

## PRODUCT OVERVIEW

**POLYTUNG NiCrBWC**—is a nickel chrome boron silicon matrix system, with 38-44% tungsten carbide particles. This combination produces a superior microstructure when welded and has excellent fine particle erosion, corrosion and toughness. The low heat input when welding POLYTUNG NiCrBWC reduces the amount of tungsten carbide particles going into solution. Deposits are not machinable and can not be flame cut.

## TYPICAL DEPOSIT CHARACTERISTICS:

⇒ Abrasion Resistance	Excellent
⇒ Impact Resistance:	Moderate—high
⇒ Deposit Layers:	1-3 passes
⇒ Deposit Cross Checks:	Yes
⇒ Magnetic:	Yes
⇒ Hot Wear Hardness	900° F
⇒ Machineability:	No

## SPECIFICATION:

Tungsten Carbides in a Nickel Chrome Boron Silicon Matrix

## APPLICATION

- ⇒ Dredge cutter teeth & heads
- ⇒ Rotary bucket dredge teeth
- ⇒ Dozer end bits
- ⇒ Pipe & elbow ID slurry type application
- ⇒ Conveyor screws
- ⇒ stabilizers
- ⇒ Filter screens

## NOMINAL CHEMICAL COMPOSITION (wt%)

W	Cr	Si	B	Ni
38-44	10.0	2.2	1.0	Bal

## RECOMMENDED WELDING PARAMETERS:

Diameter	Current	Voltage	Amperage	Shielding Gas	Wire Extension	Position
.062" (1.6mm)	DCEP	17-22*	90-150	75Ar25Co2	3/4" - 1"	Flat

⇒ Use lowest possible heat input for best results

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

## STANDARD SIZES:

### Diameter

.062" (1.6mm)