ESCO®

CONSTRUCTION ATTACHMENTS PRODUCTS

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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

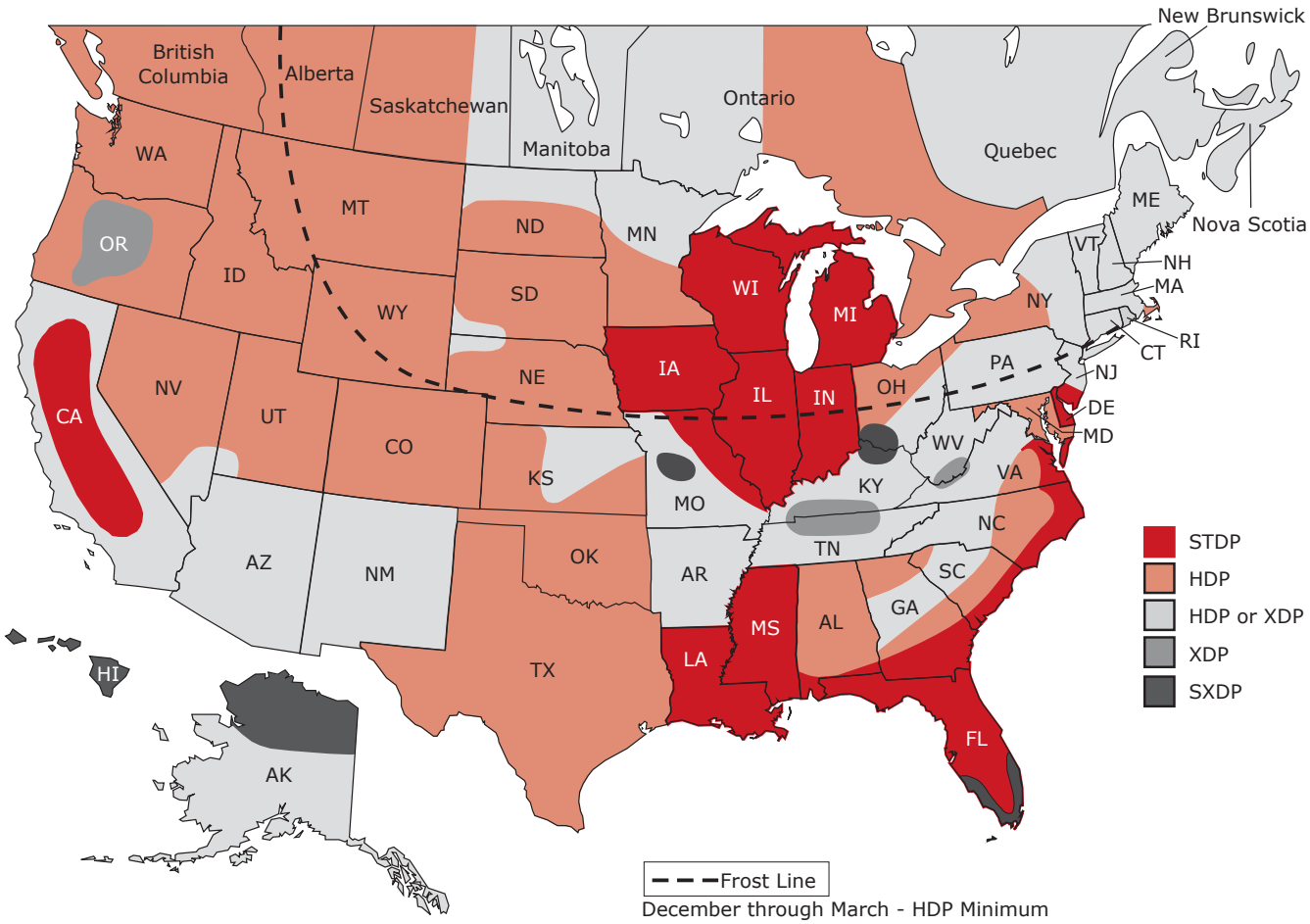
- ESCO uses the appropriate grade of steel for each bucket component to maximize strength and wear resistance
- Optional wear packages offer additional protection beyond the wear resistant steels used to fabricate the bucket

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

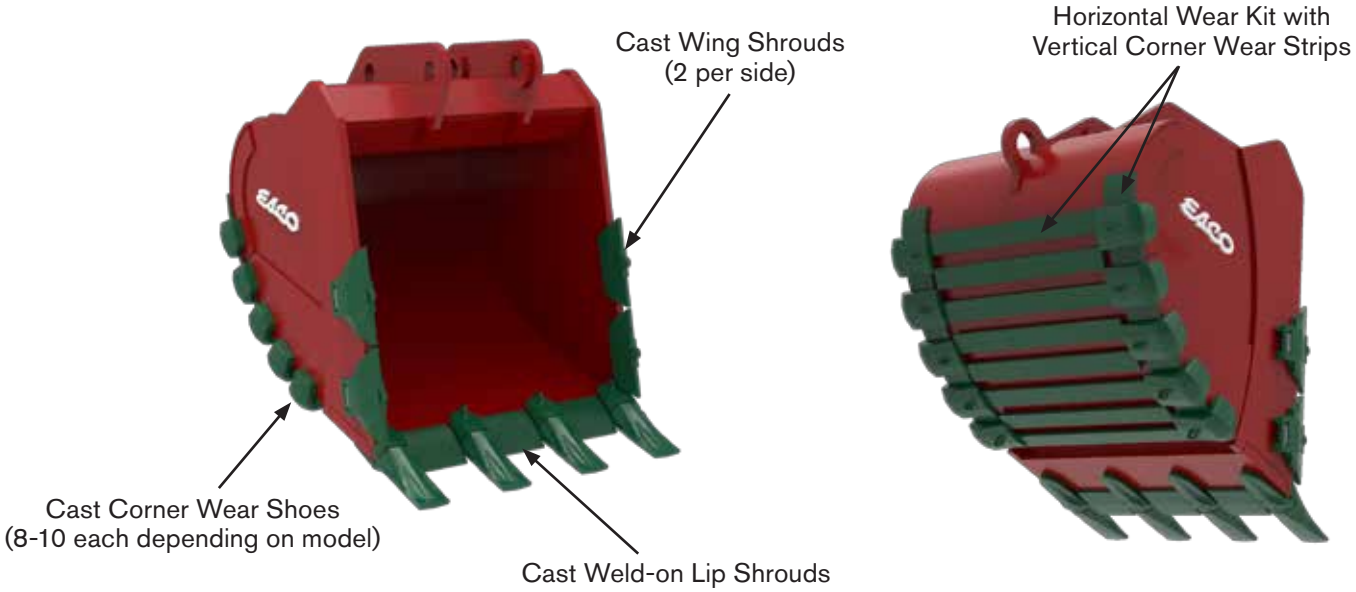
- AR 400 ribs — available in custom spacing
- Tough, T-1 steel plate lip
- Cast shrouds for wing wear protection
- Lip and beam gussets for stability in high stress areas

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

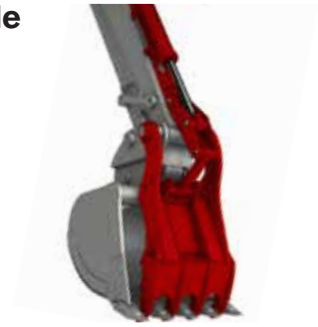
- Premium grade T-1 steel used in all critical components
- Three working positions for more versatility
- Integrated design stores in one unit
- Three or four tine options
- Easily adjusted by moving a single pin, reducing downtime

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 andrear 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

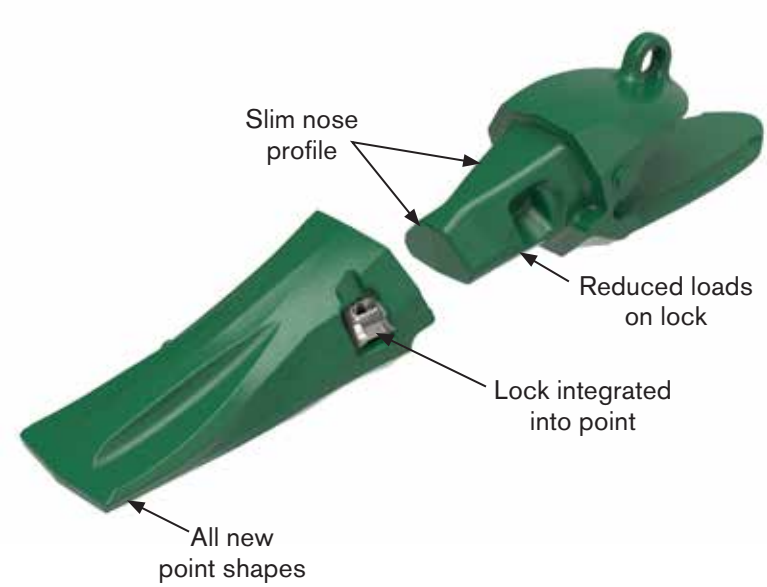
Ease of Use

- 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

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.

*Additional point shapes are available in select sizes.

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.

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

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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

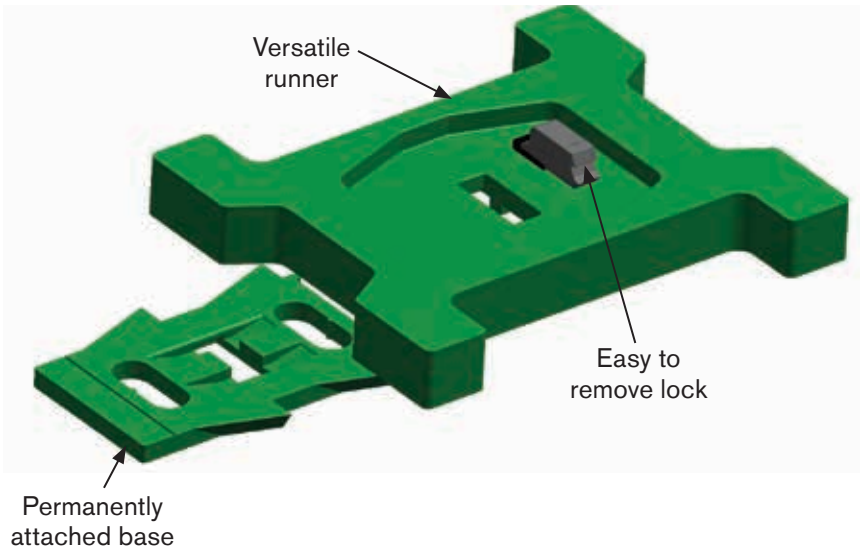
- Ultralok tooth system for longer wear life and extra strength and long wear life
- Proper positioning of the tool box ripper on the bucket will allow for ripping and digging with the ripper shank in place

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

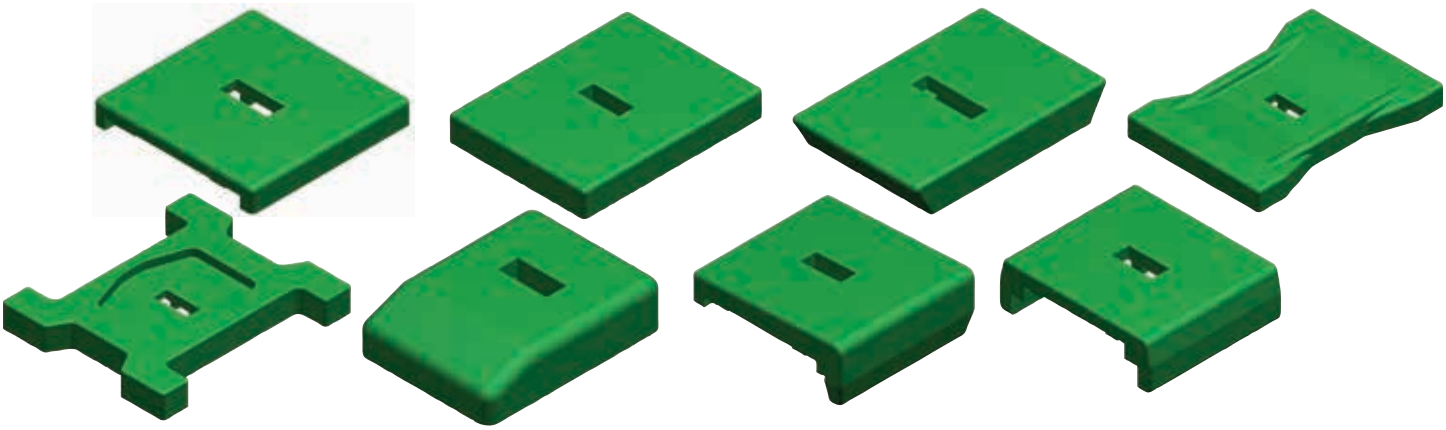
- Lightweight wear runners are safer and easier to handle
- One-piece lock is fast and simple to install and remove
- No large wear plates to handle or welding required for replacement

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



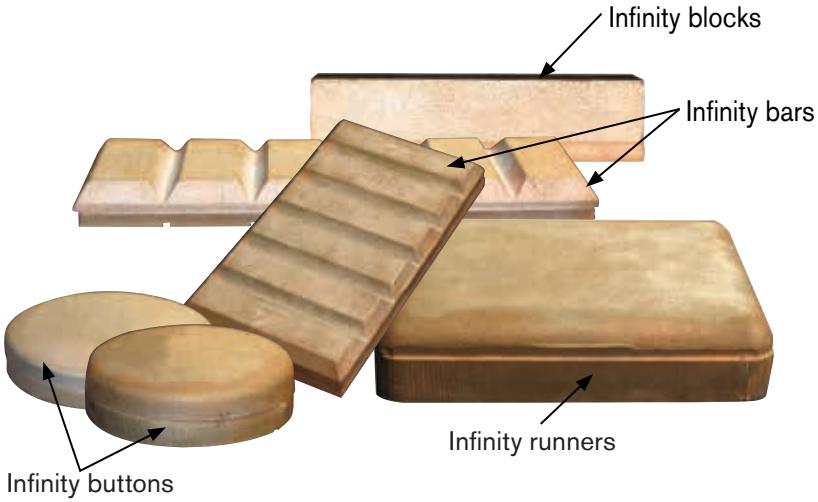
Infinity® Bimetallic Wear Products

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

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

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