

Cabinet Gorge Reservoir Bridge (USA)



Project description

The new Cabinet Gorge Bridge, opened to traffic in December 2017, replaced the old load-limited truss bridge originally built in 1920. In 2011, MDT hired Morrison Maierle to design a replacement structure who selected a 375 foot main span structure with uneven backspans of 110 and 275 feet. The new structure is one of the longest steel plate girder spans in the Northwest. In addition, a unique approach was used by linking the two piers back to a fixed abutment on one end with fixed disc bearings, and to a free abutment on the other end with a modular expansion joint. The construction involved lifting the center span off a barge and installing it in place.

mageba scope

mageba's scope on this project included design and supply of 9 disc bearings of fixed and guided type. The range of bearings includes vertical loads from 380 kips up to 1308 kips. All bearings feature beveled sole plates, sloping in the longitudinal direction to accommodate the bridge camber. To support the future replacement process, the bearings were anchored to the substructure using bolted dowels allowing easy removal and replacement.

mageba also supplied one LR4 modular expansion joint, that was installed on one bridge abutment.

The bearings and expansion joint were manufactured and delivered in the summer of 2017.

Highlights & Facts

mageba Products:

Type: TENSA®MODULAR LR4 expansion joint
RESTON®DISC bearing

Installation: 2017

Structure:

City: Heron, Montana

Country: USA

Type: Beam Bridge

Main span: 375 ft (114 m)

Length: 760 ft (231 m)

Completion: 2017

Owner: Montana Department of Transportation

Contractor: Dick Anderson Construction

Engineer: Morrison Maierle

The Cabinet Gorge Bridge is located in Heron, Montana



Fully assembled fixed RESTON®DISC bearings



RESTON®DISC bearing during load testing

