

Deh Cho Bridge (Canda)



Project description

The Deh Cho Bridge, located in Canada's Northwest Territories, was completed in the fall of 2012. The \$202 million cable stayed bridge spans the Mackenzie River near Fort Providence, replacing an existing ferry service in the summer, and an ice crossing route in the winter. The Deh Cho Bridge is the only permanent crossing of the Mackenzie River. The structure ensures that the region to the north will not be cut off from southern Canada for an annual 8 week period, when forming or melting ice, not strong enough to carry the ice road, prevents the passage of the ferry. The new 0.68 mi (1.1 km) long bridge has nine spans of lengths ranging between 294 ft (90 m) and 624 ft (190 m).

mageba scope

mageba was awarded the contract to design and manufacture the modular expansion joints required at each end of the Deh Cho Bridge. mageba provided an 11 gap TENSA®MODULAR expansion joint at one abutment, and an 8 gap modular expansion joint at the other. These modular expansion joints, reliable in the most extreme conditions of northern Canada, are able to facilitate movements of up to 35 in (889 mm). In addition, they are also exceptionally flexible, allowing movements in every direction as well as limited rotations about every axis.

Highlights & Facts

mageba products:

Type: TENSA®MODULAR LR

expansion joints of types LR8 and LR11

Installation: 2010–2012

Structure:

Location: Northwest Territories,

Canada

Completed: 2012

Type: Cable stayed bridge Length: 3,642 ft (1,100 m)

Contractor: Ruskin

Location of the Deh Cho Bridge in northern Canada



A modular expansion joint of the type required by the new bridge



View of a modular expansion joint from beneath, showing its control mechanisms

