

BIM FOR OFFSHORE DETAILING

# bocad Offshore

bocad Offshore provides a range of powerful specific tools for sustainable structural steel conceptual and detailed design, extending from fabrication to construction of offshore and marine projects such as wellhead and production platform topsides, jackets; spars, semi-submersibles, tension leg platforms (TLP), jack-up rigs, floating production, storage, and offloading (FPSO), as well as wind farms.

A standout feature is its unique capability to generate general arrangement drawings, which not only saves significant time during revisions but also ensures that design drawings remain consistently current. The software includes automatic weight control and welding inspection reports, profile cutting plans, welds marking, offshore-specific shop and assembly drawings, rolled plates unfolding, pipes 3D profiling, and boasts multi-discipline design software interoperability with compare and update.



## Target market:

- Conceptual and detailed design of structural steel, including fabrication and construction
- Offshore and marine projects, such as:
  - Wellhead and production platform topsides, jackets
  - Spars, semi-submersibles, tension leg platforms (TLP)
  - Jack-up rigs
  - Floating production, storage, and offloading (FPSO)
  - Wind farm substations and support structures for wind turbines

## You expect:

- User-friendly and efficient 3D modeling of complex joints and large structures for offshore platforms
- The ability to create accurate and high-quality presentations for deliverables containing relevant information for the offshore industry in a short timeframe
- A complete structural workflow from conceptual design to fabrication with change management
- Material estimation for purchasing, minimizing raw material wastage
- Stress analysis and multi-discipline plant design software interoperability
- A dedicated support team with years of experience in the offshore industry

## We offer:

### Topsides:

- Built-up girders, box beams, pad eyes, cones with plate unfolding, etc.
- Standard automatic and customizable connections, including insert plates, wings, stiffeners, haunch joints, star plates, etc.

### Jackets:

- Pre-set jacket grids
- Jacket panel configurations with minimal gap distance and clash detection
- Can length according to incoming bracings and API rules
- Doubler plates, external and internal ring connections, anodes and more

### Hulls:

- Hull stiffeners, brackets and more

### Miscellaneous:

- Libraries for handrails, stairs, grating, and ladders

### Welds:

- Weld preparation, including bevelling, rat holes, etc., for robots
- Welds according to AWS standards, complete with NDT information for welding inspection reports and weld mapping.

### Pipe profiling:

- Pipe rotation to achieve desired 0° orientation or short point
- Extraction of included angle, eccentricity, bevel angle, bevel offset, and cut type (saddle or miter) data for 3D profiling robots or pipe unfolding drawings.
- Long seam orientation
- Extraction of pipe unfolding diagrams with values for X and Y projections, seam location, tubular length from ID to ID, and total weld length

### Drawings and reports:

- Standard offshore 2D graphics, including can hatching, break symbols, splice symbols, hollow symbols and more
- Material summary, weight control reports and more
- Profile cutting plan