



**SULZER PUMPS INC.
MANUFACTURING
ENGINEERING
JOB SPECIFIC PROCEDURES
FLORIDA POWER CORPORATION
BELZONA 1341
SUPERMETAL GLIDE**

Procedure No. D51.517
Revision NO. 0
Revision Date: 9/01/99
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SUBJECT: APPLICATION OF A CERAMIC COATING

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Date

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Date

1.0 PURPOSE

This procedure provides instructions and identification of materials for the coating of the interior surfaces of pumps with Belzona.

2.0 SCOPE

This procedure shall be used for the following job:
01709016 FPC'99.

3.0 RESPONSIBILITY

The *Manufacturing Engineering* Manager is responsible for the maintenance and revision of this procedure.

4.0 GENERAL

4.1 This specification establishes the standard application and surface preparation requirements for SBPI.

4.2 All coatings shall be applied per the manufacturer's recommendations as defined by this procedure..



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5.0 SAFETY

- 5.1 Only personnel qualified by the painting foreman shall perform surface preparation and painting operations.
- 5.2 Qualified personnel shall be instructed by the painting foreman in the proper methods of both surface preparation and surface coating.
- 5.3 Sulzer Bingham shall furnish adequate personal protective equipment for eye, face and respiratory protection. Personnel shall be instructed in the proper use and maintenance of the safety equipment.
- 5.4 Application and preparation for coating shall be performed with adequate ventilation, and with the proper protective equipment.

6.0 SURFACE PREPARATION

- 6.1 All interior surfaces shall be grit-blasted as required to remove any sand, grit, oil or other surface contamination.
 - 6.1.1 The compressed air used for blasting and/or cleaning/drying shall be free from water and oil. Traps and separators shall be provided both at the compressor and at the pot inlet.
 - 6.1.2 Grit materials used for blasting shall be free from dirt or other water soluble, acid soluble, or other contaminants.
 - 6.1.3 If required, solvent cleaning and degreasing shall be performed using lacquer wash



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- 6.1.4 Surfaces adjacent to the area to be coated must be masked using a high quality duct tape.
- 6.1.5 Surfaces prepared by grit-blasting shall be prepared using an angular abrasive. To American Standard SSPC SP 10 (near white metal finish) ensuring a minimum 3 mil (75 micron) profile.
- 6.1.6 On completion of blasting, remove duct tape and wash all surfaces with Belzona 9111 (or other non-oil base cleaner) in order to remove residual blasting debris. Laquer Thinner or MEK is acceptable.

7.0 COATING APPLICATION

- 7.1 Coating shall be applied in accordance with the suppliers recommendations and instructions over blasted surfaces (reference section 6.0).
 - 7.1.1 Prior to the application of all surface coatings, the surface preparation shall be visually inspected to ensure an acceptable bonding surface. If required, the surface may be "touched up" via grit-blasting, solvent cleaning to restore proper surface preparation.
- 7.2 Surfaces to be Coated shall be defined by a sketch by Manufacturing Engineering.
 - 7.2.1 It is critical that all surfaces are coated before the surface has a chance to oxidize.
 - 7.2.2 Surfaces adjacent to the area to be coated must be masked



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8.0 TESTING

8.1 A high voltage holiday tester shall be used to locate, identify pin holes & voids.

8.1.1 Voltage setting, set at 100 volts per mil.



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Sketch 1

