

Corpus Christi Harbor Bridge (USA)



Project description

This project involves the replacement of the current US 181 Harbor Bridge in Corpus Christi, Texas, along with a change in the alignment to interchange between US 181 and Interstate 37. The current bridge does not provide enough clearance for ocean-bound ships travelling to and from the Port of Corpus Christi.

The proposed improvements both to US 181/SH 286 and Harbor Bridge will address structural deficiencies and navigational restrictions of the current bridge, and improve safety, connectivity, and level of service.

The new Harbor Bridge accommodates larger ships and will be the longest cable-stayed bridge in the U.S. and Canada when completed. The old bridge was demolished, making way for the new, six-lane bridge (3 lanes in each direction, as well as a bike/pedestrian path).

mageba scope

mageba is supplying 8 RESTON®SPHERICAL bearings for the main span and 156 RESTON®DISC bearings for the south approach bridge. In addition, 8 TENSA®MODULAR LR9-LS (mov. capacity 36" (914 mm)) and 10 TENSA®FINGER RSFD finger joints (mov. capacity 10" to 12" (254–305 mm)) will be also supplied.

To ensure 50 year service life, all disc bearings were equipped with high grade ROBO®SLIDE sliding material.

The TENSA MODULAR joints being supplied on this project have been extensively tested in accordance with the AASHTO fatigue testing requirements. Such rigorous testing gave mageba the confidence to issue the 50-year warranty required by the owner for these joints.

The installed finger joints' design allows the easy replacement of any portion of the joint in case of any damage or if parts have to be removed for inspections and maintenance.

Highlights & Facts

mageba Products:

- Type: TENSA®MODULAR LR8 modular joints
- TENSA®FINGER RSFD finger joints
- RESTON®SPHERICAL bearings
- Installation: 2019–2024

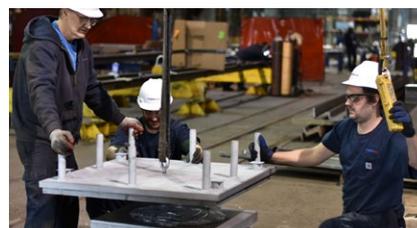
Structure:

- City: Corpus Christi, TX
- Country: United States
- Main span: 1,661 ft. (506 m)
- Length: 5,818 ft. (1,773 m)
- Owner: Texas Department of Transportation
- Contractor: Flatiron/Dragados LLC

The US 181 connects Corpus Christi and Portland in Texas



A free sliding bearing is being assembled



A 3D isometric image of the installed TENSA®MODULAR LR9-LS expansion joints

