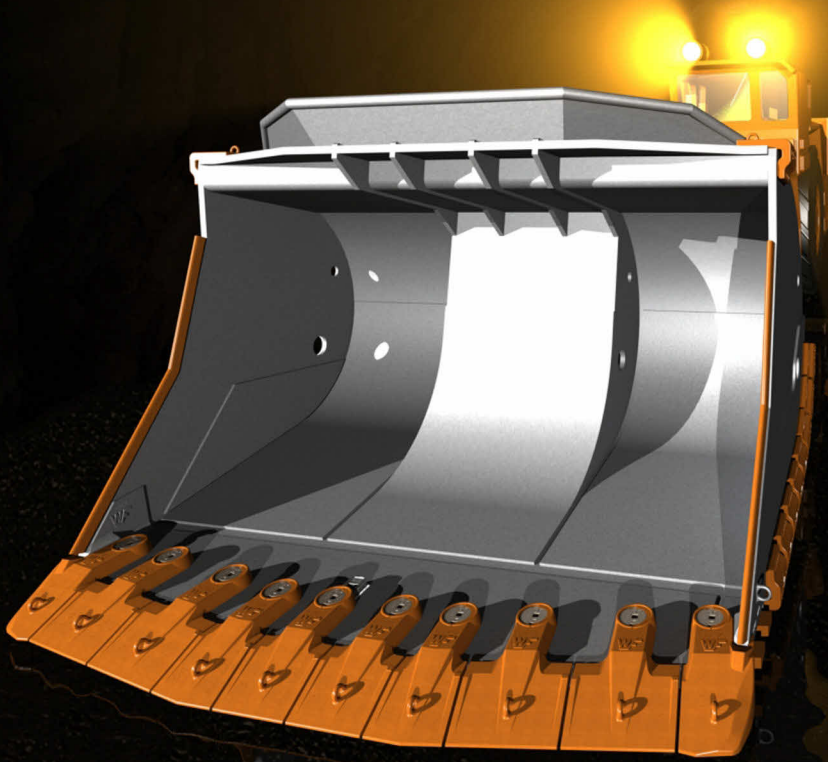




**FASTLOCK SHARP SERIES - THE NEW GENERATION**  
complete bucket protection solution for LHD underground mining machines





## Benefits

### Improved machine efficiency

- Robust proven design avoids breakages and maintenance issues.
- Better digging for longer with strategically placed wear material and stay sharp profile.
- Fully integrated lip and bucket protection.

### Improved Safety and ease of change out

- Safe and easy mechanical change outs.
- No need for gouging or welding during change outs.
- One man operation.
- Reduced number of components and change out process steps.

### Reduced Operating Costs

- Reduced down-time of machine compared to other systems with up to 100% more wear life.
- Potential to cut present GET costs by up to 60% alone (see case study).
- Reduced change out times and maintenance.
- Only change the segments that are required.
- All factors resulting in reduced costs per tonne.







## Design features

### Locking system

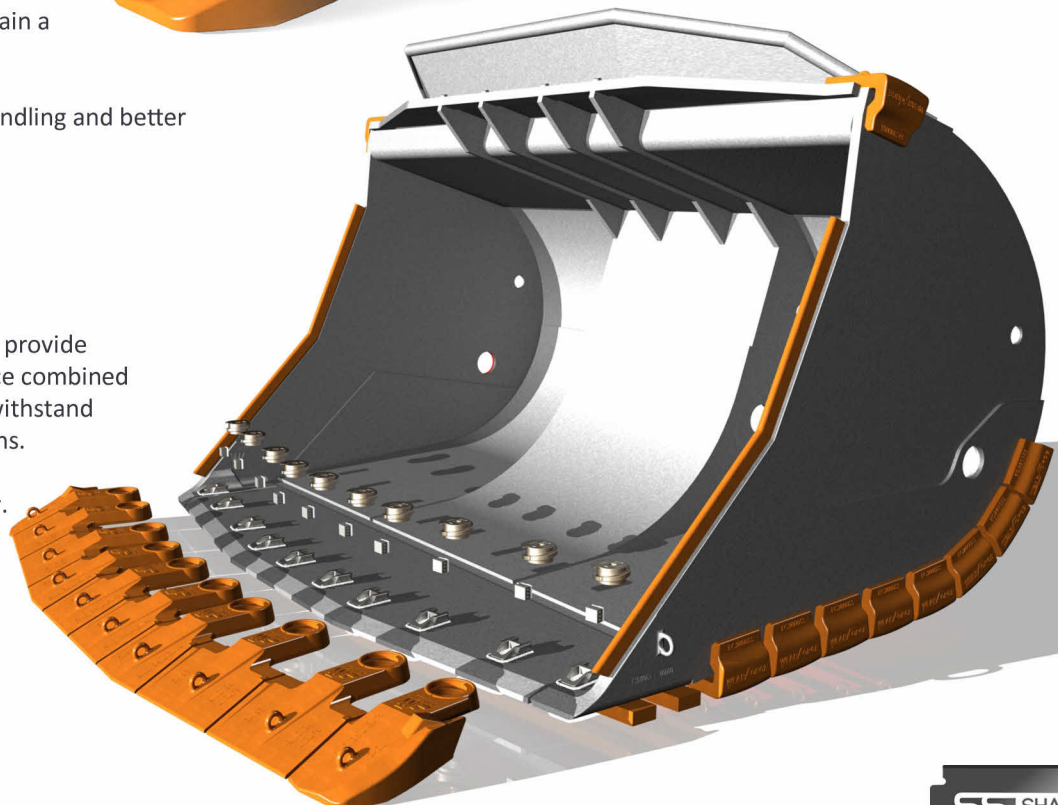
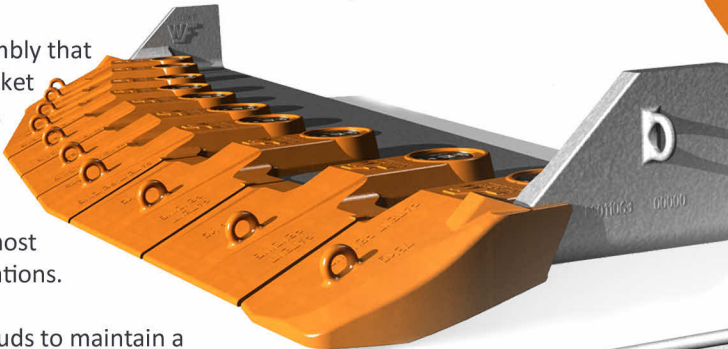
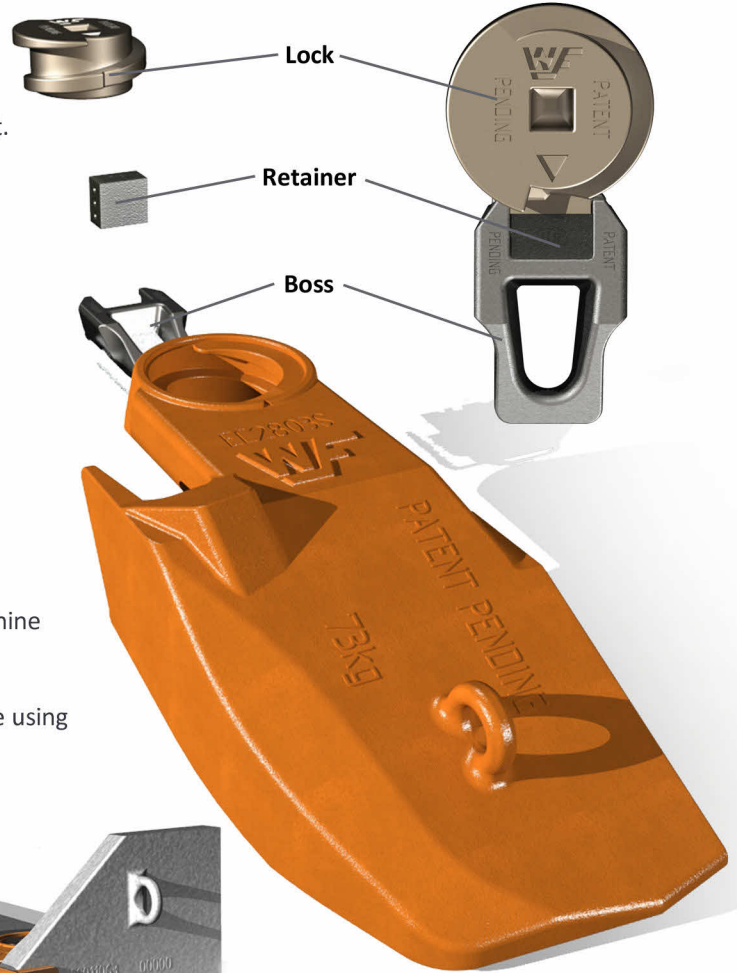
- Simple, quick hammerless locking, that simply screws in and out.
- Fines quickly broken, shroud easier to remove without the need for gouging.
- Reusable lock, simply change retainer for best results.
- Boss fully protected from external wear.
- Minimal number of components helps to simplify mounting and inventory.
- Same locking used on all overground lip shrouds.

### Shroud design

- Penetrative profile to improve load cycle times and reduce machine consumption.
- Designed to last longer and stay sharper throughout working life using high end CAD and non-linear Finite element analysis tools.
- Integrated assembly that provides full bucket wear protection.
- Range of shrouds to accommodate most bucket configurations.
- Half corner shrouds to maintain a continuous cutting edge.
- Slimline lifting lug for safe handling and better shroud performance.

### Steel quality

- Steel has been optimised to provide maximum abrasion resistance combined with maximum toughness to withstand high impact service conditions.
- Wear slower thus last longer.
- Withstand heavy impacts, static loads and repetitive stresses that can cause fatigue and breakages.



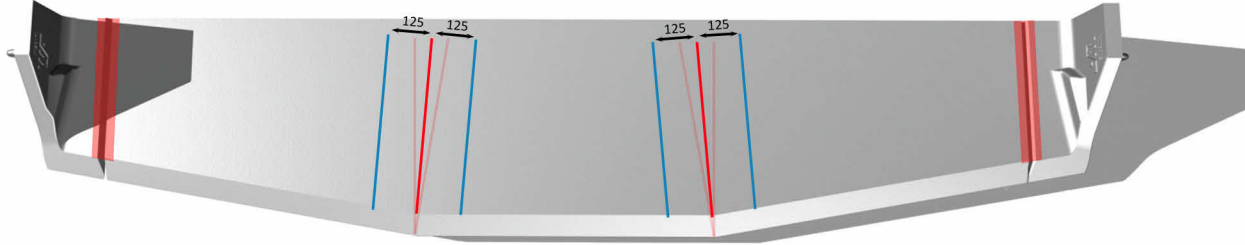


## Installation Guide



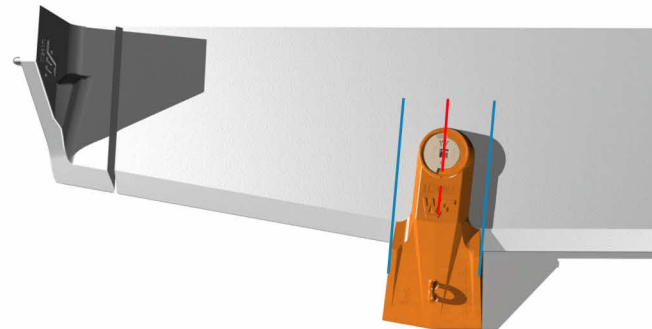
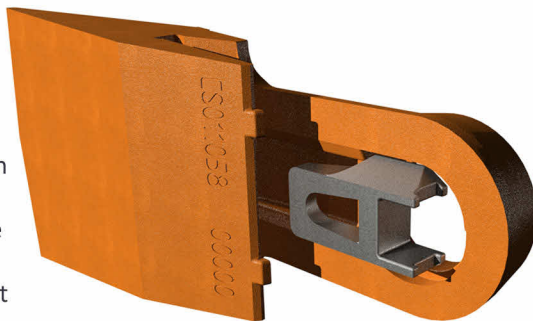
### Step 1.

- a:** Prep and weld cast corners to lip.  
**b:** Square off from straight and delta edges to find transition centres. mark a line either side as shown.



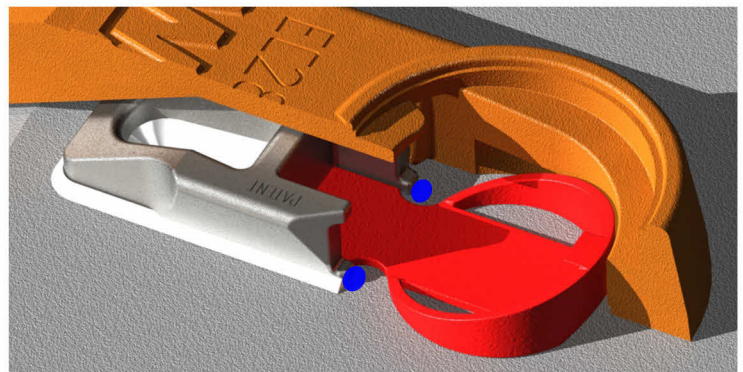
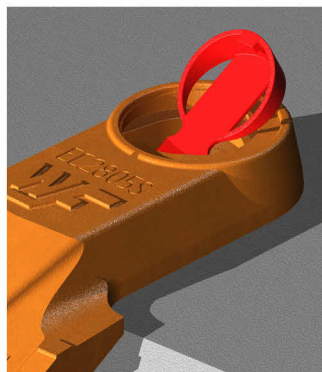
### Step 2.

- a:** Insert metal boss into transition shroud from below.  
**b:** position transition shroud & boss onto lip as shown, ensure lip and shroud make frontal contact and lines and edges align.



### Step 3.

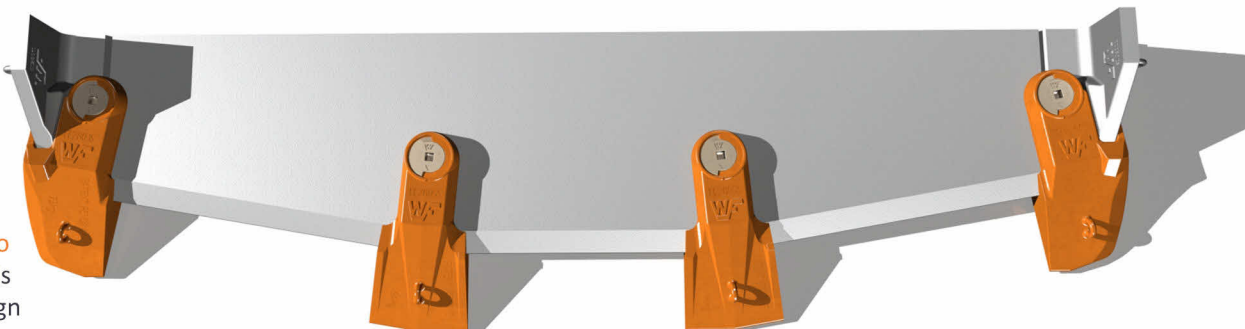
- With the shroud positioned insert supplied jig as shown. Pull boss back with fingers so that it touches jig and tack weld boss to lip in indicated positions. **repeat steps 2 & 3** for second shroud.



### Step 4.

- a:** Insert circular locks into both transition shrouds without retainers for safety.

- b: Repeat steps 2 to 4** for corner shrouds (shrouds should align with cast corners).



### Step 5.

- space subsequent shrouds equally **repeating steps 2 to 4a.**







## Installation Guide



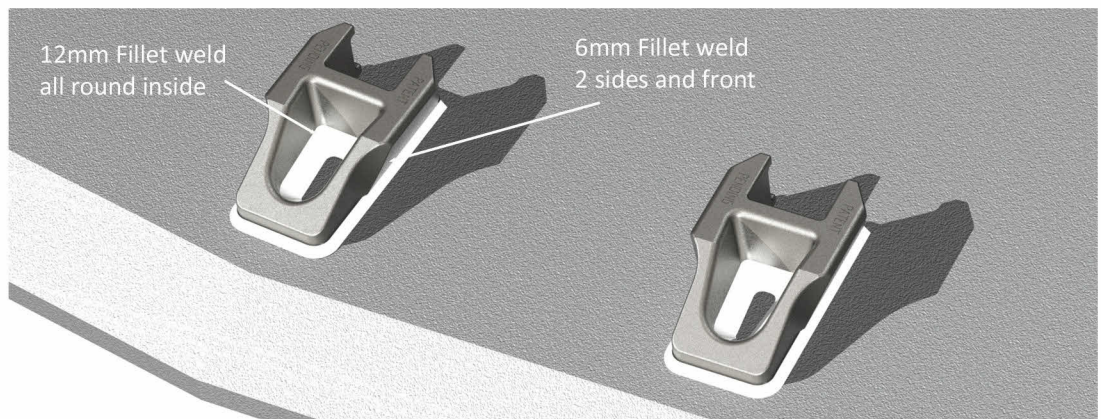
### Step 6.

once all bosses have been tack welded, remove locks and shrouds (refer to mounting guide for instructions).



### Step 7.

Weld all bosses to blade making sure that they do not move or that tackwelds break during procedure.

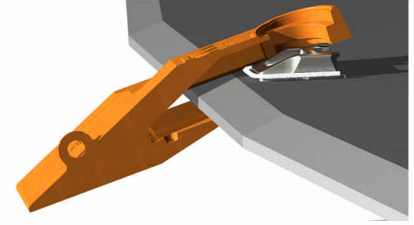
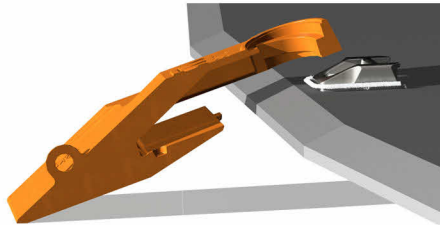


## Mounting Guide



### Step 1.

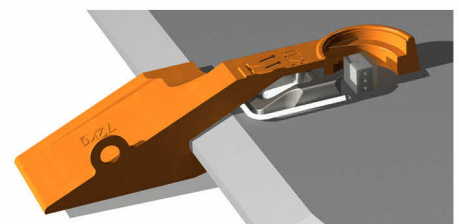
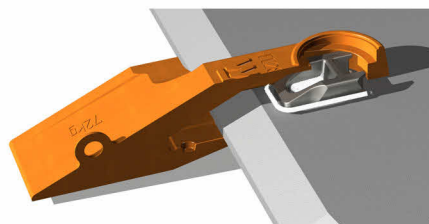
Angle shroud as shown and slide over boss.



### Step 2.

**a:** Push the shroud so that the shoulders of the boss engage with shroud.

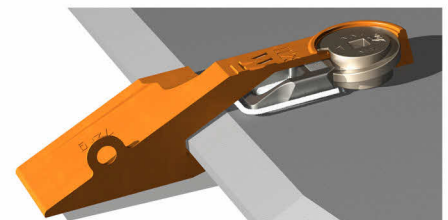
**b:** Insert retainer as shown.



### Step 3.

**a:** Insert lock.

**b:** Rotate lock through 360° using a 1" breakout bar or rattle gun, until the arrow on the lock faces forward as shown.



### Dismounting

Remove any compacted fines from lock and follow reverse procedure to dismount. (Subsequent cleaning and inspection of the lip and boss should be done prior to mounting. Always change any worn components).

### NOTE

Always follow the correct safety precautions and use full safety equipment and clothing during procedures to avoid injury.



## Full service offering

### Overview

At Wearforce we strive to improve your business by providing you with the products and services required to get the job done quickly, efficiently and effectively.

### Engineering and Maintenance

Our specialized and hugely experienced technical staff and boiler-makers are able to assist with any heavy or light weight maintenance work, builds or rebuilds.

### Profile Cutting

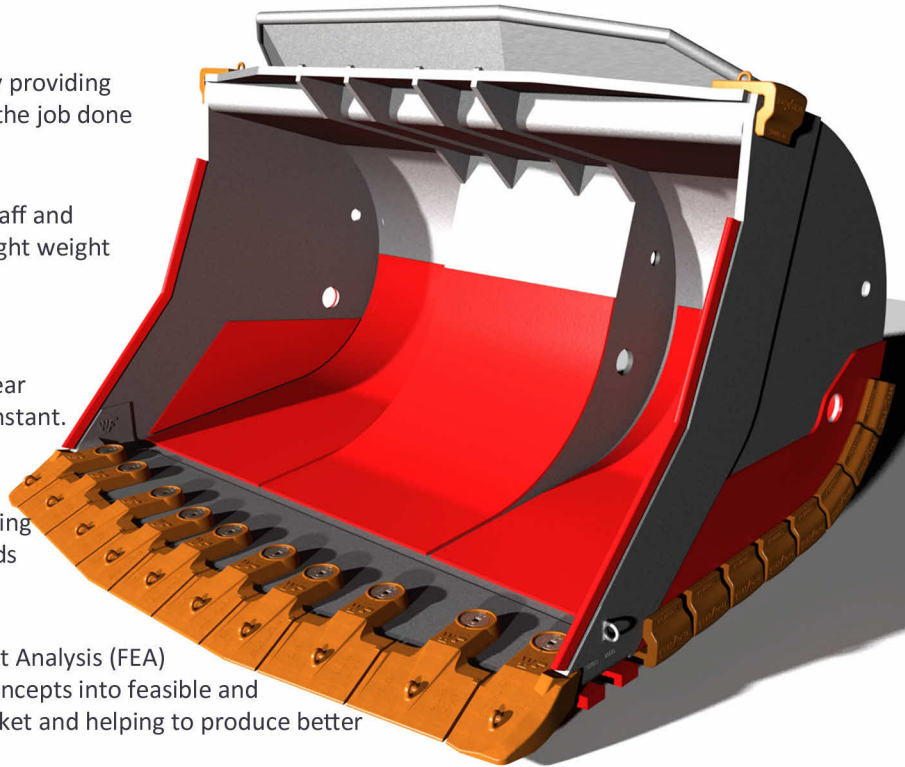
With in-house CAD, Nesting and CNC Profile cutting facilities in our Perth branch, we can pull and cut wear plate directly from stock to meet your needs in an instant.

### Boilermaker labour hire

We have a series of professional and experienced Boilermakers (often inducted with all the major mining companies) for onsite labour hire to meet your needs and requirements.

### Design & Development

We use high level CAD and Non-linear Finite Element Analysis (FEA) software to design, simulate, evaluate and shape concepts into feasible and reliable finished designs. Thus reducing time to market and helping to produce better designs that fully meet our customer's needs.



## Full Bucket protection

### Wearplate

Cut to requirements from Wearalloy 450 - a martensitic abrasion resistant steel, with an average hardness of 450 HBW. The steel offers very high resistance to abrasive wear and impact granting a longer service life.

### Wearstrips and profile bars

Cut from Creusabro - an advanced high resistant performance steel thanks to its outstanding wear performance it can be used as a replacement for conventional Q&T plate & cast applications.

### Additional GET

Heelblocks  
Grouser Bars  
Composite Products







**Head office - Australia**

**Address** 533 Abernethy Road,  
Kewdale, Western Australia 6105

**Tel** +61 (0) 8 9353 6111

**Fax** +61 (0) 8 9353 6188

**Email** [sales@wearforce.com.au](mailto:sales@wearforce.com.au)

**North American Office**

**Address** 69 Bristol Road,  
Chalfont, Pennsylvania 18914, USA

**Tel** +1 (215) 996 1770

**Fax** +1 (215) 822 1423

**Email** [sales@wearforce.com.au](mailto:sales@wearforce.com.au)