

SUSTAINING CORPORATE MEMBER PROFILE

MAPEI Underground Technology Team

Utt MAPEI

We are in the tunnel with you from the start to the end of the job

APEI's Underground Technology Team (UTT) provides the construction market with a range of products dedicated to underground construction work. In addition to the "regular" construction challenges faced on above-ground jobsites, each underground job features additional unique challenges due to the often severe locations. MAPEI's UTT group and the products it represents were created to meet the expectations of these challenging environments.

From the project specification to the admixtures for shotcrete and concrete to the final protective coatings, MAPEI's UTT group and technology are there "for the whole job," said Bill Allen, UTT Business Development Manager – Tunneling. The UTT group is a successful division of MAPEI Group, which has provided proven construction system solutions for more than 80 years.

BACKGROUND

Established in 1937, MAPEI Group is a global corporation based in Milan, Italy, and includes 87 subsidiaries that comprise 81 plants in 35 countries. MAPEI is a world-leading manufacturer of mortars, grouts, and adhesives, as well as complementary products for installing floor and wall coverings. MAPEI manufactures chemical products for



Fig. 1: MAPEI's UTT products were used to help a tunnel boring machine dig the Anacostia River Tunnel, which extends for 2.37 miles (3.81 km) from Robert F. Kennedy Stadium in northeast Washington, DC, to Poplar Point in southeast DC



Fig. 2: MAPEI's UTT products have commercial as well as industrial applications. Its additive technology was added to shotcrete to create the walls of this high-tech wine cave

building, including waterproofing products, admixtures for concrete and repair products, and decorative and protective exterior coatings, as well as the UTT product line.

"The UTT group started in earnest in the U.S. in 2015," stated Wesley Morrison, UTT Regional Manager – North America. "But the business has grown substantially since then."

In the underground industry, speed is essential—not only of the products themselves but also of the evolution of technology. MAPEI reinvests a considerable percentage of its annual profits back into research and development (R&D) to maintain a leading technological advantage.

MAPEI's commitment to R&D ensures that the UTT line comprises innovative and technologically advanced products that the UTT team is trained to use.

MAPEI UTT PRODUCTS

The UTT product line is divided into six categories:

- Concrete technologies include more than 70 products, ranging from superplasticizers, accelerators, and retarding agents to "accessory" products dedicated to every type of underground concrete application, including shotcrete, ready mixed concrete, and precast concrete;
- Injection, consolidation, and anchoring products consist
 of a complete range of ready-to-use cementitious mixtures, chemical mixtures, and chemical resins designed
 for underground injection into rock, soil, and concrete
 structures. These products help to improve soil properties, stop water leaks, improve internal cohesion,
 and anchorage;
- Waterproofing systems feature a wide range of waterproofing options, including synthetic geomembranes and spray-applied membranes for all moisture conditions;
- Renovation, maintenance, and repair technologies include products for repairing concrete, fireproofing mortars, equipment for ready-to-use shotcrete, and injected products;
- Coatings for underground construction include protective paints, cementitious mortars, and ceramic coatings; and
- Mechanized tunneling offerings from UTT encompass a range of products and on-site technical assistance services to support clients throughout tunneling projects, from start to finish.

No matter the division or the product line, MAPEI is known for quality products and for providing system solutions. As Allen stated, "The distinguishing point for UTT is our field support, and our applied technology in the field. Simply put, we don't just sell a product, but rather we go into the field and help our customers use our products— on their jobsite, with their conditions, personnel, and equipment. There are many salesmen who do not know how to make their products work under field conditions. Customers/contractors appreciate and recognize this fact."

Morrison concurred, agreeing that UTT's technical services and agility are unbeatable. "We service a project from the very beginning to the very end like no one else in the industry does," he said. "We also have the agility to adjust to the customers' needs when necessary."



Fig. 3: Mapequick CBS 2 Holding Tanks

MAPEI UNDERGROUND TECHNOLOGY TEAM

Phone: 502.432.2865 www.utt.mapei.com

E-mail: mapei.utt.na@utt.mapei.com

www.shotcrete.org Winter 2019 | Shotcrete 75