



PROJECT PROFILE

Precast structures and fast-setting flooring solve downtime problem in electrolytic cell building



CUSTOMER

Kerr McGee Chemical Company

Hamilton, Mississippi

CONTRACTOR

McCrary-West Construction Co. • *Columbus, Mississippi*

PROJECT OVERVIEW

Production in the cell building at Kerr McGee's manganese processing facility virtually never shuts down. The low pH anolite solution from the cells degrades the concrete substructure over time. Any floor repair material must be allowed to cure fast in order to achieve its chemical resistance before the solution is allowed to spill onto the area.

The solution to this challenge has been to install in phases TuffRez® 200FS, a fast-setting epoxy mortar system. These repairs have been expertly made under less than optimum conditions (limited time, poor access and temperature extremes). In 1995 the contractor also began to fabricate precast sumps and trenches using PermaRez® 333 vinyl ester polymer concrete. The drain system in the building has almost entirely been replaced with the results of improved flow and no evidence of degradation.

KEY CONSIDERATIONS

Chemical resistance: to acidic solution from electrolytic cells leaking onto floors.

Fast-setting: due to limited downtime.

SYSTEM PRODUCTS

- **TuffRez® 200FS**
Epoxy Topping Binder, Fast Set
- **PermaRez® 333**
Reinforced Lining for Concrete & Steel,
Acid & Solvent Resistant
(used with special grade aggregates for precasting sumps and trenches)