

# **CTC6000 CHROMIUM CARBIDE OVERLAY**

## **CTC6000**

Is manufactured with high quality materials as a bulk overlay of high chromium, high carbon alloy onto a base plate utilising submerged arc welding to achieve a wear resistant plate for use in a variety of material handling applications.

#### **BASE PLATE**

The standard base material is mild steel plate of varying thickness, ensuring the finished parts are readily weldable. Alternative base plate grades can be incorporated with the CTC6000 overlay to meet specific customer requirements.

## **OVERLAY MATERIAL**

The CTC6000 overlay consists of primary M<sub>7</sub>C<sub>3</sub> carbides and fused WC in a eutectic matrix of austenite and eutectic M<sub>7</sub>C<sub>3</sub> carbide.

#### **SPECIFICATION**

CTC6000 overlay has been manufactured to ensure compliance with the microstructure, chemistry, hardness and dry abrasion test values for specific customer requirements.

## **TYPICAL PROPERTIES**

**Bulk Hardness:** >700 HV30 ~1500 HV<sup>0.5</sup> Primary M<sub>7</sub>C<sub>3</sub> carbide: Volume fraction Primary Carbides: 20% to 40%

#### **WELDING**

The base material can be welded with standard low hydrogen welding consumables. (Avoid contact with overlay material)

## **CUTTING, FORMING & FABRICATION**

Plasma cutting is the recommended method for cutting CTC6000. The mild steel backing plate provides CTC6000 with structural integrity, thus allowing entire structures to be fabricated from CTC6000.





#### **BENEFITS**

- Welding into position is made easy due to mild steel base.
- Proven performance against Q&T Steels
- Excellent wear properties of casting
- Readily formed into almost any shape mild steel can.
- Available in a range of thickness up to 50on20 (70mm).

#### **APPLICATIONS**

Applications involving high sliding abrasion and medium impact, such as.

- Chutes
- Ore Bins
- **Feeders**
- Excavator bucket protection
- Stackers
- Mobile Plant
- **TLO Systems**
- Hoppers
- Screen decks
- Spill plates





Technical Data Sheet available upon request