

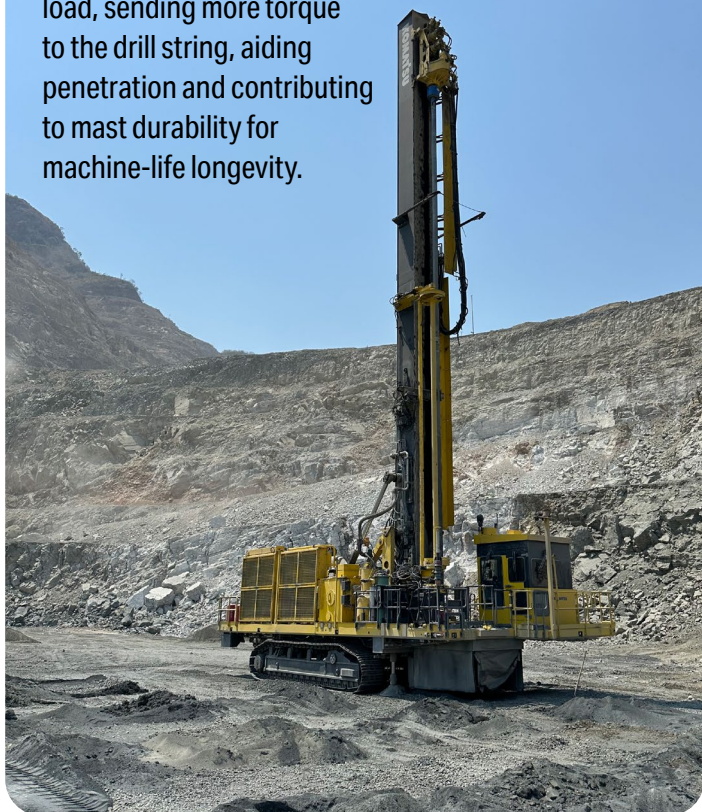


ZR series: Consistent drilling starts with a boxer mast and rack-and-pinion power

In mining, drilling reliability and efficiency are everything — every hole counts, and every hour saved adds up. That's why Komatsu engineered the ZR series drills with two core innovations: a rugged boxer-style mast and a low-maintenance rack-and-pinion pulldown system. Built to help minimize downtime, streamline cycles and support daily targets, the ZR series aims to keep your drill turning and your operation moving, shift after shift.

Why torsional stiffness matters:

Resists twisting under load, sending more torque to the drill string, aiding penetration and contributing to mast durability for machine-life longevity.



Boxer-style mast: Structural strength, simplified service

The ZR series features a distinctive boxer-style mast designed for strength, accessibility and durability. High torsional stiffness effectively transmits rotary torque to the drill string, helping minimize structural fatigue and promote straighter holes. Straightforward plate weld joints eliminate stress risers common in lattice-style designs, and the open mast structure provides clear access to carriage and pipe carousel components. This simplifies maintenance by limiting technician time in confined spaces.

The boxer-style mast is designed to help:

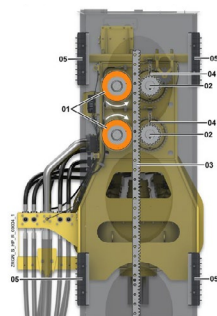
- Transmit rotary torque efficiently with increased torsional stiffness
- Mitigate the risk of structural cracking through robust design
- Enable live tower mast raises to support fast cycle times
- Simplify maintenance with open, accessible components
- Withstand harsh mining duty cycles with rugged construction

Want fewer service delays and more productive shifts?

Discover how the ZR's pulldown system delivers reliable force where it counts — at the hole.

Rack-and-pinion power: The driving force behind ZR series drilling efficiency

Downtime is costly — especially when underperforming systems slow drilling or stall operations. The ZR series' rack-and-pinion carriage drive is designed to deliver strong, consistent force and speed in both pulldown and retract. With no chains, cables or hydraulic cylinders, it transmits drive force directly to the drill string — helping control weight on the bit and directing critical loads to components built to handle them. Heat-treated gearing promotes durability, and the simplified design helps streamline maintenance and limit service interruptions.



01 - backup rollers
02 - pulldown pinions
03 - rack segment
04 - open gear lubricant pinion brushes
05 - carriage slide assemblies



Delivers direct
pulldown force
— critical for
drilling in
hard rock



The rack-and-pinion carriage drive is designed to help:

- Deliver consistent pulldown and retract force in tough conditions
- Extend drilling time with reliable, controllable performance
- Reduce downtime with durable, purpose-built components
- Eliminate cable and chain maintenance
- Simplify service with accessible design
- Promote longer consumable life through precise force control

Ready to reduce downtime and drill with confidence?

Talk to your Komatsu representative to see how the ZR series can help optimize your mine's drilling performance.

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. or its subsidiaries, or the respective owners or licensees.

KOMATSU

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

