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Chong Ming Yangtze River Bridge (China)

Project description

Located near Shanghai at the mouth of the Yangtze River, since 2008 the cable stayed bridge forms a key part of the 25.5 km Chong Ming Crossing, which combines both bridge and tunnel sections. Above the main navigation channel the six lane bridge has a span of 730 m and a total length of 1,430 m. Deck height above the navigation channel is 53 m, high enough for 50,000 t bulk carriers and 30,000 t container ships to pass below. Twin steel box girder deck boxes are used, separated by a 10 m gap to minimise aerodynamic forces and connected by cross beams at 15 m spacings. Balanced cantilever construction was used for the main span. Inverted Y shaped main bridge towers sit on massive foundations made up of 60, 2.5 m diameter cast piles. Wind and live loads are significantly higher than the norm. The site is in an area frequently hit by typhoons, and the bridge is designed to take two railway tracks sometime in the future.

mageba scope

TENSA®MODULAR expansion joints type LR22 with a movement capacity of 1,760 mm, which permit movements and rotations in all three directions. All TENSA®MODULAR expansion joints feature mageba's patented asymmetric control system for even gap distribution and are 100 % watertight. To ensure high traffic safety also during rain, the steel surface was treated with an anti-skid surfacing that is also used on aircraft carriers. Experts consider this to be one of the most durable system available.

Highlights & Facts

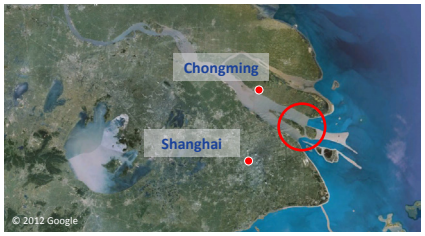
mageba Products:

Type:	TENSA®MODULAR expansion joints type LR22
Features:	max. movement 1,760 mm
Installation:	2009

Structure:

City:	Shanghai
Country:	China
Type:	Cable-styed bridge
Length:	1,430 m
Owner:	Shanghai Yangtze River Tunnel Bridge Construction and Development Co., Ltd
Contractor:	CCCC Second Harbour Engineering Company Ltd.
Engineer:	Shanghai Municipal Engineering Design Institute

Shanghai is China's largest city and its economic powerhouse



The Chong Ming Crossing during construction

A TENSA®MODULAR expansion joint, ready for installation

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