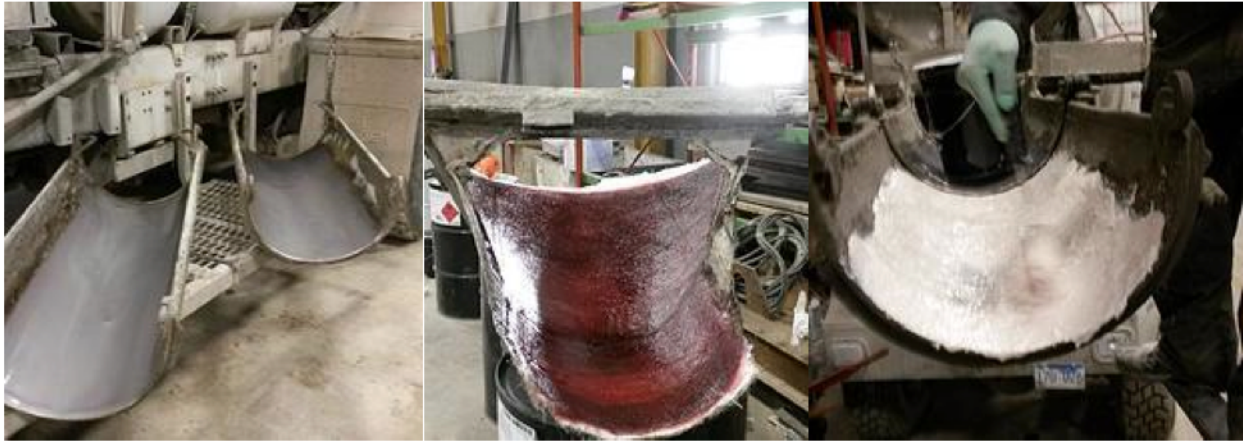


Cement Truck – Abrasion Test



Location / Year

Twin Cities Cement Dec. 2012
Vinton, IA

Fabricator / Applicator

AlphaGen Materials

Fabrication Details: Resin & System

Discharge Shoot – Cement truck
General Purpose Polyester Resin System
Cerarmix AR-1 Material – 1.5 oz. Mat reinforced
90-100 mil Mat Reinforced Coating System

Technical Data

High abrasion environment
High Ph. material

Service Conditions

Ambient Weather conditions
Ranging from 20F to 100F
Wind, Rain and UV .

Design Considerations

Material selected for testing due to abrasive nature of cement and aggregate materials
Look at the service life in comparison to the replacement cost, and repair cost.

Comments

This is one of the applications Cerarmix materials were used at the Twin Cities Cement materials plant in late 2012. Truck shots have run 6-9 months without repair.

However, another application on the material shoots and hoppers of the aggregate bagging operation have shown outstanding results. The material consists of 3/8" limestone, concrete and masonry sand. (Multiple grades) The flow rate of the material is approx...(15 ft³ per minute). In this application Cerarmix was applied in a multi pass application 1/2" thick. (Alternating AR-1 and 1.5 oz. fiberglass mat). Operation runs 16 hours per day / 5 days per week. Previously used Polypro and other thermal plastic were exhibited a service life of 6 month or less. The Cerarmix test samples were inspected in 7/2/2014 are starting to show signs of a wear pattern but, are currently still in effective service. (1 year and 8 months vs. 6 months) Less downtime = positive return on investment.

AlphaGen and Cerarmix continue to test different applications throughout there facility. Look for more aggregate case histories to follow.