

Open Arc Welding Wire

April 2016

## **PRODUCT OVERVIEW**

POLYCHROME 100 D—an iron based high carbon, high chromium carbide metal cored wire, is designed for metal to earth applications with severe abrasion and light to moderate impact. POLYCHROME 100D develops a tight cross check pattern and is used on crushing equipment primarily in the power generation and cement industry. A unique attribute of POLYCHROME 100D is that it can be applied in multiple layers when using stringer beads and special procedures (contact Polymet for more information). This process is used to refurbish coal and cement pulverizer rolls and rings. Deposits are normally limited to two layers and cannot be machined or flame cut.

### **TYPICAL DEPOSIT CHARACTERISTICS:**

#### **SPECIFICATION:**

Chrome carbide

⇒ Abrasion Resistance: High

Low-Moderate

 $\Rightarrow$  Hardness:

Impact Resistance:

HRC 55-62

⇒ Deposit Layers:

\*2 Passes

⇒ Deposit Cross Checks:

Yes

⇒ Magnetic:

Yes

⇒ Hot wear hardness:

900°F

⇒ Machineability:

No

#### **APPLICATION**

- ⇒ Crushing and grinding equipment
- ⇒ Pulverizer rolls & rings
- ⇒ Wear plate
- ⇒ Pipe & elbow ID cladding

# **NOMINAL CHEMICAL COMPOSITION (wt%)**

**Cr C Mn Si Fe** 29.0 5.0 1.7 0.8 Bal

## **RECOMMENDED GTAW PARAMETERS:**

Diameter	Current	Voltage	Amperage	Shielding Gas	Wire Extension	Position
.109" (2.8mm)	DCEP	28-30	425-600+	None	1"-1 1/4"	Flat
.125" (3.2mm)	DCEP	29-33	450-600+	None	1"-1 1/4"	Flat

The properties listed are typical and not to be construed as guaranteed values. Actual properties may vary depending on customer operating conditions.

## **STANDARD SIZES & PACKAGING:**

Diameter Packaging

.109" (2.8mm) 60# coil, 220# drum

.125" (3.2mm) 500# drum

<sup>\*</sup>Multi-layer when applied using stringer beads and automatic operations. Limited applications, contact Polymet for more information