



Rig Name: Atlantic Rotterdam

Rig Type: Jack-up

Owner name: Atlantic Oilfield Services

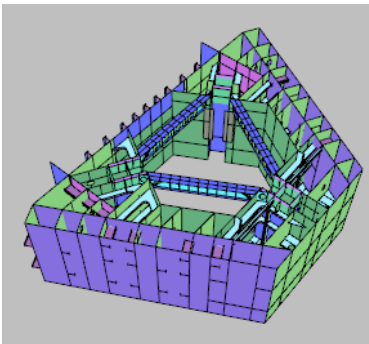
Classification Society: ABS

Pertinent code: SNAME

Code design: ASD

Shipyard: Remontowa in Gdansk (Poland)

Click below to see 3D model!

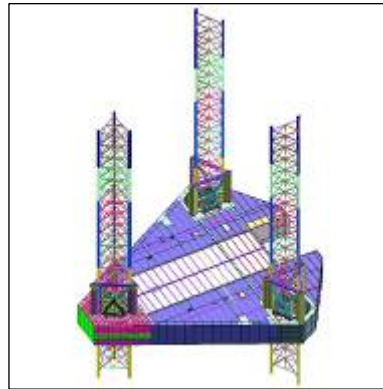


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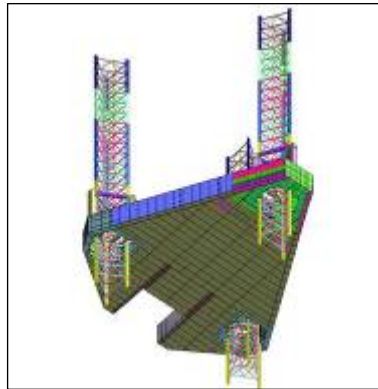


Project description: Preparation of stress analysis for No 32 Preload Tank, located on FWD side of 'Atlantic Rotterdam' jack-up unit, was done to reduce amount of time required for replacing corroded sections through the optimization of repair process.
No 32 Preload Tank repair has been done on February/March 2011 year in Remontowa Shipyard, Gdansk (Poland)

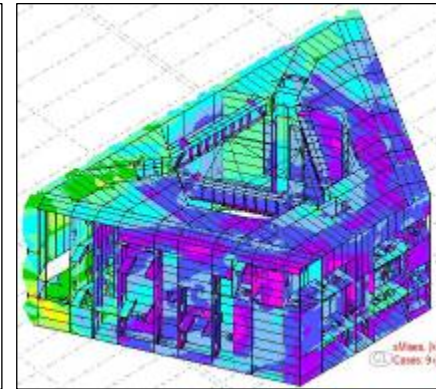
FEA Model



Global FEA Model



Results



Stress Plot

Photos



Replacement of Corroded Plates

R.E. scope of work is to analyze structure of Preload Tank 32 for all loads present during repair works, such as structure self weight and weight of equipment left on platform (e.g. lifeboats, cranes). The analysis of the structure includes the following stages:

1. Stress analysis of intact state of Tank No 32 'in working condition'.
2. Stress analysis of crop state of Tank No 32 (all access holes for remedial works + all plate cut outs done at once) in 'working condition'.
3. Stress analysis of crop state of Tank No 32 (all access holes for remedial works + all plate cut outs according to Shipyard sequence) in 'working condition'.
4. Stress analysis of crop state of Tank No 32 (all access holes for remedial works + all plate cut outs according to R.E. modified sequence) in 'working condition', and if required.
5. Stress analysis of crop state of Tank No 32 in 'working condition' for one additional simulation requested by the client.

Engagement Condition

Upload your problem to us and give us relevant input to allow us to resolve your problem, we will need:

1. As built of structure to create 3D FEA model.
2. Static and environmental loads during repair.
3. Sequence replacement of corroded plates