

Items Designed by Structural

Primary structures

The following items are what are known as primary structures (details on what is defined as primary can be found in EEMUA 158, the construction specification for fixed offshore structures):

- Jacket.
- Integrated deck.
- Process modules.

A primary structure is critical to the global integrity of the asset and failure of primary structural members would risk danger of collapse of the asset. For these reasons, the applicable design codes and materials and fabrication requirements are more onerous, requiring all work to be fully checked at all stages.

Secondary structures

Secondary structures are load-bearing structures that are not critical to the integrity of the asset. Local damage would occur if these structures failed, but the asset would remain intact (details on what is defined as secondary can be found in EEMUA 197, the specification for the fabrication of non-primary structural steelwork for offshore installations). Secondary structures include:

- Deck stringers.
- Deck plates.
- Access platforms.
- Stair towers.
- Equipment supports.
- Protection frames.
- Piperacks.
- Pipe supports.
- Passive fire protection.

Tertiary structures

Tertiary structures are low and non-load bearing structures that include:

- Handrails.
- Ladders.
- Gratings.
- Drip trays.
- Drain boxes.
- Gutters and penetration sleeves.

Installation aids and mechanical handling

Structural engineering is also responsible for the design and specification of rigging and lifting frames and for the installation and removal of permanent and temporary equipment, such as lifting frames, spreader bars, pad eyes, and runway beams.

Multi-discipline supports

While equipment installed by other disciplines requires supports, the supports themselves are normally designed by the structural teams.