



**WEIR**

**ESCO**

Hydraulic Face Shovel  
Fronts and Backboards  
For Mining Class Machines

## ESCO® hydraulic face shovel buckets

ESCO produces reliable, performance-driven face shovel fronts and backboards for the world's most demanding mine sites. Available for 120 to 800-ton machine classes, sized to match site payload specifications.

Our offering is customized for production requirements and material conditions for maximum machine productivity and lower total cost of production. OEM compatible profiles allow for easy integration into an operation's existing bucket fleet.



### Increased productivity

#### High efficiency lip and G.E.T.

Industry leading Nemisys® lip system provides unmatched reliability and wear life without extra weight.

#### Optimized payload

Engineered to site material density to achieve the desired balance of maintenance requirements and payload demands.

#### Increased machine availability

High-strength steel fabricated to exacting weld specifications results in less unplanned maintenance.

#### Lower maintenance cost

Wear protection is customized to site needs. ESCO G.E.T. has proven lower cost of ownership compared to competitor systems.

### Prioritizing safety

#### Engineering integrity

Collaborative engineering process provides precise bucket weight and capacity information. The safety of your personnel and the health of your equipment is essential.

#### OEM compliant

Buckets are developed using machine OEM guidelines including gross allowable load (GAL), pin-to-point, machine breakout force (BOF) and rated capacity.

#### Fabrication standards

Welding is performed to exacting standards and stringent quality controls using only high-quality steels. Specifications meet or exceed industry standards.



## ESCO® hydraulic face shovel standard features

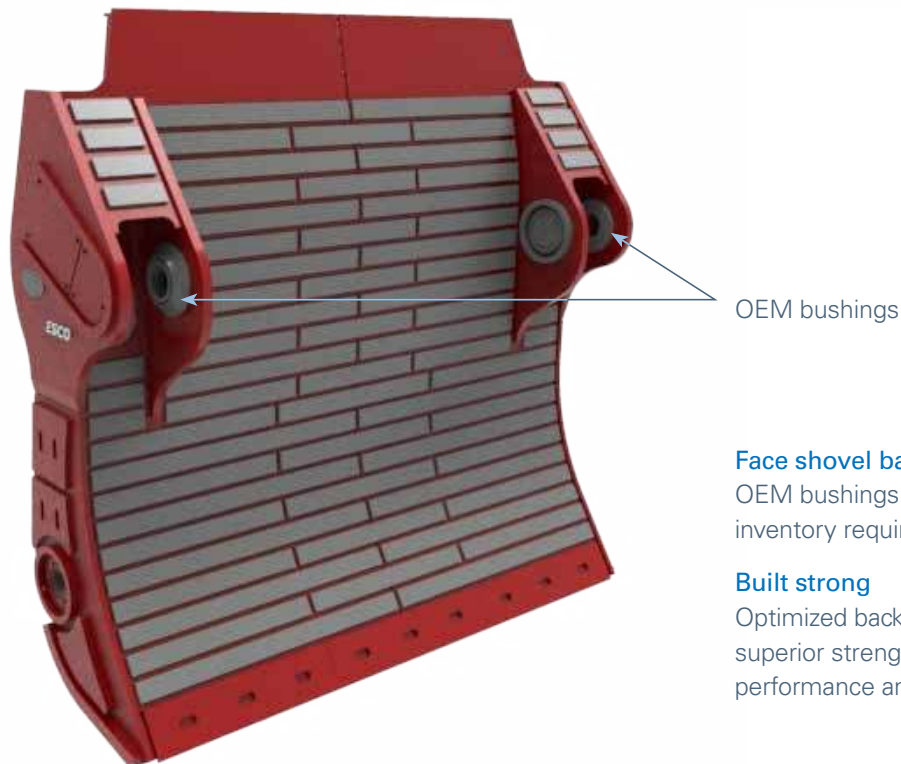
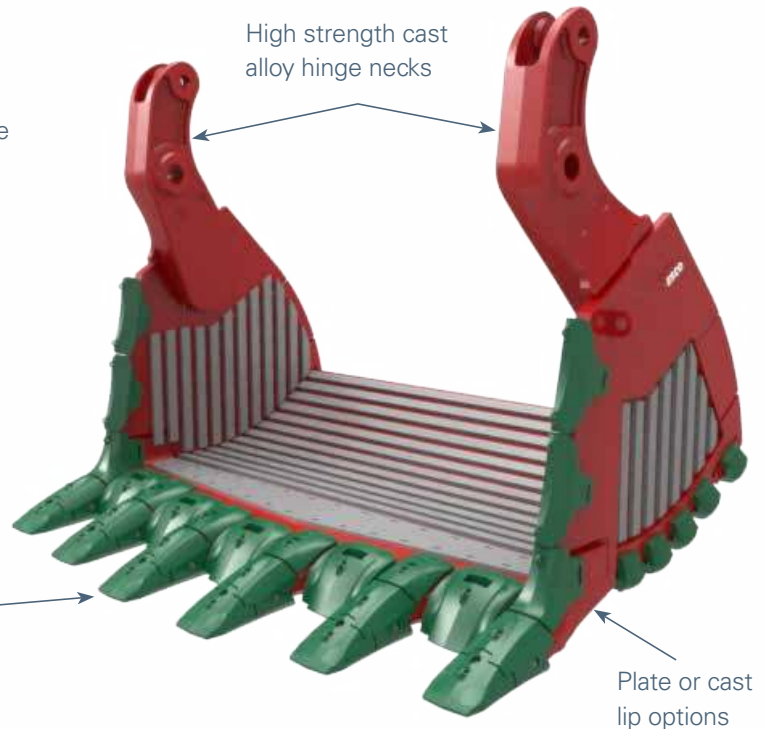
ESCO mining bucket fabrications exhibit excellent toughness as they are made from high grade A514 plate and welded and inspected to rigid ESCO standards.

### Face shovel fronts

- Longer wearing, easy-to-change wear parts provide more uptime for increased machine utilization
- Exceptional lip and side plate protection with ESCO mechanical lip and wing shrouds
- Industry leading lip and G.E.T. system lowers operating cost per ton

### Engineered to outlast

Reliable cast hinge necks made from durable ESCO alloy 12T provides high strength to low weight ratio compared to fabricated hinges.



### Face shovel backboards

OEM bushings simplify maintenance and reduce inventory requirements.

### Built strong

Optimized backboard interior ribs and gussets provide superior strength and rigidity resulting in reliable performance and extended life.

## Nemisys® lip options

ESCO® is proud to offer the field-proven Nemisys mining lip system for hydraulic face shovels. Operating on over 700 machines worldwide, the system has demonstrated market leadership in reliability, site safety and enhancing machine performance.

The Nemisys system features an integrated single-side lock for easier and faster removal to minimize machine downtime during maintenance cycles. The hammerless lock provides improved engagement with the nose to significantly reduce the chance of point loss and unplanned downtime.



R point



S point



SBW point



Lip shroud



Wear cap



SW point



V2 point



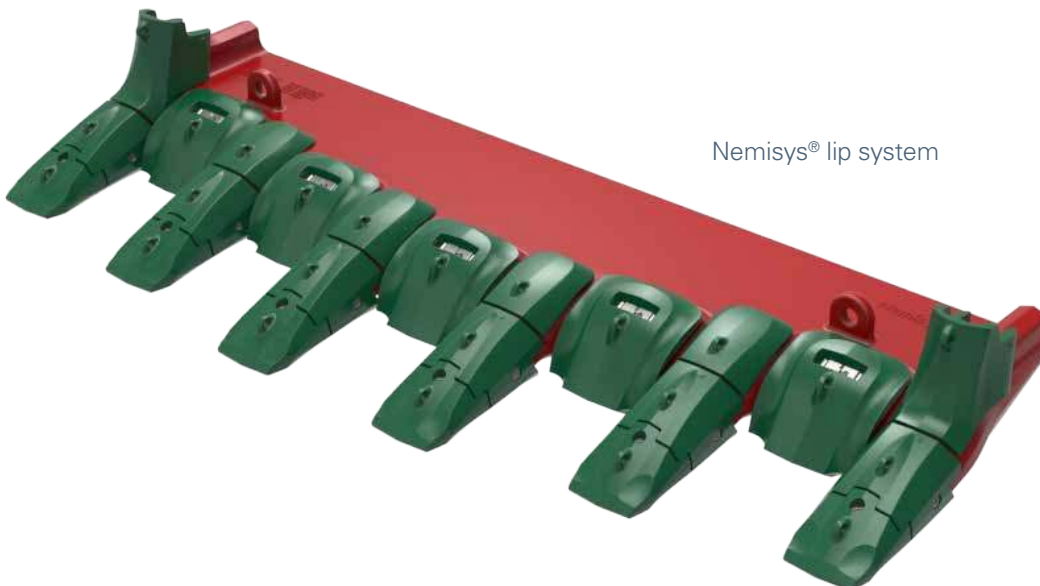
V7 point



Intermediate adapter



Intermediate adapter wear cap option



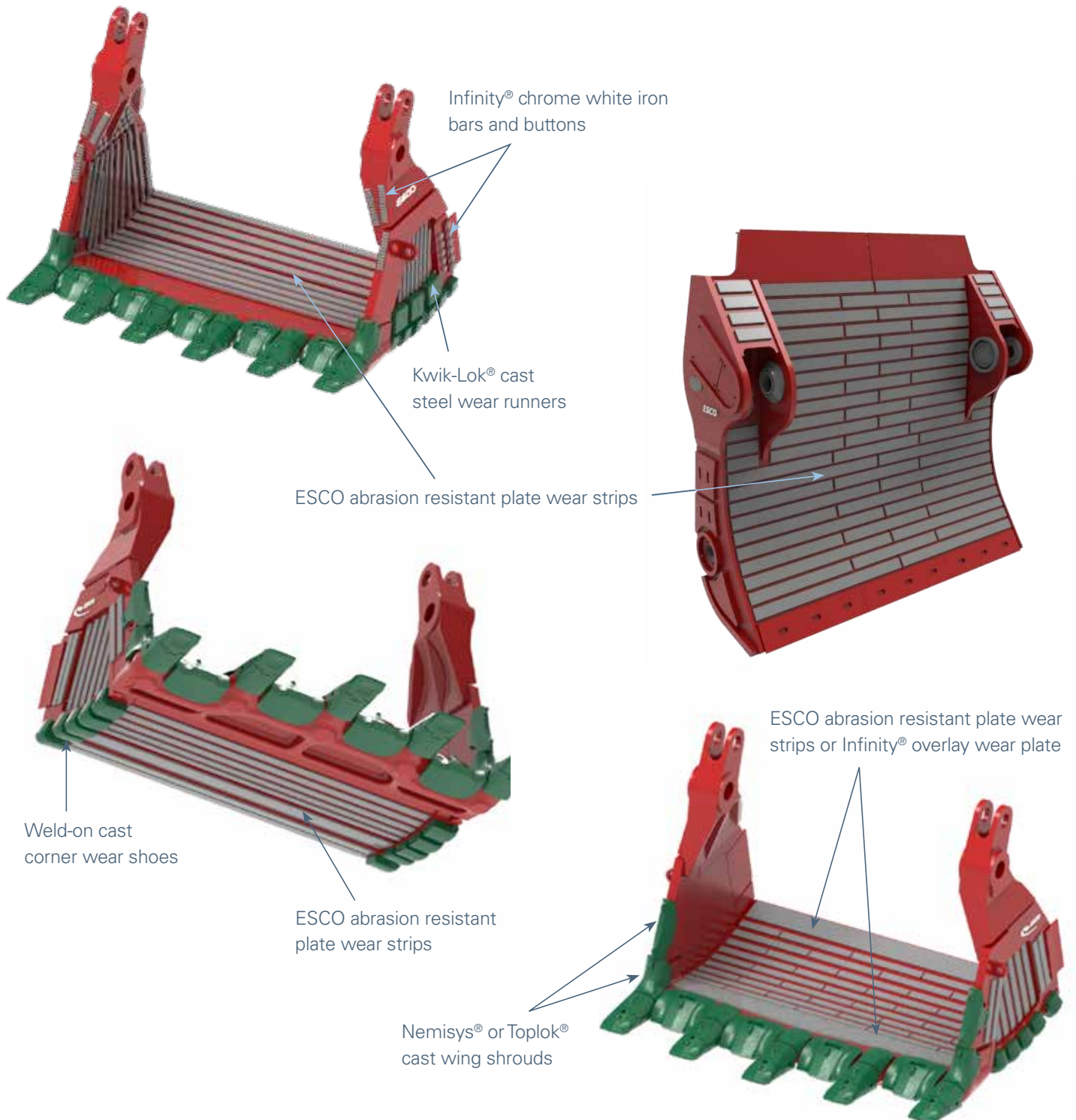
Nemisys® lip system

**Proven in severe applications at the most demanding mine sites around the world.**



## ESCO® hydraulic face shovel wear protection

ESCO works with mine sites to customize bucket wear protection to match operating conditions, allowing predictable duty cycles synchronized with planned maintenance intervals. Many wear protection options are available with some examples shown below.

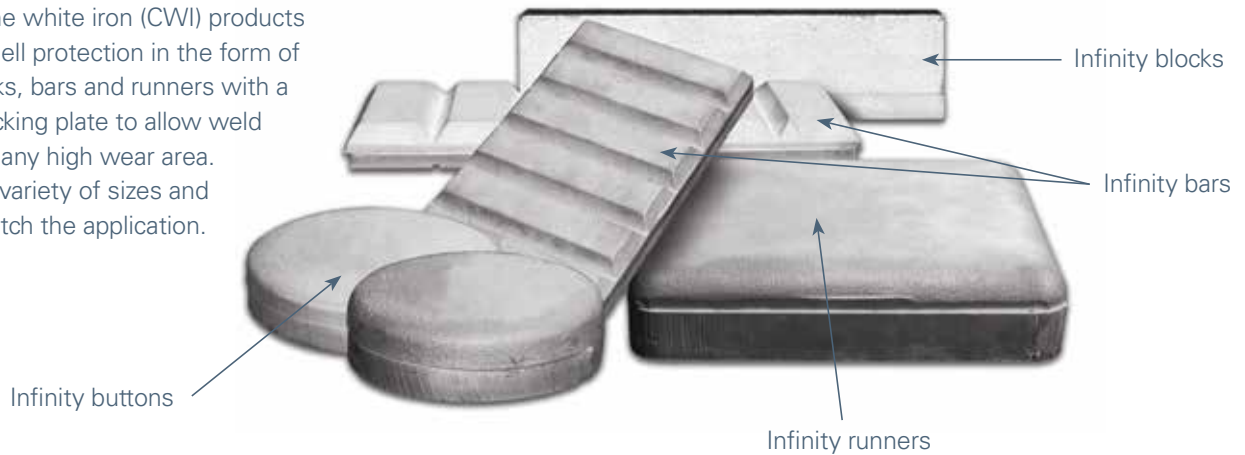


## ESCO® hydraulic face shovel wear protection

Custom wear packages are available for new buckets or for retrofit to existing customer buckets. The wide variety of cast and plate wear products to choose from ensures the right protection in the right location to match the application.

### Infinity® buttons and blocks

Infinity chrome white iron (CWI) products offer 700 Brinell protection in the form of buttons, blocks, bars and runners with a mild steel backing plate to allow weld installation in any high wear area. Available in a variety of sizes and shapes to match the application.



### Abrasion resistant plate

**ESCO AR400** – Through-hardened plate with a typical hardness of 360-444 BHN and a typical toughness of 20 ft.-lbs. in the transverse direction. The plate is very formable, has high wear resistance, and has excellent toughness and weldability.

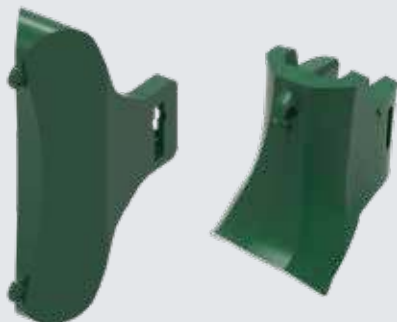
**ESCO AR450** – Through-hardened plate with a typical hardness of 420-470 BHN and a typical toughness of 18-20 ft.-lbs. in the transverse direction. The plate is formable, has superior wear resistance, and has very good toughness and weldability.

**Infinity Chromium Carbide Overlay Plate** – Has a minimum hardness of 573 BHN and offers optimum wear protection in extreme abrasion and medium impact applications. The overlay plate is formable and is available in custom designed kits to fit a wide variety of surface configurations.

### Kwik-Lok® II wear runners

Cast steel, heavy-duty wear runners, sized for easy handling and placement where needed most. The system features a one-piece locking system that provides safer and faster replacement.

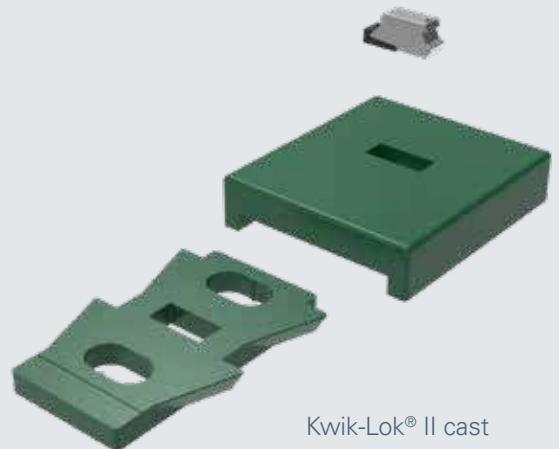
### Cast wear solutions



Cast Nemisys® or  
Toplok® wing shrouds



Cast corner  
wear shoes



Kwik-Lok® II cast  
steel wear runners



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