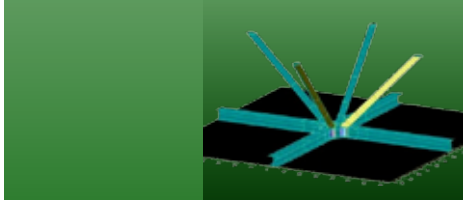


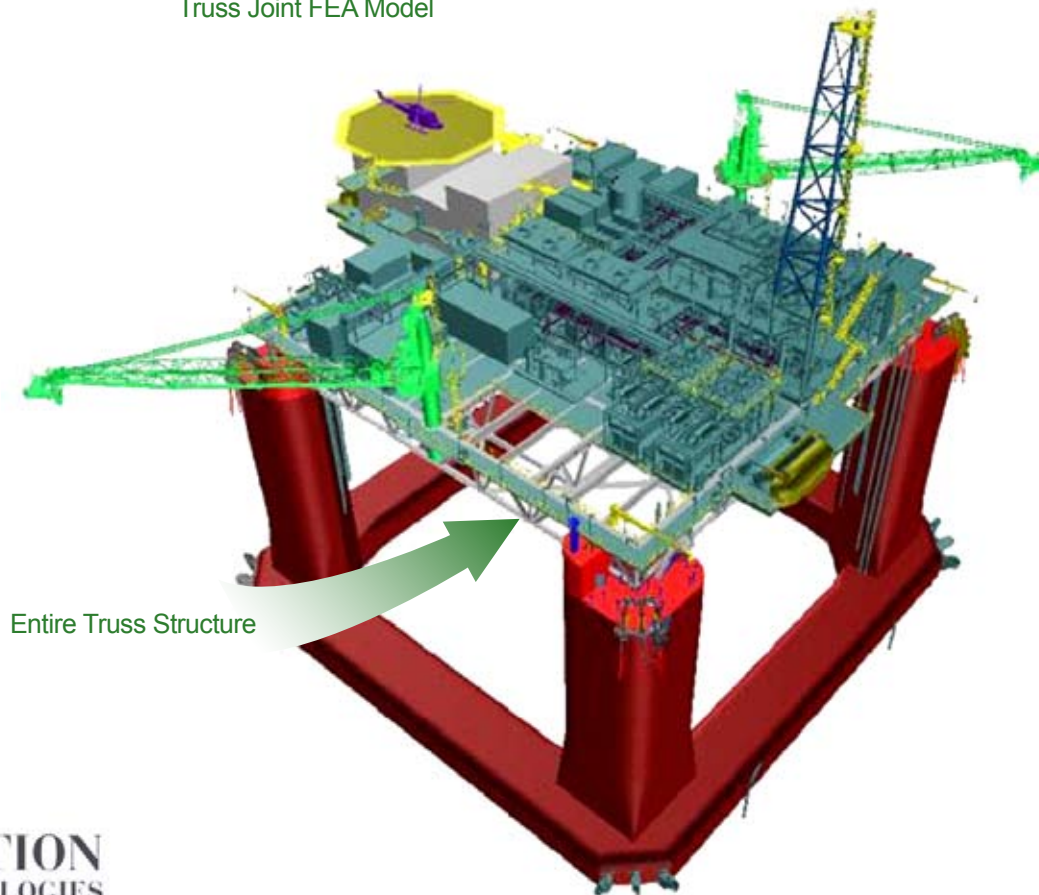
TRUSS JOINT MODELING AND ANALYSIS

Bastion was contracted to model and analyze three new truss joint configurations for a new semi-submersible deepwater drill rig. The idea behind the truss designs are to have less tubular connections to support the entire deck load which decreases the weight and aids in inspect tasks.

Bastion structural analysts built three different bar-to-beam element models and ran over 700 load cases per joint. All models were built using FEMAP and calculated with NASTRAN solver. Supporting structural analyses performed using ABS code requirements.



Truss Joint FEA Model



Entire Truss Structure

