Technical Datasheet

POLYWEAR 60

Oxy-Acetylene / GTAW Welding

April 2016

PRODUCT OVERVIEW

POLYWEAR 60—is a nickel chrome silicon boron continuous cast rod that form complex borides and carbides in a nickel matrix. POLYWEAR 60 is designed for a wide range of applications, such as metal to metal sliding, and a combinatio n of wear, corrosion, oxidation or galling. Deposits maintain a high level of hardness up to 1200°F . POLYWEAR 60 yields smooth deposits and can be applied to low and medium carbon steels, cast iron and stainless steels.

TYPICAL DEPOSIT CHARACTERISTICS:

- ⇒ Abrasion Resistance — Excellent
- ⇒ Impact Resistance: — Fair
- ⇒ Corrosion Resistance: — Good
- ⇒ Hardness-single layer: — 54-62 HRC
- ⇒ Deposit Cross Checks: — No
- ⇒ Magnetic: — No
- ⇒ Machineability — Grinding
- ⇒ Hot Hardness — Up to 1200°F

*Two layers on carbon steel

SPECIFICATION:

AWS 5.21 ERNiCr-C

APPLICATION

- ⇒ Shaft sleeves
- ⇒ Bushings
- ⇒ Valves
- ⇒ Pump parts
- ⇒ Dies
- ⇒ Oil extraction screws
- ⇒ Centrifuges

NOMINAL CHEMICAL COMPOSITION (wt%)

C	Cr	Si	B	Ni
0.7	14.0	4.0	3.0	Bal

RECOMMENDED GTAW PARAMETERS:

Diameter	Current	Voltage	Amperage	Shielding Gas
.156” (4.0mm)	DCEN	18-22	120-160	Argon
.187” (4.8mm)	DCEN	18-22	160-190	Argon

RECOMMENDED WELDING PARAMETERS:

Diameter	Tip Size	Flame	Position
.156” (4.0mm)	4	1X	Flat
.187” (4.8mm)	5	1X	Flat

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

7397 Union Centre Blvd. West Chester, OH 45014 / Phone: 513-874-3586 / Fax: 513-874-2880
E-mail: sales@polymet.us