



CONCRETE

MiniShot – SHOTCRETE TESTING 2.0

BUILDING TRUST



FAST PRODUCT DEVELOPMENT AND CLIENT SUPPORT



MiniShot connected to a computerized system

INTENTION / GOAL OF MINISHOT

The unique Sika MiniShot system targets the dilemma of having a reliable and valid laboratory testing method for shotcrete performance. It comprises the MiniShot, a highly accurate dosing system, and the Pulsment, an ultra sound spectrometer for non-destructive strength measurement. It is now possible to investigate the interaction of chemically reactive shotcrete components in a fast, easy and reliable way.

BENEFITS FOR OUR CUSTOMERS

MiniShot system was invented in order to fulfill three main tasks:

- Development of tailor-made shotcrete admixtures
- Creating cost-performance optimized shotcrete mix designs
- Quality control for running construction projects

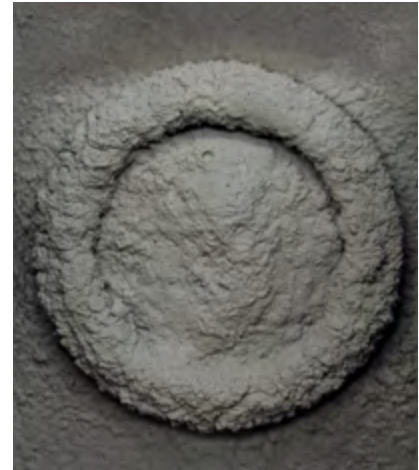
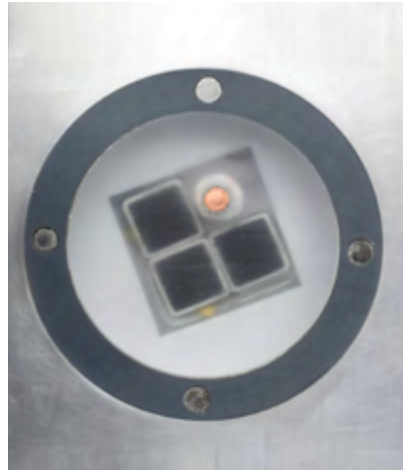
THAT IS THE MOST PRODUCTIVE
METHOD I HAVE BEEN EXPOSED TO
IN TWENTY YEARS OF MONITORING
SHOTCRETE PERFORMANCE -
TRULY AMAZING.

Australian mining customer

FUNCTION OF MINISHOT

MiniShot is the consequent downscaling of the entire shotcrete process to the chemically relevant parameters: From shotcrete to an equivalent paste out of cement, fines, admixtures and water, as well as the mechanical treatment of the specimen which exactly matches that of the site application.

Specimens are sprayed into the measuring cells of the Pulsment, an ultra sound spectrometer which determines the shear modulus as a measure of the strength evolution, non-destructive and continuously.



Non sprayed (left) and sprayed (right) cells of the Pulsment

EXAMPLES OF SUCCESS STORIES



Hydropower Project Nant de Drance, Switzerland

A MiniShot laboratory pre-study Sigunit L-5601 AF was determined as the most suitable accelerator for the specific cement-admixture combination of this hydropower project. This study was well confirmed by subsequent field trials and, since August, this job site is delivered with the new Sigunit.



Zinkgruvan Mine, Sweden

MiniShot evaluation supported the acquisition of Zinkgruvan owned by Lunding Mining Group. Evaluation time for the MiniShot was shorter than two weeks.



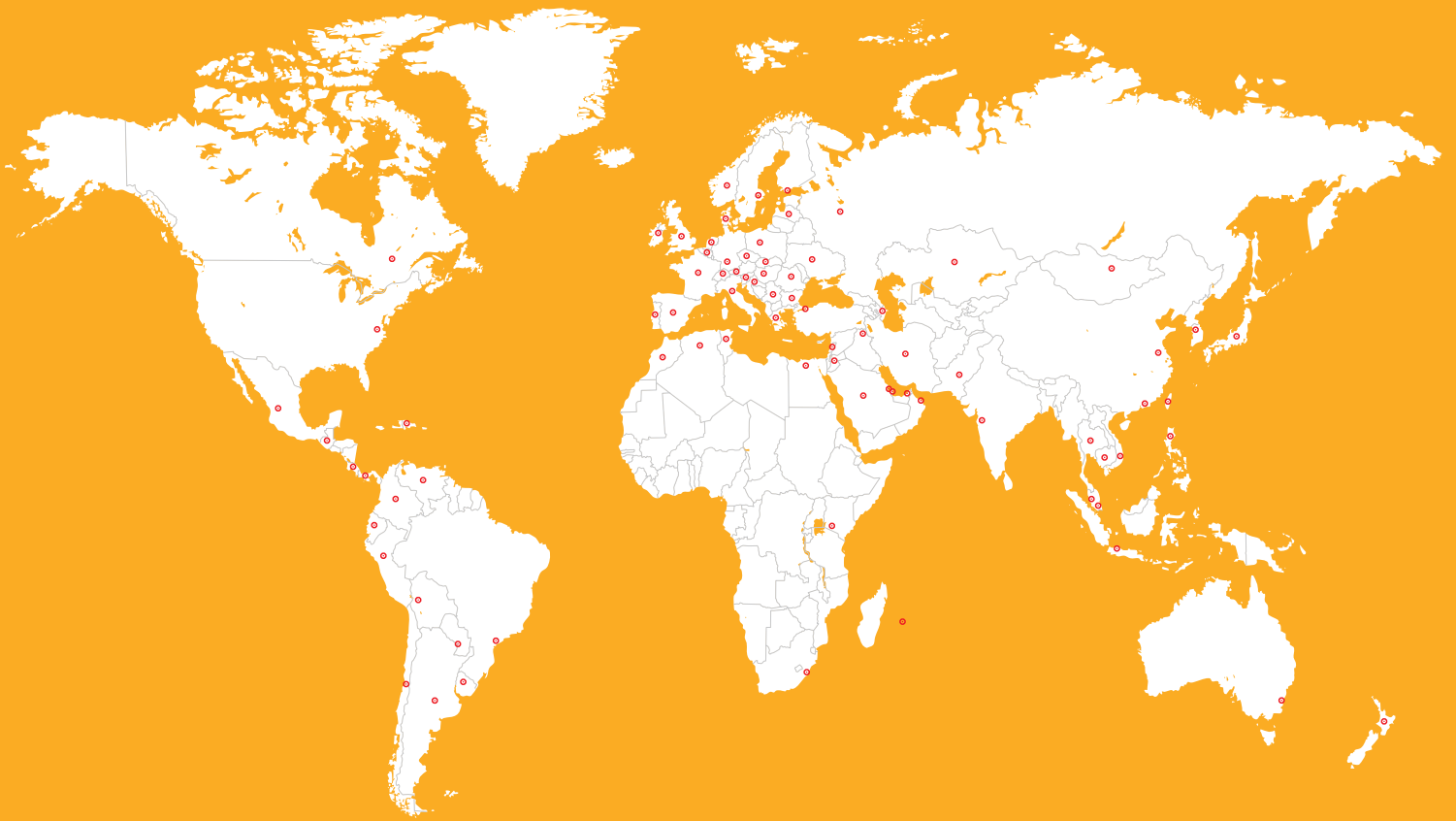
Nuevas Corvo Mine, Portugal

Large underground zinc, lead, copper mine owned by Lunding Mining Group. MiniShot helped to establish Sika Shotcrete admixtures to finalize long term supply contract with the company.

MINISHOT LABORATORIES WORLDWIDE

- Zurich, Switzerland
- Jakarta, Indonesia
- Istanbul, Turkey
- Montreal, Canada
- Sydney, Australia
- Stockholm, Sweden
- Madrid, Spain
- Bogota, Colombia

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, facades). Sika is a leader in processing materials used in sealing, bonding, damping, reinforcing and protecting loadbearing structures. Sika's product lines feature highquality concrete admixtures, specialty mortars, sealants and adhesives, damping and reinforcing materials, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.



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