

NEW LEVELS OF PROTECTION

Linas Mazeika, 3L&T Inc., USA, asks how we can protect equipment from corrosion and abrasion at very high temperatures.

Summary

Over the last several years, 3L&T has developed different materials for corrosion protection in cement plants, covering a wide range of requirements. The equipment damage can be more severe if there is not only corrosion, but also fine particle abrasion and very high temperatures.

The company's most recent material development combines a ceramic precursor with a proprietary

combination of nano size active fillers to achieve very high abrasion resistance and exceptional corrosion protection at temperatures up to 455°C (851°F).

Extensive laboratory testing was carried out to measure and certify the properties of this new material, and a field trial was completed in California with good results. Currently the company is evaluating two field applications to protect refractory anchors and gas ducts.