

ICE - SKATING RINK Bietigheim - Bissingen (Germany)

NEW BUILDING

Client: Town council of Bietigheim-Bissingen

**Certified
Inspection Engineer:** Prof. Dipl.-Ing. Matthias Pfeifer

Our services: Structural engineering inspection in accordance with regulations and standards
Static calculations
Execution planning
Random monitoring of the structure during the building phase

Brief description: Construction of a new indoor ice-skating rink with room for 4,500 spectators

- 3-storey steel and reinforced concrete structure
- circular hall with a diameter of 85 m, height of building 16.5 m
- level foundations with solid floor plate
- reinforced concrete slabs, reinforced cavity wall and high-load transfer beams
- viewing stand structure made from load-bearing precast concrete elements
- fish-bellied steel trusses every 7 m form the main load-bearing structure of the hall covering a span of up to 67 m
- low volume of concrete used at approx. 65-70 kg/m²
- stiffening of the Building through ring effect
- special structural requirements for the reinforced concrete outside walls due to high pressure from partial earth fill

Architects: Schultz + Partner Architekten BDA, Braunschweig

Structural Engineers: ARUP GmbH, Frankfurt/Main

Completion: 2013

