

# Cairo Monorail (Egypt)



## Project information

Egypt's ancient capital is currently being equipped with two state-of-the-art monorail lines to complement its vast existing transportation network.

The first line extending from Nasr City to the New Administrative Capital is 56.5 km long, and the second extending from 6th of October City to Al-Mohandessin is 42 km long. The New Administrative Capital line will consist of 21 stations while the 6th of October City line will feature 12 stations.

Once completed, the two lines will each be able to transport 45,000 passengers per hour in each direction. The fully-automated, driverless, trains will have rubber tyres to reduce noise, in addition to being corrosion-resistant and recyclable.

When the project is finished, Cairo Monorail will be the longest driverless monorail system in the world.

## mageba scope

mageba has been supporting the construction of the system by supplying TENSA®MONORAIL RSFD expansion joints. This type of joint is a special version of the TENSA®FINGER RSFD expansion joint that has been adapted for use in accommodating expansion and contraction movements of concrete monorail beams.

At 889 locations along the system's monorail beams, a five-part solution was required – a short expansion joint on the top of the beam, and two further expansion joints on each side of the beam.

All of the expansion joint elements – 4,445 in all – required to be manufactured and delivered to site in just 6 months, with the long-term performance confirmed by fatigue testing involving two million load cycles.

## Highlights & facts

### mageba products:

Type: TENSA®MONORAIL RSFD expansion joints  
 Installation: 2022–2023

### Structure:

Country: Egypt  
 City: Cairo  
 Type: Monorail  
 Owner: NAT  
 Contractor: Imagro  
 Designer: INNOVA

The project is situated in the capital of Egypt, Cairo



Some of the pairs of finger plates which were delivered to site separately



The upper part of a finger type expansion joint is being lifted into position

