

Construction Solutions for the Major Infrastructure Project Bar-Boljare Highway Montenegro

Concrete Admixture, Waterproofing, Concrete Repair
and Protection, Grouting and Joint Sealing

Sika®Work



BUILDING TRUST



Project description

The Bar-Boljare highway is one of the most significant infrastructure projects in the modern history of Montenegro. This highway aims to connect Montenegro's coast with its northern region and further with Serbia, thereby improving transportation links, reducing travel time, and stimulating the country's economic development. The project is divided into several sections, with the first and most significant being the Smokovac-Mateševo section spanning 41 kilometers. This section includes 20 bridges and 16 dual-tube tunnels, which together make up almost half of the total length of the mentioned section.

Project requirements

The project requirements demanded high-performance construction solutions capable of withstanding extreme geographical characteristics of Montenegro's mountain terrain. Extreme weather conditions, including heavy rainfall and temperature fluctuations required durable and reliable materials to ensure long-term performance. Cost efficiency and time optimization were essential to meet project deadlines without compromising quality and safety standards. Sika's advanced technologies provided sustainable, high-quality solutions tailored to the specific demands of the complex project.

Sika solutions

Sika provided a wide range of products used during various phases of construction, including concrete admixtures, waterproofing systems, and specialized mortars as well as protective layers for concrete surfaces. One of the key products supplied by Sika for this project was concrete additives. Additionally, Sika provided waterproofing systems for the tunnels, ensuring long-term protection against water ingress, which is particularly important in tunnels that pass through mountainous areas prone to underground water.

Furthermore, Sika supplied special mortars for the protection and repair of concrete surfaces, ensuring high resistance of the structures to wear and damage over time. The use of these products allowed the contractors to address the technical challenges in construction and meet high standards of quality and safety.

Sika products

- Concrete production: Sika® ViscoCrete® -1022/-4075/-4077/-5380, Sika® Plastiment®-20 R, SikaPaver® AE-310, SikaControl®-100, SikaFiber®, SikaPump® Start, Sika® Sigunit®, etc.
- Waterproofing: Sikaplan® membrane (WT 1100-20 HL), SikaShield® portfolio, Sikalnject®, Sikadur® portfolio (-31 plus/-101/-201, etc.)
- Concrete repair: Sika MonoTop® repair mortar portfolio (-1010/-412/-1/-22/-3020, etc.)
- Concrete protection: Sikagard® portfolio (-340 W/-680 beton color/-640 W/-700 S, etc.)
- Grouting: Sikagrout®-212/-314/-42, etc.
- Joint sealing: Sikaflex® sealants portfolio (-11 FC/PRO 3/-406, etc.)

Project participants

Project owner	Danilo Draganic
Contractor	China Road and Bridge Corporation (CRBC)
Sika Organization	Sika Srbija d.o.o.



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