

KOMATSU

Blasthole drills





Harnessing the power of industrial technology to support a sustainable, prosperous future for all.

You move the minerals. We make the machines.

The essential minerals you produce power modern technology, facilitate community growth and move society forward. But these minerals are hard to find and tougher to mine.

Your customers trust you to deliver these resources, so you need an equipment, service and technology provider you can rely on to help keep your operation productive and efficient. Together we can focus on operating safely, productively and responsibly.

Comprehensive solutions

At Komatsu, we believe that safety, reliability and productivity are the cornerstones upon which you build your business. As your trusted partner, we're committed to helping you achieve these results.

Our values are built upon your most important goals

Safety

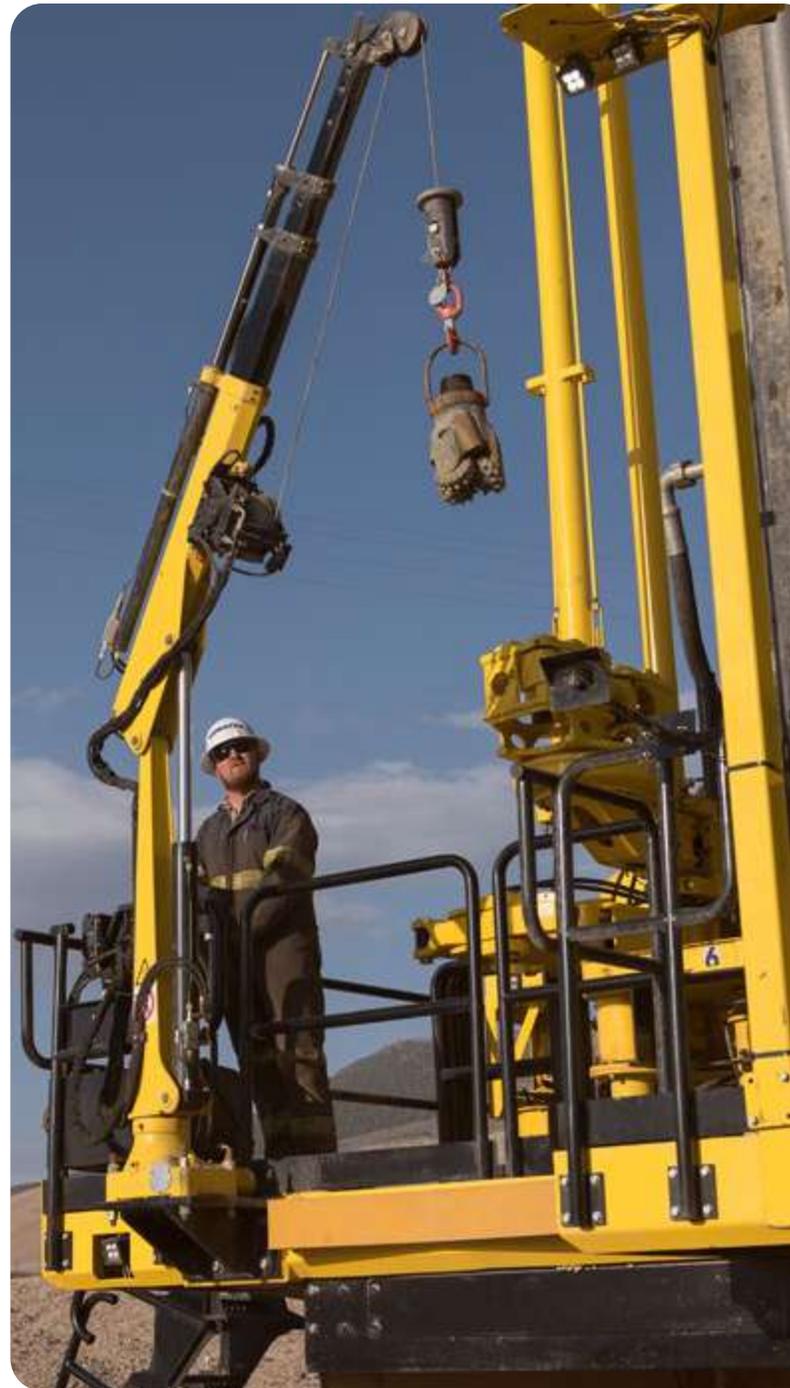
- Operator cab with clear, unobstructed view of drilling areas
- Low dB(A) audible noise footprint reduces occupational exposure
- Full windows, bright night-time illumination, and multiple video cameras provide maximum visibility in any condition
- Drills equipped with effective guarding, segregation and restraint, and accessibility protecting both Operations and Maintenance

Reliability

- 100-year history of producing durable equipment
- With one of the largest service footprints in the industry, we're there when you need us
- Effective in all extreme conditions including heat, cold, arctic, heavy dust, high elevation, poor visibility and weak power grids
- Robust chassis and structures enable reduced component wear, providing more uptime

Productivity

- Auto-bit carousel provides the ability to flex hole diameter quickly so operators can adapt the mine plan in less time
- Drill mast designed for high-cycle fatigue resistance, reducing downtime
- Fewer components exposed to wear, reducing maintenance and increasing uptime
- Our engine/compressor technology provides high penetration rates while optimizing fuel burn



Delivering customer-driven mining solutions to our partners throughout the world.

The reliability you need for the productivity you demand



Ready for the toughest conditions

It's easy to find machinery that will function well in ideal environments.

But you can count on P&H® and Komatsu drills to deliver consistent performance when working in the **toughest** rock conditions – **wherever** the mine is located.

Weak power grids

The electric 320XPC has a soft start transformer option that limits the impact of starting the drill on weak power grids by reducing the initial inrush current. This can reduce overall power infrastructure cost and increase the life of the main motor and compressor.

Extreme temperatures

Performing reliably throughout the globe, our drills protect the operator and equipment in temperatures over -40°F (-40°C). Both the ZR and ZT drills feature a best-in-class heat exchange unit to mitigate high thermal loads generated during operation, with the ZT44 able to handle temperatures up to 131°F (50°C).

High altitude

Committed to providing reliable drilling equipment for all your needs, we offer machines that have the power and air capacity to maximize productivity at altitudes as high as 15,000 ft (4572 m).

On the job with rotary and track drills

Rotary drills deliver results

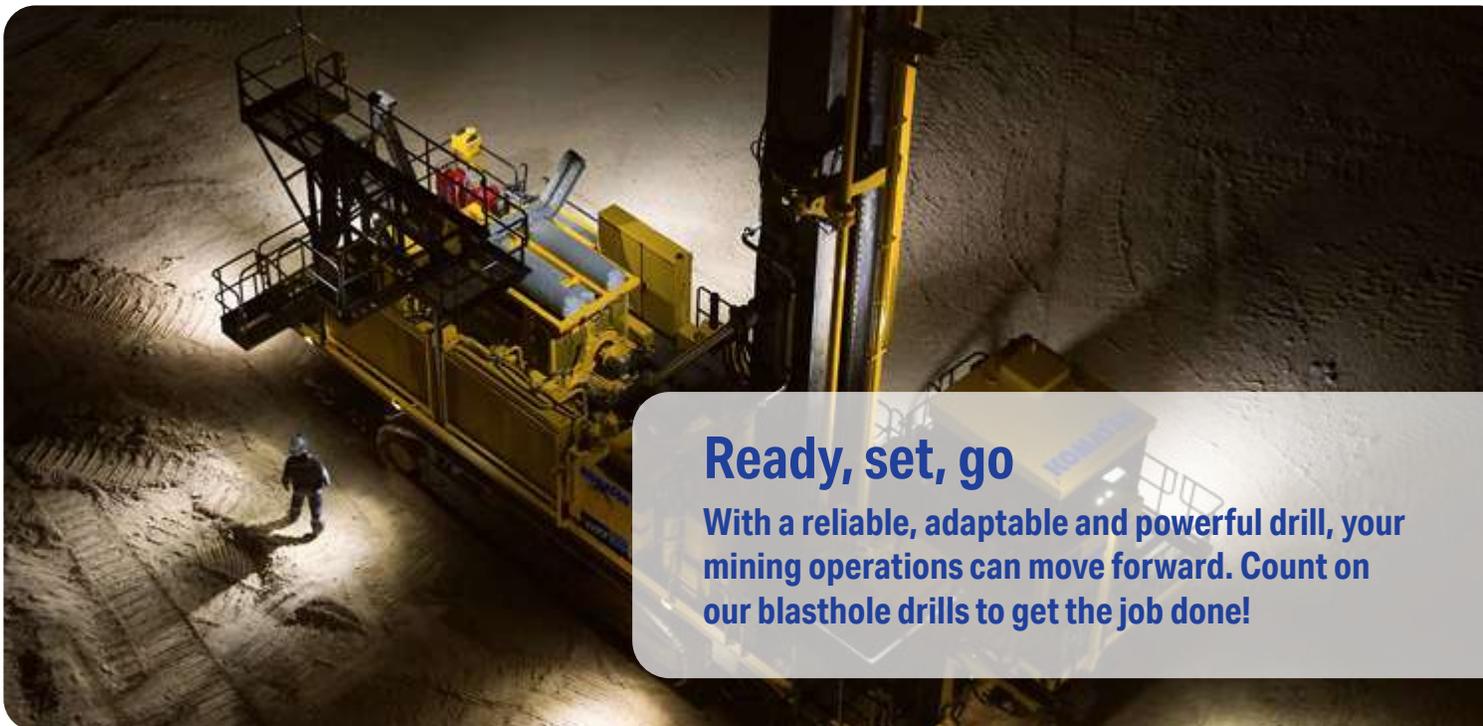
With a long history in platform-type drills, we continue to improve our drills to enhance your capabilities.

- Powerful rack and pinion pulldown
- Rugged structures
- Optimized air
- Superior propel
- High-pressure hammer drilling option

Track drills get the job done

Expanding our blasthole drills product line, these purpose-built contour drilling machines complement our rotary equipment so you're equipped for any surface drilling need.

- Increased horsepower
- High air capacity
- Higher torque
- Faster penetration rates



Ready, set, go

With a reliable, adaptable and powerful drill, your mining operations can move forward. Count on our blasthole drills to get the job done!

Versatile, robust solutions for all your mining applications

Model		Hole diameter	Single pass	Multi pass
ZT44		140 mm – 216 mm 5.5 in – 8.5 in	6.1 m plus drill string 20 ft	42.7 m/140 ft (Up to 4.5" pipe) 30.5 m /100 ft (Up to 5.5" pipe)
ZR77		200 mm – 270 mm 7 7/8 in – 10 5/8 in	16.8 m 55 ft	85 m 280 ft
ZR122		270 mm – 349 mm 10 5/8 in – 13 3/4 in	19.8 m 65 ft	85 m 280 ft
320XPC		270 mm – 444 mm 10 5/8 in – 17 1/2 in	19.8 m (standard) 65 ft 21.3 m (optional) 70 ft	39.6 m (single pipe rack) 130 ft 59.4 m (dual pipe rack) 195 ft



ZT44

Designed for mining applications and featuring dual engine and compressor control settings, this highly productive and reliable machine delivers versatility for production, pre-split and auxiliary uses.



ZR77

Featuring an innovative boxer style mast paired with a single rack and pinion pulldown system, this machine can be configured for rotary or DTH drilling, diesel or electric power, and single- or multi-pass drilling.



ZR122

With up to 122,000 lbs (55,338 kg) of bit loading, this machine can be configured for rotary or DTH drilling, diesel or electric power, and single- or multi-pass drilling. This drill is the workhorse for 12 1/4" (311 mm) hard rock drilling in the toughest mining applications.

Model

Drilling method

Power train

Technology

ZT44

DTH

Diesel

Semi-autonomous

ZR77

DTH
Rotary

Diesel
Electric

Fully autonomous
HPGPS geo fencing
Quadview camera system
Obstacle detection

ZR122

DTH
Rotary

Diesel
Electric

Fully autonomous
HPGPS geo fencing
Quadview camera system
Obstacle detection

320XPC

Rotary

Electric

Fully autonomous
HPGPS geo fencing
Quadview camera system
Obstacle detection



320XPC

Perfectly matched with P&H 4100XPC shovels, the 320XPC has been designed to handle the most complicated strata variability, delivering up to 150,000 lbs (68,038 kg) of bit loading and has operational longevity. It's the preferred choice for large diameter blasthole drilling in extremely difficult rock conditions.



Advanced technology improves safety and performance

The features you need

- High precision GPS geo fencing
- Pattern management
- Auto navigation
- Obstacle detection and collision mitigation
- Hole positioning
- Advanced auto drill

Stratification modeling

- With Komatsu stratification modeling, you can map out the material conditions using the energy effort index. This creates geological data information that can supplement decisions around blast planning.
- With Komatsu ProVision Machine Guidance stratification module, refine drill and blast processes to reduce explosives costs by more than 20%.

Digging deep with drilling tech



PreVail® and Komtrax® Health Management systems

Coverage by PreVail and Komtrax Health Management systems provides you with 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.

Powerful data with PreVail RHM

With this health management system installed on your P&H and Komatsu drills, you can quickly see:

- Benchmarking of key performance indicators to make performance gaps more visible and set in motion corrective measures to maximize productivity
- 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
- Operating practices analysis to allow for review and correction of operators not following best practices for optimal productivity

Smart tech and tele-remote capabilities

ZR Series onboard smart technologies, like auto-bit changing and auto-pipe handling, help lower operational costs and optimize machine performance.

The ZR Series Intelligent Compressor Control regulates air flow to manage chip settling velocity, reduce fuel consumption and extend drill string life, while delivering a constant, predictable, penetration rate.

Optional Tele-remote Operation: Compact portable console provides line-of-sight tele-remote operations from a distance of up to one mile using the same intuitive interface in the operator's cab. All drill control functions are available through the console.

Blasthole drills

Consumables for your Komatsu drill

In addition to our line of durable drills, we also have blasthole drill tools to support your demanding drilling needs. All of these blasthole tools are designed to provide top performance and superior overall value.

These tools contribute to reduced rig maintenance, lower operating costs and increased productivity.

Blasthole drill steel



- Tool joints fabricated from alloy steel
- Wrench slots are milled to suit needs
- Integral drill steel is forged from premium alloy

Stabilizers



- Better penetration rates
- Increased life
- Lower overall operating costs

Swivel mount shock sub



- Increased penetration rate
- Longer life
- Reduced noise levels
- Lower drill maintenance costs

Committed to your goals

You, our customers, are always top of mind in everything we do. Whether we're designing equipment, manufacturing machines or producing top-quality consumables, our goal is to make your job safer, easier and more productive.

Makeup/ break-out tool



- Quick and easy dismantling and assembly of drill string
- Portable to service all drills at mining site

Topsup and Bitsub



- Topsub serves as adapter between drill pipes and shocksub; protects threads against wear and damage
- Bitsub is integral, providing a crossover connection to provide superior wear protection and long life

Equipping the world to empower a sustainable future together

Although we've been historically known for our superior equipment, we also provide comprehensive service solutions and fleet management technology.

Committed to enhancing your entire ownership experience, we leverage the intelligence of big data to deliver actionable insights and provide the technology needed to make sure you have the service, tech tools and parts you need to reduce downtime

Komatsu: Leading the way >FORWARD

Tomorrow's mining will demand ever-evolving technology in order to lower costs, raise productivity and drive zero harm. With virtual work sites throughout the world, we're able to develop and deploy the right technology at the right time.

We are Komatsu. We are your global partner.



Ready to convert?

Contact your Komatsu Mining service rep or visit komatsu.com for more information on converting to a Komatsu drilling solution.

Product designs, specifications and/or data in this document are provided for informational purposes only and are not warranties of any kind. Product designs and/or specifications may be changed at any time without notice. The only warranties that apply to sales of products and services are Komatsu's standard written warranties, which will be furnished upon request.

Komatsu and other trademarks and service marks used herein are the property of Komatsu Ltd., Komatsu America Corp., Komatsu Mining Corp., or one of their affiliates, or the respective owners or licensees.

KOMATSU

[komatsu.com](https://www.komatsu.com)

