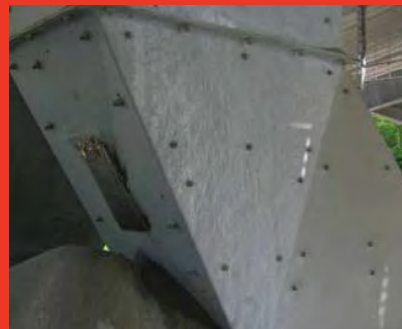


Wear Management Solutions

# Wear protection of Chutes and Liners

*Enduring Performance...*

*Stronger, with  
Eutectic*



- Engineered turn-key solutions
- Increase service life of chutes and liners
- Latest solutions for abrasion and impact wear
- Reduce maintenance costs and decrease plant shutdowns
- CastoDur Diamond Plate (CDP®) Technology



## Engineered for Maximum Wear Protection

- Wear protection experts design and build chutes and liners to your specification
- Superior wear plate, expertly placed to resist combinations of wear.
- Fully equipped workshops with the latest technology
- Rigid quality control procedures
- Ready-to-install chutes save you time and money



Thin, smooth, fused, tungsten carbide, powder plate

Complex carbide XuperWave plate



## Extend Service Life with XuperWave® CDP Wear Plate



Straight Bead

XuperWave Bead

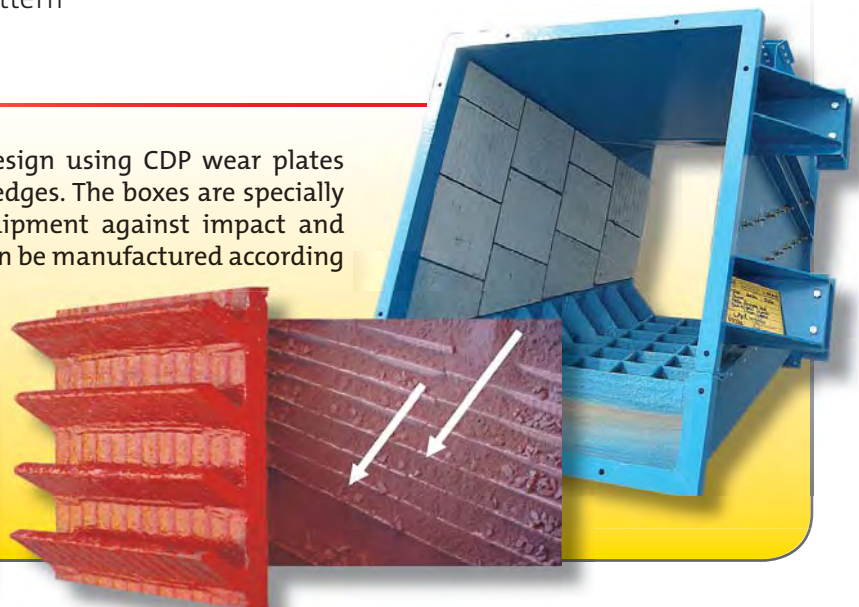
- XuperWave - zigzag weld bead pattern
- Ideal for chutes exposed to fine particles at high velocity
- Maximum protection against linear erosive wear
- Prevents fine particle tracking at points most susceptible to wear such as the stress cracks and weld bead overlap
- Reduces wear by up to 30% over conventional straight weld bead pattern

## Rock Box Solution

The **Rock Box Solution** is an exclusive Eutectic design using CDP wear plates and specified hardfacing alloys on the wear plate edges. The boxes are specially designed to retain material, protecting your equipment against impact and abrasion, resulting in increased service life. Parts can be manufactured according to customer design specifications.

### ADVANTAGES:

- Extended service life of valuable chutes
- Significant cost savings
- Custom fabrication available
- Wide variety of wear plate alloys



Stronger, with Eutectic

[www.eutectic.com](http://www.eutectic.com)



## World Leader in Advanced Alloy Development in Wear Plate

PLATE	TYPE	ABRASION	EROSION	IMPACT	CORROSION	DESCRIPTION	G65*	HARDNESS (HRC)	TOTAL PLATE THICKNESS**			
<b>CDP 395N</b>	WELED	■	■	■	■	<b>HIGHEST ABRASION RESISTANCE</b> NanoAlloy® nano size ultra hard phases.	12 mm <sup>3</sup>	68-71	10mm (3/8")	13mm (1/2")	19mm (3/4")	
<b>CDP 4666</b>	WELED	■	■	■	■	<b>HIGHER ABRASION RESISTANCE</b> Complex carbides and borides. High-temperature.	17 mm <sup>3</sup>	61-64	8mm (5/16")	10mm (3/8")	13mm (1/2")	19mm (3/4")
<b>CDP 4923</b>	WELED	■	■	■	■	<b>HIGHEST IMPACT RESISTANCE</b> Titanium carbide.	24 mm <sup>3</sup>	54-57	13mm (1/2")	19mm (3/4")		
<b>CDP 4624</b>	WELED	■	■	■	■	Chromium carbide.	23 mm <sup>3</sup>	58-61	10mm (3/8")	13mm (1/2")	19mm (3/4")	
<b>CDP 112</b>	FUSED	■	■	■	■	Lightweight plate with hard nickel alloy matrix and tungsten carbide particles.	12 mm <sup>3</sup>	58-61	6mm (1/4")			
<b>CDP 212</b>	FUSED	■	■	■	■	Lightweight plate with hard nickel/iron alloy matrix and tungsten carbide particles.	12 mm <sup>3</sup>	58-61	6mm (1/4")			
<b>CDP 6503</b>	PTA	■	■	■	■	65% tungsten carbide on a hard nickel alloy matrix.	10 mm <sup>3</sup>	62-65	7mm (5/16")	9mm (3/8")		

\* ASTM G65 average volume loss in mm<sup>3</sup> after specimen is subjected to wear by dry sand abrasion.

\*\* Custom thicknesses available upon request.

■ Primary Protection ■ Secondary Protection

## Workshop Case Study

Lime dust causes severe wear on the walls and manhole location of a cement chute.

The previous solution was to fabricate the chute from 3/4" (19 mm) thick AR400. The chute lasted 12 months in service.

To increase service life, Eutectic recommended fabricating the chute from 3/8" 6 + 4 (6mm base + 4mm hardfacing) CDP 4666 complex carbide wearplate. Based on the G65 abrasion wear test results (shown at the right) CDP 4666 will last 13 times longer than AR400 (13x/1x).

Expected service life of the chute =

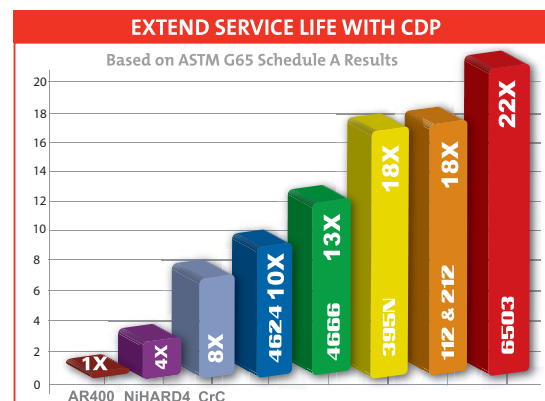
$$\frac{\text{CDP 4666 hardfacing thickness}}{\text{AR400 thickness}} \times \text{G65 Multiplier} \times \text{previous service life}$$

Example:  $\frac{4}{19} \times 13 \times 12 \text{ months} = 32 \text{ months service life}$

Eutectic's Solution is expected to last over 2 years longer than AR400!



Chute fabricated and protected



## On-Site Services: *The Reliability Experts*



Whertec is the on-site service division of Castolin Eutectic. The division offers a highly organized inspection, mobilization, welding and thermal spray service covering a wide range of industrial applications. Every job is covered by a pre- and post-project report that can be used to assess future preventative maintenance requirements and evaluate in-service performance of key component parts. Whertec operates with stringent health and safety standards and has established a reputation for efficiency and reliability.

The combination of Castolin Eutectic's product and application expertise with a world-class site mobilization team offers customers the best possible solution for on-site projects – test the reliability experts with your demanding repair or material conservation projects.



## *Typical Industries Served using Eutectic Solutions...*



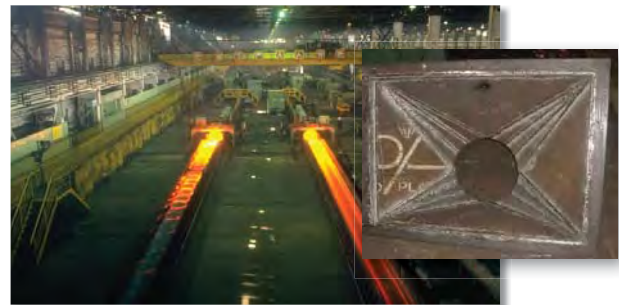
Mining



Power Generation



Cement



Steel

**YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS**



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