

# Increasing weather limits for smaller vessels

Presentation Recap!



Pål gave a talk at the Miros Event about increasing the weather limits for smaller vessels ...

**Here are the three main take aways:**



Many people are still using the DNV simplified method...

...even though:

- It's conservative
- It's not applicable for their operation
- Time-domain analysis can be almost as quick

Modelling and analysis of marine operations (DNV RP-N103)

#### 4.1.3 Main assumptions

4.1.3.1 The simplified method is based upon the following main assumptions;

- The horizontal extent of the lifted object (in the wave propagation direction) is relatively small compared to the wave length.
- The vertical motion of the object follows the crane tip motion.
- The load case is dominated by the vertical relative motion between object and water – other modes of motions can be disregarded.

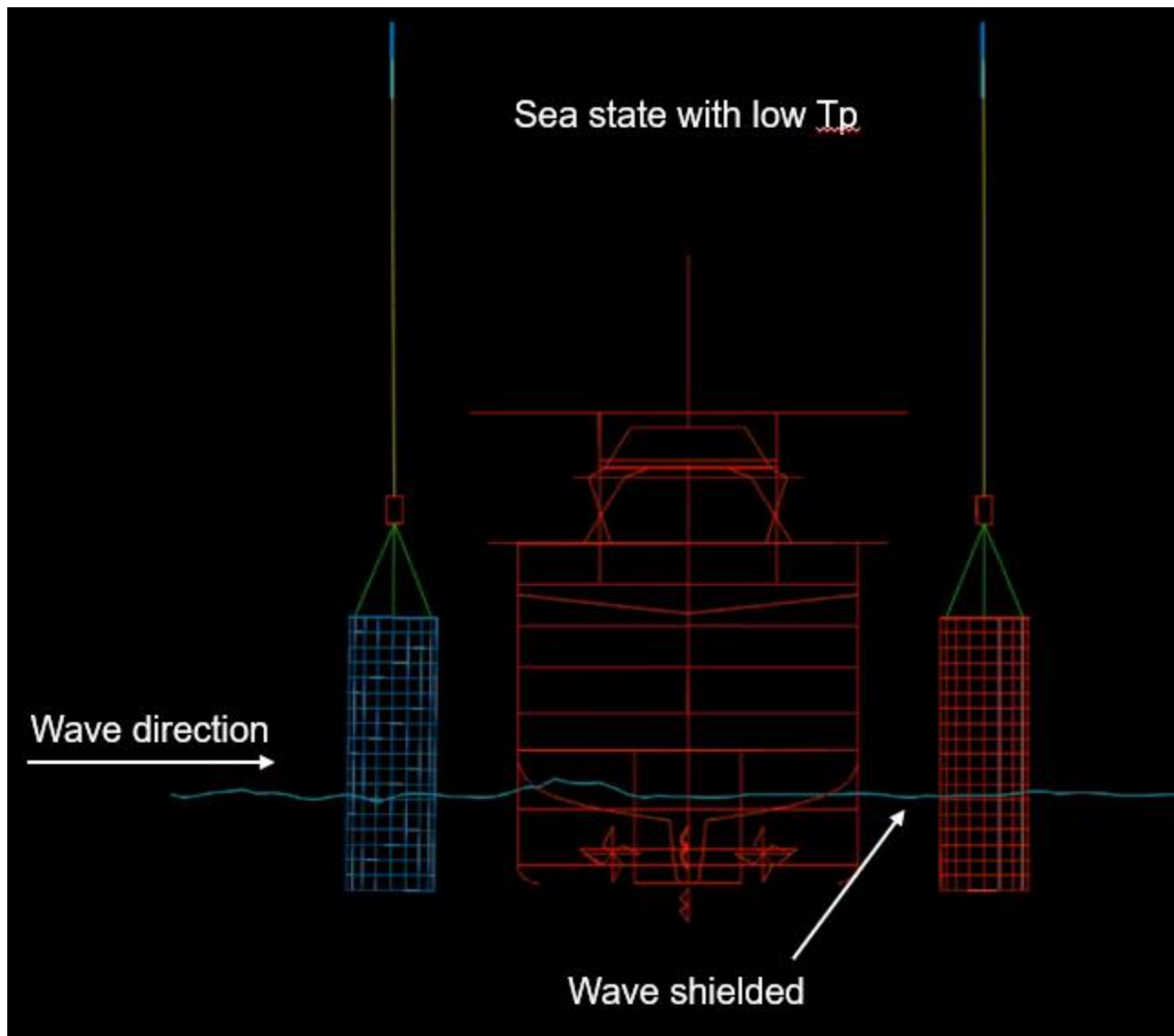
4.1.3.2 More accurate estimations are recommended if the main assumptions are not fulfilled, see, Sec.3.

4.1.3.3 Increased heave motion of the lifted object due to resonance effects is not covered by the Simplified Method, see [4.3.3.3].



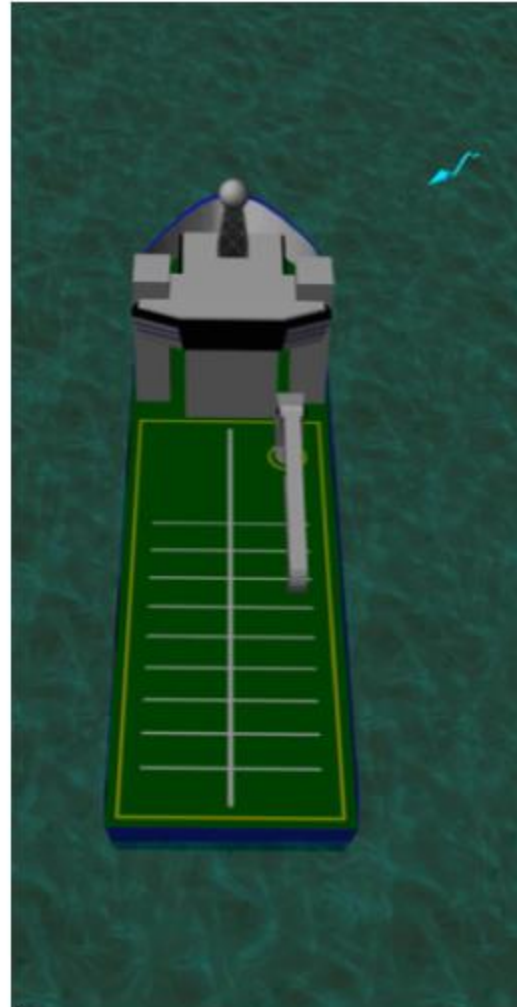
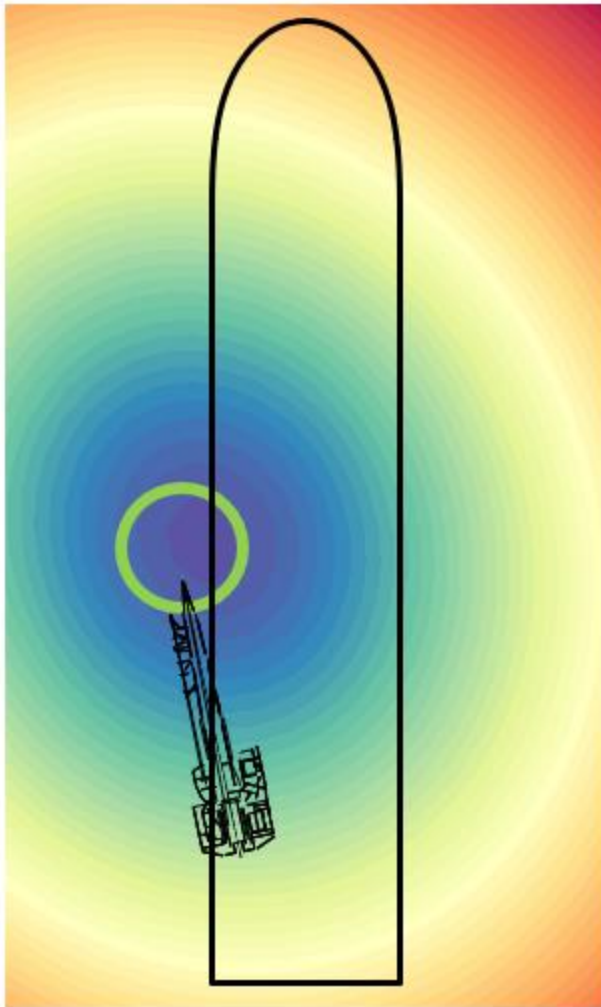


Use shielding for higher, more realistic weather limits:



Assess the crane tip position for minimum motions:

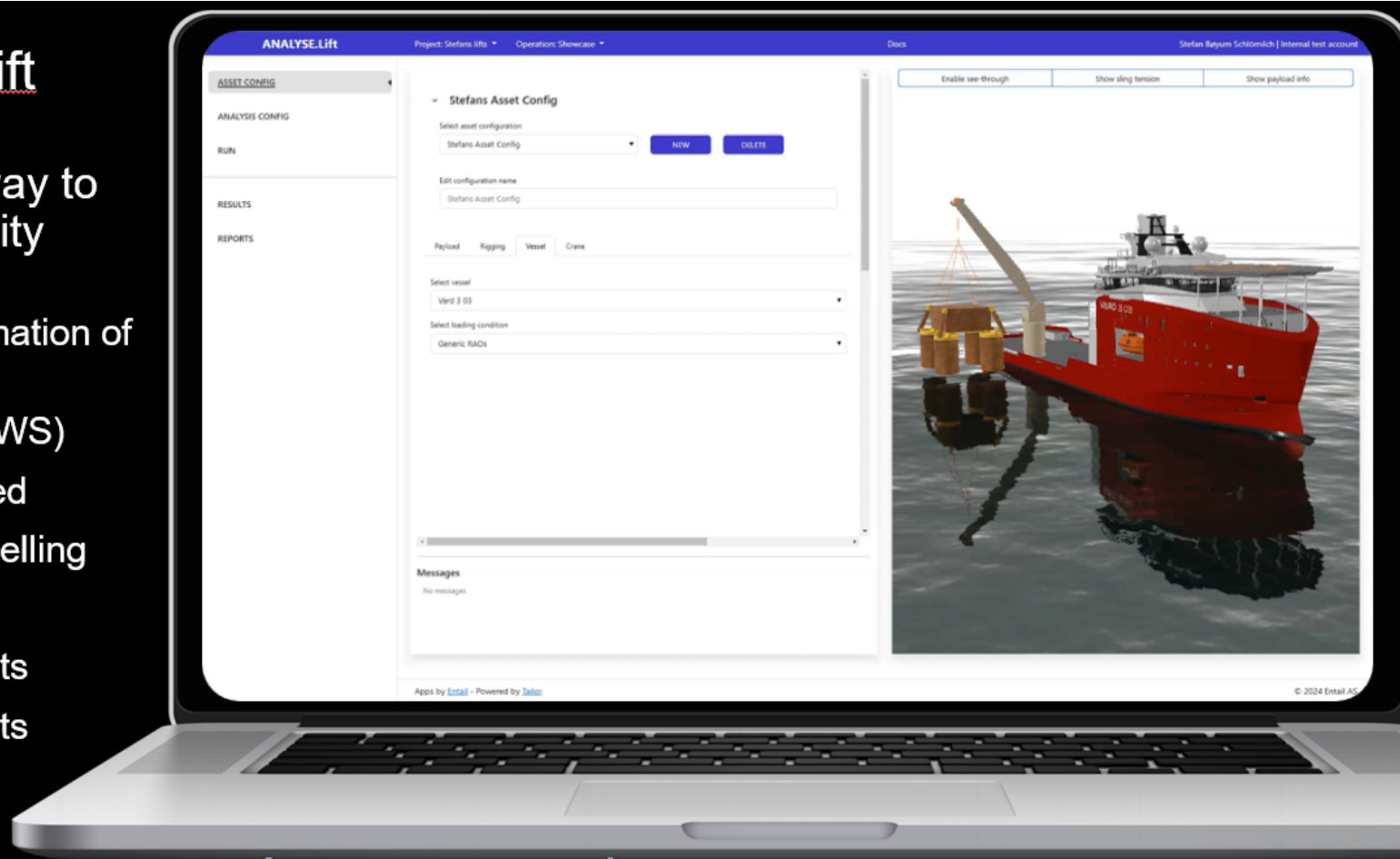
Maximum vertical rigid body motion in quartering sea



# ANALYSE.Lift

The quickest way to higher operability

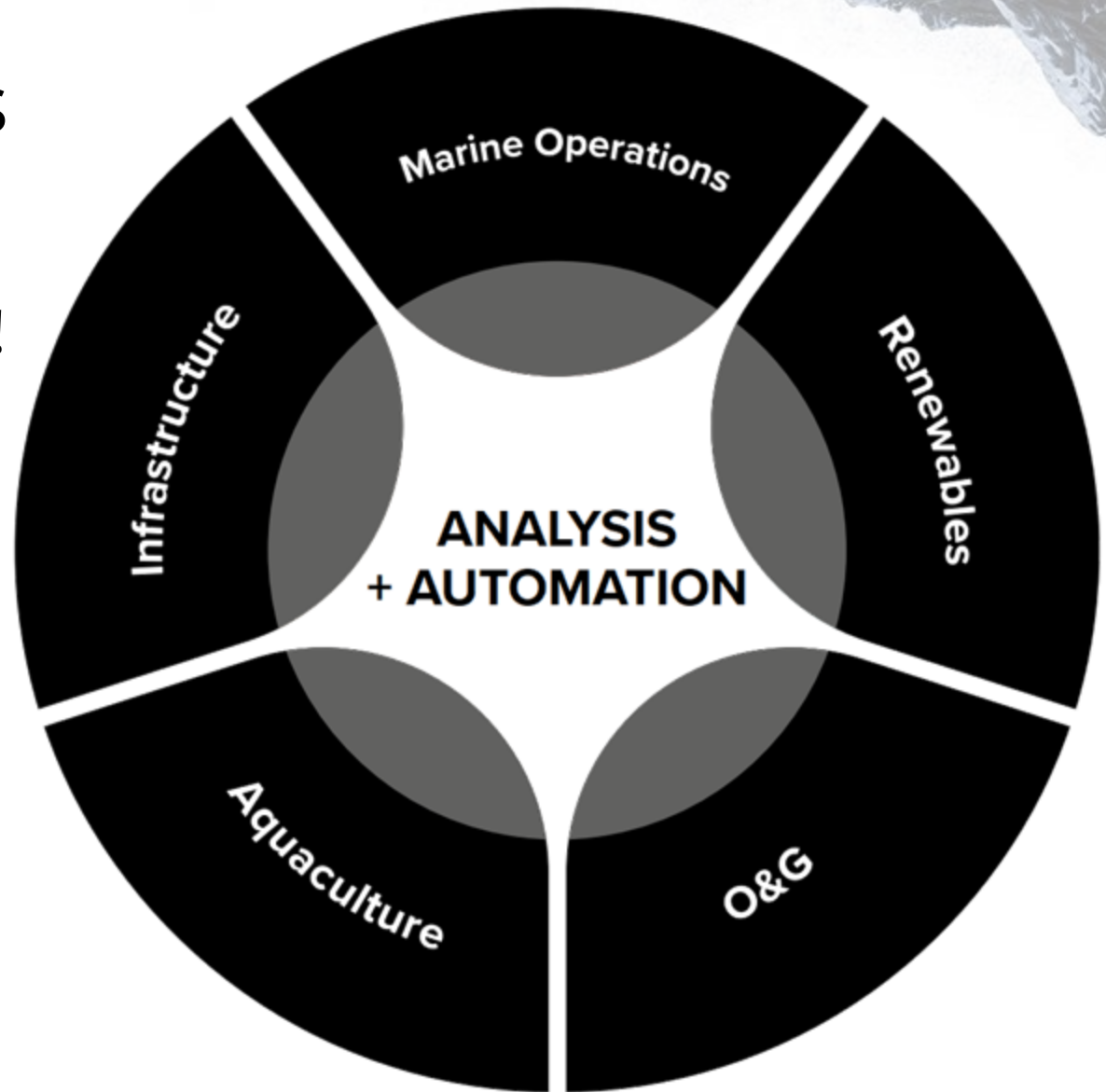
- Complete automation of lifting analyses
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- DNV Rules
- Interactive results
- Automatic reports





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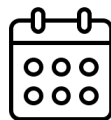
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