



# MINING SOLUTIONS YOUR COMPETENT AND DEDICATED PARTNER



BUILDING TRUST





## MINING SOLUTIONS FROM SIKA

Sika is ready to be your innovative and reliable partner for modern mining technologies. With over 100 years of a proven track record with experienced staff, excellent products and a global presence, Sika can provide you with tailor-made, fast and efficient solutions for all the mining challenges you are faced with on a daily basis.

With a local setup in all countries and production facilities close to your mine site, Sika is able to deliver our solutions fast and reliably.

# A COMPLETE RANGE OF FAST AND RELIABLE SOLUTIONS FOR THE MINING INDUSTRY



## CONCRETE ADMIXTURES

A complete range of concrete admixtures which allows you to tailor-make your concrete with the desired properties



## SHOTCRETE ACCELERATORS

A complete range of state-of-the-art shotcrete accelerators to ensure rapid setting for a safe and efficient mining process and reduced turn-around times



## FIBERS

High quality steel and synthetic fibers for improved flexural and tensile strength for your shotcrete linings



## INJECTION SOLUTIONS

A complete range of quality injection products which can be tailor-made to meet your needs for stopping water ingress and ground consolidation



## BACKFILL

Advanced admixtures to influence rheology, flow and binder content for your backfill material, saving costs and improving efficiencies



## OTHER CONSTRUCTION SOLUTIONS

A complete range of Sika's proven products for grouting, repair, flooring, waterproofing and protective coatings for your specific mining needs



## SERVICE AND SUPPORT

A highly motivated and well trained group of experts on a global, regional and local level are ready to support all your mining requirements

# CONCRETE ADMIXTURES

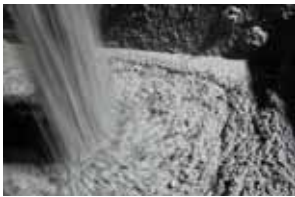
A wide variety of technologies and solutions for your needs



## Sika's tailor-made and state-of-the-art concrete admixtures

allows you to achieve the desired concrete properties in an efficient and cost effective manner.

Latest in-house PCE technology and world-class R&D allows us to adapt our products to the most stringent requirements.



### WORKABILITY

Workability time is crucial in many mining applications when dealing with long travel times and often high ambient temperatures



### PUMPABILITY

With many applications in mines, pumped concrete can be improved by using a pumping agent and other additives



### FLOWABILITY

Self-Compacting Concrete (SCC) is capable of flowing under its own weight, completely filling formwork and achieving full compaction without vibration



### DURABILITY

Deterioration of concrete roadways through abrasion by constant heavy equipment traffic can be minimised by using the right admixtures and mix design

## MAIN REQUIREMENTS FOR CONCRETE IN MINING

- Pumpability
  - Reduction of starting pressure with **SikaPump® Start-1**
  - Reduction of friction and wear with **SikaPump®**
- Workability
  - Improvement in workability time with ViscoCrete
  - Long workability with **Sika ViscoFlow®**
  - Retardation with **SikaTard®**
  - Acceleration with **SikaRapid®**
- High flowability and cohesion (SCC & Slack Line Concrete)
  - Improvement of cohesion with **Sika Stabilizer**
  - Improvement of cohesion & durability with **SikaFume®**
  - Improvement of flowability with **Sika® ViscoCrete®**
- Durability of concrete roadways
  - Increasing impact resistance with **SikaFiber®**
  - Reduction in permeability with **SikaFume®**

Essential for a good durability is the curing of the concrete especially under the hard conditions in a mine.

- **Sika® Antisol®**

# SHOTCRETE ACCELERATORS

For a safe, fast and efficient shotcrete lining



## **SIGUNIT® ACCELERATORS**

Sika's state-of-the-art shotcrete accelerators will allow you to secure your drive in an efficient and safe manner with reduced turn-around times.

Our alkali-free Sigunit® shotcrete accelerators are developed to provide you with a durable, high-performance and efficient shotcrete.



## **MINISHOT - TESTING AT LAB SCALE**

With Sika's newly developed and unique MiniShot Equipment, we are able to test any shotcrete design in the laboratory resulting in much lower costs and much faster results.

With fully equipped mining laboratories in all world regions, Sika is able to support the mining sector professionally and economically.

# FIBERS

High performance polypropylene fibers



## **SIKA FIBER T60s® - MACRO SYNTHETIC FIBERS**

The use of structural fibers, both steel and polypropylene, in shotcrete increases the load absorption capacity and crack resistance.

Polypropylene fibers have proven to be an efficient and cost effective solution for both shotcrete and concrete for all your mining projects.

# INJECTIONS

Complete solution for consolidation, cavity filling and stopping water



## GROUND CONSOLIDATION

Pre-injected products such as micro cement and colloidal silicates are used to improve both rock/soil conditions and provide a safer working environment.

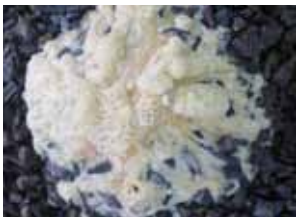
Cave-ins and unstable ground can be improved by quick-reacting polyurethane and polyurea silicate system out of our **SikaFix**® range of products.



## STOPPING WATER

Our **SikaFix**® polyurethane and polyurea silicates are designed for stopping and sealing the ingress of water. In challenging water conditions, either high volume and/or pressure, a rapid reacting foaming resin is recommended.

The product range includes 1-component PUs, as well as fast reacting foaming 2-component systems.



## TAILOR-MADE APPROACH

In the mining sector challenging circumstances arise on a regular basis, finding the right solution is not always easy. Sika's R&D Team understands this and we are always striving for the right solution for every project. Our goal is to deliver mine specific solutions to ensure excellent performance and trouble free applications.

# BACKFILLING

Full range of tailor-made rheology modifiers



## BACKFILL RHEOLOGY OPTIMIZERS

Our state-of-the-art admixtures will be able to achieve the best cost-performance of your backfill slurry by reducing friction, improve rheology, avoid segregation and reduce binder content.

# OTHER CONSTRUCTION SOLUTIONS

Complete range of chemicals for all applications



## GROUTING

Cementitious and epoxy resin based grouts



## ANCHORING

Cementitious and epoxy resin based capsules for all anchoring requirements



## WATERPROOFING

Products and technologies for the simplest to the most challenging applications



## PROTECTING

Wide range of protective coatings (including fire protection) and impregnations



## SEALING & BONDING

Full range of elastic joint sealants and adhesives based on PU, silicone and acrylics



## FLOORING

Cementitious, resin and polyurethane systems for all types of floors



## ROOFING

Full range of roofing solutions including PVC sheets and liquid applied membranes



## EQUIPMENT

State-of-the-art shotcrete (Aliva®) equipment and injections pumps

# SERVICE AND SUPPORT

A highly motivated and qualified team of experts

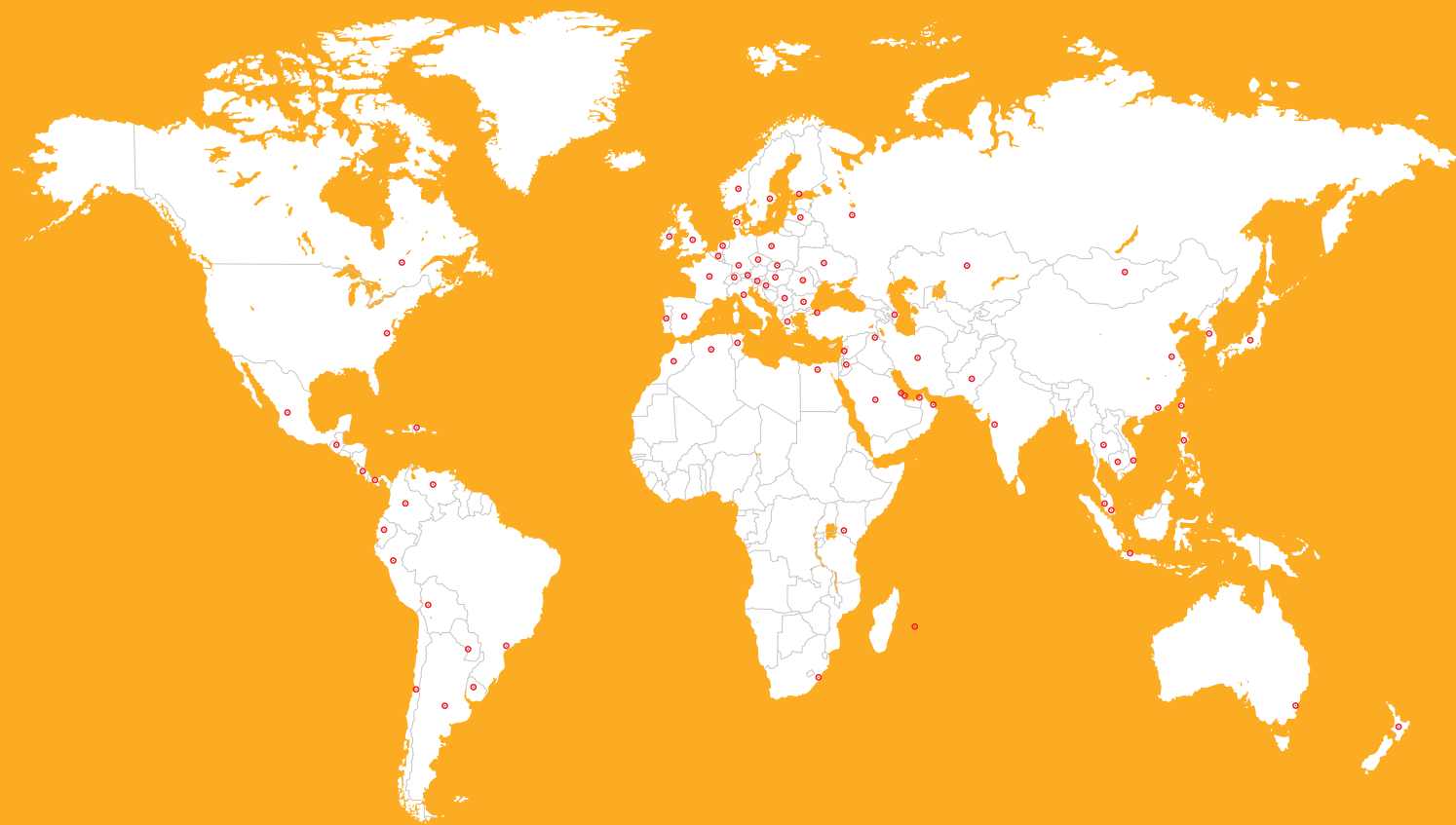


## DELIVERING PERSONAL SERVICE

A group of highly motivated, well trained and dedicated experts are ready to serve and provide you the most cost efficient solutions for the mining industry.

Sika's objective is to provide personalised service for mine specific solutions.

# GLOBAL BUT LOCAL PARTNERSHIP



## WHO WE ARE

Sika AG, Switzerland, is a globally active specialty chemicals company. Sika supplies the building and construction industry as well as manufacturing industries (automotive, bus, truck, rail, solar and wind power plants, façades). Sika is a leader in processing materials used in sealing, bonding, damping, reinforcing and protecting loadbearing structures. Sika's product lines feature high quality concrete admixtures, specialty mortars, sealants and adhesives, damping and reinforcing materials, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

**SIKA EUROPE**  
**SIKA SWEDEN**  
**SIKA NORWAY**  
**SIKA FINLAND**

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