



FGD Reaction Tank Lining

PROBLEM:

A South-Central Utility installed limestone SO₂ scrubber systems on their 720 MW units in 1985 and 1987. The Reaction Tank walls and ceilings were originally lined with a thick FRP mat product. This lining started to fail within the first year of operation. The failure mode was delamination between coats and disbondment between the lining and the substrate (carbon steel). The linings on all nine tanks on each unit were failing and the tanks corroding.

SOLUTION:

In November of 1987, after complete removal of the failed material from the walls and in spots on the ceiling, **DUROMAR'S HPL 2131**, 100% solids, high abrasion resistant product was used to reline one tank. We used a special **DUROMAR** designed "Grout Pump" system which allows up to 80 mils of material to be applied in one application. Since we require no primers and apply the complete lining in one coat, we eliminate the major causes of lining failure. **HPL 2131** was applied at 50-60 mils on the walls and ceiling. The joint between the walls and the concrete floor was filled with a closed-cell foam backer rod and topped with additional **HPL-2131**.

RESULTS:

After six months of operation the **HPL 2131** lining was still in perfect condition. On that basis, the go-ahead to do the other tanks was given. A second inspection after 18 months of service again showed the **HPL 2131** to be in perfect condition.

CURRENT STATUS:

Today, after over 13 years of service, the **HPL-2131** is still in excellent condition and continues to protect the tank walls.

COMMENTS:

DUROMAR'S HPL 2131 is a versatile product. Because of its excellent performance in the Reaction Tanks, it was successfully used to repair and/or replace failed gunite lining in the scrubber outlet duct, replace failed FRP lining in a limestone ballmill sump, replace a failed rubber lining in another limestone ballmill sump, and patch the glass lined additive feed tanks.

DUROMAR'S HPL 2131's excellent abrasion resistance and chemical resistance (pH range of 1.5 - 12.5) allow it to be used in many different environments. The simplicity of the one-coat system makes it the most easy to apply and failure free lining system in the industry.



QUALITY SYSTEM
REGISTERED TO
ISO 9001:2000



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