

Proxon 21031

Pre-Alloyed, Self-Bonding “Stainless Type” Nickel-Chromium Powder

Description

Proxon 21031 is a pre-alloyed, self-bonding «stainless type» nickel-chromium powder designed for producing homogenous coatings using conventional combustion or plasma thermal spray equipment. It is particularly well-suited for applications involving corrosion at high temperatures.

Product Details

- Coating of parts in the pulp & paper industry
- Protection of fan blades, shaft sleeves, and roller bearing seats Coating of compressor pistons

APPLICATIONS:

Thickness Limit: >0.125 inch

Proxon 21031 is a self-bonding NiCrAl alloy with good resistance to corrosion from wastewater. Coatings from Proxon 21031 have a very low coefficient of friction and provide thick deposit capability (<3mm).

Utilities: Pump shaft bearing fit, pump pistons, impeller shafts

General: Electric motor shafts, end bells, grinder spindle bearings, drill press quills

PROCEDURE FOR USE

Preparation:

Clean and preheat the spray areas to 50 – 150°C. Remove damaged material and round off edges.

Spraying:

Roughing can be done at 0.004 inch per revolution crossfeed with infeed of 0.010 to 0.030 inch.

Apply the powder in the preheated state to achieve the desired coating thickness. Maintain the spray layer temperature between 50°C and 200°C. Do not exceed a coating thickness of 2 mm.

Cooling: Allow the coating to cool in still air. Good machined finishes can be obtained using carbide tools with low turning speeds in the range of 50 to 80 surface feet per minute.

Finishing can be done at less than 0.004 inch per revolution crossfeed with infeed of less than 0.005 inch (turning speed can be increased somewhat for finishing). Coolants and applications involving corrosion should be avoided.

Note: please refer the parameters given in operation manual

TECHNICAL DATA

Values	Combustion	Plasma
Macrohardness:	HRB 85	84HRB
Microhardness:	DPH 225	215 DPH
Bond Strength:	>4000 psi	>5000psi
Max. Service Temperature: 1600°F		
Melting Point: 2550°F (1379°C)		