

## ROOF CONSTRUCTION SOUTHERN GRANDSTAND FOOTBALL STADIUM MILLERNTOR Hamburg (Germany)

## **NEW BUILDING**

Client: Football-Club FC St. Pauli, Hamburg

AGN Architects - Engineers - general planners Walter Hellmich GmbH, Dinslaken Architects:

Freyler Industriebau GmbH, Kenzingen

Our services: For the roof construction of the southern

grandstand: Full structural design Vibration analysis Optimising calculations

The construction was based on a ready planned and approved tender planning optimized and

relieved by 35% steel.

**Brief description:** Construction of a new roof for the southern

grandstand with standing area and seats for 5,600 spectators

- roof covering an area of approx. 80 x 30.5 m

- main trusses 80m in length braced by two outer supports and two inner supports

- side structure made from steel trussed girders spanning 12.5 m und a cantilever of 18 m

- the whole construction in very filigree i-beam sections and round pipe

- taking advantage of plastic load reserves

- assembly on site possible by joining prefabricated, welded subsystems and bolting with high-tensile

screws

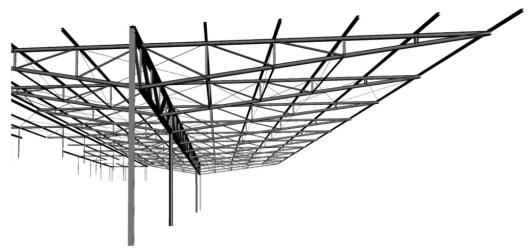
Basis for this type of optimised construction, where we were able to save 35% of the originally calculated steel requirement, were the available and already planned and approved tender documents.

2008 Completion:









Pictures / Illustrations: Professor Pfeifer und Partner Part GmbB, Peters Stahlbau GmbH