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PAUL BIYA STADIUM

BUILDINGS AND SPECIAL STRUCTURES

- STADIUMS

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PAUL BIYA STADIUM

Location

Yaoundé, Cameroon

Client

Fédération Camerounaise de Football

Contractor

Gruppo Piccini S.p.A.

Scope of work

Design, fabrication and installation of steel structures

Period of execution

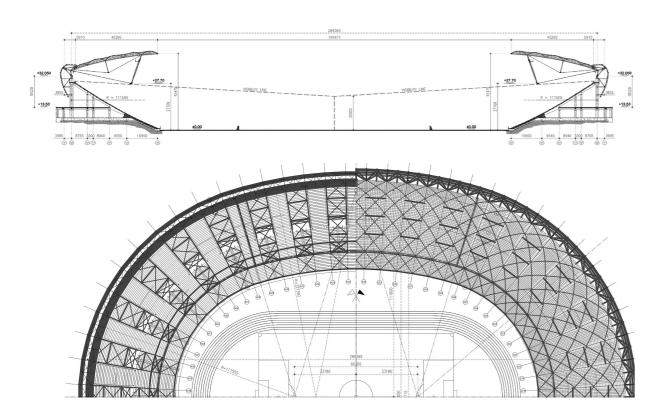
2017-2018

Weight

8.000 tons

The "Sports Complex d'Olembe", also called COSO, is a stadium designed to host the 2019 Africa Cup of Nations (AFCON). With 60.000 seats, a hotel, a shopping mall, gyms and swimming pools, this complex aims to become a new point of reference for the Cameroonian capital.

The Paul Biya Stadium roofing is a tensile structure, a solution based on pre-tensioned cables composing an external compression ring connected through radial cables to and internal tension ring, supporting a membrane. Firstly, these cables are laid down and pretensioned on the ground, secondly pulled from the external compression by means of jacks reaching their final position. Consequently, the resistance of the structure is obtained by the overall behaviour of the high-resistance



cables rather than by the inertia of each single element. This stadium typology permits a light and flexible structure, reducing installation time and crane capacity requirements. The rest of the structure is composed by prefabricated

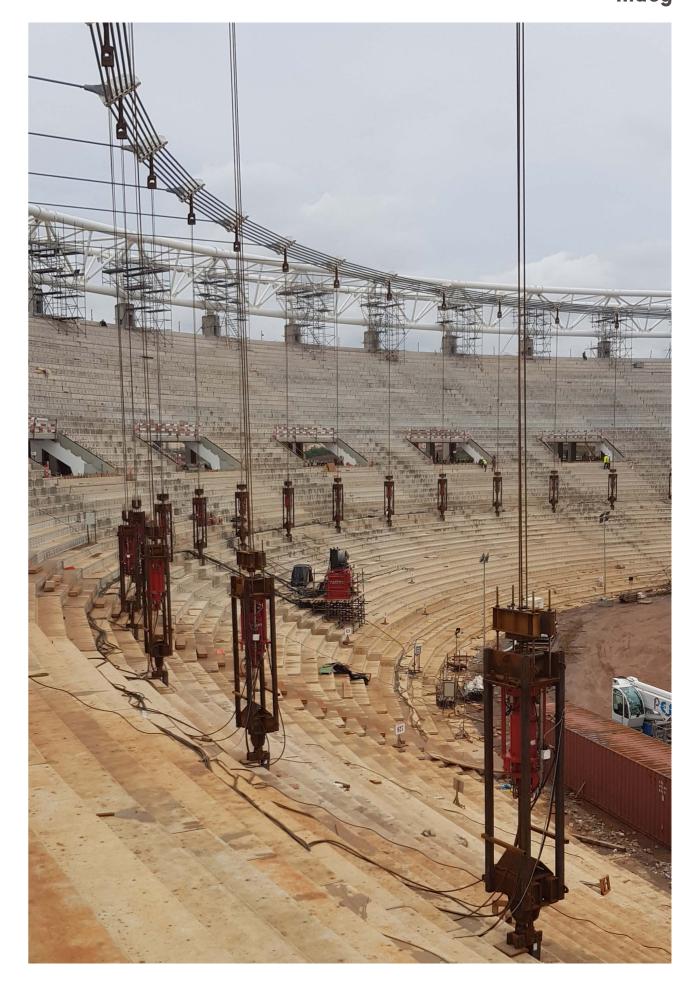
concrete and steel elements that, built in the factory with a more controlled environment in respect to an on-site construction, allow for a time and cost reduction.





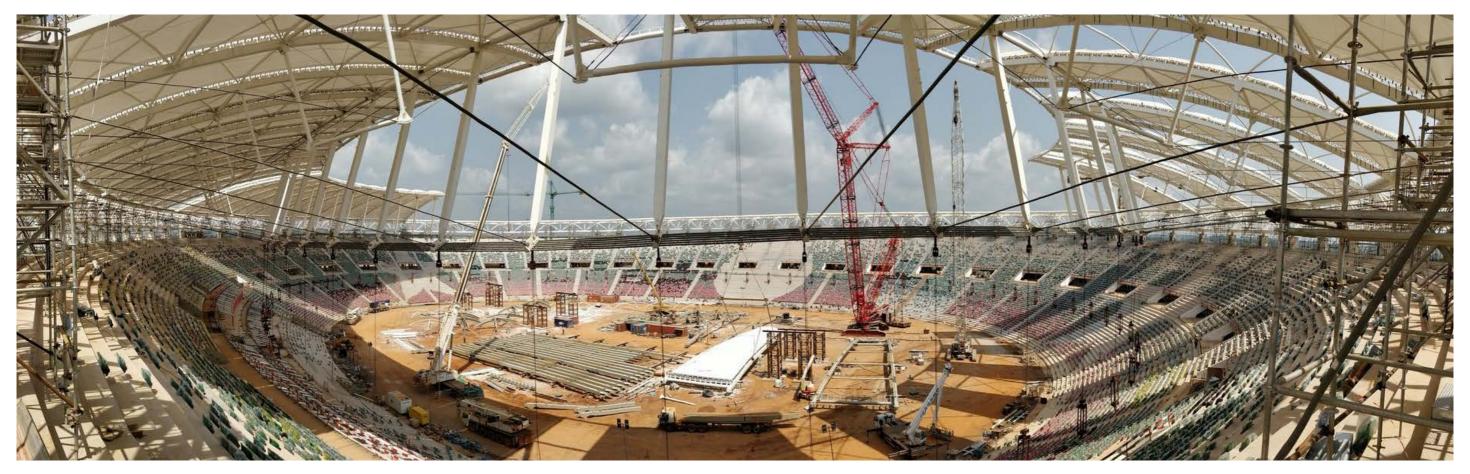


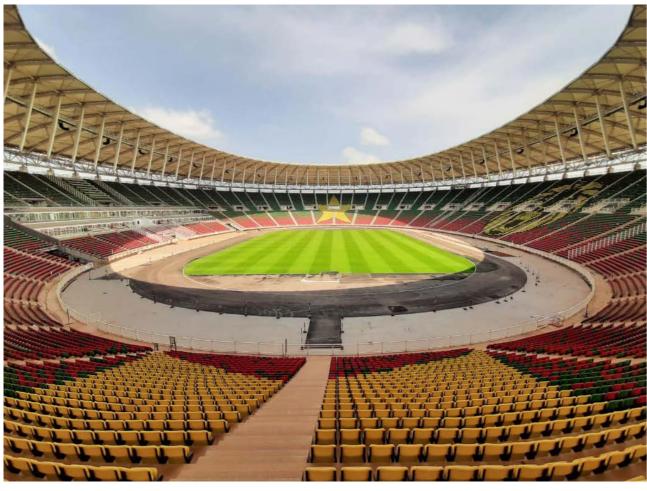




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