Proprietary Tungsten Carbide Vacuum Furnace Fused Powder Wear Plate

# CastoDur® Diamond Plate 112



- Deposit consists of 35% Tungsten Carbides dispersed into a NiCrBSi wear resistant matrix
- Up to 20 times the life of conventional heat treated steels
- Manufacturing process is able to produce a dense, smooth and crack free deposit
- No dilution into the base metal



#### **DESCRIPTION:**

EutecDur CDP 112 is a unique development in the design of wearplate. This product is created with a patented vacuum fused powder coating, which consists of densely packed tungsten carbide particles held together in a nickel alloy matrix. The extreme hardness of the tungsten carbide withstands abrasion and erosion while the nickel matrix gives the coating its adhesion and toughness.

Due to CDP 112's design, it can be easily cut, formed or rolled into desired shapes and sizes for custom fabrications. By using a fusible powder we are able to produce a dense, smooth and crack free 2mm (5/64") thick coating over a 4mm (5/32") substrate. With the combination of our manufacturing process and the powder alloy, we are able to create the highest wear life possible on such a thin and lightweight wearplate.

## **TECHNICAL DATA:**

Overall Thickness	Base	Overlay	Approx. Wt. per sq/ft
1/4" (6mm)	4mm	2mm	10.15 lb.

## **OVERLAY PROPERTIES:**

Nominal Hardness: Matrix HRC 58-60 Microhardness: DPH 1500-1800 Macrohardness: HRC 58-60

Max Service Temperature: 1200° F (approx. 649°C)

Overall Wear Plate Density: 0.284 lb/in<sup>3</sup> ASTM G65 Wear Test Results: 12-mm<sup>3</sup>

Typ. Analysis with Principal Elements: NiCrBSiFe + WC-W<sub>2</sub>C

## **STANDARD SIZE:** 31½" x 47½" (800mm x 1200mm)





### **WELDING INFORMATION:**

CDP 112 premium wear plates are easily welded using Eutectic alloys:

## SMAW (Electrode)

Joining Electrode Coating Repairs

Ultimium 112

Mild Steels EutecTrode® 66

EutecTrode® 66XHD

Alloy steels EutecTrode® 680

Xuper® 6868 XHD

# **GMAW (Wire)**

	Joining Wire	Coating Repairs
Mild Steels	EnDOtec® DO*66	1st EnDOtec® DO*11 2nd M56FW
Alloy steels	EnDOtec® DO*68S EnDOtec® DO*29S	

## **Eutalloy® (Spray Process)**

	Joining Wire	<b>Coating Repairs</b>
Mild Steels	NA	Super Jet® Torch with TungTec®
Alloy steels	NA	10112 Powder

## **TYPICAL APPLICATIONS:**

Cement: Fan Blades, Deflector Blades and Roller Mill Classifiers

Classifiers

Utilities: Exhauster Blades and Classifiers, Boiler Ducts and

Burners

Pulp & Paper: Chipper Housings, Chip Blowers and Hog

**Housing Liners** 

Oil Sand Mining: Feed Aprons & Chutes, Haul Trucks, Skid

Pads and Runners

Recyclers: Wear Guides, Deflectors, Holding Bins and

Hoppers

## YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



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