD-Y24 Hand-Held Rock Drill is suitable for dry drilling. It is predominantly used in drilling split holes and breaking holes on quarry and underground mine site applications. It can also be used for horizontal drilling and sloping blast hole works.

## Features Include

Light weight, low air consumption, efficient to run and easy to operate. The BD-Y24 Hand Held Rock Drill is a mid range drill that is suitable for most applications.

## BD-Y24 Hand-held Rock Drill Parameters

Parameter	Imperial	Metric
Shank (hex x Length)	7/8" x 4 1/4"	22mm x 108mm
Weight	≈50lb	≈23kg
Length	1' 11 13/16"	605mm
Cylinder Diameter	Φ 2 3/4"	Φ 70mm
Piston Stroke	2 3/4"	70mm
Air Consumption	≤ 12 gal/s	≤ 50 l/s
Air Pressure	0.4~0.63 MPa	0.4~0.63 MPa
Impact Frequency	≤ 28 Hz	≤ 28 Hz
Drilling Speed	≥ 12 19/32 inch/min	≥ 320mm/min
Drilling Diameter	Φ 1 11/32" ~ 1 21/32"	Φ 34~42mm
Drilling Depth	16' 4 55/64"	5m

## BD-Y28 Hand-held Rock Drill



### Product Information

The BD-Y28 Hand-Held Rock Drill is suitable for dry drilling. It is predominantly used in drilling split holes and breaking holes on quarry and underground mine site applications. It can also be used for horizontal drilling and sloping blast hole works.

### Features Include

Light weight, low air consumption, efficient to run and easy to operate. The BD-Y28 Hand Held Rock Drill is the most powerful hand-held drill that is suitable for heavier applications.

### BD-Y28 Hand-held Rock Drill Parameters

Parameter	Imperial	Metric
Shank (hex x Length)	7/8" x 4 1/4"	22mm x 108mm
Weight	≈55lb	≈23kg
Length	2' 2"	659mm
Cylinder Diameter	Φ 3 9/64"	Φ 80mm
Piston Stroke	2 23/64"	60mm
Air Consumption	≤ 14.5 gal/s	≤ 55 l/s
Air Pressure	0.4~0.63 MPa	0.4~0.63 MPa
Impact Frequency	≤ 35 Hz	≤ 35 Hz
Drilling Speed	≥ 15 3/4 inch/min	≥ 400mm/min
Drilling Diameter	Φ 1 11/32" ~ 1 49/64"	Φ 34~45mm
Drilling Depth	16' 4 55/64"	5m

Black Diamond Drilling can custom manufacture equipment to suit your drilling needs.  
Please contact one of our representatives to discuss your equipment requirements.



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