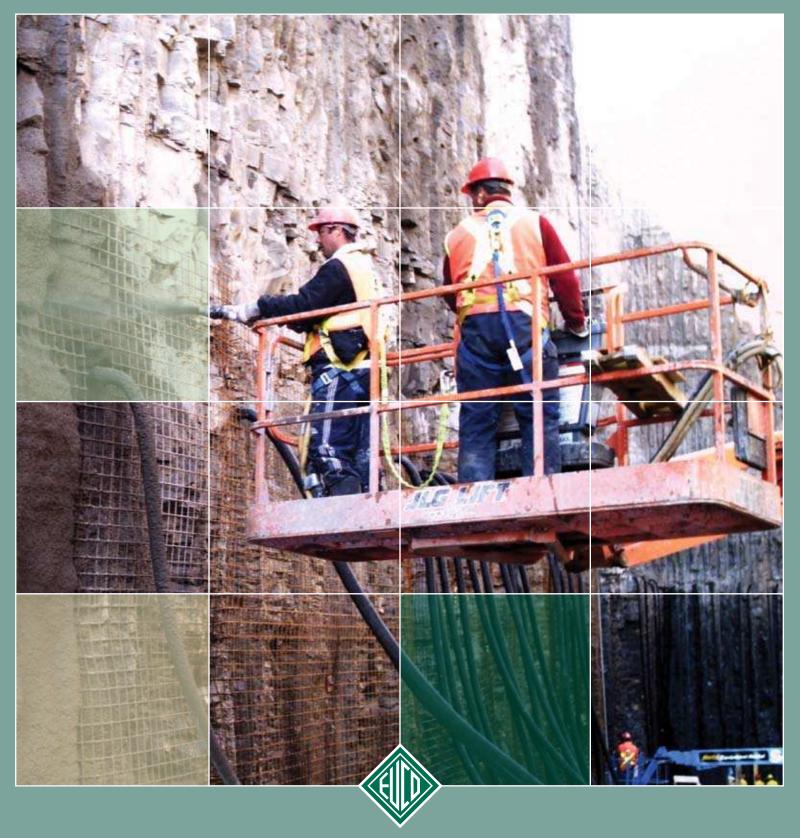
The Euclid Chemical Company



PRODUCTS FOR QUALITY SHOTCRETE



EUCLID SHOTCRETE SOLUTIONS

The Euclid Chemical Company is involved in shotcrete applications for all types and sizes of industries including architectural rehabilitation, structural rehabilitation, construction of swimming pools, water parks and skateboard parks, slope stabilization projects, surface and underground mining, and tunneling projects. The Euclid line of shotcrete products is successfully used in both manual and robotic application methods.

Our line of products for wet and dry-mix shotcrete applications have both performance and cost-saving advantages.



DRY-MIX SHOTCRETE (GUNITE) APPLICATIONS

Reliable performance in dry-mix shotcrete applications begins with Euclid Chemical's line of premium, packaged shotcrete mixes. The EUCOSHOT line of shotcrete mixes are formulated to generate less dust and to produce less rebound than most competitive products.

All of the EUCOSHOT mixes, with the exception of B Accelerated, can be mixed with water and shot as a wet-mix material.

In addition to packaged mixes, The Euclid Chemical Company also manufactures several dry admixtures.

EUCOSHOT is a microsilica-modified, shotcrete material that can be supplied in 50 lb. or 3,300 lb. bags.

EUCOSHOT B AND EUCOSHOT B Accelerated are packaged mixes containing binders, including microsilica and chemicals: just add your own aggregates.

EUCOSHOT F is a microsilica-modified, shotcrete material containing microfibers that can be supplied in 50 lb. or 3,300 lb. bags.

EUCOSHOT F Plus like EUCOSHOT F, contains microfibers, plus a corrosion inhibitor.

EUCOSHOT SF is a microsilica-modified, shotcrete material containing structural synthetic fibers that can be supplied in 50 lb. or 3,300 lb. bags.

EUCOSHOT Supreme is a latex modified, shotcrete material available in 50 lb. or 3,300 lb. bags.

EUCOSHOT LR is a low resistivity shotcrete mix for use on repair projects where an induced current is applied to reinforcing steel.

EUCOSHOT D-A is a 2-component, dry accelerator that is added to the mix. It is designed to speed the setting time of the shotcrete and reacts when water is added at the nozzle.





WET-MIX SHOTCRETE APPLICATIONS

Using admixtures to control wet-mix shotcrete properties allows shotcrete to be used in a multitude of situations where it may not have been considered. The Euclid Chemical Company has been involved in successful design and application of special use shotcrete mixes for long transport distances and structural applications to swimming pools.

Set Stabilization

Shotcrete mixes can be formulated using **EUCOSHOT S** to hold off setting times to allow for long transport distances, hot environment applications, or simply as insurance to allow a little extra time, as things do not always go as planned on the jobsite.

EUCOSHOT S is designed to enhance the performance of our flow-enhancement admixtures.



Flow Enhancement

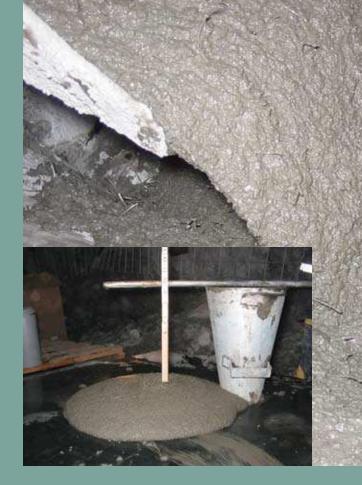
Flow enhancing admixtures are used in shotcrete to ease the pumping pressure of the mix. They are also a necessity when using structural fibers in a mix. The Euclid Chemical Company provides a line of such products to meet the requirements of the contractor at the best cost-benefit ratio for the application.

EUCOSHOT SP is a superplasticizing admixture that greatly increases the slump of a shotcrete mix without the addition of water, to aid both gravity flow and pumping of the mix. EUCOSHOT SP is especially beneficial when adding structural fibers to a shotcrete mix.

EUCOSHOT SP-HT, similar to EUCOSHOT SP, but formulated for high temperature usage, will extend the working time of shotcrete at temperatures up to 130°F (54°C).

EUCOSHOT SSP, is a high end superplasticizer that can be used to pump shotcrete excessively long distances. It has been used successfully to flow a shotcrete mix over 7,000 feet vertically without segregation, at a 10" slump.

EUCOSHOT IL, an internal lubricant that will ease the movement of cement and aggregate particles within the mix to aid the pumping and flow processes. Although the rheological properties of the mix will change, the slump will not. Addition of EUCOSHOT IL will also lessen the wear on shotcreting equipment.





ACCELERATORS

Liquid accelerators are used to help hang shotcrete mixes on vertical and overhead surfaces. These accelerators also allow the nozzleman to build greater thicknesses in a single pass, saving time.

EUCON SURESHOT is a liquid accelerator that helps the mix gel by reacting with the water. It can also be added to the nozzle water in dry-mix applications. It does not significantly accelerate the set, allowing workers to finish the placed shotcrete.

For applications that require initial setting within minutes, EUCON SURESHOT AF is a liquid, high performance, alkali-free accelerator that has been proven in many mining and tunneling operations. Dosage can be adjusted to give optimum setting characteristics for different environments.



ADAPTING TO OUR CUSTOMERS REQUIREMENTS

When a project requires specialized products, communicate your requirements with your local Euclid Chemical representative. We may be able to adapt our products to meet your needs.

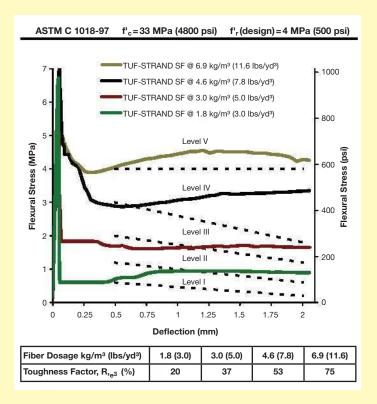


TUF-STRAND SFTM FIBERS



These synthetic structural fibers are a patented, coarse monofilament, self-fibrilating polypropolene/polyethylene blend, successfully used to replace welded wire mesh and steel fibers in a wide variety of applications. TUF-STRAND SF fibers are designed to provide shotcrete with increased flexural toughness, impact and fatigue resistance with the added benefit of superior plastic shrinkage cracking control.





INNOVATIVE SOLUTIONS...INTENSIVE CUSTOMER SERVICE

Not sure what product is best for a particular application? The Euclid Chemical Company has the expertise to help you decide on the best product(s) for your application and to optimize costs.

We can also assist with equipment acquisition, nozzleman training, or to simply find a reputable contractor or shotcrete consultant. The Euclid Chemical Company has been leading the industry with innovative shotcrete mix designs, both dry-mix and wet-mix, to meet demanding requirements in the mining and repair/rehabilitation markets.

So whether you need assistance with an existing project or to get a new one started, The Euclid Chemical Company can provide the support needed to ensure your success.



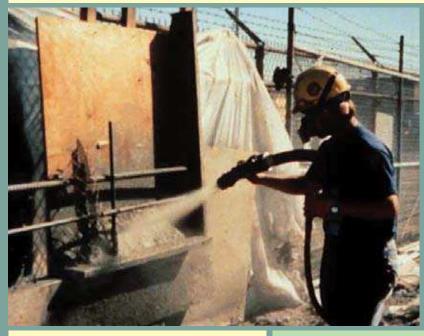
RELATED PRODUCTS FOR SHOTCRETING OPERATIONS

EUCON MSA is a ready to use powdered microsilica (silica fume) product for use in wet or dry shotcrete mixes. Microsilica significantly enhances strength and durability and reduces the permeability of hardened shotcrete. It is specified in many shotcrete mix designs.

PUMPTEC "B" is a line-slicking compound to provide initial lubrication to piping, hoses and pumps used in shotcreting applications.

EUCO-KLEEN, a VOC-compliant releasing agent, can be sprayed onto shotcreting equipment prior to startup to simplify cleanup at the end of the day. It is also excellent for releasing shotcrete samples from molds. EUCO-KLEEN is suitable for use with steel, wood, aluminum, fiberglass or PVC.









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An RPM Company

The Euclid Chemical Company serves the global building market as an ISO 9001:2000 supplier of specialty products and support services for the concrete and masonry construction industry. Marketed under the EUCO name, we offer a full line of admixtures, repair and maintenance products based on the latest technologies. We provide complete specification assistance and laboratory support as well as on-site service for guidance on proper product usage. EUCO materials are warehoused in over 200 locations in the USA and are available world-wide through international affiliates.

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