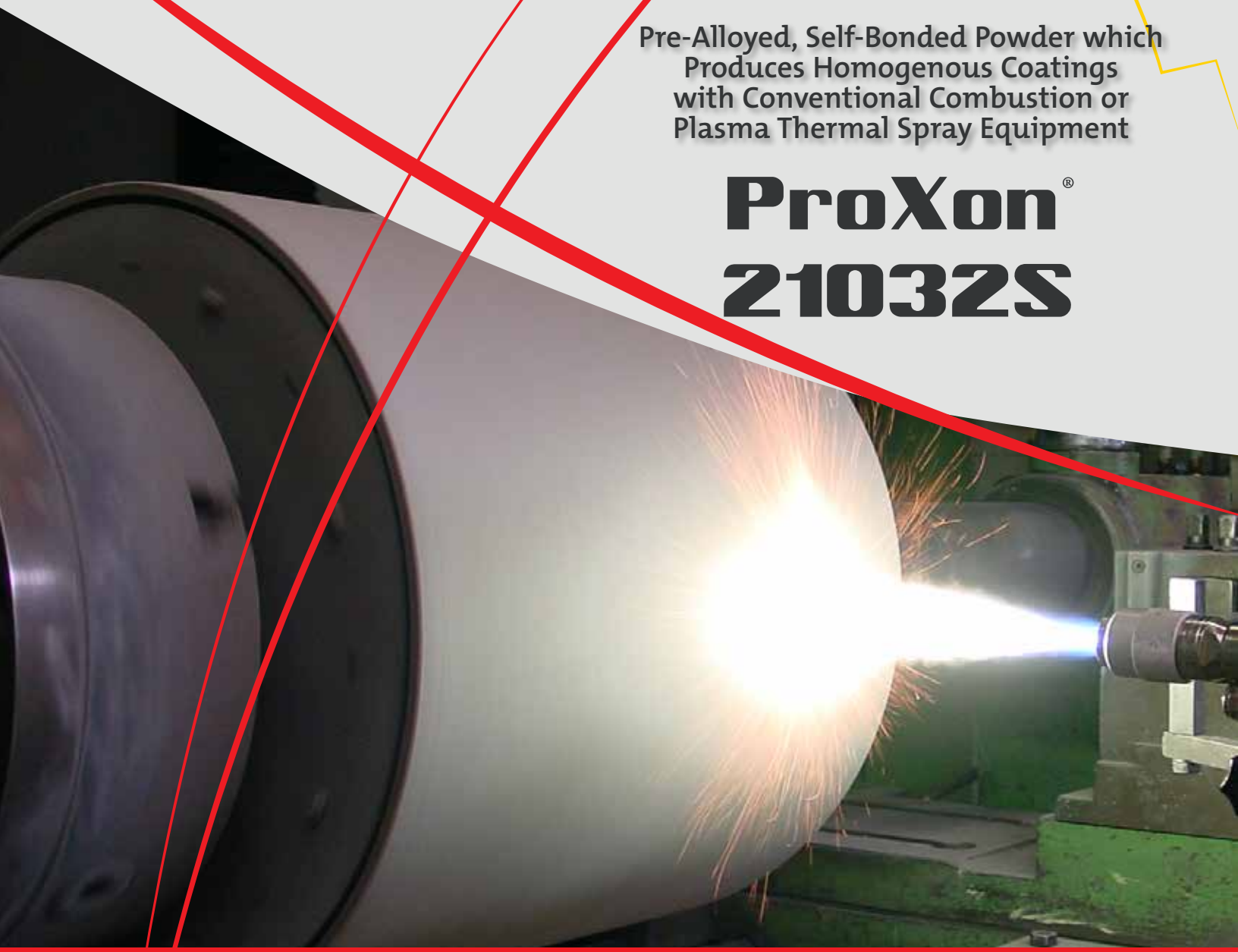
Castolin Eutectic®
Eutectic Castolin

Pre-Alloyed, Self-Bonded Powder which Produces Homogenous Coatings with Conventional Combustion or Plasma Thermal Spray Equipment

ProXon® 21032S



- Minimal operator technique needed for excellent coatings
- Separate bond coating material is not required
- May be finished by machining

ProXon® 21032S

ProXon 21032S is a pre-alloyed, self-bonding powder which produces homogenous coatings with conventional combustion or plasma thermal spray equipment. The unique exothermic nature of the powder minimizes dependence on operator technique to obtain excellent quality coatings. A separate bond coat material is not required. 21032S powder is a unique nickel-molybdenum-iron alloy particularly well suited for applications involving acid corrosion. Additions of titanium help to produce a strong exothermic reaction and to ensure excellent resistance to abrasion and galling.

Coatings can be deposited more economically than other conventional self-bonding materials, with all spray systems, due to higher spray rates, higher deposit efficiencies and greater coverage per pound. Additionally, because of the unique manufacturing process used to produce ProXon 21032S, nozzle build-up and loading, frequently a problem with composite self-bonding powders, is eliminated.

TECHNICAL DATA

Typical Values	
Typical Macrohardness:	30 -36 HRC
Coating Density:	8.1 g/cc
Coating Weight (lb/ft²@0.001"):	0.042
Interconnected Porosity:	5%
Bond Strength:	5000 psi
Max. Service Temperature:	1200°F (649°C)
Thickness Limit:	0.060"
Aparent Density:	2.0 g/cc
Hall Flow:	42 sec / 50 gr

PROCEDURE FOR USE:

ProXon 21032S can be finished by machining or by grinding using a coarse grain, low-bond strength silicon carbide wheel. Good machined finishes can be obtained using carbide tools such as "D" shaped, K68 and low turning speeds in the range of 50 to 80 surface feet per minute. Roughing can be done at 0.004 inch per revolution crossfeed with infeed of 0.010 to 0.030 inch.

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 should be avoided unless the coating is first treated with a sealer such as RotoGuard or SealTec-LT.

TYPICAL APPLICATIONS

APPLICATIONS	INDUSTRY
• Impellers, Pump Shafts	Utility
• Plungers, Shaft & Seal Surfaces	Chemical
• Recovery Boiler Waterwall Tubes	Pulp and Paper
• Machine Element Repair	General

Observe normal spraying practices, respiratory protection and proper air flow pattern advised. For general spray practices, see AWS Publications AWS C2. 1-73, "Recommended Safe Practices for Thermal Spraying and AWS TSS-85, "Thermal Spraying, Practice, Theory and Application." Thermal spraying is a completely safe process when performed in accordance with proper safety measures. Become familiar with local safety regulations before starting spray operations.DO NOT operate your spraying equipment or use the spray material supplied, before you have thoroughly read the equipment instruction manual. Refer to the Eutectic website for Material Safety Data Sheet (MSDS) information. DISREGARDING THESE INSTRUCTIONS MAY BE HAZARDOUS TO YOUR HEALTH.

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