

COATINGS IN ACTION

Background:

Mechanical face seals are widely used in rotary type pumps to prevent leakage through the shaft clearances. The basic design incorporates a stationary surface, typically made of carbon or a like material, and a rotating part which must resist corrosion, wear and scoring. The face of this rotating part must be ground smooth with no surface porosity in order to prevent leakage.

Although many coatings and inserts have been tried, end user demands for seals with greater longevity, as well as, OEM need to minimize costs constantly drives the industry toward the evaluation of new and improved materials and technologies.

Coating Specifications:

Purtech D1235 was selected because of its high hardness and negligible porosity. Deposited by our Hypersonic Spray Process, this coating exhibits bond strengths in excess of 9000 PSI.

Benefits:

- 1 No Distortion-** The cast bushings were completely machined in one step. The use of brazed inserts had previously distorted the bushings requiring multiple machining operations.
- 2 Lower cost-** The coating was provided at a savings of 50% over the insert price with substantially greater savings in reduced machining time.

Results:

Thousands of pieces have been coated to date. Although the life expectancy varies based on operating conditions, seal life has remained consistent with that of brazed inserts at a significant cost savings to the customer. Customer satisfaction remains high.

Should you have a part restoration or hardsurfacing application, please call one of our in house engineers or send your requirements to

Purtech Incorporated, 12 Progress St., East Stroudsburg, PA 18301

UHV HVOF PLASMA TWIN WIRE ARC WIRE METALLIZING

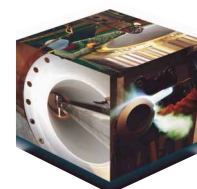
Visit our web site at
www.purtech.com

or contact us

by telephone at
(800) 452-1669

via facsimile at
(570) 424-0397

or email
Infonow@purtech.com



Coatings In Action