



IN FULL SWING

KEEPING MINES MOVING

For over six decades, L&H Industrial has been solving critical machine challenges for mines worldwide. With deep expertise in swing systems for electric rope shovels, we know that when this assembly fails, production halts, something no mine can afford. That's why we've engineered the most reliable, high-performance swing system solutions.

With precision components, cutting-edge engineering, and field-tested upgrades, L&H swing systems extend machine life, boost durability, and minimize downtime. Our solutions are built to meet mining's toughest demands, enhanced with features that help ensure maximum uptime and efficiency.

That's the power of true innovation: keeping your machines running, your production moving, and your operation...

IN FULL SWING

L&H INDUSTRIAL





MINING NEVER STOPS, AND NEITHER DO WE



DESIGN & ENGINEERING

Our engineers aren't just skilled, they're hands-on industry experts in electric rope shovels and swing systems. We know exactly how these systems operate and, more importantly, why they fail.

With this expertise, we've developed groundbreaking innovations that redefine reliability and extend equipment life. By integrating advanced geometry with cutting-edge metallurgy, our swing systems are built to endure the world's harshest conditions, lasting longer, performing better, and minimizing downtime to keep your operation running at peak efficiency, shift after shift.



MANUFACTURING & REPAIR

At L&H Industrial, "good enough" is never good enough. Our manufacturing and repair services set the gold standard in swing system quality, precision, and durability. Behind every component we produce is a powerful combination of cutting-edge machining technology and the industry's most skilled craftsmen, experts who demand perfection in every cut, weld, and finish.

Ensuring that every swing system leaving our shop is built to exceed standards. Our swing systems don't just fit, they outperform, last longer, and redefine reliability in the most demanding mining environments, because nothing less will do.



MONITORING & CONTROLS

Downtime isn't an option, and guessing on maintenance is a risk no operation can afford. That's why L&H developed advanced monitoring and control solutions, providing real-time visibility into the health of your swing system, so you can prevent failures before they happen.

By combining predictive analytics, sensors, and smart diagnostics, our technology delivers actionable insights into wear patterns, performance, and failure risks. The result? Smarter maintenance, fewer breakdowns, and maximum uptime. With swing systems in extreme environments, precision monitoring isn't a luxury, it's a necessity.



FIELD SERVICES

Installing and servicing your swing system requires precision and efficiency. Our field service teams use advanced portable machining tools, custom shovel lift systems, and expert alignment technology to tackle the most complex on-site work, wherever your operation is.

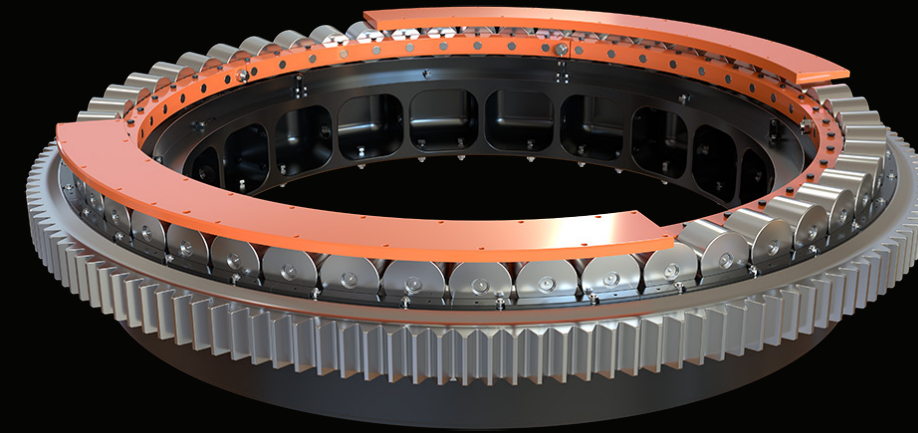
From new swing system installations and shovel undecking, to component replacements and in-place machining, we bring shop-level precision to you.

Our expert technicians work safely and efficiently with unmatched skill. When failure isn't an option, trust the team that delivers on time, on site, with total precision.



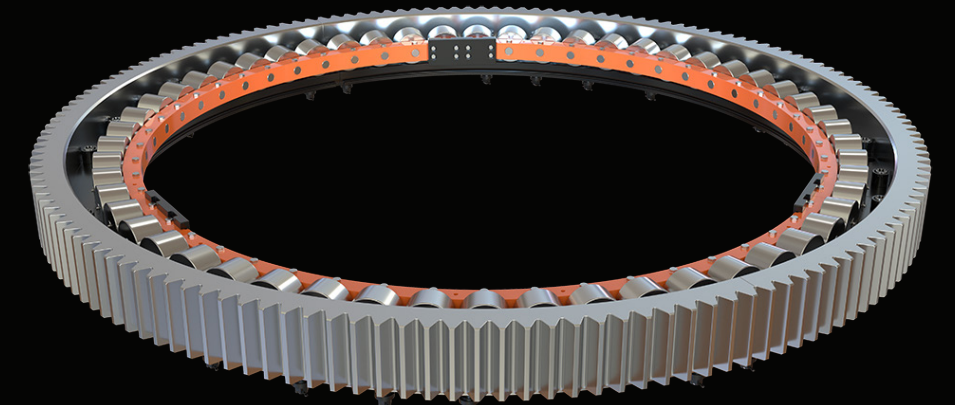
WE SEE CHALLENGES AS OPPORTUNITIES TO INNOVATE

We don't simply replace swing systems, we redefine them. Our expertise lies in recognizing areas within OEM designs that present opportunities for improvement and collaborating closely with customers to address these challenges. By combining precision engineering with a deep understanding of mining equipment, we craft solutions that surpass conventional replacements, offering unparalleled durability, performance, and reliability. Through a proactive, problem-solving approach, we assess failure points, listen to customer needs, and engineer innovations that set new standards for swing system performance.



CATERPILLAR/BUCYRUS SWING SYSTEMS

- **Swing Pedestals** – Designed for extreme-duty mining and available new or through L&H's industry-first exchange program
- **Bolt-On or Integral Swing Gears** – Engineered from seamless rolled ring forgings, available in single-piece or two-piece designs for simplified maintenance
- **Upgraded Roller Assemblies** – Featuring a cageless design that eliminates frequent adjustments and reduces hardware failures
- **Enhanced Upper and Lower Rail Systems** – Thickened cross-sections provide increased stiffness and reliability
- **Thrust (3rd) Rail Geometry Upgrade** – Enhanced rail and gear profiles increase thrust surface area and structural support to reduce deflection and improve system performance



KOMATSU/P&H SWING SYSTEMS

- **3rd Rail Thrust System Upgrade** – Makes the thrust surface replaceable to extend overall system service life. Also improves roller containment and increases thrust surface area to reduce wear rates
- **Extended-Height Rail Segments** – Increase revolving frame stiffness by over 45% to improve roller load sharing, enhance performance, and reduce the need for structural repairs
- **Field-Optimized Swing Gear Fitment** – Ensures precise gear alignment, reducing vibration and premature wear

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**WE DON'T FOLLOW INDUSTRY STANDARDS,
WE DESIGN AND BUILD BEYOND THEM. AT
L&H, INNOVATION IS HOW WE LEAD, AND
PROVEN SOLUTIONS ARE HOW WE DELIVER.**

Mike Wandler
President and CEO / L&H Industrial

FASTER, STRONGER, SMARTER

We've spent decades perfecting heavy equipment manufacturing, with a focus on precision, efficiency, and durability. Our materials are sourced in North America, ensuring quality and supply chain reliability. Combined with our state-of-the-art Vertical Turning Lathe (VTL), one of the largest in North America, and deep expertise in swing system engineering, we deliver high-performance solutions with faster lead times and exceptional quality.

Swing systems face two major industry challenges: quality and lead time. Delays and inconsistencies can cost mines millions in downtime. Through advanced machining technology and optimized production processes, L&H Industrial delivers top-quality swing system components faster than ever, optimizing uptime and efficiency.

IN HOUSE CAPABILITIES

- VTL handles up to 250 tons (500,000 lbs) and 12.8 meters (41'6") in diameter with extreme accuracy
- AGMA Q12+ delivers precision grinding for swing gears, ensuring perfect fit and maximum lifespan
- Live tooling capabilities for milling, drilling, and tapping, reducing the need for secondary machining
- 100% in-house gear manufacturing, eliminating outsourcing delays and guaranteeing quality

BIG IN SCALE, BIGGER IN IMPACT





MOBILE MUSCLE FOR MASSIVE MACHINES

We show up where others tap out. When the biggest machines in mining go down, our field crews go in. We don't wait for perfect conditions. No matter how remote, complex, or critical, we handle the toughest shovel repairs in the harshest places.

› Machining where others can't

We bring precision machining to the field—fast. From line boring to drilling, our portable bars cover 1.25" to 6", our gantry mills up to 19 feet in one setup, and our cordless digital radius mill delivers real-time accuracy anywhere.

› Better installs begin with better insights

From teardowns to installs and relocations, we do the heavy work with precision and zero margin for error. Every bore aligned. Every move calculated. Our audits catch issues early, boosting uptime, performance, and safety.

› Welding that withstands work

Our certified technicians bring deep experience and advanced automation to the field, delivering fast, precise repairs that hold up in the toughest conditions, from structural fixes to critical component rebuilds.

› Raising the bar, not the risk

Our proprietary 1,528-ton jacking system lifts the entire shovel; boom, stick, and dipper, allowing crews to work safely from the ground without scaffolding or suspended loads. We undeck faster, smarter, and safer.



**BUILT
WITH
INSIGHT,
TESTED
IN
REALITY**





L&H INDUSTRIAL