WEIR

ESCO

Nemisys® Cast Lip Systems

For Mining Excavators, Face Shovels and Dragline Buckets

Lower your cost per ton with the Nemisys® system

Proven and efficient

With over 750 installations worldwide, ESCO Nemisys lip and G.E.T. system is field proven to lower operating cost per ton.

Increased machine availability

- Superior alloys and optimized system profile result in longer-lasting components
- Simple, intuitive locks provide safer, faster parts replacement
- Reliability and wear life unmatched in the industry keeps machines operating with minimal downtime

Lower maintenance costs

- Proprietary alloy, increased lip protection and large bearing areas extend operating intervals
- Longer lasting and more reliable G.E.T. reduces planned and unplanned service events
- Quick and easy parts replacements by fewer crew members, with no hot-work required

Lower total parts expense

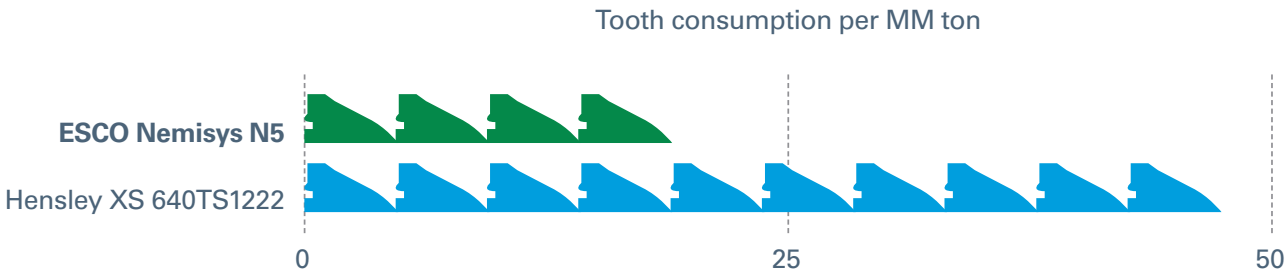
- Longer lasting and more reliable G.E.T. results in fewer parts purchased versus competitors
- Fewer parts purchased reduces mine site inventory to ship, stock and manage

“Annual cost savings of $1.1m USD justified converting our entire fleet to the Nemisys system.”

– Iron Ore Mine, Africa

Case study: G.E.T production performance

Based on over 21M metric tons of production data by a PC5500 Hydraulic Face Shovel at a major Copper Mine, Brazil



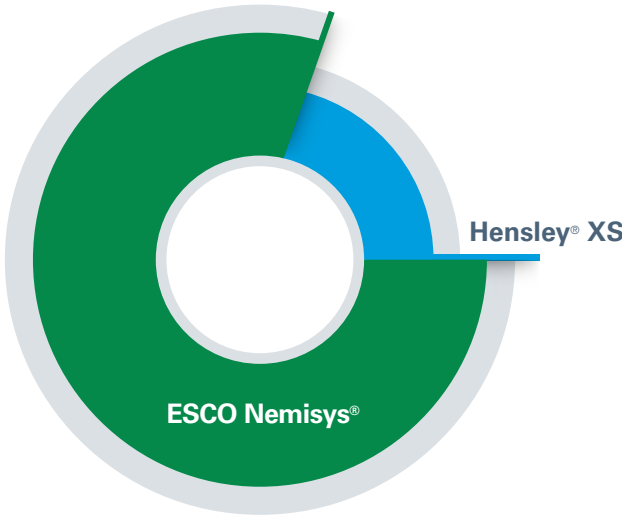
Tooth consumption

Hensley XS 640TS1222

- 44 teeth per MM ton
- 3 unplanned stoppages for G.E.T. failure every MM ton

ESCO Nemisys N5

- 17 teeth per MM ton
- Zero unplanned stoppages for G.E.T.



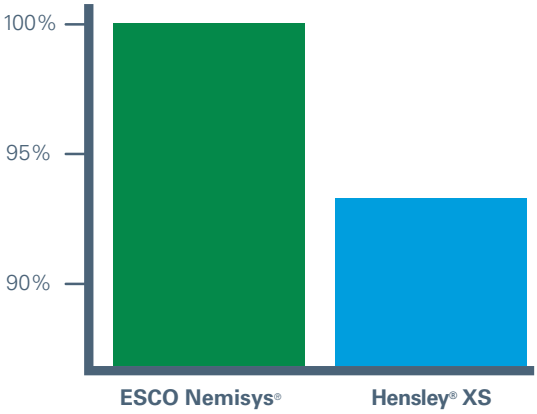
Machine availability

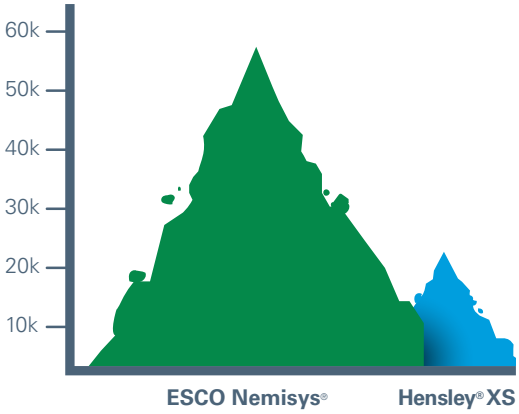
ESCO Nemisys system

- 1.0M metric tons produced per hour of required maintenance

Hensley XS system

- 0.22M metric tons produced per hour of required maintenance





Reliability

ESCO Nemisys system

- Zero G.E.T. losses per 1M metric tons produced

Hensley XS system

- Three G.E.T. losses per 1M metric tons produced

Tons moved

ESCO Nemisys system

- Average tons moved per G.E.T. component: 57,388 metric tons

Hensley XS system

- Average tons moved per G.E.T. component: 22,527 metric tons

Data confirms ESCO provides exceptional savings per each million metric tons of production:

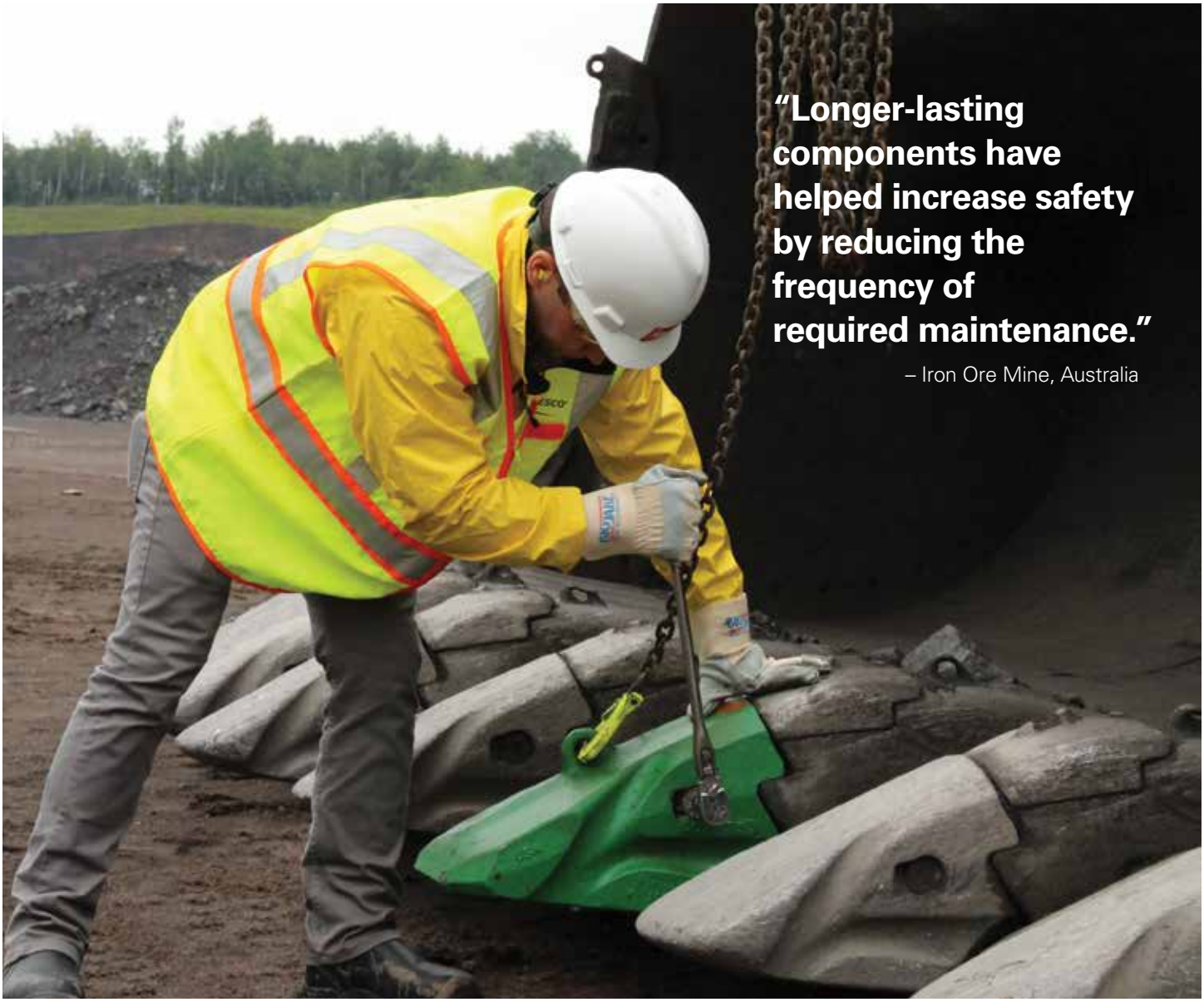
- 155% more tons moved per tooth
- 66% fewer parts consumed
- 56% reduction in G.E.T. expense
- 77% less G.E.T.- related downtime
- 100% elimination of shutdowns due to G.E.T. loss

Data contained in this document is based on actual field performance at a Brazilian copper mine and is for comparison purposes only and does not constitute a guarantee. Installation, operating conditions, wear and tear and maintenance are factors outside the control of ESCO and will affect product performance. Hensley is a registered trademark of its respective company and is not affiliated in any way with ESCO Group LLC.

Increase site safety with the Nemisys® system

Engineered to reduce exposure to injury

- Keep your crew away from crusher maintenance through superior locking systems that keep teeth and shrouds on the lip
- Safer installation and removal with Integrated pry points and compatibility with the ESCO SecureLift™ system
- Longer lasting alloy for fewer parts replacements and less exposure for maintenance personnel.
- Faster and easier replacement: all teeth and adapters feature the same fully hammerless lock that use standard hand tools



Over 750 installations worldwide

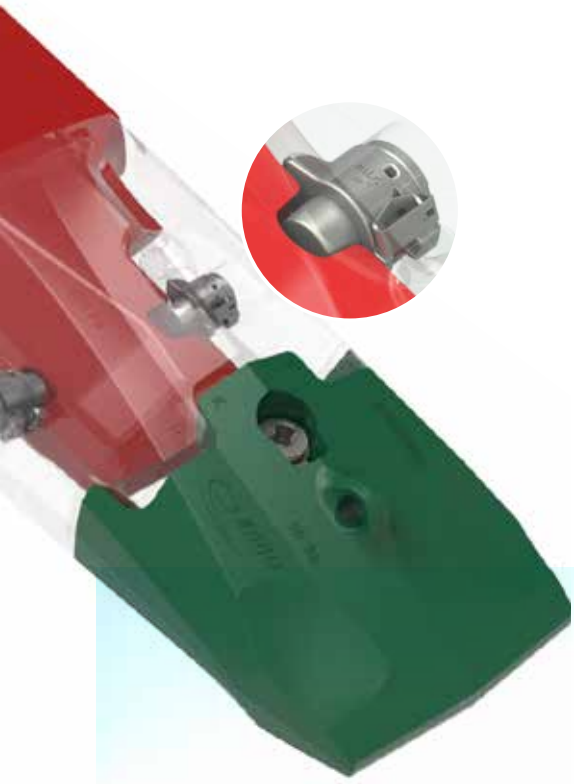
The Nemisys lip system is helping mines across the globe increase productivity and lower their cost per ton through best-in-class tooth and shroud retention, faster and safer replacement and improved lip coverage. As confirmation of its value and reliability, over 2 out of every 3 users of the Nemisys system have already elected to install Nemisys products on additional machines at their site.

We realized an 80% increase in service life and impressively low throw away metal with Nemisys.

– Iron Ore Mine, Brazil

Longer-lasting, more reliable

The Nemisys® system features a reliable integral locking system, proprietary alloy, and streamlined geometry – working in tandem to lower your cost per ton by reducing G.E.T. - related downtime and extending the life of your bucket.



ESCO SecureLift™ system for safer removal.

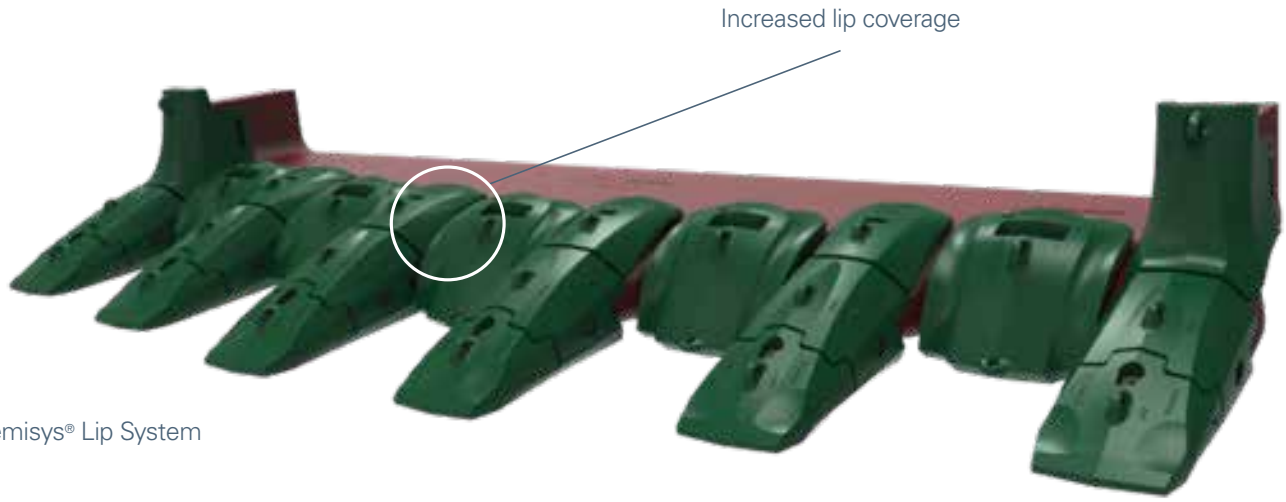
"We're moving over 400,000 more tonnes between tooth changes using Nemisys."

– Coal Mine, Australia

Increased lip protection and productivity

Fewer lip rebuilds and lower maintenance costs

The shrouds and adapters are engineered to protect more of the Nemisys lip leading edge, extending the service life between lip rebuilds by up to 70%. Improved wear metal placement increases shroud life by up to 30%. The contoured profile promotes material flow for more efficient loading to reduce cycle times and increase production.

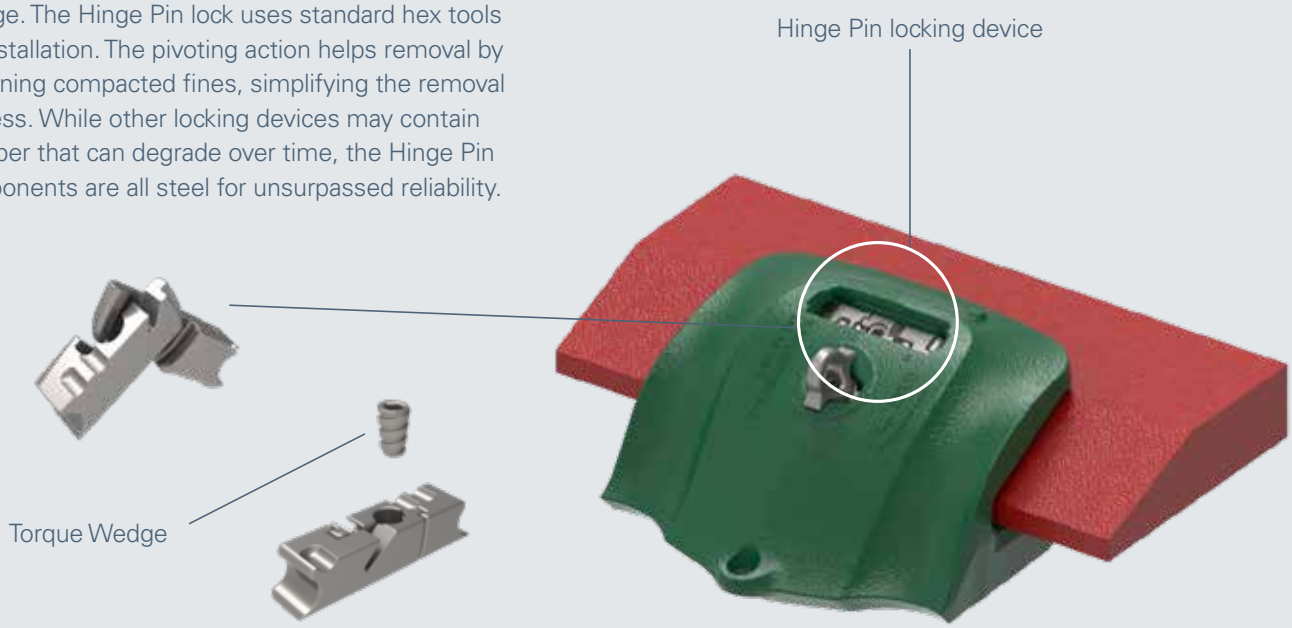


Nemisys® Lip System

The ESCO Hinge Pin hammerless locking system

Easy to use and extremely reliable

The Nemisys lip shrouds are held in place with the ESCO Hinge Pin featuring the unique Torque Wedge. The Hinge Pin lock uses standard hex tools for installation. The pivoting action helps removal by loosening compacted fines, simplifying the removal process. While other locking devices may contain a rubber that can degrade over time, the Hinge Pin components are all steel for unsurpassed reliability.



Pick the best tool for the job

The Nemisys® system is available with a wide range of tooth shapes, adapter types and shroud duty classes to match your digging conditions.

"R" Rock

"SW" Standard Wear Cap

"S" Standard

"DG" Dragline

"V" V-Bit

"LS" Single piece

Standard, XHD and wear-cap adapters

Standard and XHD shrouds

Sizing guide

The Nemisys system is available in five sizes to better match machine break out force.

Machine Class for Nemisys System								
MACHINE CONFIGURATION	350 TON		500 TON		600 TON		800 TON	
	Std-Duty	XHD	Std-Duty	XHD	Std-Duty	XHD	Std-Duty	XHD
Mining Hoe	N95	N1	N3	N5	N3	N5	N5	N7
Face Shovel	N95	N1	N3	N5	N5	N5	N5	N7

Note: The table above provides conservative nose sizing guidance based on all global mining applications. Please consult with your ESCO representative to ensure the Nemisys product is correctly applied to your application.

“Excellent for maintaining sharpness as they wear.”

– Coal Mine, North America

ESCO Group LLC – A Weir Group Division
2141 NW 25th Ave,
Portland, OR 97210
USA

www.esco.weir

P3025MIN-ENG-L0520