

➤ Wear Plate Systems Technical Data Sheet

With the advancement of technology it is now critically vital to minimise maintenance downtimes by effectively utilising superior wear products that are longer wearing and cost effective, whilst still improving safety aspects by reducing hazards and associated risks.

Ceramic Wear Plates

Wear is a complex phenomena made up of several mechanisms.

Vertical Impact (10 to 90 degrees)



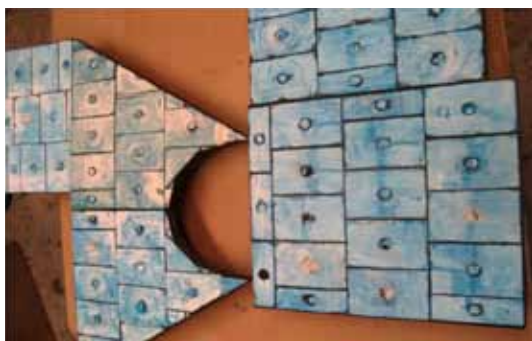
Horizontal Abrasion (0-10 degrees)



Rolling - Combination of above

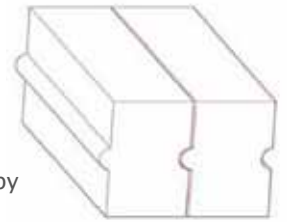


Wear resistant linings and materials must be capable of handling these different mechanisms.



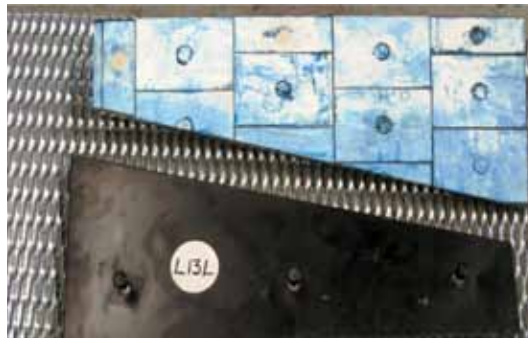
Ceramic Wear Plates Alumina Ceramic Tiles

Our ceramic tiles are a modular system where ceramic tiles manufactured from high wear resistant alumina have been moulded into a polyurethane elastomer matrix by chemical bonding.



The design ensures the tiles are locked into the system, preventing movement even in the most aggressive applications.

L13L Plates pre-manufactured shapes & sizes



NEW 504



Wear plate attached to man hole lid



2 Wear Plate Systems

Calyco Ceramic Wear Plates (Rubber backed)

- As well as Calyco ceramic/polyurethane wear plates, Calyco also supply a wide range of rubber backed ceramics
- These come in a variety of standard sizes and thicknesses
- Further to this any, shape of ceramic block can be used i.e. hexagonal, square, cylindrical
- The rubber backed ceramic plates can also be custom made to suit required designs.



Apart from the advantages of extended wear rates and the cost effectiveness of using Calyco Ceramic Wear Plates, there are other bonuses...

- Zero porosity
- Isostatically moulded
- Australian manufactured
- Rapid delivery time
- Lightweight to handle
- Noise reduction
- Polyurethane elastomer
- Unique locking mechanism
- Any size or design available on request.

3 Wear Plate Systems

OCCUPATIONAL HEALTH & SAFETY ISSUES

For many years it has been well known within the mining industry that manual handling and installation of wear materials has been a contributing factor to the injury of many workers.

Sprains, strains and major soft tissue injuries are well documented, though application of minor changes would have rectified many associated risks and hazards.

MANUAL HANDLING

Categories of manual handling:

- Lifting, Carrying or Putting down
- Pushing, Pulling, Throwing or Restraining
- Awkward postures (bending, twisting)
- Repetitive movements.

Common hand injuries:

Caught between

- (crush, pinch points)
- Struck by (hand tools, ejected parts).

Come into contact with:

- (sharp tools & edges, hot surfaces).

A critical aspect of using conventional wear materials is chute design, where inherent hazards and risks are encountered.

- Confined space
- Limited movement
- Poor ventilation
- Slips and falls
- Fatigue of worker
- Time spent in chute
- Poor egress and access
- Additional time in chute equates to Additional risk of injury.

Mining Products

- **Wear Protection**
- Equipment & Machinery
 - Drilling and Blasting
 - Engineering Plastics
 - Consumables
 - Safety