

Constantine Overpass (Algeria)



Description of the project

This road bridge in Algeria's third biggest city was constructed by the Incremental Launch Method (ILM). The ILM approach to bridge construction enables a bridge deck to be fully constructed, in carefully controlled conditions, at one side of the obstacle to be spanned across, and to be slid into place across previously constructed piers to the abutment at the other side. The method does not require the placing of formwork or falsework between the deck's support points and can thus increase efficiency and minimise impacts on traffic.

mageba scope

mageba supplied pot bearings to support the bridge's deck at its abutments and piers while accommodating movements and rotations. Due to the decision to construct the bridge by incrementally launching its deck across its piers, the bearings had to be designed accordingly. This was achieved by equipping the bearings with specially designed sliding plates on top, which would enable the deck to be slid into place (providing extra lift to counter cantilever deformation due to gravity) and could then be adapted after completion of construction to fulfil their permanent function.

Highlights & facts

mageba products:

Type: RESTON®POT ILM bearings
Features: For ILM construction
Installation: 2014

Structure:

City: Constantine
Country: Algeria
Completed: 2014
Type: Box girder bridge
Length: 143 m
Contractor: Construtora Andrade Gutierrez

Constantine is in northeastern Algeria and the country's third largest city



An ILM bearing in the factory, showing its stainless steel upper surface



An installed ILM bearing during bridge deck launching, with PTFE sheets minimising friction

