

# DGC EC180 CHROMIUM CARBIDE OVERLAY

## EC180

**EC180** 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 **EC180 overlay** to meet specific customer requirements.

### OVERLAY MATERIAL

The **EC180 overlay** consists of primary  $M_7C_3$  and MC carbides in a eutectic matrix of austenite and eutectic  $M_7C_3$  carbide.

### SPECIFICATION

**EC180 overlay** has been manufactured to ensure compliance with AS/NZS 2576:1996 Grade 2455.

### TYPICAL PROPERTIES

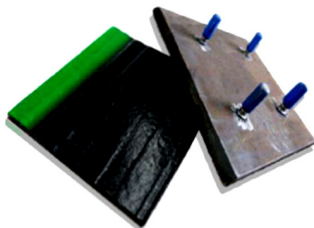
Bulk Hardness:	>630 HV30 (~57 HRC)
Primary $M_7C_3$ carbide:	~1500 HV <sub>0.5</sub>
Volume fraction Primary Carbides:	15% to 35%

### WELDING

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

### CUTTING, FORMING AND FABRICATION

Plasma cutting is the recommended method for cutting **EC180**. The mild steel backing plate provides **EC180** with structural integrity, thus allowing entire structures to be fabricated from **EC180**.



Technical Data Sheet available upon request.

### 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.

### APPLICATIONS

Applications involving severe sliding abrasion and medium impact, such as:

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



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