Lusail City Bridges (Qatar)



Project description

Lusail is a modern, planned city in Qatar, located on the coast 15 km north of Doha city centre. On an area of 38 square kilometres, the new city includes four islands and 19 multi-purpose districts. The population of Lusail is expected to eventually increase to 450,000 people. The city's new sports stadium, with a capacity of over 80,000 people, will host the opening and final matches of the 2022 FIFA World Cup.

To facilitate road transport around the new city, seven bridges were recently constructed by Samsung C&T Corporation, including two suspension bridges and several concrete box girder structures.

mageba scope

mageba supplied a large number of expansion joints for this project, designed to accommodate the movement requirements of the various bridges. Each bridge required two joints at each end - one for the main bridge and one for the approach structure at each location. The 28 expansion joints thus required included TENSA® MODULAR joints with up to 5 gaps (type LR5), and TENSA®GRIP single gap joints of types RS-A (with anchor loops) and RS-B (with anchor studs). Many of the joints feature "sinus plates" on the surface, minimising vibrations under traffic and thus greatly reducing both noise and fatigue loading on the joints.

Highlights & facts

mageba products:

Type: 28 TENSA® MODULAR

and TENSA®GRIP expansion joints

Features: Noise-reducing sinus

plates on surface

Structure:

City: Lusail City
Country: Qatar
Completed: 2014

Types: Suspension / box girder

road bridges (7 in total)

Contractor: Samsung C&T Corp.

Lusail City is located on Qatar's Gulf coast, 15 km north of Doba city centre



Lifting of a TENSA®GRIP expansion joint into position on site



A TENSA®GRIP Type RS-B joint (on left) and a TENSA®MODULAR (LR3) joint before concreting



