

PRODUCT OVERVIEW

Alpha 1800 is an Iron Boron cored wire specifically designed for arc spray systems. It produces a hard, abrasive and corrosion resistant coating, with a service environment up to 1500° F. Excellent finishes can be obtained by typical grinding and lapping techniques. Alpha 1800 is used in a wide variety of high wear applications,, particularly high temperature erosion environments.

TYPICAL DEPOSIT CHARACTERISTICS:

- ⇒ Typical Hardness: HRC 60-65
- ⇒ Bond Strength: 8350 psi
- ⇒ Deposit Rate: 10 lbs/hr/100A
- ⇒ Deposit Efficiency: 70%
- ⇒ Wire Coverage: 1.0 oz/ft² / mil
- ⇒ Surface Finish: Grind **

SURFACE PREPARATION

Surface should be clean, white metal, with no oxides (rust), dirt, grease, or oil on the surface to be coated. **Note:** It is best not to handle surfaces after cleaning.

Recommended method of preparation is to grit blast with 24 mesh aluminum oxide, rough grind, or rough machine in a lathe.

** Grind using Aluminum Oxide

APPLICATION

- ⇒ Boiler tubes & tube shields
- ⇒ Fan blades

NOMINAL CHEMICAL COMPOSITION (wt%)

Fe	B	C
92.0	7.6	0.4

RECOMMENDED SPRAY PARAMETERS:

Diameter	Air Pressure	Voltage	Amperage	Standoff
1/16" (1.6mm)	*50-60 psi	*29-32	*100-200	3-6 in (8-16 cm)

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

STANDARD SIZES & PACKAGING:

Diameter	Packaging	Part Number
1/16" (1.6mm)	25# LWS	ALPHA1800-062LWS01