



**EUCLID CHEMICAL**

# TUNNELING SOLUTIONS



- ANNULUS GROUT ADMIXTURES
- PRECAST CONCRETE ADMIXTURES
- SOIL CONDITIONERS
- CUTTERHEAD FOAM
- FIBER REINFORCEMENT
- CONCRETE REPAIR & PROTECTION PRODUCTS



# TUNNELING

## COMPLETE CONCRETE SOLUTIONS

Time-tested experience as a valuable partner in large tunnel projects throughout the Americas has earned Euclid Chemical the reputation as an innovative leader in tunneling and underground products.

Euclid Chemical serves the tunneling industry with the design and manufacture of a full line of products that improve production and performance at every stage of an underground project. For tunnel construction, soil conditioning, annulus grouting and repair, the industry depends on The Euclid Chemical Company to deliver superior products and support.

### TUNNEL CONSTRUCTION SOLUTIONS

Euclid Chemical is involved with all facets of tunnel construction. Products ranging from microsilica-modified patching material, to anti bleed and segregation / viscosity modifying products. These materials are formulated specifically to help tunneling contractors obtain consistent and reliable performance.

### WATERPROOFING

Water ingress is detrimental to any interior space. For tunneling applications, it is critical to maintain a dry environment for the people and processes that utilize the tunnel. For decades, Euclid Chemical has provided waterproofing systems for tunnels and other structures throughout the Americas. In 2011, The Euclid Chemical Company acquired the U.S. rights to Vandex™ waterproofing systems. With the addition of Vandex's crystalline technologies, Euclid Chemical has a waterproofing solution for all concrete and masonry substrates within a tunnel.

#### CRYSTALLINE WATERPROOFING

VANDEX SUPER

HEY'DI K-11

#### CEMENTITIOUS WATERPROOF COATINGS

VANDEX BB 75

VANDEX CEMELAST

TAMOSEAL

#### CHEMICAL GROUTS

DURAL AQUA-DAM

DURAL AQUA-DAM LV

DURAL AQUA-FIL

### FIBER REINFORCEMENT

Euclid Chemical provides micro- and macro-synthetic fibers and steel fibers for concrete and shotcrete reinforcement. These products can be used to control plastic shrinkage cracking of concrete, provide equivalent temperature and shrinkage reinforcing to conventional steel and can also replace limited amounts of steel rebar, add toughness, increase impact and abrasion resistance and improve overall durability.

#### MICRO-SYNTHETIC FIBERS

PSI FIBERSTRAND

#### STEEL FIBERS

PSI STEEL FIBERS

#### MACRO-SYNTHETIC FIBERS

TUF-STRAND SF FIBERS

In keeping with our **ONE SOURCE** approach, Euclid Chemical offers products and services to ensure successful and consistent performance. Products like silica fume, release agents, concrete cleaner, ore pass liner materials, set time extender for on-site addition and light reflective flooring products will help keep tunneling projects on schedule.



## ANNULUS GROUT

Euclid Chemical manufactures a full line of admixtures designed to improve production and placement of unique annulus grout applications to enhance flow characteristics and improve hardened properties.

### ACCELERATORS

EUCON SURESHOT  
ACCELGUARD NCA  
ACCELGUARD 80

### SET STABILIZERS

EUCON STASIS  
EUCON DS

### WATER REDUCERS

EUCON-WR  
EUCON-WR 75  
EUCON-NW  
EUCON-DX

### SUPER PLASTICIZERS

PLASTOL 6200EXT  
PLASTOL 6400  
PLASTOL ULTRA 209

### SPECIALTY

EUCON ABS  
VISCTROL

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## TBM PRODUCTS

Euclid Chemical offers premium Cutterhead foams to help reduce equipment wear and soil conditioners. Euclid Chemical custom blends each Cutterhead foam for project specific conditions and requirements.

### SOIL CONDITIONER

EUCON SC12

### CUTTERHEAD FOAM

EUCON CHF

## PRECAST ADMIXTURES

Euclid Chemical's admixtures are designed for the production of quality precast concrete for projects of all sizes and under the most demanding of conditions. Whatever the project application calls for, Euclid Chemical's ability to pair technology, engineering and service provides the precise formula needed to optimize precast concrete's function and performance.

### ACCELERATORS

ACCELGUARD NCA  
ACCELGUARD G3

### SUPER PLASTICIZERS

PLASTOL 6200 EXT  
PLASTOL 6400  
PLASTOL ULTRA 209  
PLASTOL 5700

### SPECIALTY

EUCON ABS  
VISCTROL  
EUCON CIA  
PLASTOL AMP-X3

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## REPAIR MORTARS

From simple hand applied mortars to complex form and pour products, Euclid Chemical has the correct repair method for your specific conditions and expectations.

### FORM AND POUR

EUCOCRETE  
TAMMS FORM AND POUR

### HORIZONTAL TROWELABLE

EUCOCRETE  
VERSASPEED

### VERTICAL/OVERHEAD TROWELABLE

EUCOREPAIR V100  
SPEED CRETE RED LINE  
TAMMS STRUCTURAL MORTAR

## INDUSTRY LEADERSHIP

For more than a century, The Euclid Chemical Company has served as a leading supplier to the concrete and masonry industry offering a full line of engineered concrete admixture and construction products marketed under the EUCCO brand name. These products include concrete admixtures, block and masonry additives, curing and sealing compounds, epoxy adhesives, floor and wall coatings, structural grouts for columns, equipment and machinery, joint fillers and repair products. The Euclid Chemical Company strives to bring innovative technologies and products to the concrete market with industry leading customer service.

## CUSTOMER SOLUTIONS

The Euclid Chemical Company is unique in our offering of superior products, unparalleled customer service and industry support. The Euclid team delivers a range of value-added resources and in-depth industry experience to architects, designers, engineers, building contractors and owners. Comprised of highly trained professionals who are available in local offices across the Americas, our experts are active members on industry technical committees including American Concrete Institute (ACI), International Concrete Repair Institute (ICRI) and American Society for Testing and Materials (ASTM). Our experienced field team is available to support you and your projects using Euclid Chemical solutions and products manufactured under the stringent standards of our ISO 9000:2008 certified quality system. The Euclid Chemical Company works hand-in-hand with customers:

- performing field evaluations, and troubleshooting on a project-by-project and technology basis.
- assisting in product selection, specification, installation and related technology.
- attending pre-design meetings, assisting in clarifying specifications and recommending product application techniques.

## LABORATORY SERVICES

Our world class Cement and Concrete Reference Laboratory (CCRL) inspected facilities are equipped with state-of-the-art equipment and staffed by an exceptional team of professional, ACI certified technicians. These outstanding resources provide The Euclid Chemical Company the capability to offer comprehensive analytic and petrographic evaluation and testing services via programs that conform to the standards prescribed by the American Society for Testing and Materials, the U.S. Army Corps of Engineers (USACE), the American Concrete Institute and the International Concrete Repair Institute.

## TRAINING

The Euclid Chemical Company generously shares product information and technical knowledge through training and seminars conducted for project owners, contractors, distributors and design professionals. Many programs are AIA/CEU registered, allowing eligible attendees to earn professional development hours. Euclid Chemical is proud to sponsor these opportunities for our associates and colleagues as part of our ongoing commitment to the concrete construction industry.

## BUILDING GREEN

The Euclid Chemical Company offers an extensive line of green products that are specific to LEED guidelines. The LEED (Leadership in Energy & Environmental Design) Green Building Rating System provides a national standard for defining an environmentally friendly, sustainable "green" building. Points awarded to building projects based on water savings, energy efficiency, materials and indoor environmental quality.



**EUCLID CHEMICAL**

19215 Redwood Road  
Cleveland, OH 44110  
t 800-321-7628  
f 216-481-7072

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