Nickel-Based, Self-Fluxing, Hardfacing Powder for Resistance to Impact and Wear

Eutalloy[®] 11497



- Porosity-free deposits
- Hand-finishing capability
- Rapid build up with minimal overspray
- Excellent machinablity



DESCRIPTION:

Eutectic 11497 is a nickel base Eutalloy alloy designed to provide a combination of machinability and resistance to wear and corrosion. Excellent weldability and machinability permits easy contour forming on steels, stainless steel, nickel alloys and cast irons. The Eutalloy process permits precise deposition of 11497 so that thin, tough overlays can be applied and dimensional tolerances maintained.

TECHNICAL DATA:

Powder Properties

Nominal Composition: Nickel, Boron, Silicon Hall Flow Rate: 14 seconds Bulk Density: 4.8 g/cc

Coating Properties

Hardness: 25 HRC Maximum Service Temperature: 1200°F (650°C) Thickness Limit: Unlimited

APPLICATIONS:

General-purpose build-up and dimensional restoration for cast iron and steel parts such as:

- Gears
- Cast Iron valve seats
- Molds
- Keyways
- Bearing seats
- Renew drawing tools

PROCEDURE FOR USE:

Preparation:

All surfaces to be coated should be thoroughly cleaned, removing all contaminants, oxides and grease. Thin surfaces and edges require no preheating. However, large, heavy and cast iron parts of all thickness should be heated to about 575°F (approx. 302°C) (blue hot).

Coating instructions:

For coating operations the flame of the Eutalloy B or SuperJet S torch should be adjusted to neutral with the powder feed on. To prevent oxidation of the base material we recommend spraying a thin coat of Eutectic 11497. A second coat is delivered in the following manner: preheat locally to fusion point (when the first coat becomes glazed in appearance), then spray and fuse the second coat simultaneously. Move progressively along, spraying and fusing, until the entire surface is covered. Distance between the cone of the flame and the piece should be .25 - .75 inch. Leave the part to cool slowly and away from air currents. Where possible, place it in vermiculite or cover with a thermal blanket

Finishing Procedure:

Machine with standard carbide tools or grind with the following parameters: Grinding Wheel Type: Green Silicon Carbide Grit Size: 60 - 80 Grade: H (soft) Structure: 5 Bond Type: Vitrified Wheel Speed: Use Manufacturer's Recommendation Work Speed: 50 -65 surface feet per minute

YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



EUTECTIC CORPORATION N94 W14355 Garwin Mace Drive Menomonee Falls, WI 53051 USA Tel.: +1 (800) 558-8524 eutectic.com EUTECTIC CANADA 428, rue Aimé-Vincent Vaudreuil-Dorion, Québec J7V 5V5 Canada Tel.: +1 (800) 361-9439 eutectic.ca



Statement of Liability: Due to variations inherent in specific applications, the technical information contained herein, including any information as to suggested product applications or results, is presented without representation or warranty, expressed or implied. Without limitation, there are no warranties of merchantability or of fitness for a particular purpose. Each process and application must be fully evaluated by the user in all respects, including suitability, compliance with applicable law and non-infringement of the rights of others, and Eutectic Corporation and its affiliates shall have no liability in respect thereof. 11497 06/17 © 2008, Eutectic Corporation, © Reg. T.M., Printed in the U.S.A.