

## PRODUCT OVERVIEW

**POLYWEAR 50**—is a nickel-chrome-silicon-boron metal cored wire that forms complex borides and carbides in a nickel matrix. POLYWEAR 50 is designed for a wide range of applications, such as metal to metal sliding, metal to earth high abrasion and a combination of wear, corrosion, oxidation or galling. Deposits maintain a high level of hardness up to 1200°F. POLYWEAR 50 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:	Moderate
⇒ Corrosion Resistance:	Good
⇒ Hardness-single layer:	35-45 HRC
⇒ Deposit Layers:	2
⇒ Machineability	Grinding
⇒ Hot Hardness	Up to 1200°F

\*Two layers on carbon steel

\*\* Multiple layers: 49-56 HRC

### SPECIFICATION:

AWS 5.21 ERCNiCr-B

## APPLICATION

- ⇒ Shaft sleeves
- ⇒ Bushings
- ⇒ Plastic extrusion screws flights
- ⇒ Slurry pipe and elbows
- ⇒ Oil extrusion screws
- ⇒ Sewage extrusion screws

## NOMINAL CHEMICAL COMPOSITION (wt%)

<b>Cr</b>	<b>Si</b>	<b>B</b>	<b>Ni</b>	<b>C</b>	<b>Fe</b>
12.5	4.0	2.5	Bal	0.6	4.9

## RECOMMENDED WELDING PARAMETERS:

Diameter	Current	Voltage	Amperage	Shielding Gas	Wire Extension	Position
1/16"	DCEP	24-26	200-240	Argon	1/2" - 3/4"	Flat

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