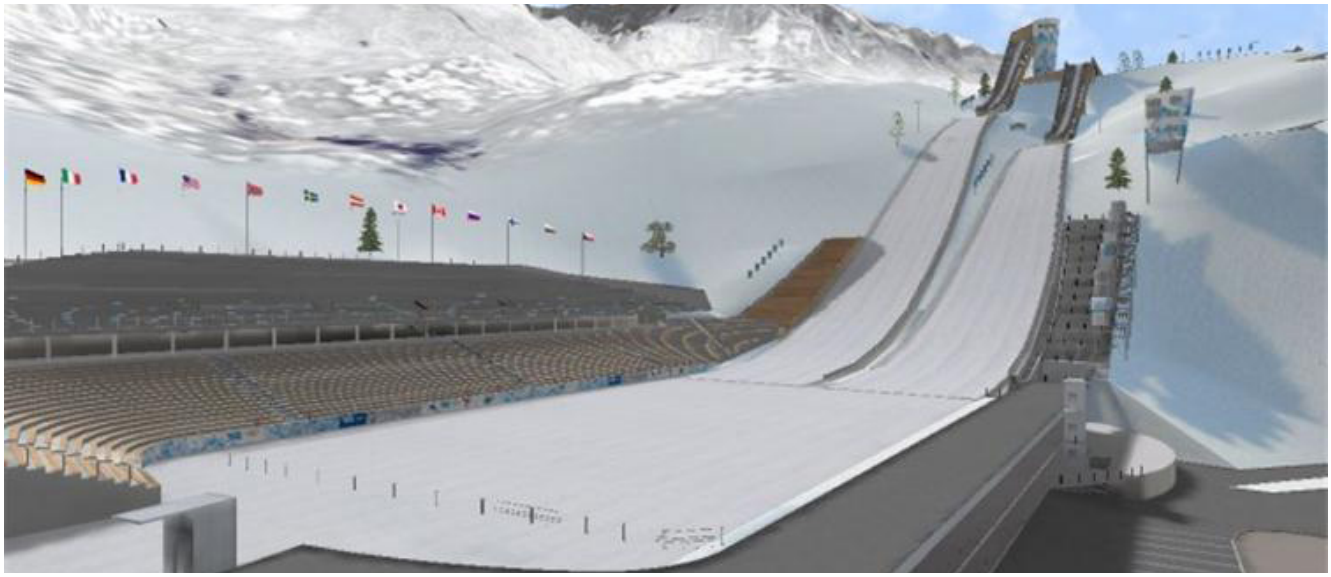
Sochi ski jump facility (Russia)



Project description

The "RusSki-Gorki" ski jumping centre, built for the 2014 Winter Olympics in Sochi, has two ski jumps and associated buildings and infrastructure. A structure at the bottom of the jumps supports part of the viewing and ski-out area, and also the start/finish area for Nordic Combination events. This structure, a composite steel-concrete bridge deck, has multiple season-dependent purposes. Its design is such, that when the viewing area is subjected to the weight of thousands of spectators, uplift force conditions result at a number of the structure's support bearings.

mageba scope

mageba supplied RESTON®SPHERICAL bearings to support this structure. These bearings feature internal uplift protection, with uplift forces flowing through the bearing's centre – unlike bearings that resist uplift by clamps at each side. This minimises force eccentricity, and thus also the moment effects and prying actions that would be more demanding on the bearing. The bearings are designed for downward forces of up to 8,700 kN and uplift forces of up to 460 kN. Thanks to the use of this type of bearing, and ROBO®SLIDE sliding material instead of PTFE, the bearings are as small and compact as possible.

Highlights & facts

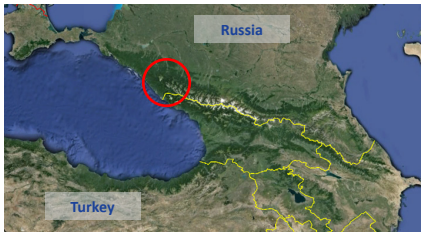
mageba products:

Type:	RESTON®SPHERICAL bearings with ROBO®SLIDE sliding material
Features:	Uplift resistance
Installation:	2013

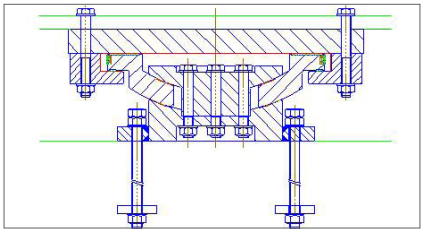
Structure:

City:	Sochi
Country:	Russia
Completed:	2013
Type:	Ski jump facility

Sochi, host city of the 2014 Winter Olympics, is located on Russia's Black Sea coast



Cross-section of spherical bearing with internal uplift protection – avoiding eccentricity of forces



A guided sliding uplift bearing during assembly (without sliding plate on top or guides at sides)

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