



SIKA AT WORK VADLAHEIDI AKUREYRI - ICELAND

WHO WE ARE

Sika 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 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 Data Sheet prior to any use and processing.









VADLAHEIDI PROJECT **AKUREYRI**

The Vadlaheidargöng project is a 7.2 km long double lane road tunnel located east of Akureyri, which aims to adapt the national road alignment to reduce the travel time.

The main parts of the project consist of:

- 7'170 m long double lane road tunnel.
- 6 technical and safety side tunnels.
- Additional road works of 11.3 km.



CLIENT

Vadlaheidarganga hf. (Company in majority owned by the Icelandic Road Administration).

CONSTRUCTION PERIOD

2013 - 2017.

CONTRACT SUM

CHF 54 Mio. (ISK 7'054 Mio.).

JOINT VENTURE COMPANY

ÓSAFL sf.

JOINT VENTURE PARTNERS

Marti Contractors Ltd., CH-Moosseedorf. ÍAV hf, IS-Reykjavík.

LEAD COMPANY AND COMMERCIAL LEAD

ÍAV hf, IS-Reykjavík.

TECHNICAL LEAD

Marti Contractors Ltd., CH-Moosseedorf.

GEOLOGY

- Basalt with intersections of sedimentary layers.
- High water inflow: cold and geothermal hot water.

WORK DESCRIPTION

- Underground excavation, rock support and grouting work:
 Excavation methods: drill and blast and pipe umbrella
- Excavated length and volume: 7'230 m, $495'000 \text{ m}^3$.
- Grouting method: systematic probe drilling, cementous and chemical pre-grouting.
- Core drilling length: 200 m.
- Standard rock support : shotcrete (15'000 m³) and systematic rock bolts (28'500 pcs).
- Additional rock support: spiling bolts and reinforced shotcrete arches, wire mesh (22.9 t).

Underground water and frost protection work:

- PE-foam & shotcrete lining: 45'000 m².

Other underground and surface work:

- Pre-cut excavation: 90'000 m³.
- Roadwork: 11'3 km.
- Fresh water and drainage system.
- Installation of cables pipes.

Concrete work

- 6 technical and emergency buildings.
- Two 84 and 224 m long portals.

Electrical and safety work

- Earthing system.
- Electrical installations and equipment.
- Tunnel safety equipment.

SIKA SOLUTIONS

Sigunit®-L53/P1 AF S

SikaFix®-210 (A+B)

Sigunit®-L5346 AF

SikaFix®AC-21

Sika® ViscoCrete® SC-307

SikaPump® Start-1







Testing the shotcrete, modified with Sika technology, for the right properties.