# Grand Stade des Lumières, Lyon (France)



## **Project description**

The Stade des Lumières is 58,000-seat stadium that is being built in the city of Lyon in south-eastern France. The stadium will be the new home of the football club Olympique Lyonnais, replacing its current stadium, Stade de Gerland, in 2015. Among its first special uses will be as one of the venues for the staging of the 2016 UEFA European football championship, which is being hosted by France.

The stadium's most notable feature is its translucent roof, which, with its large surface area, must be constructed to resist the enormous uplift forces that can be generated by strong wind forces.

## mageba scope

16 RESTON®SPHERICAL bearings play a key role in supporting the stadium's enormous roof, four at each side of the playing field. These are designed to carry weight forces of up to 18,200 kN, and all are equipped with uplift clamps to enable them to resist uplift forces of up to 2000 kN that might arise on exceptional occasions due to strong winds. All of the bearings are of the guided sliding type (type KE), allowing sliding movements of up to +/- 210 mm along one horizontal axis while resisting transverse forces of up to 3000 kN. Worthy of particular note is the fact that the bearings were designed to be installed "upside down", with their long sliding plates connected to the large, robust substructure rather than to the roof.

#### **Highlights & facts**

#### mageba products:

Type: RESTON®SPHERICAL

bearings

Features: Uplift protection,

ROBO®SLIDE material, "upside down" design

Installation: 2014

Structure:

City: Lyon Country: France Completed: 2015

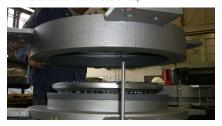
Type: Football stadium

Capacity: 58,000
Architect: Populous
Contractor: VINCI

The stadium is the home of Olympique Lyonnais, the football team of the city of Lyon



Assembly of a typical RESTON®SPHERICAL bearing, with its calotte's flat surface on top



Contrary to most applications, the bearings are designed to be installed "upside down"

