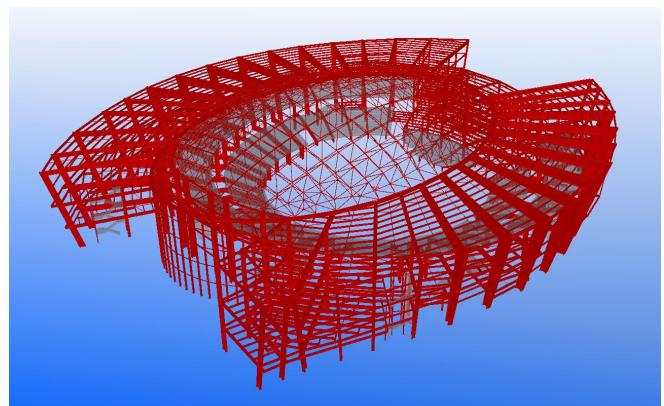
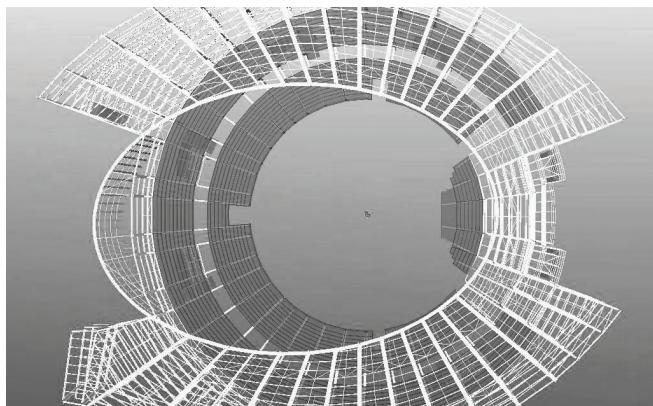




Engineering Structures for Life



BUILDINGS - SPORTS FACILITIES

Dammam University Multipurpose Hall

ABOUT

The Dammam University campus is located in Dammam on a plot of 90.000 m². The campus is divided into 3 parts: the main building that is built on an area of 3.000 m², the administration building comprising of 12 floors, with a total area of 17.833 m² and a multipurpose hall to accommodate 5.000 spectators with a total area of 17.568 m².

GEG provided services comprised the Multipurpose Hall [structural design review](#). The main structure is in steel with the stands concreted on-site.

To fulfil new Dammam University requirements, GEG proposed the following main changes:

- New architectural plot and adjustments in slab levels and auditorium's layout;
- Consider all mainframes as principal. Changing the original concept which considered mainframes and secondary frames;
- Replication of steel section as much as possible;
- Assuming secondary beams (purlins) as simply supported considering also steel element design;
- Not possible to change column base positioning because concrete piles were already under construction.

FACTS

Year: 2014-2015

Client: Martifer

Services: Independent design review, Structural Engineering

TEAM

LOCATION

Dammam, Saudi Arabia