

**JOYGLOBAL**

**P&H**

# Rotary Blasthole Drill

## Product Overview





JOYGLOBAL  
Service Leader



Delivering world-class mine performance

At the core of our commitment to customers is providing world-class solutions through our unique direct service network. This allows us to **collaborate with customers**, developing innovative parts, products, consumables and systems that lower their total cost of ownership while safely maximizing production.



Our commitment to quality and reliability is supported by our focus on Operational Excellence. We use Joy OpEx principles to eliminate waste, simplify the process, automate and remove people from harm’s way.



Rotary Blasthole Drills from Joy Global - productive solutions for all mine types

For mines looking to meet their drilling and blasting needs at the lowest cost per meter drilled, these powerful and reliable systems make P&H drills the best choice:

Powerful pulldown

P&H drills feature top-drive rack-and-pinion pulldown, which contributes to better machine availability due to fewer wearing components requiring maintenance. P&H’s powerful and rugged rotary carriages are able to provide ample torque and bit loading to break through the toughest rock conditions in the world.



Superior propel

Built for maximum strength, P&H mainframes and crawler frames stand up to hard-rock mine conditions. Rugged crawlers and powerful hydrostatic propel drives deliver maneuverability, gradability and fast set-ups.

Ample air

A range of reliable, mining duty compressors are available to meet the specific bailing air needs for your mine. P&H drills utilize reverse helix screw compressors that provide years of reliable service.

Rugged masts

The drill mast is a structure subjected to high loads. P&H masts are designed using finite element analysis to achieve high cycle fatigue resistance and less downtime and costs repairing cracks. Constructed of common high strength alloy steel, the mast provides maximum rotary carriage and drill string support.



	250XPC	285XPC	320XPC
Hole diameter	200 mm - 311 mm 7 7/8” - 12 1/4”	229 mm - 349 mm 9” - 13 3/4”	270 mm - 444 mm 10 5/8” - 17 1/2”
Maximum bit loading	40,823 kg 90,000 lbs	53,524 kg 118,000 lbs	68,038 kg 150,000 lbs
Maximum single pass hole depth	19.8 m 65 ft	19.8 m 65 ft	19.8 m / 21.3 m 65 ft / 70 ft
Air compressor volume (standard)	85 m³/min 3000 CFM	97 m³/min 3450 CFM	97 m³/min 3450 CFM
Maximum torque	15,356 Nm 11,326 ft-lbs	17,626 Nm 13,000 ft-lbs	33,895 Nm 25,000 ft-lbs
Main power unit	Diesel	Diesel	Electric



**250XPC**  
The P&H 250XPC provides up to 40,823 kg (90,000 lbs) of bit loading specifically designed for 250 and 270 mm diameter hole applications. This drill can be found drilling in coal, copper, and diamond mines around the world.



**285XPC**  
The P&H 285XPC provides up to 53,524 kg (118,000 lbs) of bit loading specifically designed for 270 and 311 mm diameter hole applications. This drill is well suited for the majority of copper and iron applications.



**320XPC**  
The P&H 320XPC is the preferred choice for large diameter blasthole drilling in extremely difficult rock conditions. The electric main power and carriage provides more than enough torque and bit loading to drill in these tough conditions.

# Operator comfort and safety

P&H drills are designed to provide operators with a safe, comfortable, and productive working environment. The drill operator’s cab includes the latest in ergonomic and safety improvements.

### Superior visibility

The operator is provided with a clear, unobstructed view of the drilling area and areas surrounding the drill. Expansive windows and video cameras ensure that the operator is able to maintain complete situational awareness during drilling and propelling. The operator’s chair can swivel to face the direction of travel during propelling for safer repositioning.



### Safe environment

A FOPS Level II certified structure and shatter resistant glass protects the operator from harsh mining conditions. The seat rests on an adjustable, air suspension and the cab rests on viscous

mounts to provide isolation to the operator from vibrations common to drilling.

### Productive environment

Controls are located within easy reach of the operator to allow for maximum productivity.



# Ready for the toughest conditions

P&H drills provide reliable performance drilling holes through the toughest rocks no matter where the mine is located.

### Arctic conditions

P&H drills operate reliably in some of the coldest environments on the planet. The drill is equipped with the necessary heaters and insulation to protect the operator and drill from temperatures that reach -40°C (-40°F).

### High altitude

Joy Global can provide a reliable drilling platform that has the power and air

capacity to maximize productivity at altitudes up to 4572 m (15,000 ft).

### Weak power grids

Joy Global’s electric P&H 320XPC has a soft start transformer available that limits the impact of starting the drill on weak power grids by reducing the initial inrush current. This can reduce the overall power infrastructure costs for a mine and increase the life of the main motor and compressor.



# Getting the most out of your P&H drills

### Prevail Remote Health Management system

The Prevail Remote Health Management (RHM) System helps mines by providing timely, efficient machine health and performance data. The PreVail RHM system taps into the powerful communication, command and control capabilities of the electrical control system, transforming the data and information it produces into more refined knowledge of great value to your operations and maintenance management teams. That knowledge is available in several forms including KPI (key performance indicator) dashboards, graphical analysis tools, predictive modeling and reporting tools.

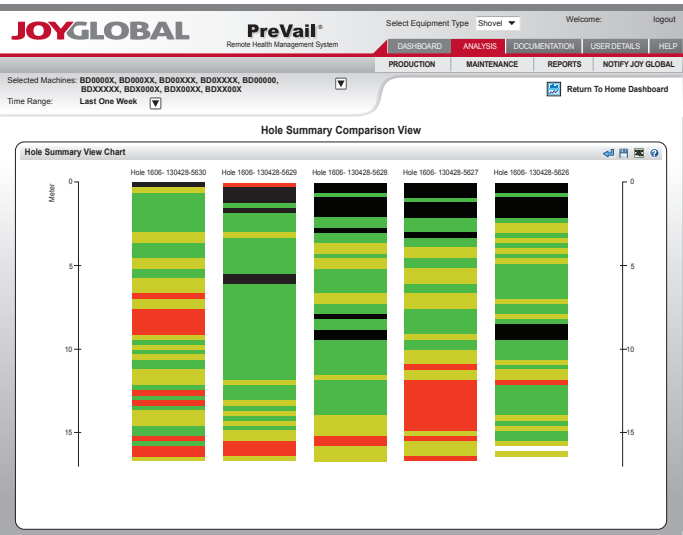
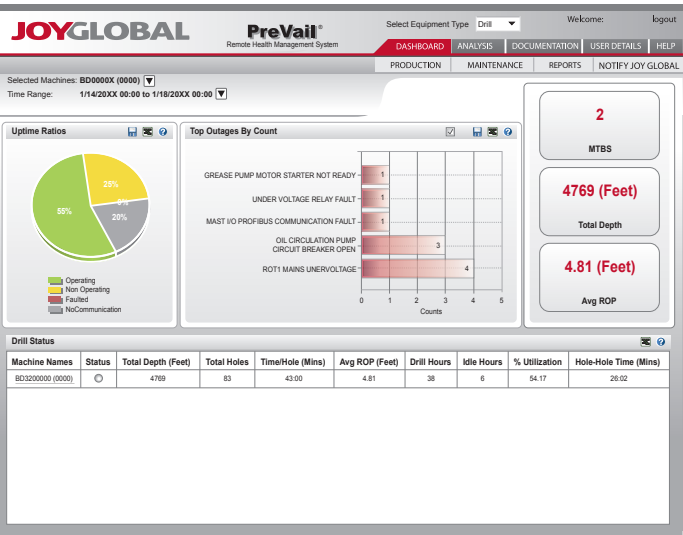
With PreVail RHM installed on your P&H drills, you have access to:

- Increased asset performance visibility to help you determine when to intervene – and position you to minimize corrective action cost
- Valuable risk management tools to help reduce troubleshooting time and mean time to recovery
- Benchmarking of key performance indicators to make performance gaps more visible and set in motion corrective measures to maximize productivity
- Operating practices analysis to allow for review and correction of operators not following best practices for optimal productivity

### P&H drill training simulator

Realistic virtual training simulators allow operators to learn a machine’s controls quickly and safely, as well as master the entire operator process from start to finish, before they ever step foot into a real-world piece of machinery. Training simulators lead to less machine downtime, fewer accidents, and a more efficient and productive operation.

The Series I Drill Training Simulator provides a real world feel in a very compact package. The simulator uses a 17” laptop, HDMI cable included for connection to a large screen monitor, and real world joystick controllers that clamp to almost any table top making it easy to set up in any environment.







# Joy Global service

Joy Global recognizes the diversity of our customers, allowing them to select from flexible service offerings that are designed to help maximize performance and productivity of P&H and Joy mining equipment. Customers are served directly by Joy Global service centers and distribution facilities that are regionally located and globally linked. The following service offerings are designed to help achieve each customer’s unique objectives:

### Service Products and Consumables

Our service products and consumables (SP&C) are engineered and specifically selected to meet exacting application and design standards. With dedicated regional warehousing and computerized inventory systems, we can assure timely and cost effective SP&C delivery to our customers anywhere in the world.

### Machine Assembly and Rebuild

Our service teams are structured to be the preferred resource for every machine rebuild by applying new machine assembly factory best practices culminating with the Joy Global Flawless Start Up process. Our assembly and rebuild program is backed by a complete range of OE services including SP&C, Component Exchange Program (CEP), on-site project management, labor, shop services, as well as a wide range of technical support.

### Component Exchange Program

Production goals will only be achieved if machines remain in operation. Minimizing machine downtime during planned and unplanned outages is critical to maintaining production goals. The Joy Global Component Exchange Program provides a ready supply of like-new, remanufactured components incorporating the latest design improvements, available from regional warehouses for same day or next day delivery.

### Technical and field services

We offer factory-trained service technicians and skilled tradesmen

to maintain and repair customers’ equipment 24/7, 365 days/year. These regional service teams are regularly trained and recertified to maintain high proficiency standards.

### Service center repair

Our unique direct service business model enables customers to deal directly with Joy Global service centers offering expedient turnaround time and high-quality service repairs based on OEM specifications. Each service center is staffed with experienced and well-trained technicians committed to delivering quality and reliability.

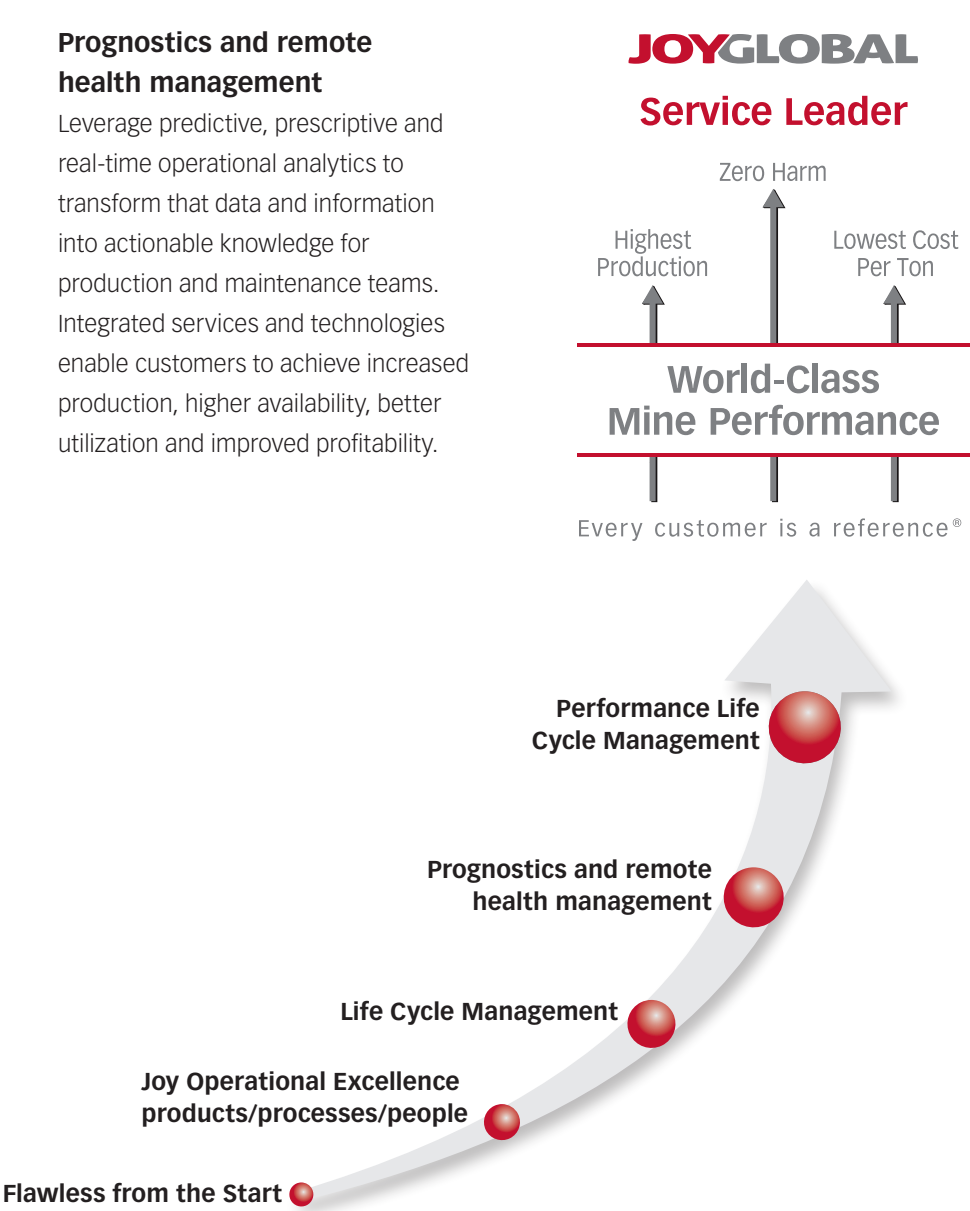


### Life Cycle Management

Through collaboration, operational excellence and integrated technology solutions, Joy Global partners with our customers to provide the asset management strategy needed to achieve desired results. Customers can select from LCM options that complement their support structure to reduce costly downtime, optimize equipment performance and take the uncertainty out of maintenance, repair and rebuild management.

### Prognostics and remote health management

Leverage predictive, prescriptive and real-time operational analytics to transform that data and information into actionable knowledge for production and maintenance teams. Integrated services and technologies enable customers to achieve increased production, higher availability, better utilization and improved profitability.



At Joy Global, we are proud to supply and support our P&H product line of exceptionally smart, rugged drilling rigs: easy to operate, easy to maintain, designed and built for exceptional performance value.

Contact your Joy Global service representative for more information on P&H drills or visit [www.joyglobal.com](http://www.joyglobal.com)





Joy Global worldwide locations

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