

Gatwick Airport Bridge (UK)



Project description

A major project to replace the bearings along the entire length of the Inter-Terminal Transit System of London's Gatwick Airport was initiated in 2007, with specialist support provided by mageba to optimise the effort required and impact on train services on this vital piece of infrastructure. Replacement of all 633 pot bearings, pier by pier, commenced in spring 2009, and was completed in early 2010.

Delivered products

The design, manufacture and installation of the bearings required several years of close cooperation with the contractor, Structural Systems (UK) Ltd, due to the project's many challenges. For instance, it was stipulated that all bearings should be replaceable, with fixed steel connections

to the existing concreted-in dowels of the piers beneath and bolted connections to the steel deck. In order to ensure that the bearings could be installed, regardless of the precise locations of the holes, dowels, and bridge deck at time of installation, a clever and highly efficient solution was proposed by mageba.

The fabrication of the bearings was split between mageba's Bülach (Switzerland) and Shanghai production facilities, the majority being manufactured in Shanghai to allow cost savings to be passed on to the customer. Crucially for the installation programme, the first batch of bearings required could be manufactured in Switzerland, saving the time required for transport from Asia to Europe.

Highlights & facts

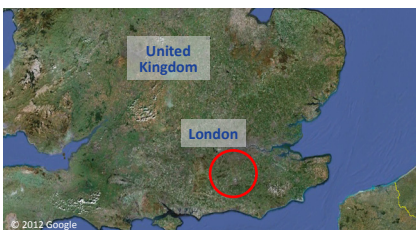
mageba-products:

Type: 633 RESTON®POT
Pot bearings
Installed: 2009-2010

Bridge:

City: London
Country: England
Type: Railway bridge

Gatwick Airport is located south of London



View from below of the viaduct which connects the airport's two terminals



One of the 633 successfully installed bearings

