Storebælt West Bridge (Denmark)

Project description

The Storebaelt (Danish: Storebælt) West Bridge was constructed between 1988 and 1994, forming part of a new 18-kilometre fixed link between Denmark's two largest islands, Fyn and Sjælland. Together with the Øresund Bridge, which links Sjælland to Sweden since 2000, the fixed link established direct road and rail connections between Western Europe and the main part of Scandinavia for the first time.

The West Bridge is a 63-span box girder bridge of length 6,611 metres, with a longest span of 110 metres. It consists of separate, parallel structures for rail and road traffic.

mageba scope

The bridge's twin parallel structures required 276 large bearings to support their decks at the abutments and 62 piers. RESTON®POT bearings were selected to meet the challenge, and designed for loads of up to 50,000 kN (half the weight of the Eiffel Tower).

TENSA®MODULAR expansion joints were also installed at seven axes, to bridge the movement gaps between the road bridge's 6 continuous sections and the abutments. These have 7, 15, 14, 15, 14, 15 and 7 gaps respectively, and the LR15 joints at three bridge axes accommodate movements of up to 1200 mm.

Highlights & facts

mageba products:

Type:	TENSA®MODULAR expansion joints (LR15), RESTON®POT bearings
Installation:	1991-1993

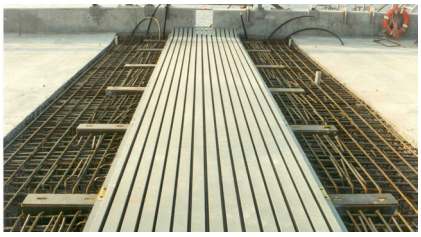
Structure:

Country:	Denmark
Type:	Box girder bridge
Length:	6,611 m
Crosses:	Storebælt (Great Belt)
Completed:	1994
Contractors:	Skanska, Hochtief, Højgaard & Schultz

The bridge forms part of an 18-km fixed link connecting Denmark's two largest islands

The 276 RESTON®POT bearings supporting the decks are designed for loads of up to 50,000 kN

A TENSA®MODULAR expansion joint with 14 gaps (1120 mm movement) during installation



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