

Vacuum Repairs Move To Second Generation

TECVAC, Inc. specializes in the analysis and repair of damaged and disrepaired concrete, masonry and stone.

Washington, DC — A construction specialty repair company has developed an array of vacuum methods to meet the rising occurrences of failure in concrete, masonry and stone members.

Tecvac, Inc. employs high-end technology in both the analysis and repair of fractures and other defects in a host of applications. Its flagship process, the PermaNewal™

Permeation Impregnation Process,

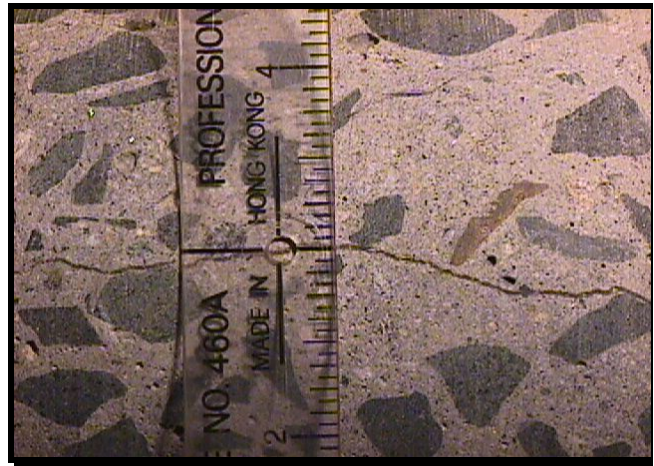
utilizes vacuum to renew large area defects. “This method of repair is proven superior to any other method of introducing repair materials into fractures, voids, and punky spots.” says President of TECVAC, Inc., Jeremy Boyd. Unlike conventional methods of pressure repair that forces the material along, the PermaNewal™ process sets up a negative pressure zone that persuades the material along naturally. “This method will set the performance standard for concrete repair.” Boyd goes on. “It is so completely filling and it works superbly in an array of associated applications.”

Indeed, the proprietary process, originally developed in Europe in the early 70's, has been used to restore everything from statues to bridge columns, warehouse floors and tile mosaics, marble facades and ancient stone relics. Research indicates its ability to repair and mitigate alkali silica reaction in concrete.

TECVAC, Inc. employs an active R&D element that applies new technology to old problems. “Most of our processes were developed to address a specific problem encountered in the field.” says Boyd, “Research and



Results of CO2 Blasting



Finer Width & Deeper Fill

Development is the mainstay of this organization. It moved us into a second generation of technology and it keeps us on the leading edge of the renewal business.” CO₂ Blasting, Electro Osmotic Material Induction and Silica Sculptor Flour are currently in development. Tecvac's Copenhagen affiliate is now preparing the final stages of testing a vacuum applied carbon fiber reinforced plastic in-situ support system for adding strength and support to weekend members.

Boyd, who is Cornell trained in the use of the Impact-Echo method of non-destructive testing, intends to utilize Impact-Echo for analysis and quality control. "There are countless analytical applications for Impact-Echo, but I am



Impact-Echo Testing

ever impressed with its abilities that pertain to fracture analysis. It is the only un-intrusive method available to measure the depth and extent of cracks. In a before and after scenario, it will positively depict repair materials and the depth of fill." Boyd was one of the first impromptu students of Claus Peterson, the owner of Germann Instruments and manufacturer/distributor of the DOCTer, Impact Echo Testing Equipment.

In addition to utilizing conventional repair materials, such as epoxies and urethanes, TECVAC, Inc. will also employ some not so conventional materials such as methyl methacrylates, vinyl esters, silicates and micro fine cements in the performance of its repairs. "Each project is different and will require different applications of materials." Boyd says. "When we repair leaking fractures, for instance, we would probably prefer to use an expanding vinyl ester as opposed to a urethane. Among other advantages, vinyl ester is much thinner and the low viscosity has proven to work well with our vacuum processes."

In keeping with its trend setting endeavors, Tecvac, Inc. is backing up its claims of superior quality with long term warranties; three years is standard with options available for extended periods of five, ten and fifteen years available. "Customers don't want to complete the same repairs over and over. Our repairs are designed and installed to last." Boyd goes on to state, "Tecvac can take the worry and responsibility for failed repairs away from the owner for ever. We stick to the one thing that gives us the edge; Proper Analysis Directs the Proper Repair. We at TECVAC have confidence in what we do and we just pass this on to our clients."

Tecvac's rapid response team is capable of meeting stringent requirements with world class service. "Our technicians have responded to client needs around the world." Tecvac technicians are vastly experienced and have responded to problems across the US, the Caribbean and China. ##

Tecvac, Inc.

"Taking Quality To A New

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