## maeg

- BUILDINGS AND SPECIAL STRUCTURES

# Hospitality and offices

**3 - 4** Hospitality/offices

maeg

# 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 383

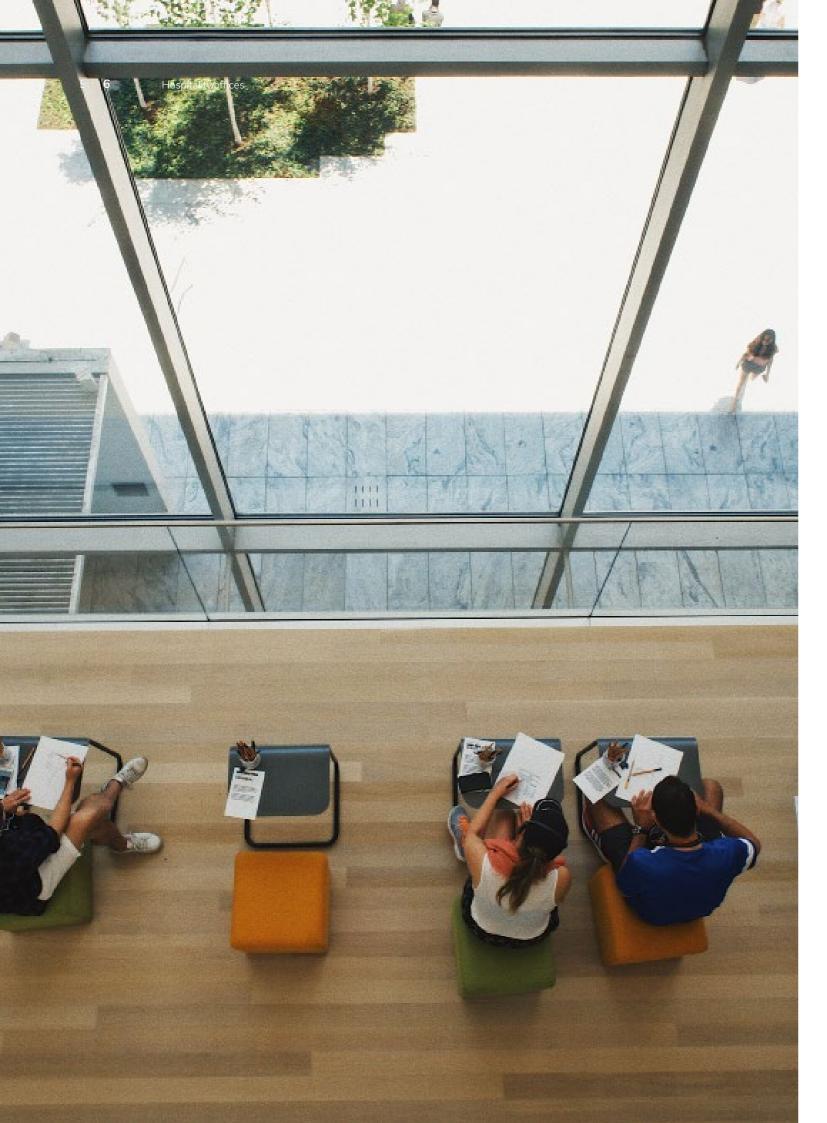
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## List of projects

## Hospitality/offices

UnipolSai Skyscraper, Milan - Italy	07-08   09-10
New Bocconi campus, Milan - Italy	11-12   13-14
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## UNIPOLSAI SKYSCRAPER

Location

Milan, Italy

### Client

Unipol Gruppo S.p.A.

### Contractor

C.M.B. Cooperativa Muratori e Braccianti di Carpi

## Scope of work

Design, fabrication and installation of steel structures

## Period of execution

2019 - ongoing

## Weight

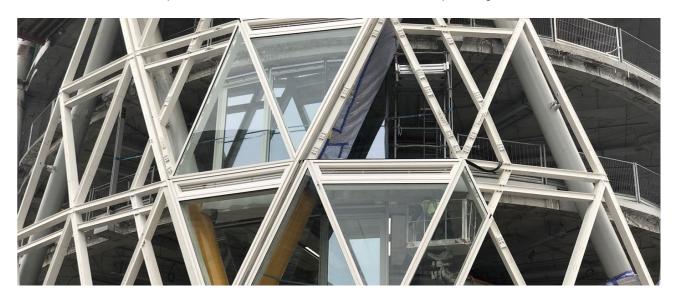
5.000 tons

The construction, also known as "Nido verticale", will be the Milan headquarters of the UnipolSai insurance company. Designed by the architectural firm "Mario Cucinella", the structure will reach a height of 125 meters and will extend across an area of 35,000 square meters.

The 23-storey building is built over a subway line: hence, to distribute the weight of the building, the tower is placed on an orthotropic plate that measures 45 by 14 meters with a weight of 745 tons. The external structure of the work is made of a grid of tubular elements with circular section, 600 mm in diameter and 40 mm thick, entirely welded together, providing to the building its characteristic shape recalling the form of a nest. The external Diagrid is connected to the reinforced concrete core through trusses made by H profiles and rectangular beams of welded sheets. The Diagrid also supports the substructures of the external



cladding, composed of double-H beams made of welded sheet metal and bolted together, on which the windows of the external "frame" will be placed. Between the central core and the external steel structure, there will be the "great void", within which a vertical garden will be created, and it will end at the top with a greenhouse.





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11 -12 Hospitality/offices

## NEW BOCCONI CAMPUS

Location

Milan, Italy

### Client

Società Campus Bocconi a r.l.

## Contractor

Impresa Percassi SPA

## Scope of work

Design, fabrication and installation of steel structures

## Period of execution

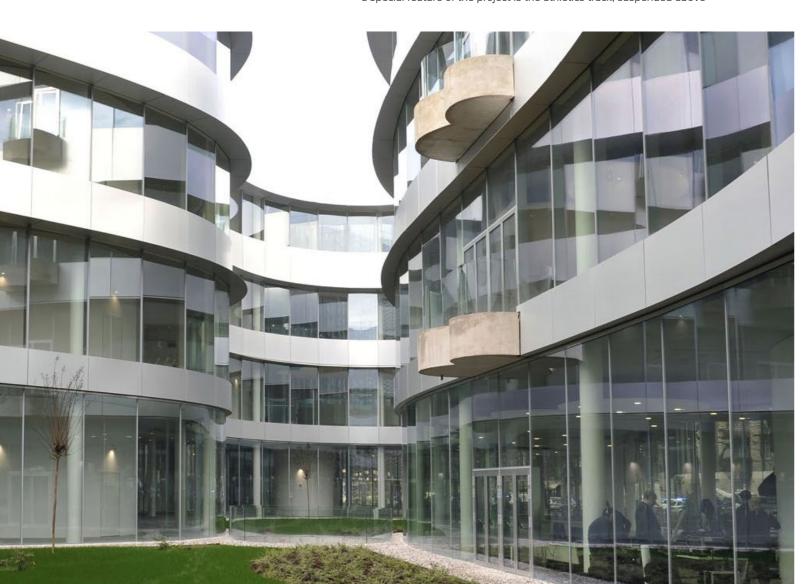
2018-2019

## Weight

870 tons

The new campus of the Bocconi University is designed by the internationally renowned Japanese architect firm SANAA. The building is located in the former area of the Milk's Central Station of Milan, covering a surface of 36,000 square meters and representing an architectonic option in harmony with the existing structures.

The project involves the construction of four distinct buildings – an accommodation building, a new MEO office (Masters, Executive, Office) and a multifunctional center named REC, whose supporting structure of the three floors is made of steel pipes for vertical structures and truss beams. The building has an Olympic-size swimming pool on the ground floor, a gym on the first floor and a basketball court on the second floor: a special feature of the project is the athletics track, suspended above



the basketball court, through 74 hangers supported on the roof trusses. The design is characterized by the attention to environmental sustainability and energy saving. Each structure is set on a reduced central body, to guarantee exposure to light to the interior spaces.





13 -14 Hospitality/offices



15 -16 Hospitality/offices

## ROME TERMINI PARKING LOT

Location

Rome, Italy

## Client

Grandi Lavori S.p.A.

## Contractor

Società Appalti Lavori e Costruzioni S.p.A. (SALC)

## Scope of work

Design, fabrication and installation of steel structures

## Period of execution

2013-2019

## Weight

14.000 tons

First of its kind in Europe, the structure is a three-floors parking lot built above the railways of Rome Termini train station. It is an ambitious and vital project aimed to solve the traffic and parking congestion of the main transportation hub of the Italian capital. The overall surface of 50.000 square meters hosts up 1.337 parking spots and dedicated area for shops and stores.

The rectangular layout of this three-levels structure measure 107\*151 meters and has a maximum height from the railways of 12 meters. The total weight of steel structures is approximately 40.000 tons. The assembly took place by realizing modules with a width equal to the whole structure (107 meters) and a length of 16 meters, which have been launched from the top using a 16 meters long launching nose

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necessary to reach the support avoiding a downwards deflection that would prevent the reaching of the correct height. All the steel structure has been assembled and launched from the top of the station, without interfering with the below train traffic.







## MALL OF QATAR

### Location

Doha, Qatar

### Client

UrbaCon Trading & Contracting (UCC)

## Scope of work

Design, fabrication and installation of steel structures

## Period of execution

2015

## Weight

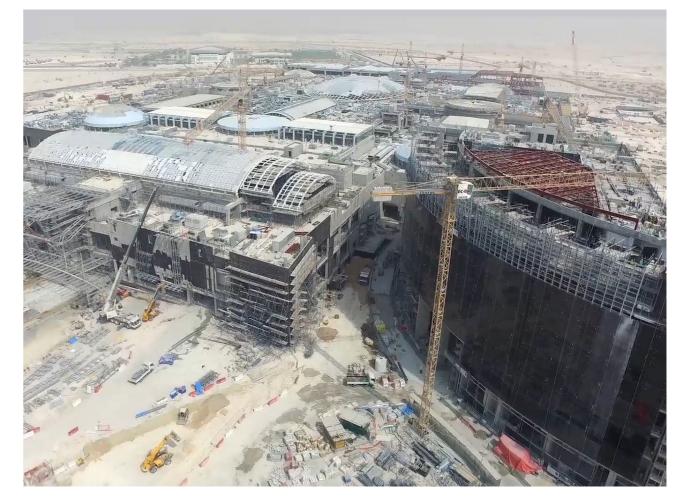
1.600 tons

Next to the AI Rayyan Sports Club hosting the 2022 FIFA World Cup, the Mall of Qatar has been designed by the internationally-known studio of architects Chapman Taylor and has a total surface of 500.000 square meters integrating a shopping, dining and entertainment experience.

The Mall of Qatar, inaugurated in April 2017, is currently the biggest mall of the country, hosting more than twenty million visitors every year. The design won the International Retail and Leisure Destination 2017 and the Retail Leadership Award 2016 also for the characteristic central hall called "the Oasis": a 30 meters high green area offering entertainment and educational areas for families. Within the Mall of Qatar there is the largest IMAX Laser 3D projection system in the world, with a 3.000 seats capacity. The supporting structure is made of steel, reaching a weight of 1.600 tons.







21 -22 Hospitality/offices



## EXPO 2015 MEXICAN PAVILION

Location

Milano, Italy

Client

ProMéxico

**Contractor** Nussli Italia S.r.l.

Scope of work

Design, fabrication and installation of steel structures

Period of execution

2015

Weight

450 tons

Built for the Expo 2015 in Milan with the topic "Feeding the Planet, Energy for Life", this temporary pavilion resembles the shape of the corn, base ingredient of the Aztec culture and inspiration of the designer.

The expository building is a horizontal parallelepiped of six floors made of steel beams IPE 400 and rectangular beams composed by welding plates with a thickness of 12 mm. The external structure of the pavilion is composed of curved tubular profiles with a circular section and a diameter of 355 mm, wrapped with a membrane made of dense-weft canvas that filters natural light and reduces energy consumption, recalling the shape of the corn's leaf. This combination has been awarded with the Expo sustainability prize. The pavilion has a height of 14 meters for a weight of 448 tons.









27 -28 Hospitality/offices

## GUIDO CENTER

Location

Libreville, Gabon

### Client

Groupement Santullo Sericom Gabon S.A.

## Scope of work

Design, fabrication and installation of steel structures

## Period of execution

2012-2014

## Weight

1.750 tons

The Guido Centre is a "L" shaped mix-use building erected in the northern part of Libreville, capital of Gabon. Built near the prestigious area of Boulevard Triumphal, main artery of the city hosting several ministries and bank offices, it is destined to become a new landmark of the city.

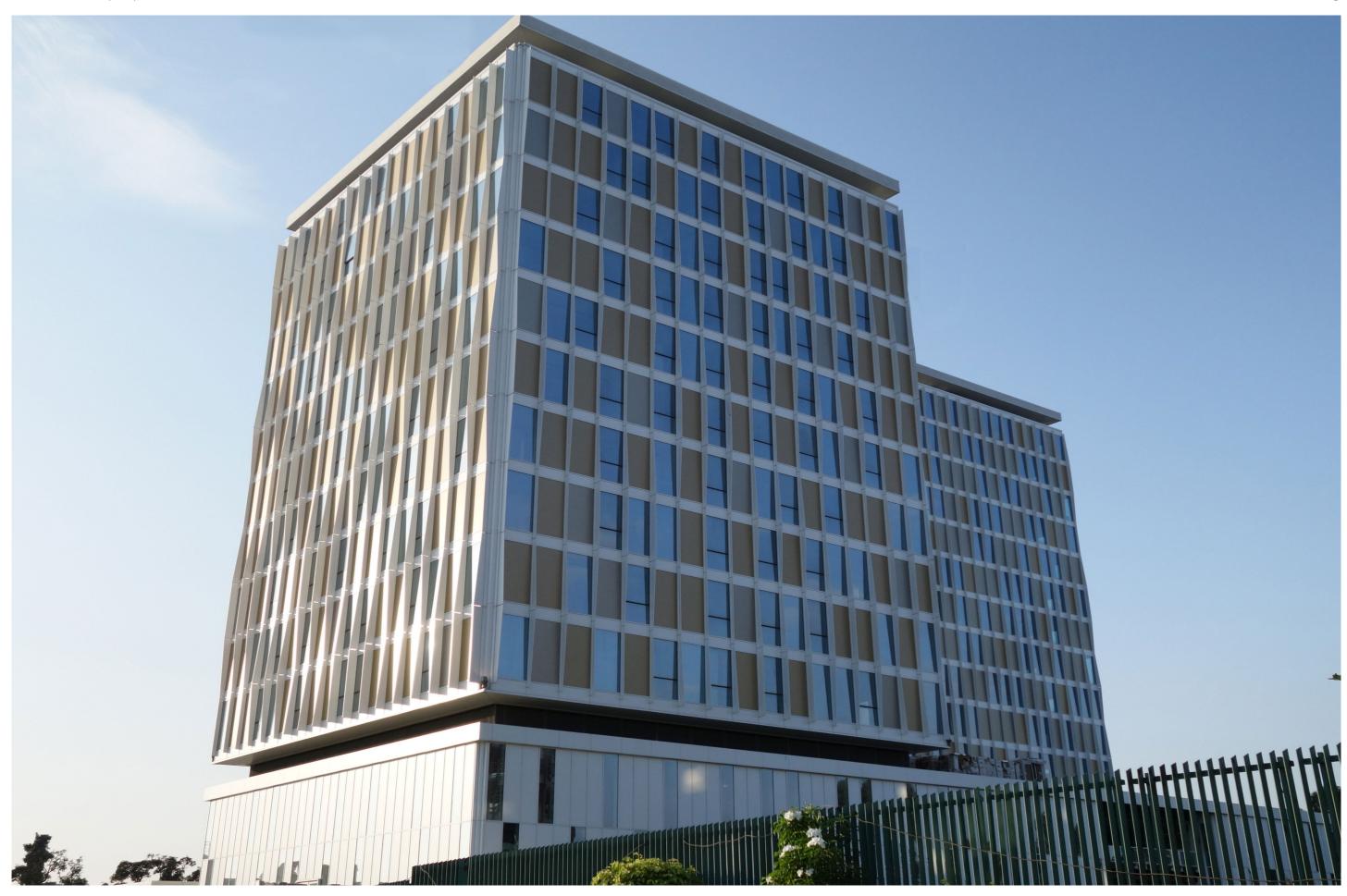
The Guido Center has a total surface of 6.600 square meters. It is composed of an underground parking lot upon which it is built a two-floors L-shaped block, hosting commercial spaces, with on top two towers, one at each extremity. The commercial north tower is composed of 12 floors with a height of 58.2 meters, while the south residential tower has 10 floors with a height of 50.7 meters and a square plant measuring 28 meters per side. A paved square with green areas completes the building. Altogether, 1.769 tons of steel structures

support the external façade, characterized by a regular grid alternating opaque and glazed modules that integrates with the surrounding reducing the environmental impact.









31-32 Hospitality/offices

## GARIBALDI COMPLEX

Location

Milan, Italy

## Client

Beni Stabili S.p.A.

## Contractor

Impresa Costruzioni Giuseppe Maltauro S.p.A.

## Scope of work

Design, fabrication and installation of steel structures

## Period of execution

2012

## Weight

1.150 tons

Garibaldi towers characterize the skyline of Milan since 1984. In 2008 they have undergone a process of renovation including a new body "C" between the two towers, made entirely of steel and hosting common spaces and recreational areas.

The new C body between the towers of the Garibaldi complex has been realized above an already existing two-floors building made of reinforced concrete, which include the terminal of the Porta Garibaldi railway station, which has not been stopped during the construction period. The new building has four floors entirely made of steel, with a total weight of 1.150 tons. On the first floor there are V-shaped pillars with an inclination of 45 degrees halving the required span on the floors above while generating a strong architectural impact. Because of

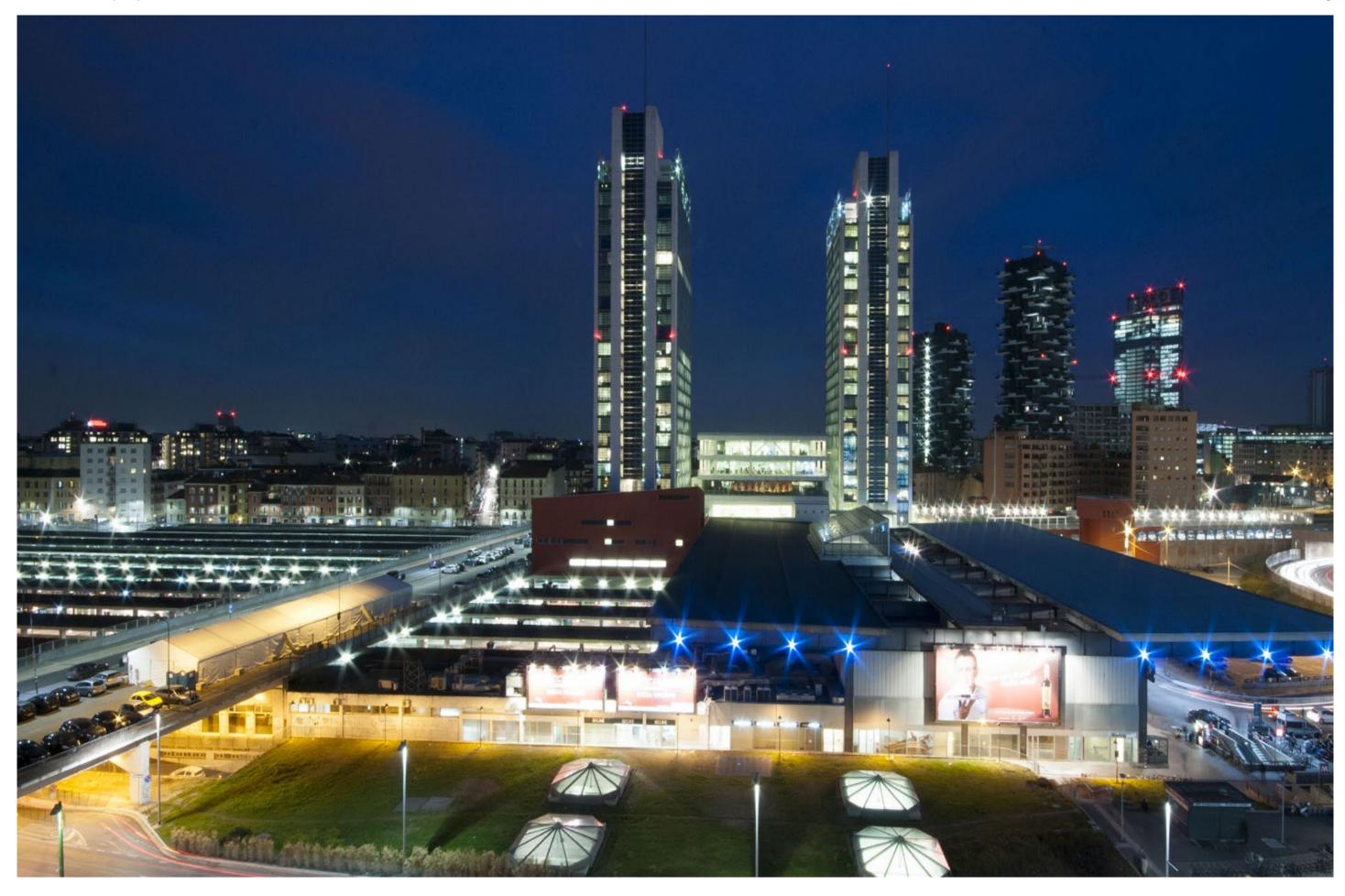
welded profiles have been used.

contractual commitments, the C body has been completed in less than six months and, to reduce time and costs, double-T





maeg Hospitality/offices



35 -36 Hospitality/offices

# CONFERENCE CENTRE "CIC"

## Location

Algiers, Algeria

## Client

Algerian Government

## Contractor

China State Construction Engineering Corp. Ltd. (CSCEC)

## Scope of work

Design and fabrication of steel structures

## Period of execution

2011-2014

## Weight

6.600 tons

With an overall surface of more than 110.000 square meters able to host up to 10.000 people, 5.000 of which only in the main conference room, it is the biggest conference centre in North Africa. The project has been conceived and financed by the Algerian Government to step up its position in the international arena.

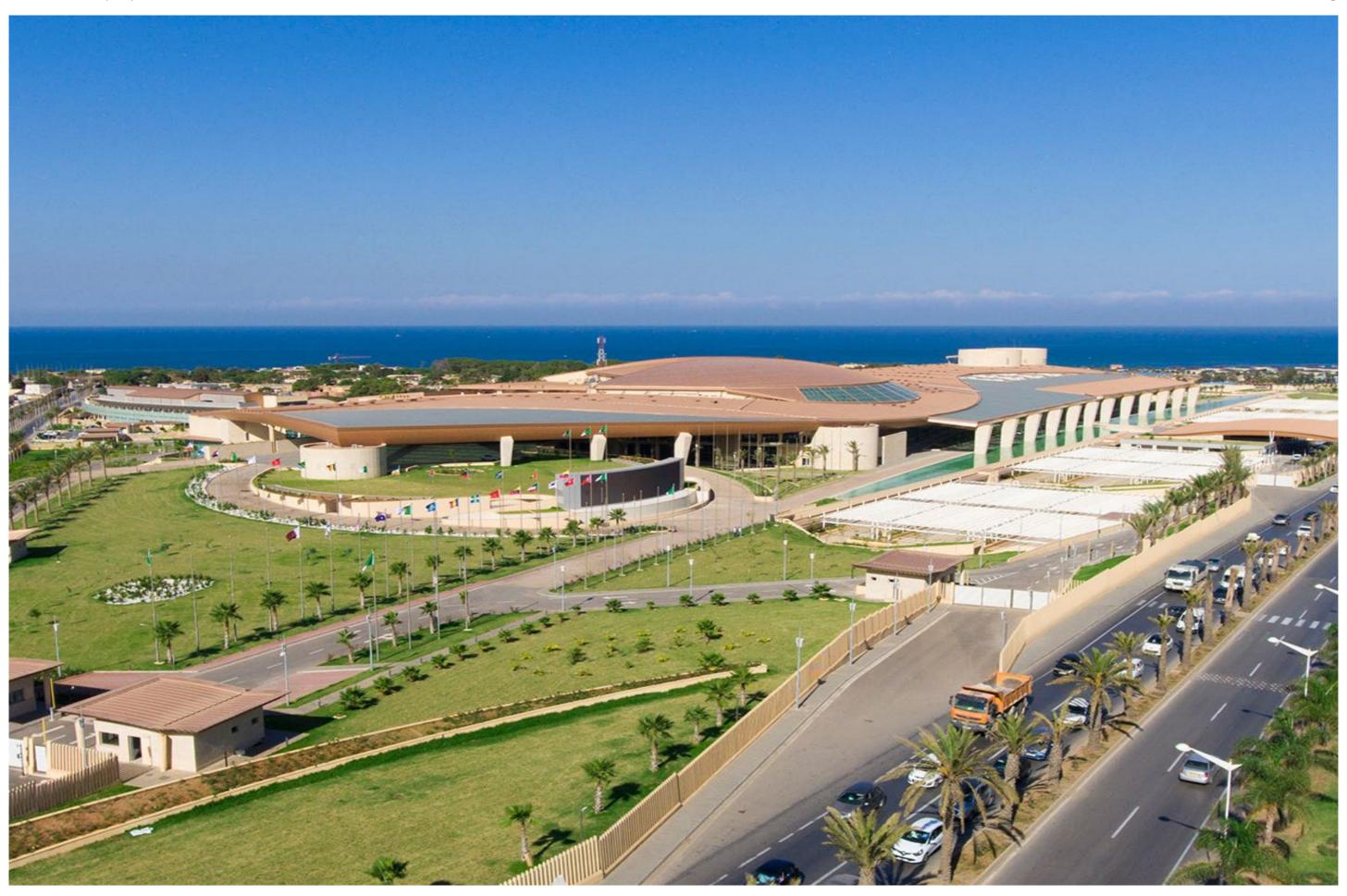
The main beams of the roofing are reticular trusses made of tubular profiles with a triangular section disposed with a pair chords on top and one on the bottom. Secondary reticular trusses support the purlins. The 6.613 tons heavy steel structure develops around a central circular body, called T4, with a diameter of 95 meters realized with reticular trusses made of tubular pipes with a maximum height of 6 meters. Around it, the main covering T5 develops for 330 meters, extending other 150 meters with the coverage T1 and T2.







37 -38 Hospitality/offices



39 -40 Hospitality/offices

## CORINTHIA HOTEL KHARTOUM

Location

Khartoum, Sudan

### Client

Libyan Arab Foreign Investment Company (L.A.F.I.C.O.)

### Contractor

Cooperativa Muratori e Cementisti (C.M.C.)

## Scope of work

Design, fabrication and installation of steel structures

## Period of execution

2005-2006

## Weight

3.750 tons

The Corinthia Hotel is one of the first five-star hotels in the Sudanese capital. It is in front of the meeting point of the Blue and White Nile, in one of the most alive districts of the city. The hotel has a majestic sail-like curved façade that has become a symbol of economic and cultural renovation for the city, offering 230 rooms and spaces for cultural and sport activities.

The Corinthia Hotel is composed of a central structure with a variable section made of steel and concrete, connected to 18 irregularly shaped floors reaching a total weight of 2.200 tons and a height of 85 meters. Externally, the curved façade is covered of steel and glass. In addition to the main building, on the side, there is a four-floors shopping mall and a conference centre, covering a total surface of 5.300 square meters with

a weight for the steel structures of 1.230 tons. A 270 tons structure with a length of 90 meters composes a coverage at the entrance. The sum of the different areas amounts to a total surface of 60.000 square meters. The assembly phase

has been performed under sever climate conditions, with temperature between 35° and 55° C, lifting the pieces at considerable heights, up to 100 meters.









43 -44 Hospitality/offices

## GOLDEN TULIP PLAZA HOTEL

## Location

Caserta, Italy

### Client

Hotel Marina di Castello S.p.A.

## Scope of work

Design, fabrication and installation of steel structures

## Period of execution

2004

## Weight

300 tons

The roofing of the Golden Tulip Plaza Hotel is the biggest structure of its type in Italy and one of the largest in Europe: a ventilated covering made of steel and shatterproof glass realized to cover the internal courtyard of this luxurious complex, conceived to create a new hub in the ex Saint Gobain area of the city.

The hotel is formed by a visually striking U-shaped body. This structure is the biggest of its type in Europe: it has a surface of 3.600 square meters (58.5\*58.5 meters) supported by 300 tons of tubular arches that, to balance the seismic of the area, directly anchor to a system of bearings transmitting horizontal forces through sliding supports. The dome, made of shatterproof laminated glass, could not be assembled on the ground and has been directly installed at height starting from perimeter beams.







45 -46 Hospitality/offices



## NH LAGUNA PALACE HOTEL

## Location

Venice, Italy

## Client

Venezia Futura S.r.l.

## Scope of work

Design, fabrication and installation of steel structures

## Period of execution

2001

## Weight

120 tons

The characteristic element of the project is a 11.000 square meters roof made of glass and steel, covering a wet dock able to host more than 400 boats.

The roof is supported by trusses leaning both on the two buildings and on pillars, contrasting the bending of the beams.

