

Tsing Ma Bridge (Hong Kong)



Project description

The Tsing Ma Bridge, with its length of 2.17 km, is the core of the Lantau connection to the new Hong Kong airport. It is one of the most technically complex bridges in the world.

At the same time, it is the longest suspension bridge in the world, supporting road and rail traffic on two levels at the same time.

The bridge was built by a partnership of construction contractors from the United Kingdom, Japan, France, Hong Kong, China and Switzerland.

mageba scope

Movements in the bridge, caused by thermal fluctuations and various loads (wind, earthquake, traffic etc.), result in continuous opening and closing of modular joints. In the Tsing Ma Bridge, the maximum longitudinal movement of modular joints is 2,000 mm.

In order to meet such demanding requirements, especially the ones related to movements, traffic loads, durability and traffic safety, the builders chose the mageba modular joints type LR25. These expansion joints divide the bridge span into 25 single traffic segments.

In order to ensure high traffic safety even in wet conditions, the entire steel surface is treated with an anti-skid surfacing. Experts consider the special multi-layered surfacing, also used on aircraft carriers, to be the most durable.

Highlights & facts

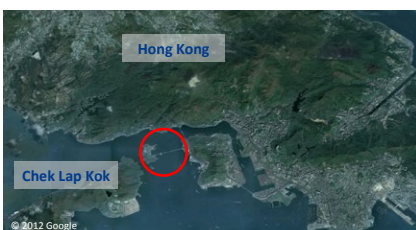
mageba Products:

Type:	TENSA®MODULAR type LR25 with Anti-Skid Surface ROBO®GRIP
Features:	max. movement 2,000 mm
Installed:	1996

Structure:

City:	Hong Kong
Country:	China
Built:	1992–1997
Type:	Suspension bridge
Length:	2,160 m

The Tsing Ma Bridge is the core of the connection to the new Hong Kong airport



mageba modular joint LR 25 being installed in the bridge



Front view of the mageba modular joint LR 25

