

# Etihad Rail Stage 2 Package 2D (UAE)



## Project description

Built to the very highest international standards, Etihad Rail will link the principal centres of trade, industry, logistics and all the major import and export points of the United Arab Emirates, as well as forming an integral part of the Gulf Cooperation Council's (GCC) railway network.

The state-of-the-art network will act as a catalyst for economic growth and sustainable social development. It will redefine logistics and transport in the region and provides a modern, safe, efficient and sustainable way of transport.

mageba was involved in Stage 2, Package 2D of the Etihad Rail project, which connects Sharjah and Dubai with Fujairah Port and has a length of 145 km.

The railway links the UAE with Saudi Arabia via Ghuweifat in the west running to Fujairah on the east coast



## mageba scope

In 2021, mageba provided 1,046 RESTON®SPHERICAL bearings, which were specially designed for railway bridges. The largest bearing facilitates a maximum vertical load of up to 38,091 kN, and is also able to accommodate movements of up to  $\pm 280$  mm.

Due to the tight time schedule, mageba's design teams in Switzerland and Shanghai had worked closely with the EPC design office, and the design of the bearings for all the 20 railway bridges was completed within only two months. A total of more than 190 technical drawings were approved.

Following a greatly expedited design and manufacturing process, the bearings were tested at our CNAS-accredited in-house testing facility.

During the project, mageba experts provided installation supervision to ensure that each bearing was installed properly.

A RESTON®SPHERICAL bearing ready for delivery



## Highlights & Facts

### mageba products:

Type: RESTON®SPHERICAL bearings  
Installation: 2021–2022

### Structure:

Region: Sharjah - Fujairah  
Country: United Arab Emirates  
Type: Railway  
Completion: 2022  
Length: 145 km  
Owner: Etihad Rail  
Contractor: CRCC & NPC  
Designer: SYSTRA

A RESTON®SPHERICAL bearing installed on site

