

Vecalloy B Amorphous Alloy

Arc Spray Wire

DESCRIPTION:

Vecalloy B is a cored wire specifically designed for arc spray systems. It produces an amorphous, hard, abrasive and corrosion resistant coating, with a service environment up to 1700° F. The inclusion of 2.0% aluminum in the formulation results in extremely high bond strength and particle to particle adhesion. High chrome like finishes can be obtained by typical grinding and lapping techniques. Vecalloy B can be used in a wide variety of high wear applications, anti-skid surfacing applications and corrosive environments.

TYPICAL DEPOSIT CHARACTERISTICS:

Typical Hardness: 985 Vickers

67 HRC

Bond Strength: 10,000 psiDeposit Rate: 10 lbs/hr/100A

• Deposit Efficiency: 80%

• Wire Coverage: 0.8 oz/sq.ft/mil

Surface Finish: Grind**
Corrosion Resistance: Excellent

APPLICATIONS:

- Boiler Tubes & Tube Shields
- Yankee Dryer Rolls
- Anti-Skid
- Fan Blades
- Drill Collars
- Hydraulic Shafts

CHEMICAL COMPOSITION (%):

Cr Nb B Ni Si Mn Al Fe 13.2 6.0 4.2 5.5 1.2 1.3 2.0 Balance

RECOMMENDED SPRAY PARAMETERS:

Diameter	Air Pressure	Voltage	Amperage	Standoff
1/16" (1.6mm)	50 - 60 psi	29-32	150 - 250	4 – 8 in (10 - 20cm)

Parameters are typical and may vary depending on equipment used. Contact your equipment manufacturer for optimum spray parameters.

STANDARD SIZES & PACKAGING:

DiameterPackagingPart Number1/16 (1.6mm)25# LLWSVECB062LWS00

The properties listed are typical and not to be construed as guaranteed values. Actual properties may vary depending on customer operating conditions. Polymet makes no warranties, express or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose, except as expressly stated in Polymet's terms and conditions.

SURFACE PREPARATION:

Surface should be clean, white metal, with no oxides (rust), dirt, grease, or oil on the surface to be coated. It is best not to handle surfaces after cleaning. Recommended method of preparation is to grit blast with 18-24 mesh aluminum oxide.

^{**}Grind using aluminum Oxide