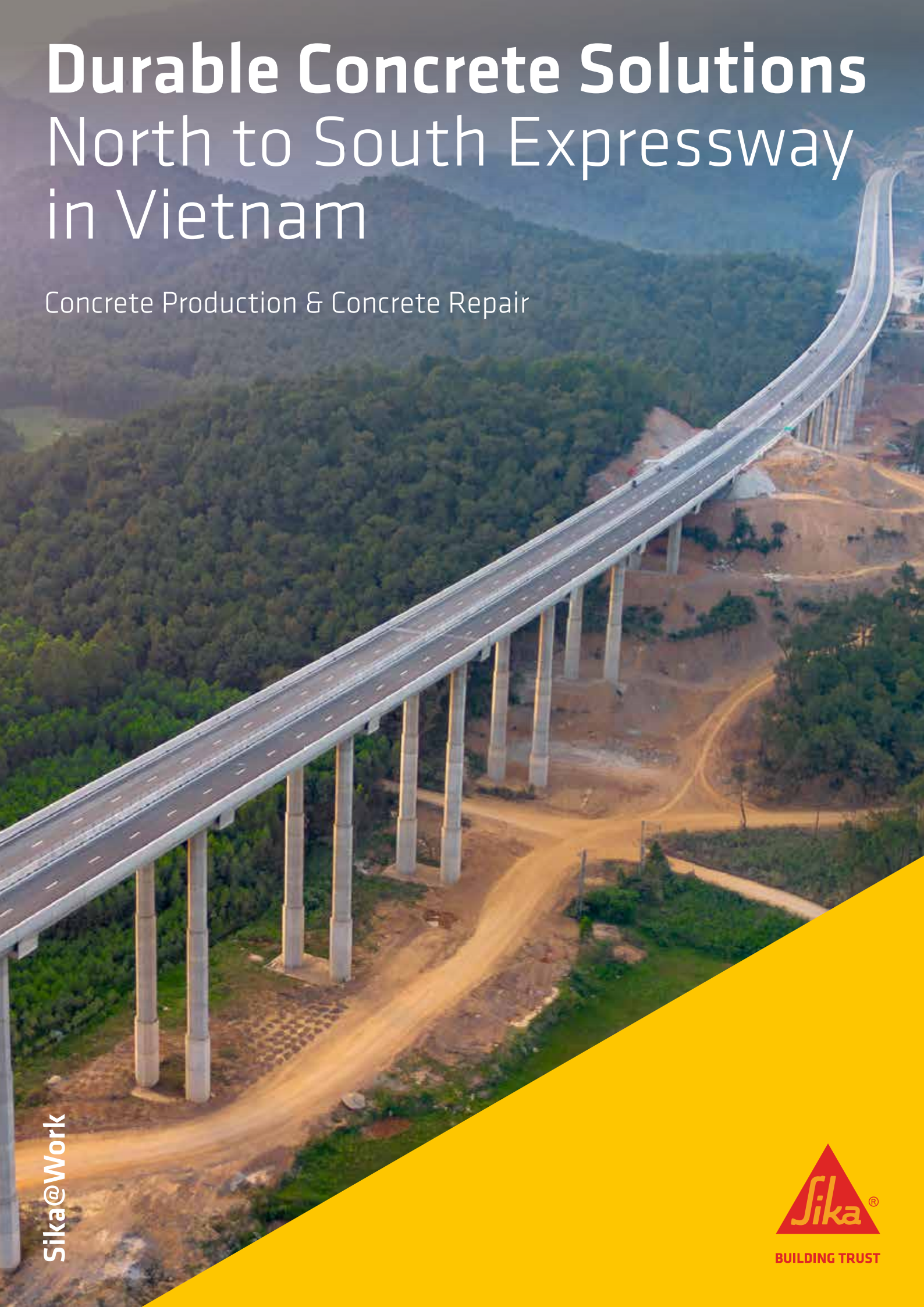
Durable Concrete Solutions North to South Expressway in Vietnam

Concrete Production & Concrete Repair



Sika@Work

BUILDING TRUST

The North-South Expressway is a key national infrastructure project that significantly improves connectivity across Vietnam. Sika solutions support the construction of durable, high-performance concrete structures along multiple expressway sections under demanding climatic and logistical conditions.

Project description

The North-South Expressway is Vietnam's largest ongoing highway development, spanning several regions and connecting major economic zones across the country. The project includes multiple sections, such as Quảng Ngãi – Hoài Nhơn, Diễn Châu – Bãi Vọt, Nha Trang – Cam Lâm, and Chí Thạnh – Vân Phong, as well as other sections constructed in different phases.

Designed to improve traffic flow, reduce travel times, and support economic growth, the expressway features extensive concrete structures, including bridges, pavements, interchanges, and drainage systems. Construction is being carried out under tight schedules and highly variable site conditions, ranging from coastal zones to mountainous terrain.

Sika supplied high quality concrete admixtures for the concrete production in this project.

Project requirements

The scale and geographic diversity of the North-South Expressway required concrete solutions capable of delivering consistent quality across multiple construction packages. Key challenges included high temperatures, heavy rainfall, long transport distances, and the need for rapid construction progress without compromising durability.

Concrete mixes needed to ensure reliable workability, controlled setting behavior, and long-term performance, while meeting national road infrastructure standards and minimizing maintenance requirements over the expressway's service life.

Sika solutions

Sika supported the project by supplying advanced concrete admixture solutions tailored to local materials and site conditions. These solutions enabled optimized mix designs with improved workability, strength development, and durability, even under challenging weather conditions.

Through close cooperation with concrete producers and contractors, Sika helped ensure consistent concrete performance across different expressway sections. The technical support provided contributed to efficient placement, reduced the risk of defects, and ensured long-lasting structural integrity for this critical transport corridor.

Concrete admixtures:

- SikaPlast®-135
- SikaPlast®-135 VN
- SikaPlast®-398 CT
- SikaPlast®-398 SF
- SikaPlast®-394
- SikaPlast®-9
- SikaPlast®-319
- SikaPlast® PH-8821
- Sika® Plastiment®-88
- Sika® ViscoCrete®-3000
- Sika® ViscoCrete® SKY 8585
- Sika® ViscoCrete® SKY 8713
- Sika® ViscoCrete® SKY 8715
- Sika® Viscocrete®-8650
- Sika® Viscocrete®-3168
- Sika® ViscoCrete®-3668
- SikaControl®-300
- Sika® Sigunit®-5460 AF L
- Sika® Sigunit® L-1453 AF
- Sika® Sigunit® D-54 AF
- Sikament®-294
- Sikacrete® PP-1
- Sika® Aer TH

Concrete repair:

- Intraplast® Z-HV
- Sikadur®-731 (AB)
- Sikadur®-31 CF Normal (AB)
- Sikadur®-732 (AB)
- SikaGrout®-214-11

Project participants	
Project owner	Vietnam Ministry of Transport (MoT)
Engineer	Transport Engineering Design Incorporated (TEDI)
Sika Organization	Sika Vietnam

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