

Heavy Engineering

- Design of large structures as per standards and codes
- Design of joints/fabrication process and manufacturing engineering support
- Preparation of intermediate BOM for procurement
- Design of jigs/fixture and special working holding devices for large fabrication
- Assembly sequence animation and CBT's
- Generation of General Arrangement (GA), fabrication, manufacturing drawings and BOM
- Validation of large structures as per standard code calculations
- Analysis of large structures for Wind, Snow and Seismic loading conditions
- Fluid Structural analysis
- Weight reduction and optimization for structures
- Weld joint analysis
- Modal, Fatigue and Durability analysis
- Failure mode analysis and what-if scenarios
- Static, buckling, non-linear, dynamic, impact, explosive, thermal and other applicable analysis
- Calculation of safety compliance of structures for codes like ASME, DIN, EN etc.
- Analysis for transportation loads and lifting conditions
- Analysis for Vacuum and pressure conditions for vacuum and pressure vessels

