

**maeg**

- BUILDINGS AND SPECIAL STRUCTURES

# Stadiums

# Specialist in the **design,** **manufacturing** and **installation** of steel structures

## About Maeg

Maeg is an international player in the construction sector. With more than 40 years of experience, Maeg's expertise can adapt to each project characteristics to devise tailor-made and innovative engineering solutions, concretely transforming design into substance.



ISO 9001:2015



ISO 1090-1/2



ISO 3834



EURO SOA



RFI - SQ008 TMF-001



AFER



RVS-15.05.11



## List of projects

### Stadiums/Sport complexes

Gewiss Stadium, Bergamo - Italy

Paul Biya Stadium, Yaoundè - Cameroon

Al Janoub Stadium, Al Wakrah - Qatar

07-08 | 09-10

11-12 | 13-14

15-16 | 17-18

# GEWISS STADIUM

## Location

Bergamo, Italy

## Client

Stadio Atalanta S.r.l.

## Scope of work

Design, fabrication and installation of steel structures

## Period of execution

2019

## Weight

1.050 tons

**Construction of the North Stand of the Atalanta Stadium, as part of the reconstruction project of the existing Stands, which will be demolished and rebuilt with a steel roof, wrapping the entire façade.**

The modernization of the "Atleti Azzurri d'Italia" Stadium in Bergamo arises from the need to make the structure compliant with UEFA standards, so as to be able to play European competitions and International matches, also providing a covered and comfortable facility for the fans. The construction of the roof of the North Stand, made by reticular beams with of tubular profiles, represents the first step towards the completion of the stadium that, at the end of the works, will have a rectangular layout and a capacity of 24,000 seats – 18,000 of them located in the two new lateral stands. The decision to renovate the existing stadium in the city, compared to a new option outside

the centre, is also a significant contribution from an urban planning point of view, regenerating the surrounding city area. To minimize the impact of the , renovations all work is planned during the summer break of the championship.





# PAUL BIYA STADIUM

<b>Location</b>	Yaoundé, Cameroon
<b>Client</b>	Fédération Camerounaise de Football
<b>Contractor</b>	Gruppo Piccini S.p.A.
<b>Scope of work</b>	Design, fabrication and installation of steel structures
<b>Period of execution</b>	2017-2018
<b>Weight</b>	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 COSO 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.





# AL WAKRAH STADIUM

## Location

Doha, Qatar

## Client

Supreme Committee for Delivery & Legacy

## Contractor

Midmac - Purr - Six Construct  
Joint Venture (MPSJV)

## Scope of work

Design, fabrication and installation of steel  
structures

## Period of execution

2016-2018

## Weight

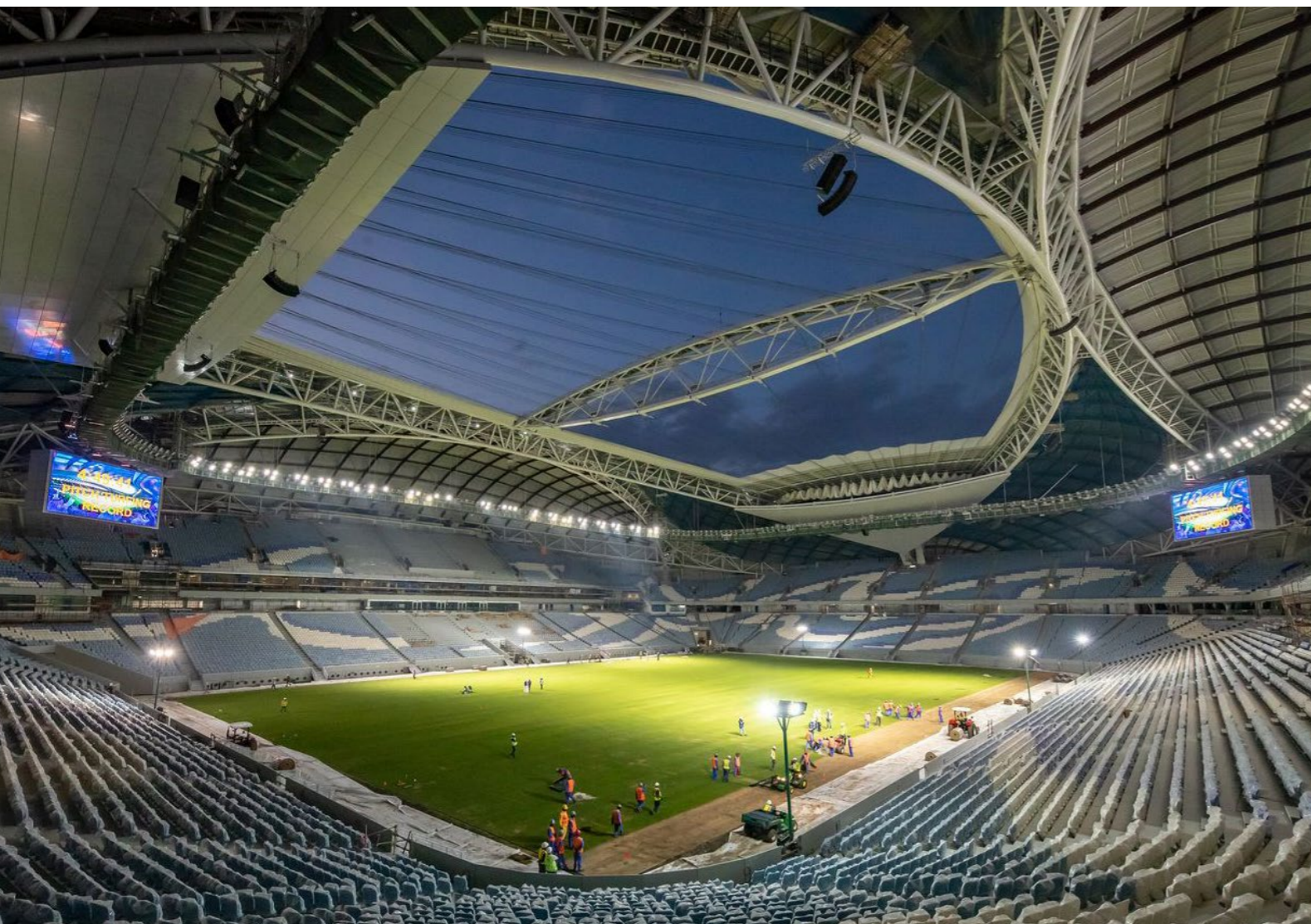
7.500 tons

This 40.000 seats stadium will host the 2022 FIFA World Cup, first time in an Arabic country. The design of the structure has been conceived by the notorious studio Zaha Hadid Architects and it has been inspired by the sails of traditional Dhow boats, used to cut through the Persian Gulf.

The roofing of the Al Wakrah Stadium is shaped like a ring divided in two symmetrical halves composed of three shells composed of reticular trusses. This light and rigid structure are connected by box purlins supporting the weight of the above secondary steel structures and external cladding. At the center of the structures, to ensure a better control on elevated temperatures of the country, there is an opening provided of a retractable roof that wrap itself into a dedicated space

called "garage". The roofing is supported on the perimeter by steel columns and four concrete pillars, while internally by two L shaped bespoke columns. The total weight of the steel structure is 7.500 tons. To comply with the requested time schedule, site production has been provided with two assembly areas with gantry cranes and a factory: the

material was preassembled and transported inside the stadium using SPMTs. To avoid interferences with other ongoing activities, all liftings have been performed from the inside, using also temporary towers reaching 60 meters of height.







Ideas  
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