Tekcrete Fast™ – New Technology Developed at UK CAER

The new Tekcrete Fast™ technology is unique and allows a fiber-reinforced, high-strength, ultra-rapid setting concrete to be applied for almost immediate stabilization of unstable geological strata for mining purposes, and damaged infrastructure. Blast or earthquake shocks can place loads on buildings that exceed their structural capacities while slabs, roofs, and foundations face blast-induced vertical and overturning forces. The reinforcement of these underground mines or damaged concrete structures requires a product that has the ability to be sent into the field immediately, and be usable at a safe distance. The Tekcrete Fast technology uses the construction technique called shotcrete and is applied at high velocity that also facilitates adherence. A slightly different formulation, Tekcrete Fast M, is used in underground applications to almost instantly stabilize dangerous mining conditions, contributing to mine safety and potentially saving lives.

This new technology was developed at the University of Kentucky’s Center for Applied Energy Research and Minova’s North American headquarters in Georgetown, Ky. It has been licensed by Minova for a new high-strength, ultra-quick setting concrete product. The product, trademarked as Tekcrete Fast and Tekcrete Fast M, will be used by the mining industry and civil engineers to immediately stabilize damaged infrastructure.

The research and joint patent leading to the Minova license began in 2009 when the UK Center for Applied Energy Research (CAER) partnered with Minova on a project for the National Institute of Hometown Security (NIHS), located in Somerset, Ky.