

## **THUNDERBOLT™** ORBIT LIVE SHAFT

The **THUNDERBOLT ORBIT™** is a revolutionary solution for gyratory and cone crusher head nut change outs. The system consists of a high-strength torque arm that receives consistent high-velocity blows from the THUNDERBOLT Recoilless Hammer, to deal with head nuts swiftly and easily. Most importantly, the ORBIT eliminates hazardous, time-consuming and physically demanding methods that rely on manual slugging, unfit-for-purpose tools and field welding. It represents the crusher industry's fastest and safest method for mainshaft maintenance.



The toughest maintenance tasks demand capable technologies that handle the conditions safely. The ORBIT is a clever combination of the industry's most powerful, proven and reliable THUNDERBOLT Recoilless Hammer and a purpose-built crusher head nut torquing technology. It delivers a step-change to the way operations change-out crusher head nuts – with vastly improved speed and safety.

**Tarnya McBurney**  
Global Product Portfolio Manager,  
RUSSELL MINERAL EQUIPMENT



### **BENEFITS**

- Reduces crusher downtime and improves reliability.
- Eliminates hazards, protects personnel, improves HSE compliance.
- Safeguards plant and equipment asset integrity.
- Expands THUNDERBOLT Recoilless Hammer utilisation.
- Optimises maintenance resources and costs.
- Frees up personnel for other critical-path tasks.
- Improves operational efficiency and safety.
- Higher crusher availability and throughput.

**RME is the world's leading Original Equipment Manufacturer (OEM) of mill relining systems.**



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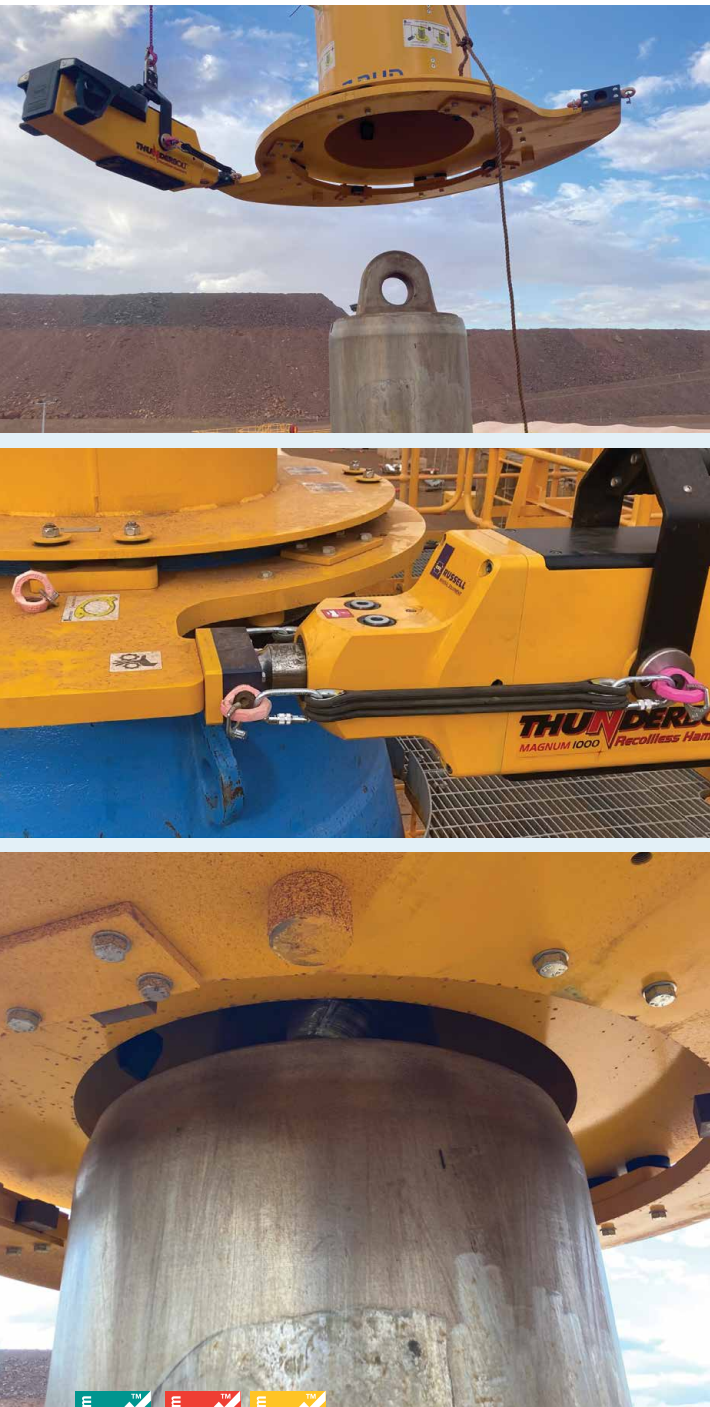
**1300+**

THUNDERBOLT  
Recoilless Hammers  
sold



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**PRODUCT BRIEF** PB  
**THUNDERBOLT ORBIT**



## FEATURES

- Integrated, all-in-one solution for gyratory and cone crusher head nut change-outs.
- High-strength torque arm ensures secure grip and even force distribution to all faces of the nut for significantly safer and faster loosening and tensioning.
- Lashing points for secure transport and crane lifting lugs as-standard for easy onsite portability.
- Purpose-built to work with the high-performance THUNDERBOLT Recoilless Hammer range – a proven technology with over 40 years of reliability in fast, safe grinding mill liner change-outs.
- 360-degrees suspension arm for optimal reach and easy THUNDERBOLT Hammer repositioning.
- Configurable counterweight balancers for different THUNDERBOLT Hammer models.
- Moil-locating socket for safe, optimised THUNDERBOLT Hammer firing alignment.
- Share THUNDERBOLT Hammers across grinding mills and crushers for increased asset utilisation.
- Optional transport frame with forklift tyne pockets.



## APPLICATIONS

- Custom-engineered and quality manufactured for precise fit and optimal performance for your crusher application.
- Site trials and commercial use have demonstrated significant reductions in gyratory and cone crusher head nut change-out time. For example, in one case, the average change-out time for a FIXED shaft crusher, was reduced from three to four (3-4) hours to around 15-20 minutes. For LIVE shaft crushers, change-out time was reduced from a full 12-hour shift to around one (1) hour.
- Available as an all-in-one solution. The ORBIT torque arm is also available as an add-on unit for existing THUNDERBOLT Recoilless Hammer users.



## LEARN MORE



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## WE ARE RME



RME was born 40 years ago with a strong resolve to address our Customers' challenges. Since then, the RME Mill Relining System has quartered our Customers' time-to-reline and eradicated a great many safety issues. This same pursuit continues to drive the development of RME INSIDEOUT Technology which aims to eliminate fatal risk by enabling relining from outside the mill.

**Cheryllyn Russell**

Non-Executive Director, RUSSELL MINERAL EQUIPMENT