

WEIR



ESCO[®]
A Weir Group Division

CONSTRUCTION PRODUCTS

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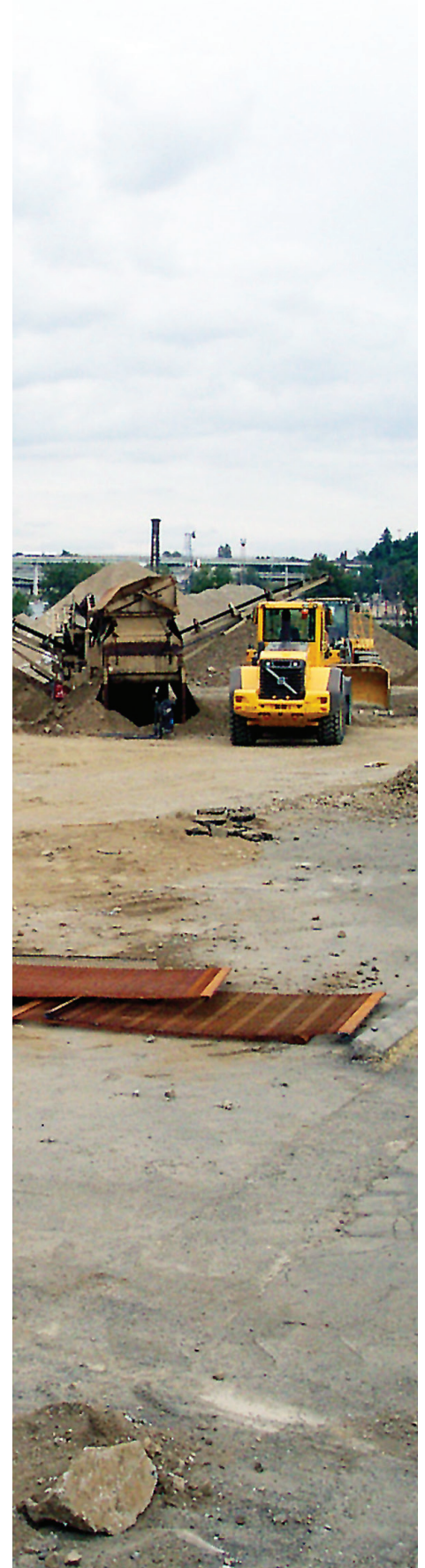
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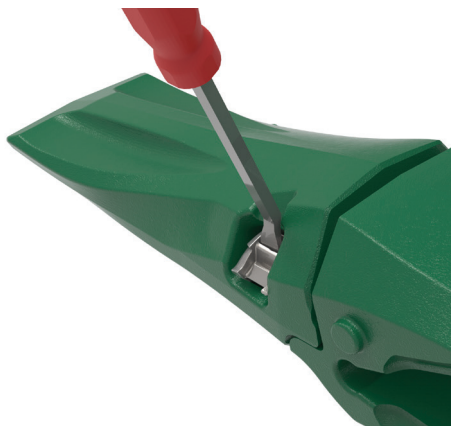
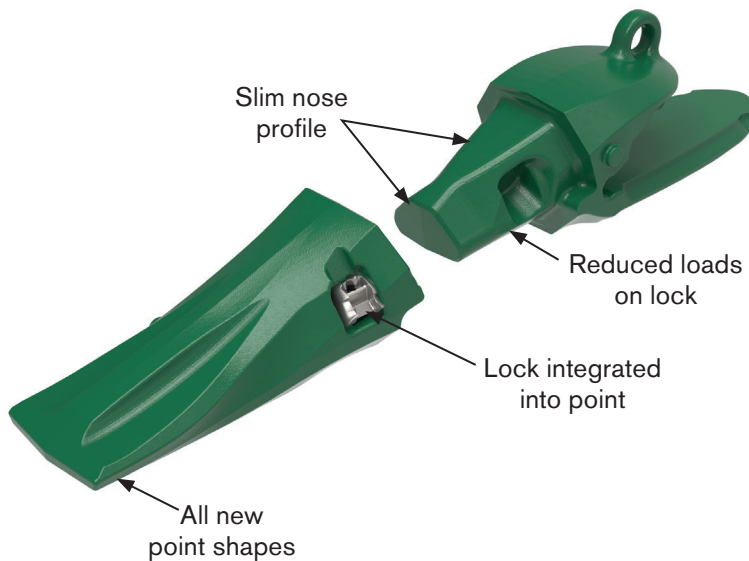
Ultralok® Tooth System



ESCO is the leader in innovation and performance for wearparts in the earthmoving industry. Keeping with that tradition, ESCO is excited to introduce the latest breakthrough in construction tooth systems — the Ultralok tooth system.

Ultralok product is an innovative and cost-efficient tooth system that answers customers' needs in any machine application. The revolutionary integrated

locking device makes the Ultralok system two pieces — unlike the traditional three piece tooth systems of the past. The Ultralok system is truly a hammerless system, not simply a hammerless locking device. Safety is increased, inventory is reduced and field replacement is simplified.



A pry-in lock is standard for general purpose and most heavy duty applications.



A bolt-in lock is optional for heavy duty and extreme duty applications.

Benefits and Features

Improved digging performance

- Better penetration than the competitors through:
 - Lower nose height
 - Smooth point to adapter transition
 - Unique triangular nose shape
 - All new streamlined point shapes

Easier to use

- Lock integrated into the point
 - Reduced customer inventory items
 - No selecting the wrong sized lock
 - No losing the lock in the field
- One simple tool operates the system – a pry bar
 - Locks point to adapter
 - Unlocks point from adapter
 - Aids in point removal from adapter
- Convenient lock access for operator

Increased safety

- Completely hammerless system
 - No hammer needed to lock point to adapter
 - No hammer needed to unlock point from adapter
 - No hammer needed to aid in point removal from adapter
- No hammer means reduced chance of injury

Ultralok® Tooth System

Standard Point Shapes*

S – The standard point, an excellent choice for excavators and wheel loaders in general purpose applications. Designed to wear sharp for penetration, and features a center rib for greater strength.

C – A chisel point primarily for use on excavators. The design provides good penetration and extra wear metal in tough applications. The heavy-duty rib and unique tear-drop relief in the bottom keeps the point sharp throughout its wear life.

P – A pick point for extremely hard to penetrate materials, and is primarily designed for excavators but can be used on wheel loaders. Top and bottom ribs provide strength and ensures the point stays sharp.

T – A twin pick point for maximum performance in hard to penetrate materials. The unique configuration minimizes the chance of rocks wedging between the tines; and is designed for use in the corner positions in conjunction with P style points to cut clearance for the buckets sides. The corner teeth can be switched to maximize wear life.

F – A flared point for general purpose digging and continuous edge applications – an excellent choice for trench bottoms and foundation excavations. The wide blade maximizes bucket capacity.

H – A heavy point for extremely abrasive applications and is primarily designed for excavators. Additional wear metal provides long point life. The heavy-duty rib and unique tear-drop relief in the bottom help to maintain sharpness as the point wears.

AP – A heavy-duty penetration point for wheel loaders with added wear metal for highly abrasive applications. The beveled tip design ensures sharpness, and the top center rib helps maintain the sharpness. An integral bottom wear shoe provides long life.

A – Designed for optimum wear on wheel loaders working in extreme abrasion applications. The beveled tip and top contoured panel ensures excellent bucket loading. The full length bottom wear shoe provides maximum wear life and ensures a smooth floor to minimize the chance of tire damage.

Quality You Can Rely On

ESCO Corporation will replace at no charge any Ultralok point or adapter that breaks, FOB point of manufacture, due to defects in materials or workmanship, providing it is not worn out and 100% ESCO components have been used in the assembly.



*Additional point shapes are available in select sizes.

Super V® Tooth System



ESCO introduced the Super V tooth system in the early 1990's and it fast became the industry standard. Today the Super V system's strength, slim digging profile, tight fitting points, and long wearing adapters still make the system an industry leader. Super V reusable locking pins, and long wearing point shapes for every application still provide maximum performance to users in all applications.

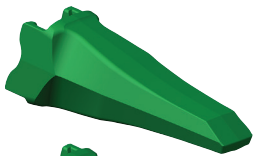
Point Shapes for Excavators



SYL – The standard offering for excavators. The design wears sharp for excellent penetration, has top and bottom ribs for strength, and plenty of wear metal.



RYL – Designed for use in high impact rock applications or as an alternative when impact is causing breakage in longer style points.



SDX – A chisel shape design that delivers very good penetration, and has increased strength and wear metal.



SHV – A heavy-duty centerline point for very abrasive applications when more wear metal is required.



VY (VYH) – Provides maximum penetration in applications such as frost or shale. It has improved wear life over other pick shaped designs. A heavier version VYH style point is also available.



TVY (TVYH) – A twin pick design with excellent penetration. It is designed to be used in corner positions in conjunction with the VY design to cut clearance for bucket sides. A heavier version TVYH style point is also available.



FLARED – For general purpose clean-up. An excellent choice for trench bottoms and foundation excavations.



TYLCE – The non-twist design is for welding plate steel across the points for easy installation and removal as a continuous edge used for grading, or when flat bottom trenching or a flush cut is desired.



Super V® Tooth System

Point Shapes for Wheel Loaders



TYL – Designed for a flush cut in general purpose applications. The design is ideal to replace the CAT® long point.



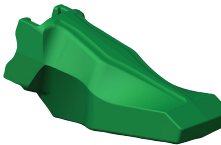
AD – For highly abrasive applications where extra penetration is needed. An excellent choice for quarry applications.



ADH – Designed specifically for use on the ESCO Loadmaster® Quarry lip. The extended wear shoe ensures a smooth quarry floor to protect tires, and offers excellent wear life (available in V43 size only).



AR – For highly abrasive applications, and offers the maximum amount of wear metal for long wear life and high economic value.



ARH – A special design for hot slag operations. It features a massive wear shoe, thicker ears and a heavier box section to stand up to the most punishing conditions. It can also be used in any application where the most wear metal is needed.



TYLCE – The non-twist design for welding plate steel across the points for easy installation and removal as a continuous edge used for grading, or when flat bottom trenching or a flush cut is desired.



Quality You Can Rely On

ESCO Corporation will replace at no charge any SUPER V point or adapter that breaks, FOB point of manufacture, due to defects in materials or workmanship, providing it is not worn out and 100% ESCO components have been used in the assembly.





MaxDRP™ Replacement Teeth

ESCO offers a comprehensive package of Caterpillar style direct replacement teeth; and a select offering of Komatsu and Volvo style direct replacement teeth.

MaxDRP replacement teeth are cast in superior ESCO alloys with advanced manufacturing techniques. With enhanced features and point shapes, the result is more customer value with exceptional wear and performance over conventional offerings.

Features and Benefits

Increased Strength and Penetration

- Reinforced box section
- Ribbed bit
- Self-sharpening
- Contoured tips

Greater Reliability and Value

- Superior ESCO alloys
- Increased pin protection
- Built-in wear indicator

MaxDRP Ripper Points

ESCO MaxDRP ripper points are designed as a direct replacement for the Caterpillar style side-pin ripper system. MaxDRP ripper points offer value-added performance with more metal in the bit section, a point that stays sharp and less throw-away metal.

- More wear metal for maximum life
- Excellent strength for improved reliability
- Optimal penetration for increased productivity



MaxDRP™ Replacement Tooth Offering

Excavator Replacement Teeth



STE - Top choice for applications that require maximum abrasion resistance while providing good penetration.



CPE - Ideal for tough applications that require optimal penetration with an excellent balance of wear metal.



SPE/TPE - Pick points for frost, shale, slate and other hard-to-penetrate materials –twin pick version in the corner position cuts clearance for the bucket.



Wheel Loader Replacement Teeth



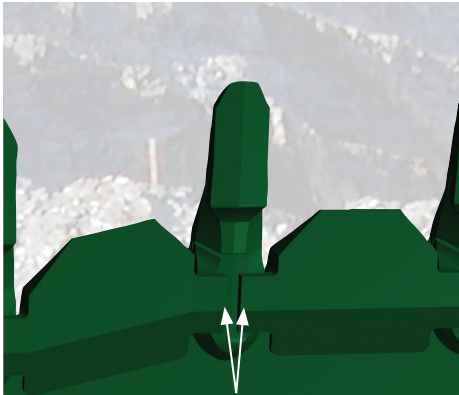
STL - Upgraded standard loader point, contoured for better penetration, increased wear life and added strength.



APL - An optimal balance of wear metal and penetration for a range of heavy duty applications.



AHL - Features an extra-heavy wear shoe for extended wear life in extreme abrasion conditions.



Center adapter bottom leg protection



Ultralok A point for long life and excellent loading



Flat bottom design provides a smooth quarry floor

Loadmaster® HDP (Quarry) Lip

The Loadmaster HDP (Quarry) lip is an innovative lip designed to meet the specific needs of the small to mid-sized loading machines used in today's aggregate operations. Constructed of a T1 plate lip and wing design, the Loadmaster® lip system combines the ESCO Ultralok® tooth system with Toplok® fully mechanical lip and wing shrouds.

Features and Benefits

Reduced Operating Costs

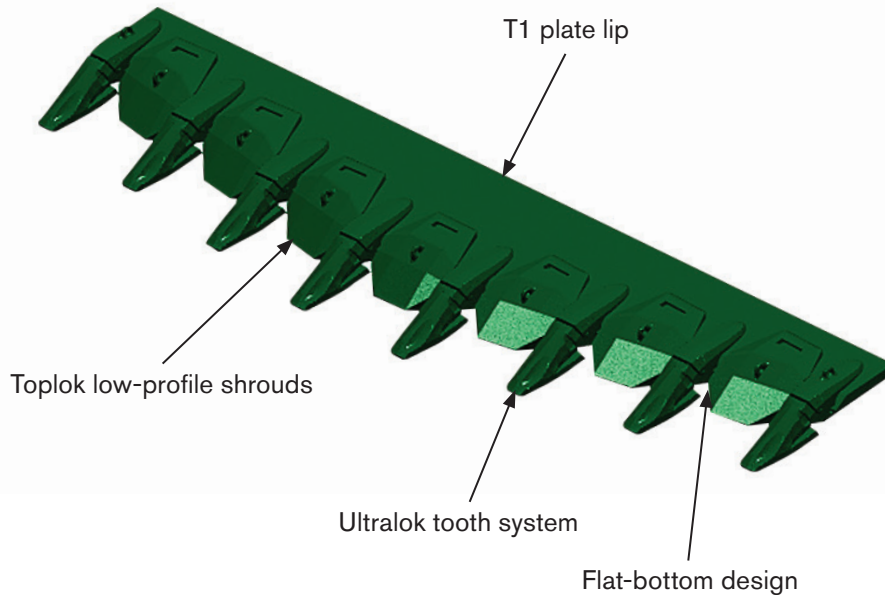
- Flat bottom design keeps quarry floor smooth to protect costly tire damage
- Tough T1 plate lip provides excellent abrasion resistance with structural integrity for longer service life
- Toplok shrouds are fit to the lip without the use of holes, reducing the chance of cracking

Greater Productivity

- Slim design of the Ultralok tooth system and Toplok shrouds increases penetration for easier loading
- Increased reliability provides maximum machine availability

Improved Safety

- Ultralok tooth system utilizes a hammerless locking system that is also easy to replace
- Heavier wear components have cast-in lifting eyes for easier handling
- Toplok shrouds are easily replaced with standard tools



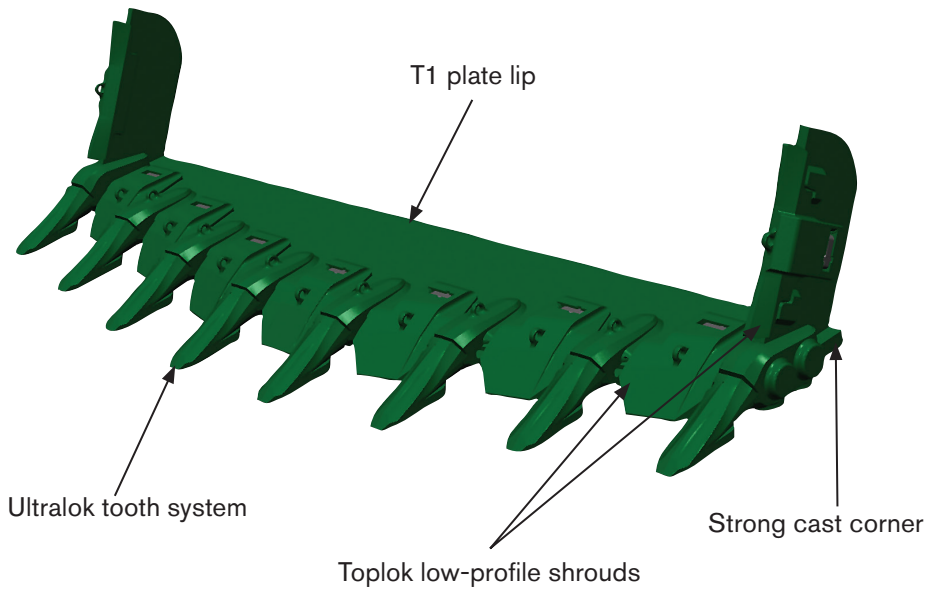
Loadmaster® XDP Lip



ESCO's expertise in tooth and wear protection systems provides the perfect basis to create the finest lip systems for quarry applications. Plate lips with ESCO cast wear components deliver a value-added lip system for a wide variety of heavy-duty loader applications.

In the Loadmaster lip family, the XDP design was developed for the larger more powerful machines found in the aggregate and mining markets. The

Loadmaster XDP lip base is made from T1 plate and comes standard with ESCO Ultralok® tooth equipment and Toplok® mechanically-attached shrouds. The major difference with this lip is the fully cast corners which provide greater strength and fatigue resistance for the most demanding applications.



Features and Benefits

Increased Reliability

- Cast corners move welds out of high stress areas for greater strength and fatigue resistance
- Tough T1 plate lip provides the highest quality lip material for balancing abrasion resistance with structural integrity
- Toplok shrouds are fit to the lip without the use of holes, reducing the chance of cracking
- Optional wear caps protect the adapters for longer life

Greater Productivity

- Slim design of the Ultralok tooth system and Toplok shrouds increases penetration for easier loading
- Increased reliability provides maximum machine availability

Improved Safety

- Ultralok tooth system utilizes a hammerless locking system that is also easy to replace



Multi-Purpose™ Lip System

The Multi-Purpose Lip broadens the ESCO lip offering by providing a cost-effective, multi-purpose lip that retains penetrating qualities for use in stock piling and rehandling applications. The Multi-Purpose Lip is offered from 50-70mm lip thickness and incorporates the ESCO Ultralok® tooth system with cast bolt-on shrouds.

Lip assemblies are available in three plate steel alloys. ForgeTemp® Steel: Non heat-treated for general purpose applications; MaxTemp® Steel: Through-hardened, heat-treated steel for use in high impact, high wear applications; and Special Application MaxTemp Steel (SAM): Through-hardened steel for maximum performance in severe impact conditions.

Features and Benefits

Economical Value

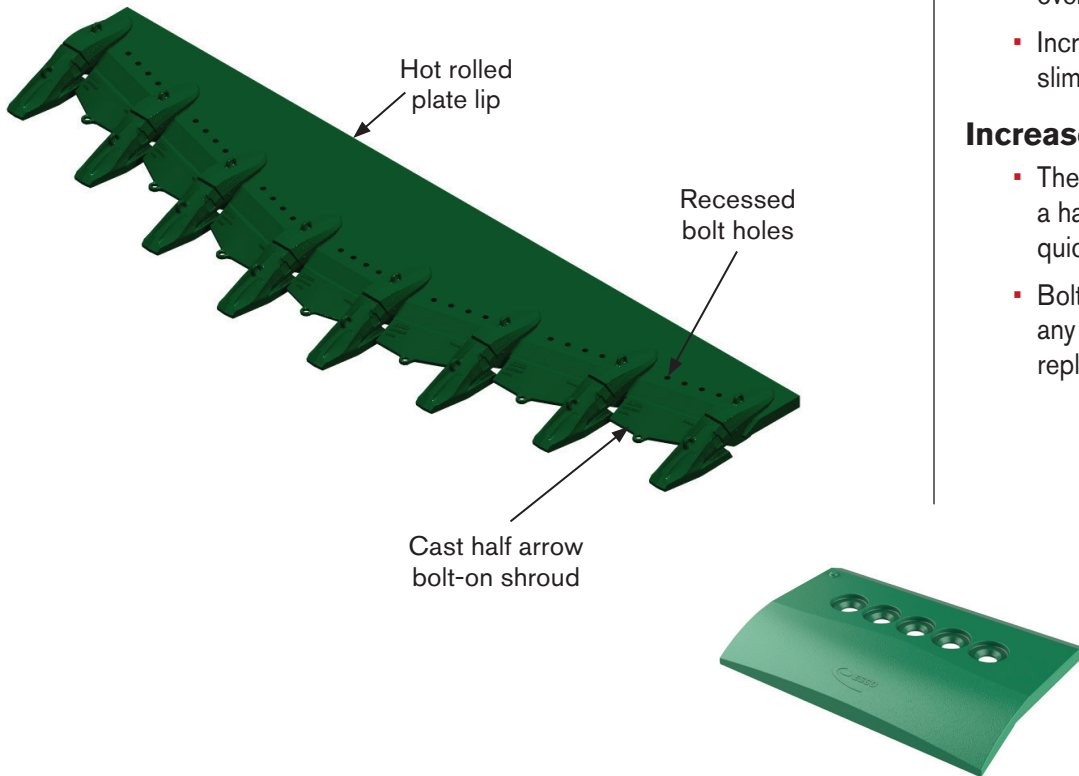
- Low cost option over the Loadmaster® lip offering
- Cost-effective lip protection with ESCO cast alloy bolt-on shrouds
- Specialty plate steel alloy options provide performance in all applications

Improved Productivity

- Superior loading and productivity over competitor plate lips
- Increased penetration with the slim profile Ultralok tooth system

Increased Safety

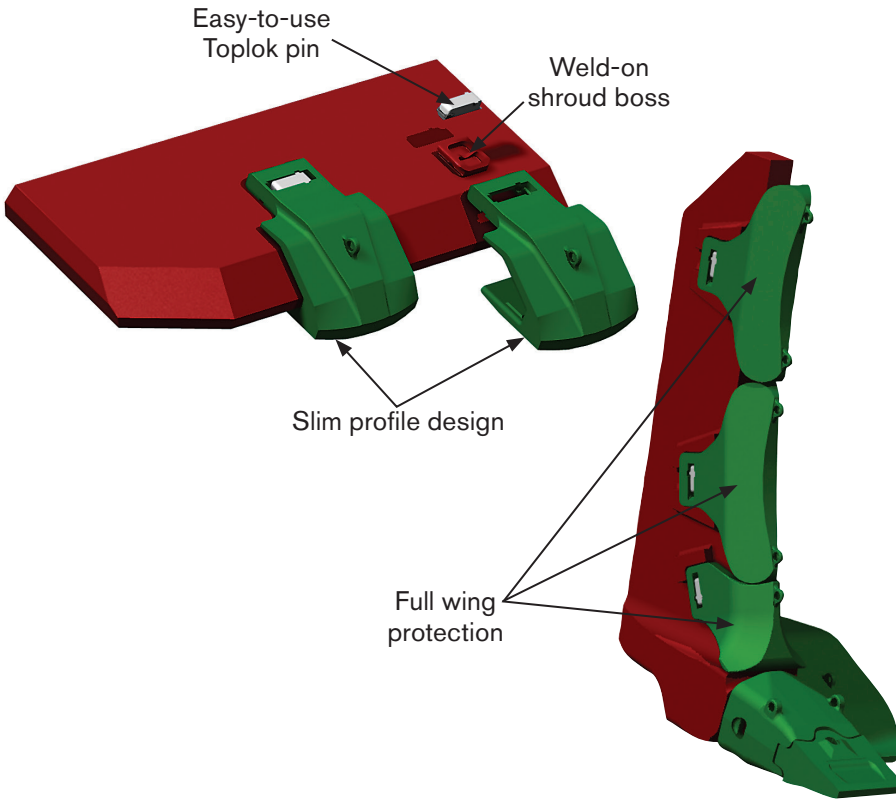
- The Ultralok tooth system features a hammerless locking device for quick and easy tooth replacement
- Bolt-on shrouds do not require any welding or hammers for replacement



Toplok® Mechanically Attached Shrouds



Toplok shrouds are field proven. Cast with through-hardened ESCO alloys, they are ideal for abrasion and impact resistance. ESCO Toplok shrouds are a fully mechanical system consisting of a pin, boss and shroud. Toplok shrouds provide excellent lip protection while maintaining penetration. ESCO provides superior products through computer-aided design technology and quality manufacturing technologies.



Features and Benefits

Reduced Maintenance

- Simple lock allows quick and easy shroud replacement in the field
- Longer lip life due to complete protection of leading edge and lip wings
- Optional wear caps extend adapter life, even in the most abrasive conditions
- Unique design does not require holes in the lip which can lead to cracking

Improved Productivity

- Slim design provides better penetration and material loading
- More time between bucket rebuilds improves machine availability
- Improved shroud life over competitors provides increased machine availability



Excavator Buckets

The advanced line of ESCO buckets is a result of industry-leading expertise in metallurgy and a tradition of innovative product design. Coupled with state of the art manufacturing capabilities, computer aided design and rigorous field testing, ESCO buckets deliver top performance while reducing downtime to the absolute minimum.

Features and Benefits

Increased Productivity

- Triple taper design for faster loading and cleaner dumping
- Ultralok tooth system for excellent penetration and reliability
- Forward projecting side reinforcing plates for increased penetration

Unsurpassed Durability

- Strong beams for torsion resistance
- T1 plate or cast lips provide structural integrity
- ESCO can match the correct duty class of the bucket to your application to increase bucket life and production

Reduced Maintenance

- ESCO uses the appropriate grade of steel for each bucket component to maximize strength and wear resistance
- Optional wear packages offer additional protection beyond the wear resistant steels used to fabricate the bucket

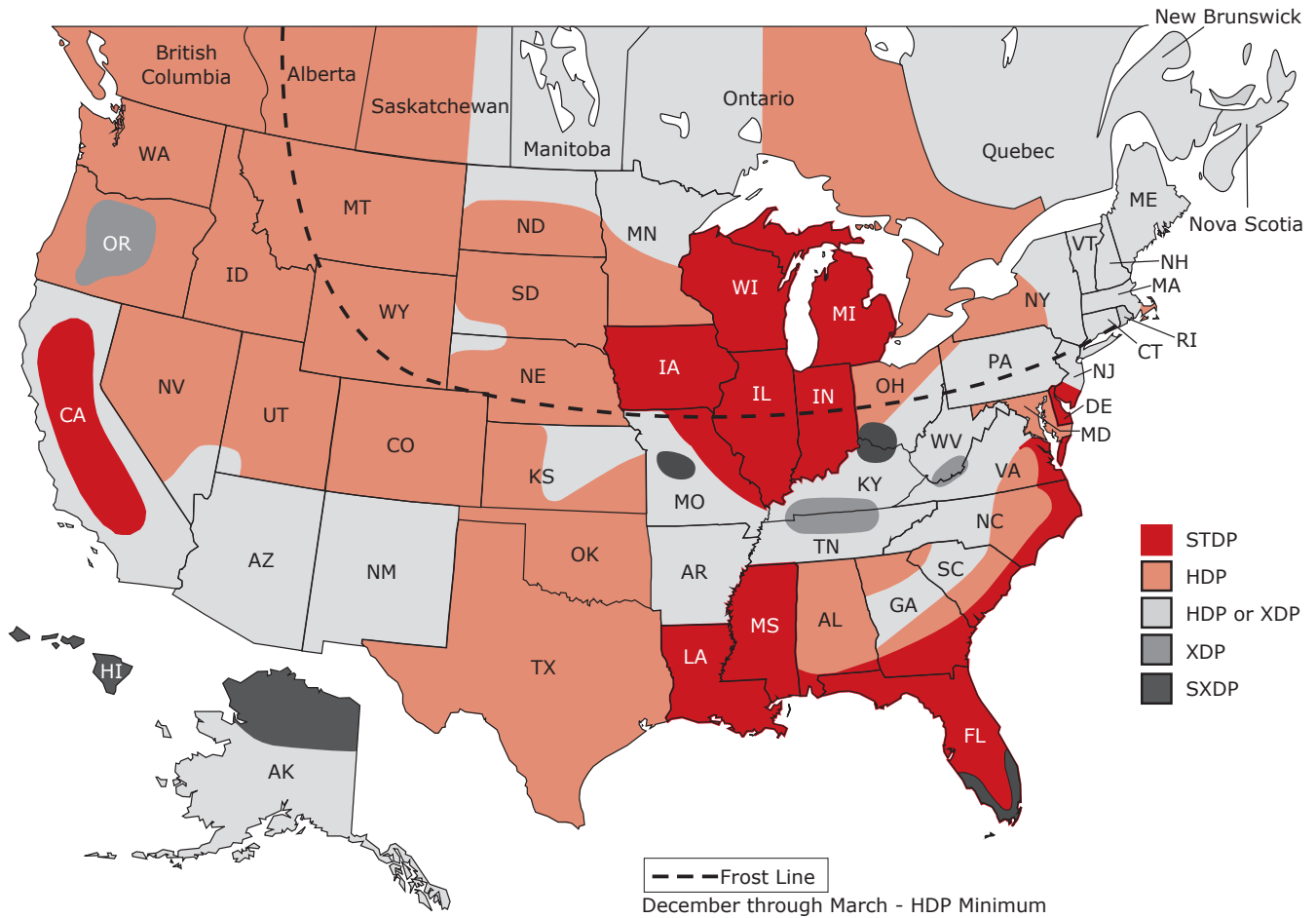
ESCO Service

- ESCO warrants all attachments to be free from defects in materials and workmanship for 1 year
- Engineers and field technicians with solutions for your applications
- ESCO representatives are located throughout North America to facilitate meeting customers' needs



Excavator Buckets

Match the Bucket Model to the Digging Conditions



Key to Bucket Recommendations

ESCO Excavator Bucket Model	Service Conditions
STDP	General purpose excavating and bailing in dirt, clay, or sandy soil.
HDP	Heavy-duty excavating in dense clay or soil and where occasional rock is encountered.
HDP or XDP	Heavy-duty excavating in shot rock, dense clay, or soil heavily loaded with rock.
XDP	Heavy-duty excavating in fragmented rock, sandstone, caliche and handling shot rock in abrasive digging conditions.
SXDP	Excavating in extremely severe and abrasive unshot rock conditions as well as coral, lava, and glacial till.

Note: This is general information only. Within each area there may be conditions that require buckets other than those recommended.

DTCH - Ditch Cleaning Bucket



Standard Features

- Wide, shallow basket design
- Tough, T-1 steel plate lip
- Bottom wear strips

Applications:

- Ditch cleaning
- Loam and sand

STDP - Standard-Duty Plate Lip Bucket



Standard Features

- Full bottom wear runner for abrasion resistance
- Strong formed beam for torsion resistance
- Tough, T-1 steel plate lip

Applications:

- Loam or sand
- Soils containing very little rock

HDP - Heavy-Duty Plate Lip Bucket



Standard Features

- Cast shrouds standard for side wear protection
- AR 400 full bottom wear runner and side wear strips
- Large formed beam to resist torsion in the connection area
- Tough, T-1 steel plate lip

Applications:

- Compacted soils or dense clay
- Loosely embedded rock and gravel

XDP - Extreme-Duty Plate Lip Bucket



Standard Features

- Cast shrouds standard for side wear protection
- AR 400 full bottom wear runner and full side wear plate
- Lip and beam gussets to strengthen high stress corners
- T-1 steel plate lip and additional side reinforcing plates

Applications:

- Shot rock or stratified materials
- Tough and abrasive applications



Integral Pin Bucket



Standard Features

- Integral pins provide pin-to-points near OEM specs
- Designed for ESCO's PosiGrab coupler
- Maximum break-out force with a coupler
- Better fuel economy

Applications:

- Compacted soils or dense clay
- Loosely embedded rock and gravel

Sifter Bucket



Standard Features

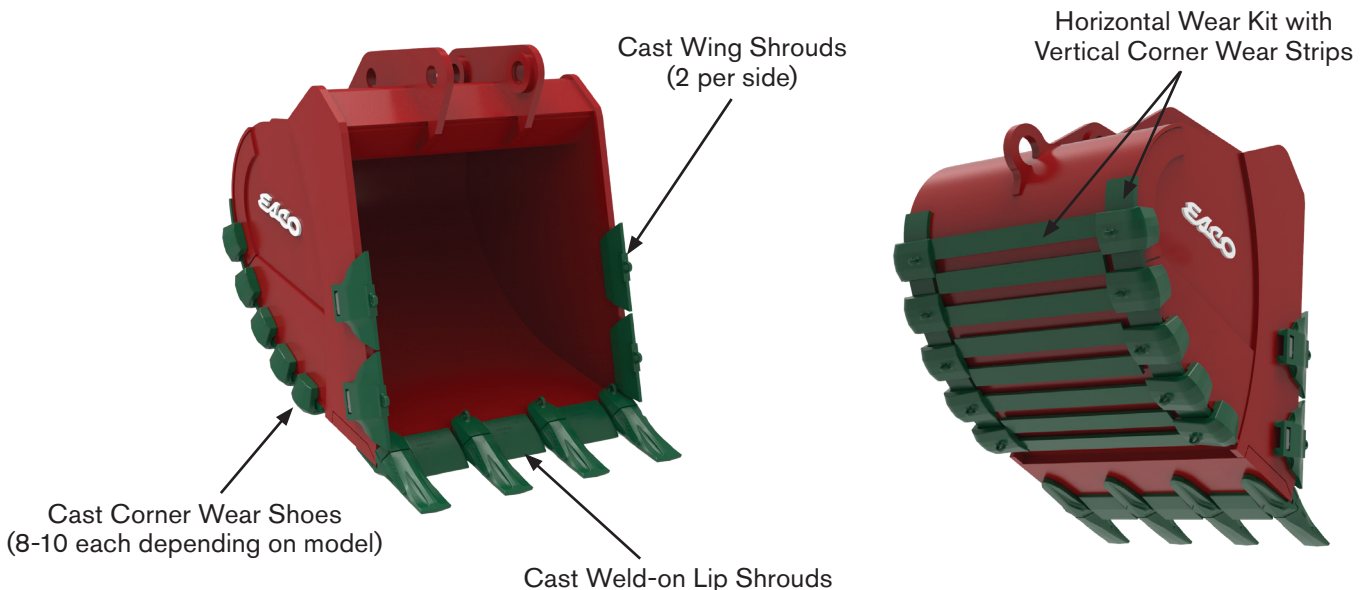
- AR 400 ribs — available in custom spacing
- Tough, T-1 steel plate lip
- Cast shrouds for wing wear protection
- Lip and beam gussets for stability in high stress areas

Applications:

- Sorting materials on site

ESCO SXDP Super Extreme Duty Plate Lip

The SXDP – Super Extreme Duty Plate Lip Bucket was developed for the most severe, high wear applications. It includes all of the ESCO XDP bucket features plus an extreme duty wear package providing more cast wear protection than any other ESCO construction excavator bucket.



Standard Features

- Double Cast Shrouds standard for side wear protection
- Cast Corner Wear Shoes
- Cast Weld-on Lip Shrouds
- Chisel Points for Penetration and Strength
- AR400 Horizontal Wear Kit and Vertical Wear Pads

Applications:

- Shot rock or stratified materials
- Tough and abrasive applications

Excavator Thumbs



Hydraulic thumbs substantially increase an excavator's versatility. Hydraulic thumbs allow the operator to place an object in the clamp, then move precisely. ESCO hydraulic thumbs are available in non-link and linkage style to meet any clamp rotation needs. Hydraulic thumbs are designed for the specific bucket setup to assure meshing without

interference through the full rotation of the thumb.

Hydraulic Thumb Kits

ESCO offers high quality machine specific hydraulic kits for excavators. ESCO hydraulic kits are designed specifically for operating thumbs. There are no unnecessary components, and thumbs will operate at full hydraulic efficiency.

Universal Rigid Style Thumb



Standard Features

- Premium grade T-1 steel used in all critical components
- Three working positions for more versatility
- Integrated design stores in one unit
- Three or four tine options
- Easily adjusted by moving a single pin, reducing downtime

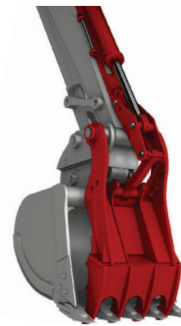
Non-Link Style Thumb



Standard Features

- Premium grade T-1 steel is used in critical components for superior reliability
- Thumb rotation is approximately 120° – dependent on machine
- Serrated teeth with webbing increases gripping action
- Large diameter pins and bushings give longer wear life
- Heavy-duty stops protect cylinders from damage

Link Style Thumb



Standard Features

- Includes progressive linkage between the cylinder and thumb
- Increased thumb rotation up to 175° – dependent on machine
- Premium T-1 steel is used in critical components for superior reliability
- Serrated teeth with webbing increases gripping action
- Large diameter pins and bushings give longer wear life
- Heavy-duty stops protect cylinders



ESCO PosiGrab® Hydraulic Coupler



The Next Generation Coupler from ESCO

The ESCO PosiGrab Coupler was designed and developed to provide simplified use for the machine operator and to optimize site safety. ESCO attachments are known for productivity and safety, and the PosiGrab coupler continues that tradition.

The PosiGrab design features both front and rear locks that are mechanically engaged independently through the full working cycle – and are also independently released with hydraulics. The natural position of the coupler is locked and only opens using forced hydraulic pressure.

All operations to pick-up or release attachments are done without leaving the safety of the cab, including the visual confirmation that the front and rear locking mechanisms are properly engaged.



Features and Benefits

Greater Safety

- Natural position of the coupler is locked
- Forced hydraulic pressure required to release lock mechanisms
- Front and rear locks are visible from the cab

Improved Reliability

- Highly engineered to reduce stress
- Precision manufactured to exacting quality standards
- Premium materials used throughout

Ease of Use

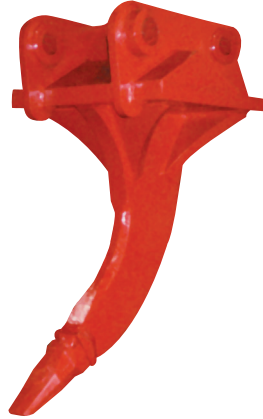
- Attachment pick-up and release completed from the cab
- Excellent visibility to engage the front and rear pins
- Will pick up the attachments within the same machine weight class

Excavator Accessories



Ripper Attachments

ESCO offers a full line of ripper attachments for excavators from 7 metric tons to 75 metric tons. Ripper attachments are best utilized when heavy-duty or continuous ripping is needed. ESCO ripper attachments are also an effective attachment when the excavator is equipped with a coupler.



Features and Benefits

Increased production

- Machine specific engineering for optimal digging geometry
- Ultralok® tooth system for penetration

Reduced maintenance

- Sturdy T1 shank for wear resistance and strength
- Cast Ultralok weld-on nose for longer nose life
- Ultralok tooth system for longer wear life and extra strength



Tool Box Rippers

Tool box rippers are excellent when only occasional ripping is required to augment the bucket's penetration in rock, frozen earth and other hard to dig materials. Tool box rippers are ideal for demolition applications to loosen material and avoid potential damage to the bucket. Tool box rippers utilize a permanently mounted attachment point on the back of the bucket and a pin on ripper shank.



Features and Benefits

Flexibility

- When not ripping the shank can be pinned up out of the way of continuous digging, or removed from the attachment point (box)
- Requires no changing of attachments to accomplish both loosening of materials and excavating of material

Increased production

- Ultralok tooth system for longer wear life and extra strength and long wear life
- Proper positioning of the tool box ripper on the bucket will allow for ripping and digging with the ripper shank in place

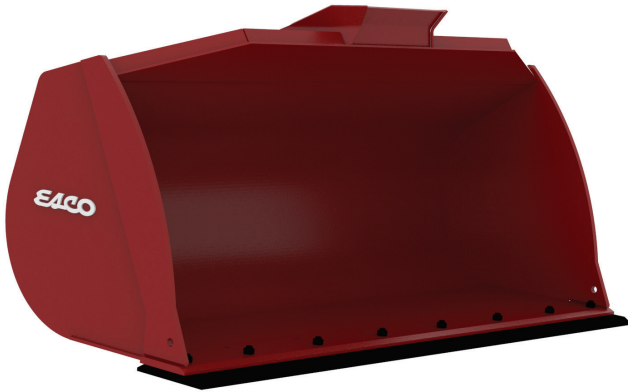
Wheel Loader Buckets



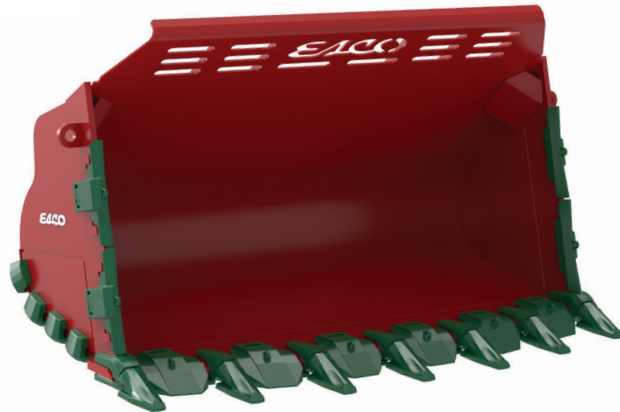
ESCO offers a range of wheel loader buckets for general purpose, heavy duty and extra heavy duty applications. From material rehandling to heavy quarry applications, ESCO has the right bucket for the job.

All our loader buckets are precision manufactured with quality materials to ensure years of reliable performance. The selection of lip assemblies and wear packages ensure the best match for any application.

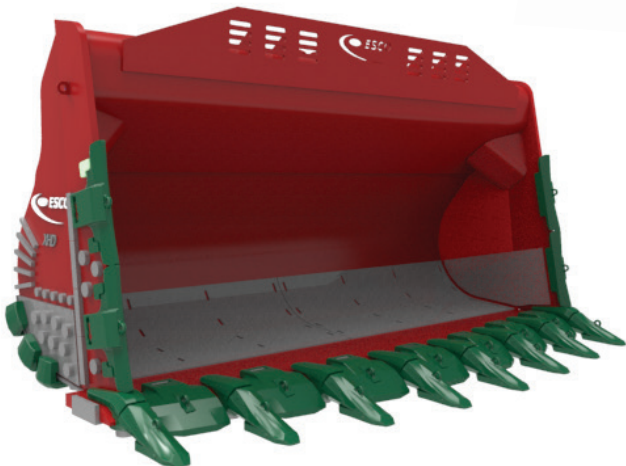
GP bucket



HD bucket



XHD bucket



Features and Benefits

Increased Productivity

- Bucket configuration and lip system are carefully matched for faster filling and cleaner dumping

Reduced Maintenance

- Superior design, materials and quality construction insure reliability
- Optional wear products and liner packages are available to provide maximum protection

Lower operating costs

- Faster filling and dumping reduces fuel consumption
- Improved penetration minimizes wheel spin and reduces drive train wear



Kwik-Lok® II System

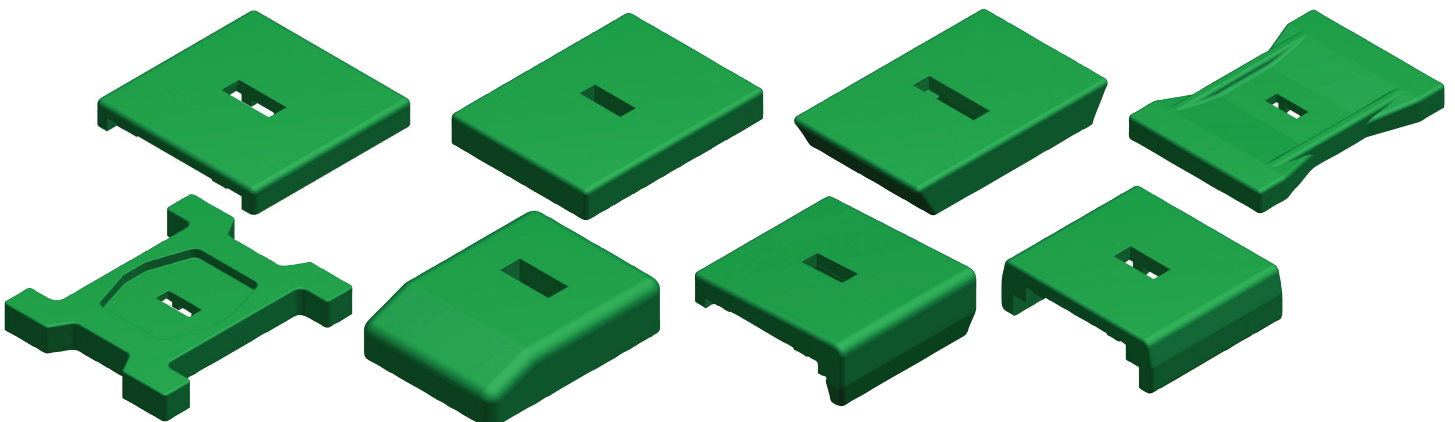
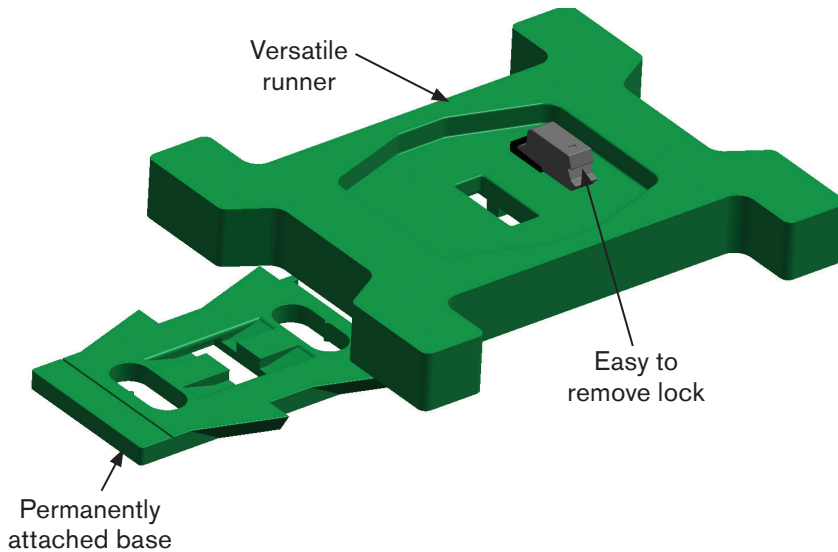


Kwik-Lok II Wear Protection

The Kwik-Lok II wear protection system provides reliable protection and convenient replacement in the field. Kwik-Lok II runners are safer and easier to change than conventional wear protection. Depending on the demands of the application, multiple wear runners may be used to protect large surfaces or a single runner can be installed to protect an area of high wear. Kwik-Lok II wear

protection improves safety, lowers costs and reduces maintenance.

The ESCO Kwik-Lok II system is an excellent option for wear protection on bucket bottoms and corners, conveyor systems, chutes, transfer points and any other high wear area in processing plants and equipment.



Features and Benefits

Improved Safety

- Lightweight wear runners are safer and easier to handle
- One-piece lock is fast and simple to install and remove
- No large wear plates to handle or welding required for replacement

Reduced Operating Cost

- Universal design is adaptable to curved and flat surfaces to provide maximum protection
- Easy-to-change system reduces maintenance time to minutes rather than hours
- Wide variety of wear runners are available to protect valuable equipment in any application
- Runners are reversible for maximum wear life

Increased Production

- Reduced maintenance ensures maximum machine availability
- Quick-change feature allows replacement during other scheduled maintenance
- Superior ESCO alloys last longer for more time between replacement

Infinity® Bimetallic Wear Products

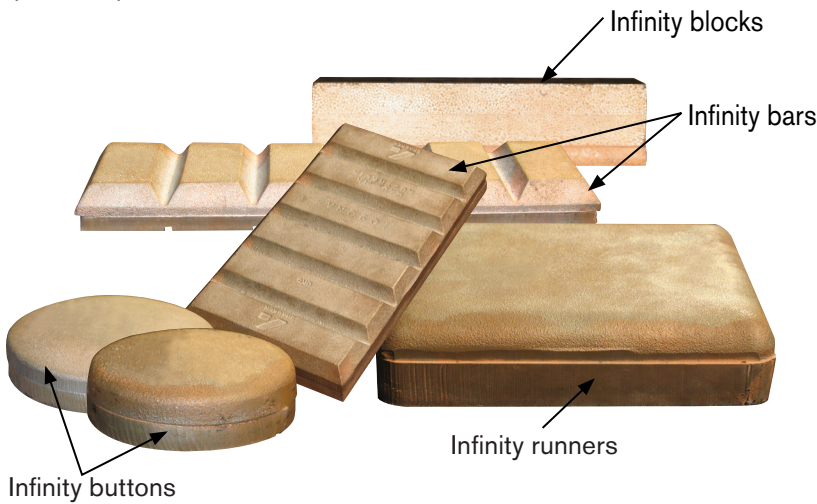


ESCO Wear Solutions are more than just a product. It is a combination of products, services and metallurgical expertise to provide superior wear protection for construction equipment and other industrial applications. A key part of this package is the Infinity Bimetallic Wear Products, a comprehensive offering of buttons, blocks, bars, runners, tiles and overlay plate to match any application.

Infinity Buttons, Blocks, Bars and Runners

ESCO Infinity wear buttons, blocks, bars and runners are a chrome white iron (CWI) casting on a mild steel backing plate. The CWI has a minimum hardness of 700 Brinell, and the mild steel backing allows easy attachment with minimal welding. There is a variety of shapes and sizes to protect any high wear area on mobile or stationary machinery.

Some of the many applications are buckets for shovels, draglines, loaders and excavators, and conveyor chutes liners, grizzly screens, crusher liners, or any other equipment exposed to abrasive wear.



Features and Benefits

Reduced Maintenance

- Protects any high wear area, eliminating the need for frequent rebuild or replacing wear plate
- Lasts longer than other wear protection
- Excellent alternative to hard facing which can lead to cracking of major structural components

Increased production

- Reduced maintenance ensures maximum machine availability
- Wide variety of shapes and sizes allows small areas to be protected, minimizing the affect on penetration and material flow

Lower Operating Cost

- Can be fit to flat or curved surfaces, eliminating the need to have wear plate formed to fit
- Bucket life is significantly increased, minimizing repair and new bucket orders



Infinity® Overlay Technology



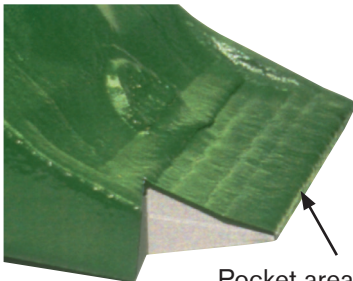
ESCO offers a wide variety of Infinity Overlay Product for application to metal components to increase wear life and improve productivity. To maximize performance, the overlay material is applied based on the specific field application.

Overlay material can be simply applied to component surfaces for protection from abrasive wear, or applied in a specific pattern that not only increases wear life, but also improves the

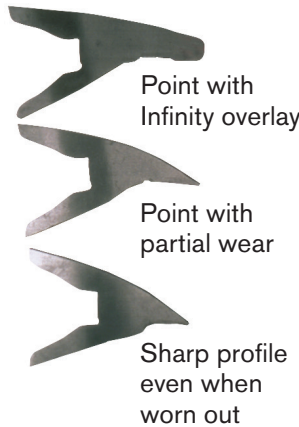
performance of the product as it wears. For example, overlay material applied to bucket teeth in a certain way dictates a wear pattern that improves penetration and loading, and thereby increases productivity for reduced operation costs. In addition, for certain applications, ESCO designs components specifically for best use of Infinity overlay material.

ESCO can recommend the best Infinity overlay to meet your needs. The following Infinity overlay products are offered to match your base product and application:

- E3 Chrome white iron overlay
- E3X Embedded tungsten carbide overlay
- E3CX Embedded tungsten carbide overlay



Pocket area on point designed to optimize E3 and E3X manufacturing process.



Features and Benefits

Improved Production

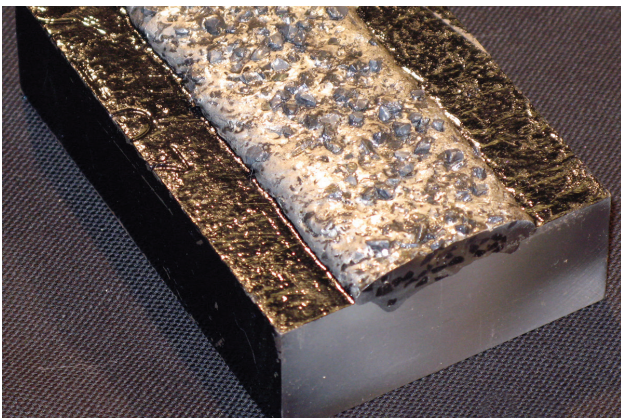
- Better penetration and loading
- Improved wear pattern and better performance

Lower Operating Cost

- Increased penetration reduces fuel consumption and wear to machine drive train
- Longer wear life with minimal downtime

Reduced Maintenance

- Protection can be modified to maximize service life
- Overlay added to wear parts at the factory to require no additional work over standard replacement activity
- Minimize the need to replace parts



Abrasion Resistant Plate



Wear is one of the biggest challenges facing high production operations today. The application at each operation is unique so ESCO offers a variety of options to protect valuable equipment. ESCO AR plate is a premium product available in 400 or 500 grades. Infinity™ chromium carbide overlay plate is an alternative for extreme abrasion applications.

AR 400

ESCO AR 400 through-hardened plate is available in 3/16" through 4" thickness. Typical hardness is 360-444 BHN, and the typical toughness is 20 ft.-lbs. in transverse direction. AR 400 is very formable and has high wear resistance, excellent toughness and weldability.

AR 500

ESCO AR 500 through-hardened plate is available in 1/8" through 4" thickness. Typical hardness is 477-555 BHN, and the typical toughness is 18 ft.-lbs. in transverse direction. AR 500 is formable in cold condition and has superior wear resistance for extreme abrasion, very good toughness and weldability.

Infinity® Chromium Carbide Overlay Plate

ESCO's Infinity Chromium Carbide Overlay wear protection is ideal in extreme abrasion and medium impact applications. ESCO overlay plate offers a minimum of 573 Brinell hardness. Infinity overlay plate is formable and can be ordered in custom designed kits to fit a wide variety of surface configurations.

Features and Benefits

Reduced Maintenance

- Protects entire surfaces, eliminating the need for frequent rebuild or replacing structural components
- Formable to contoured surfaces and easy to weld

Increased production

- Custom formed kits minimize affect on penetration and material flow
- Reduced maintenance ensures maximum machine availability

Lower Operating Cost

- Equipment life is significantly increased, minimizing repair and new replacement orders
- A variety of material options allows the best choice for abrasion and impact resistance to ensure maximum uptime



All-Cast™ Blade Products



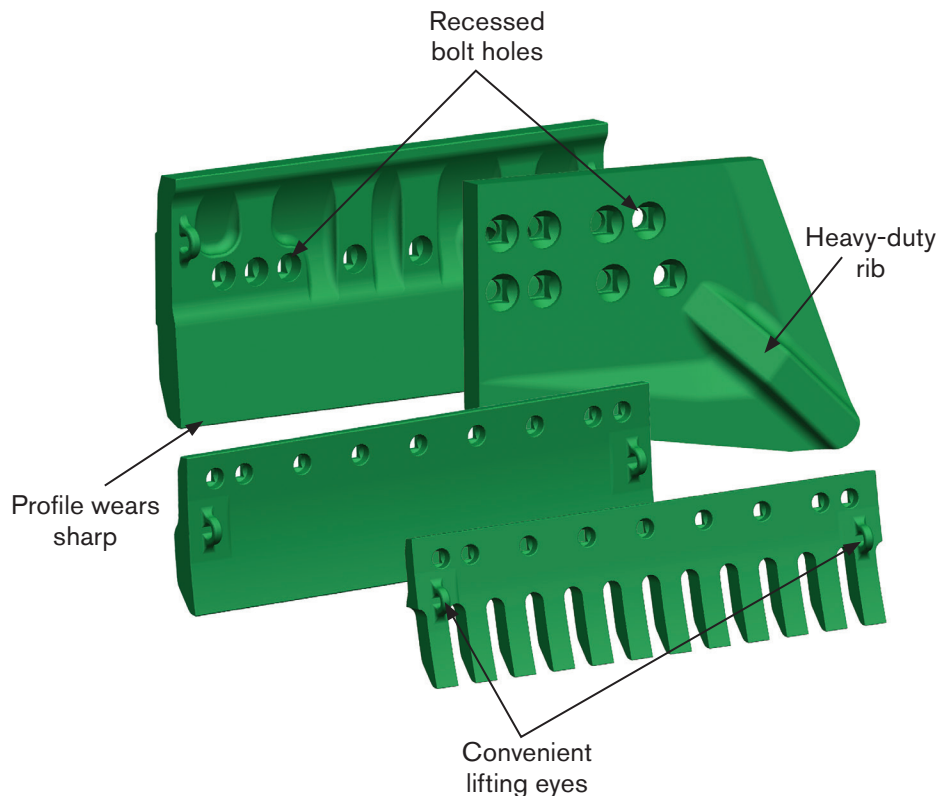
Dozing and grading at heavy construction or mine sites are among the toughest jobs around. To help these operations run efficiently, ESCO developed a comprehensive cast blade package to withstand the extreme abrasion and impact of these applications.

All-Cast Blades and End Bits for Dozers

ESCO All-Cast blades and end bits are the best product available to withstand the toughest impact and abrasive applications. Available for most popular CAT and Komatsu models above 280 HP, the All-Cast product is designed specifically to match the requirements of each individual model to ensure optimum performance.

All-Cast Blades for Motor Graders

ESCO All-Cast grader blades are designed specifically for the Caterpillar 16G and 24H machines. The straight edge version is an excellent choice for most extreme condition applications. When more penetration is required – like winter or hard pack applications – serrated versions are available.



Features and Benefits

Lower Operating Cost

- Metal is cast where it is needed, increasing wear life and reducing throwaway
- Cast steel can provide double the life over rolled steel product

Reduced Maintenance

- More time between replacement for more machine availability
- Cast steel resists severe impact, reducing the chance of breakage
- Maximum flatness evenly distributes the load on the moldboard

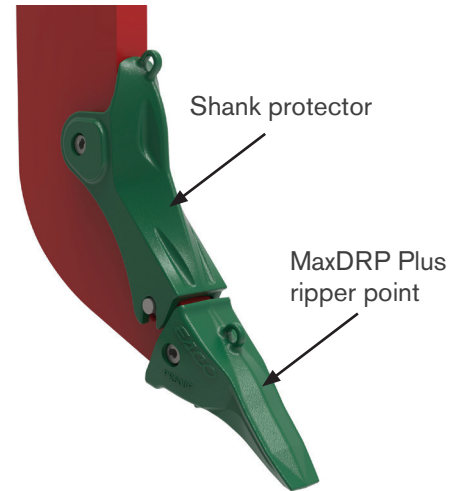
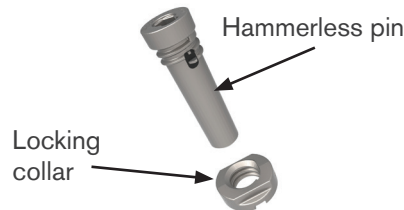
Improved Production

- Designed to stay sharp for more efficient cutting
- Long life ensures maximum machine availability



MaxDRP™ Plus Hammerless Ripper System

Designed for safety and ease of use, the system utilizes a standard wrench on a unique pin and collar locking system, eliminating the need for a hammer. No modifications to the ripper shank or nose are required to use this new system. In addition, ESCO alloys and point shapes provide up to 25% longer wear life for reduced maintenance costs.



Features and Benefits

- Easy installation and removal
- Reusable pin and collar saves money
- Slimmer profile, longer wear life
- No change to shank required

Fasteners for Blades

ESCO cutting edge bolts and nuts are produced in SAE Grade 8 alloy, and heat-treated to the highest SAE standard for fasteners. A wide assortment of working-grip lengths from ESCO guarantees the right fastener to provide the strongest possible clamp load and shear protection for any cutting edge setup.



Features and Benefits

Greater Reliability

- Long square shoulders prevent turning in the bolt hole, ensuring positive cutting edge mounting

Reduced Maintenance

- The dome bolt heads provide more metal on the topside to reduce the effect of wear that weakens the sidewall of the bolt head that can cause breakage

Increased Performance

- Hex nuts are forged in an induction heat-forming process, have full carbon content, even at the tops of the threads
- Precision threads are designed to pull the full strength of Grade 8 alloy



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