

SUCCESS STORY

STATIC BEARING FOR BUILDING

New SC football stadium, Freiburg, Germany

PROJECT DATA

Brief description

The Dreisam football stadium, home to the club SC Freiburg, was built in 1954 and does not correspond to DFL guidelines, which means that it requires special approval to be used for football matches in the German Bundesliga. A decision was therefore made in 2012 to build a new stadium with a capacity of 34,700. Following approach and the start of construction in 2018, the new stadium is due to be ready in summer 2020.

Requirement

Absorption of displacements of up to ± 30 mm in the roof and stand area.

City, year

Freiburg, 2018–2020

PROJECT DESCRIPTION

Due to the large, self-supporting steel roof structure, the steel bearings are expected to change in length as a result of temperature changes. These movements have to be transferred to the supporting structure without damage and with as little friction as possible, while simultaneously diverting the arising loads centrally and absorbing any warping in the steel structure.

SOLUTION

Perforated™ bearings type Z are used on the supports in the angled corners of the emerald-shaped stadium and on the trusses of the main stand. These are able to compensate the anticipated displacement with low friction while also absorbing any twisting and centrally diverting high forces into the supporting structure.

