

Colman Dock (USA)



Project description

Colman Dock, also called Pier 52, is an important ferry terminal in Seattle, Washington. The original pier is no longer in existence, but the terminal, now used by the Washington State Ferry system, is still called "Colman Dock".

The Colman Dock project plans to replace the aging and seismically vulnerable components of pier in order to maintain ferry service in the future. The project will also address existing safety concerns related to conflicts between vehicles and pedestrian traffic as well as operational inefficiencies. The renovation works will be implemented as a multi-phased project.

mageba scope

mageba USA supplied four RESTON®DISC bearings; $2 \times DF110$ and $2 \times DF70$, with a ULS capacity of 165 and 110 kips respectively.

All bearings were designed to provide a SLS rotation capacity of 0.02 rad. The bearings had an unusually high horizontal load to vertical load ratio which required large shear pins and the welds to be designed for tension.

The bearings were designed with a bolted connection to the structure, allowing easier replicability for future maintenance purposes.

The bearings were tested in accordance with AASHTO LRFD.

Highlights & Facts

mageba Products:

Type: RESTON®DISC bearings

Installation: 2018

Structure:

City: Seattle, WA
Country: United States

Built: 2018

Type: Ferry terminal

Owner: Washington State DOT Contractor: Jesse Engineering Co.

Colman Dock is located in Elliot Bay, Central Seattle



Manufacturing of a disc bearing



A RESTON®DISC bearing after assembly in the US factory

