

Kalna Bridge (Bangladesh)



Project description

Kalna Bridge (also known as the Madhumati Bridge) is Bangladesh's first six-lane bridge, which spans the Madhumati River. It was constructed as part of the ambitious Cross Border Road Network Improvement Project (CBRNIP).

The tied-arch bridge, measuring 690 m in length, has a main span of 150 m and it is 27.1 m wide.

The structure also forms a part of the Asian Highway Network, which connects the country's capital Dhaka with the southwest region, including the city of Benapole and reduces the travel distance between the capital and Benapole by over 100 km.

The bridge is situated in Bangladesh's southwest region, near the town of Kalna



mageba scope

For the bridge's approach structure, mageba manufactured and installed a total of 324 LASTO®BLOCK elastomeric bearings.

In addition to that, two TENSA®MODULAR LR expansion joints were supplied for the main structure of the bridge. Each of these joints has seven movement gaps and can accommodate movements of up to 560 mm.

The supplied modular joints measure 27.1 m in length and feature a special bolted splice arrangement so welding on site could be avoided.

The expansion joints were coated using a special Aluminum-Magnesium Arc Spray, which successfully passed a rigorous 6,000-hour Cyclic Salt Spray Test, withstanding alkaline, humid and dry conditions.

A seven-gap modular joint in its recess



Highlights & facts

mageba Products:

Type:	LASTO®BLOCK elastomeric bearings
	TENSA®MODULAR LR joints
Installation:	2024

Structure:

City:	Kalna
Country:	Bangladesh
Type:	Tied-arch bridge
Length:	690 m
Owner:	Roads and Highways Department Bangladesh
Contractor:	Tekken Corporation, YBC, Bangladesh's Abdul Monem Limited

Testing machine used in carrying out the rigorous 6000-hour Cyclic Salt Spray Test

