



## COATINGS IN ACTION

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POWER INDUSTRY  
WATERWALL HARDCOATING  
WEAR PROTECTION

### BACKGROUND:

In 1978 Congress passed the Public Utility Regulatory Policies Act, PURPA, making financially attractive the construction of non-utility cogeneration facilities. As of 1987 qualified facilities numbered over 1500 nationwide. Many of these boilers burn coal, culm, and solid waste materials. The highly oxidizing atmosphere of the modern combustor coupled with high velocity particles of ash and fuel cause severe degradation of the tube walls. Specific locations of erosion were identified as areas to be coated.

### COATING SPECIFICATIONS:

The portion of the lower combustor to be coated included over 325 square feet of boiler tube wall. Plasma sprayed Purtech 1044 (a hybrid chromium carbide) was selected and applied to a nominal thickness of 0.030". The upper combustor was also coated using electric lift Sky Climbers. This area was some (240) square feet of boiler tubing. In all over 1000 pounds of material was applied in a (10) day period.

### BENEFITS:

- 1** Plasma Sprayed coating significantly increases tube life.
- 2** As part of a routine maintenance program, costly shut downs can be limited.
- 3** Plasma coating quality applied on the job site.
- 4** Coating applied on a 24 hour work day. minimizing down time.

### 'ZERO DEFECTS':

A warrantee covering workmanship is of little value when downtime can run into the hundreds of thousands of dollars. For Purtech, the zero defect philosophy is a way of life. We survive on repeat business and we thrive as a result of our strong commitment to quality.

We've coupled a Zero Defect philosophy with a portable state of the art plasma system to offer our customers more. For a formal quotation, please send your requirements to;

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

UHV HVOF PLASMA TWIN WIRE ARC WIRES METALLIZING

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