ULSTEIN®

TURNING VISIONS INTO REALITY

Cadmatic and OCX in ULSTEIN Design & Solution AS

ULSTEIN

More than 100 years’ experience in the maritime industry

Innovator in maritime equipment, designs and ships

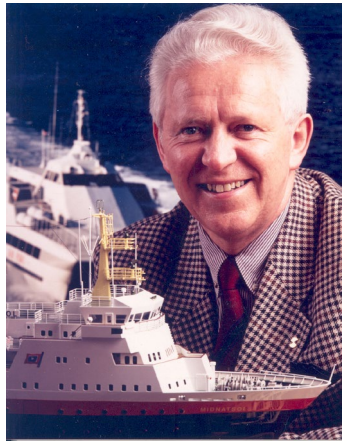
Family-owned, third generation

450+
People

4
Countries

Norway
Main office Ulsteinvik

Established 1917



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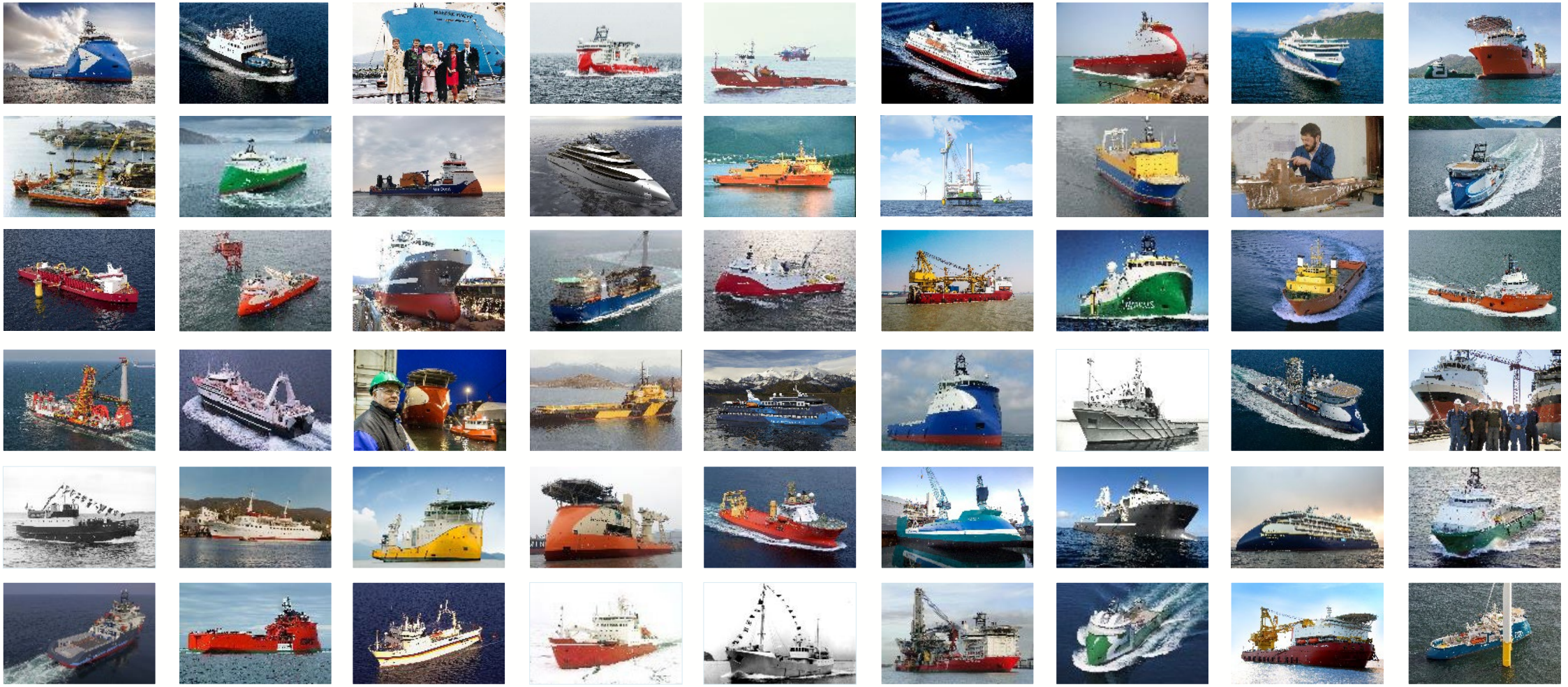
VESSELS FROM ULSTEIN



OUR HOME GROUND

323
Vessels built
Ulstein Verft
Norway.

164
Ulstein designs

117
X-BOW®s

Børulf Lefdal

Senior Principal Engineer /
Department Manager, Hull Structure & Outfitting

ULSTEIN DESIGN & SOLUTIONS AS

Started in ULSTEIN in 1995

Cadmatic Hull user since 1995

Cadmatic Hull System manager since 1997

Nauticus Hull user since 2005

Ulstein and OCX

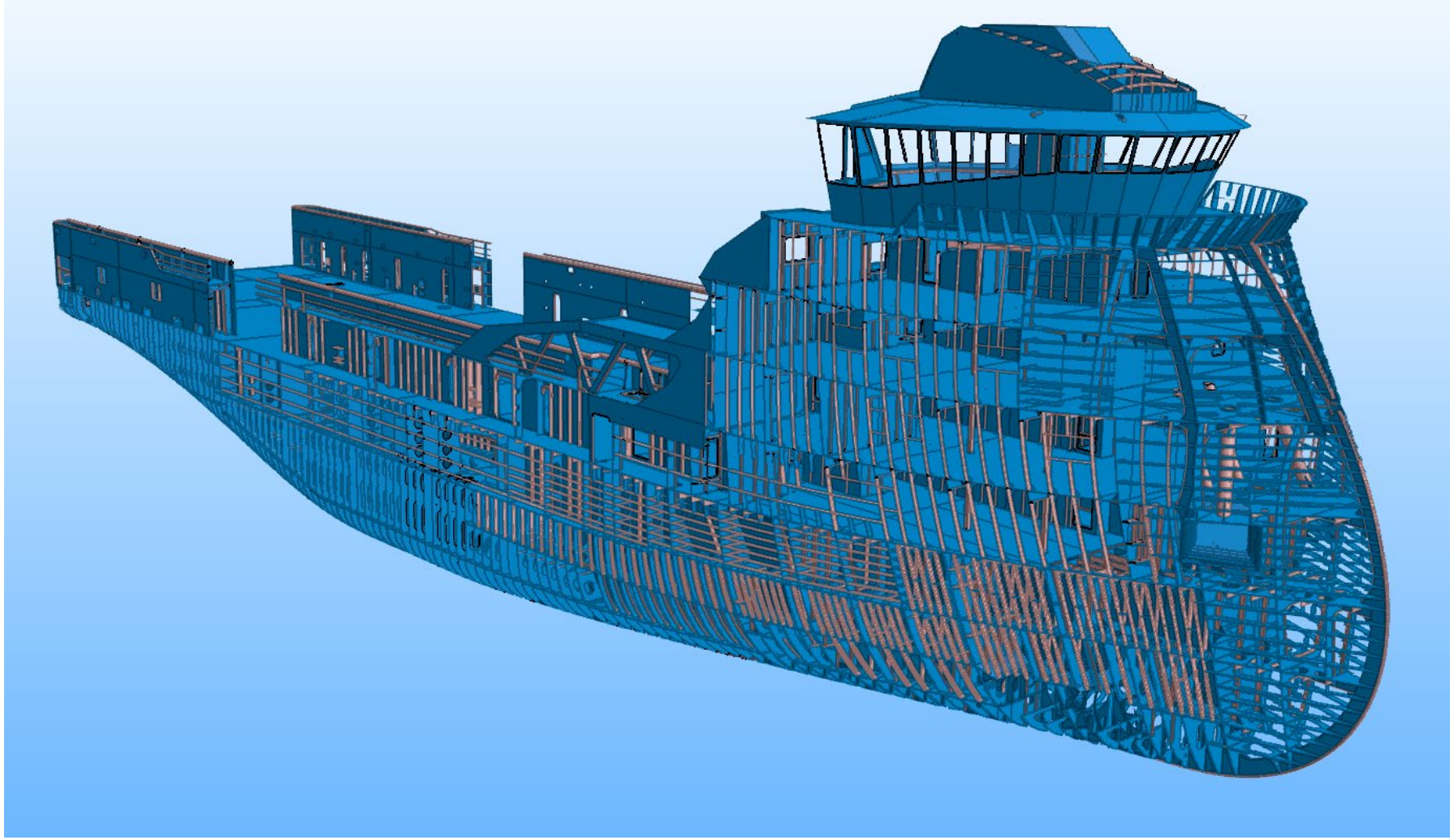
- Ulstein Design & Solution was part of the first «Approved» project which started the development of OCX in 2016.
- Currently an observer of the OCX-consortium.
- Testing of OCX export from Cadmatic and section scantling by intersecting the OCX-model is ongoing.

TESTPROJECT

ULSTEIN PX105

An existing hull project we have upgraded to Cadmatic Hull version 24T3RC02 OCX.

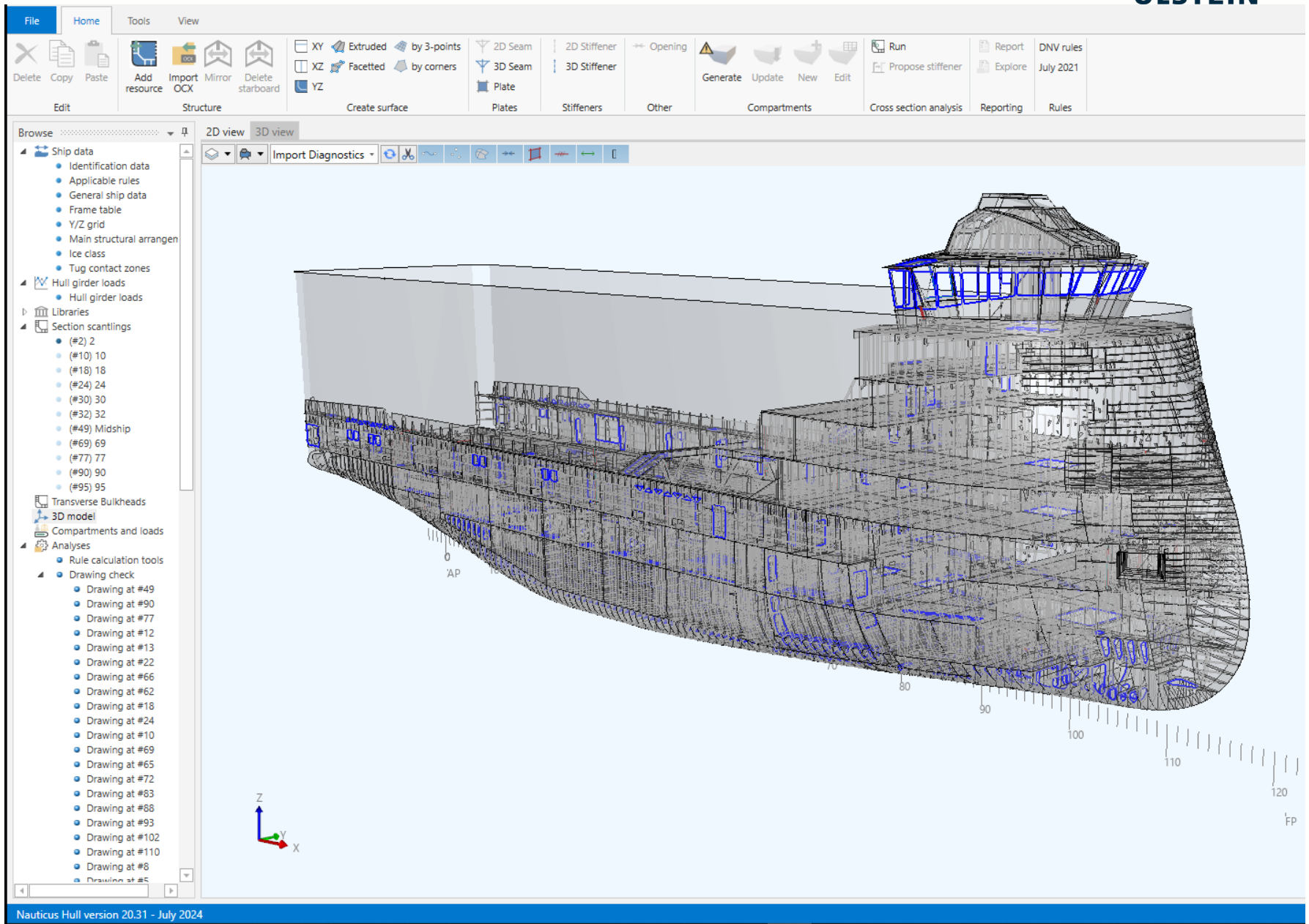
Successfully exported to OCX.



TESTPROJECT

ULSTEIN PX105

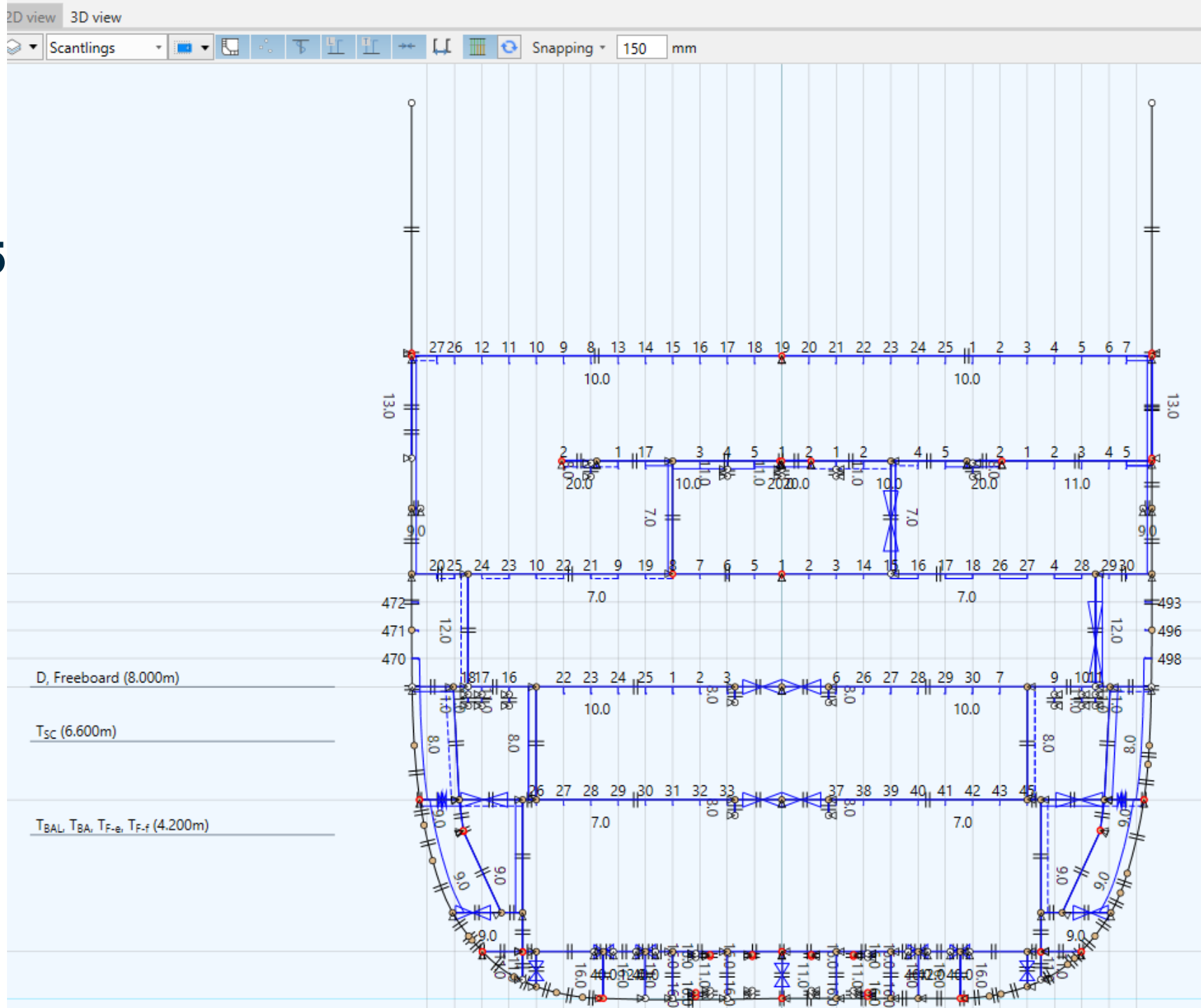
Successfully imported OCX in Nauticus Hull version 20.31- July 2024



TESTPROJECT

ULSTEIN PX105

Section scantling created by intersection of imported OCX model in Nauticus Hull.

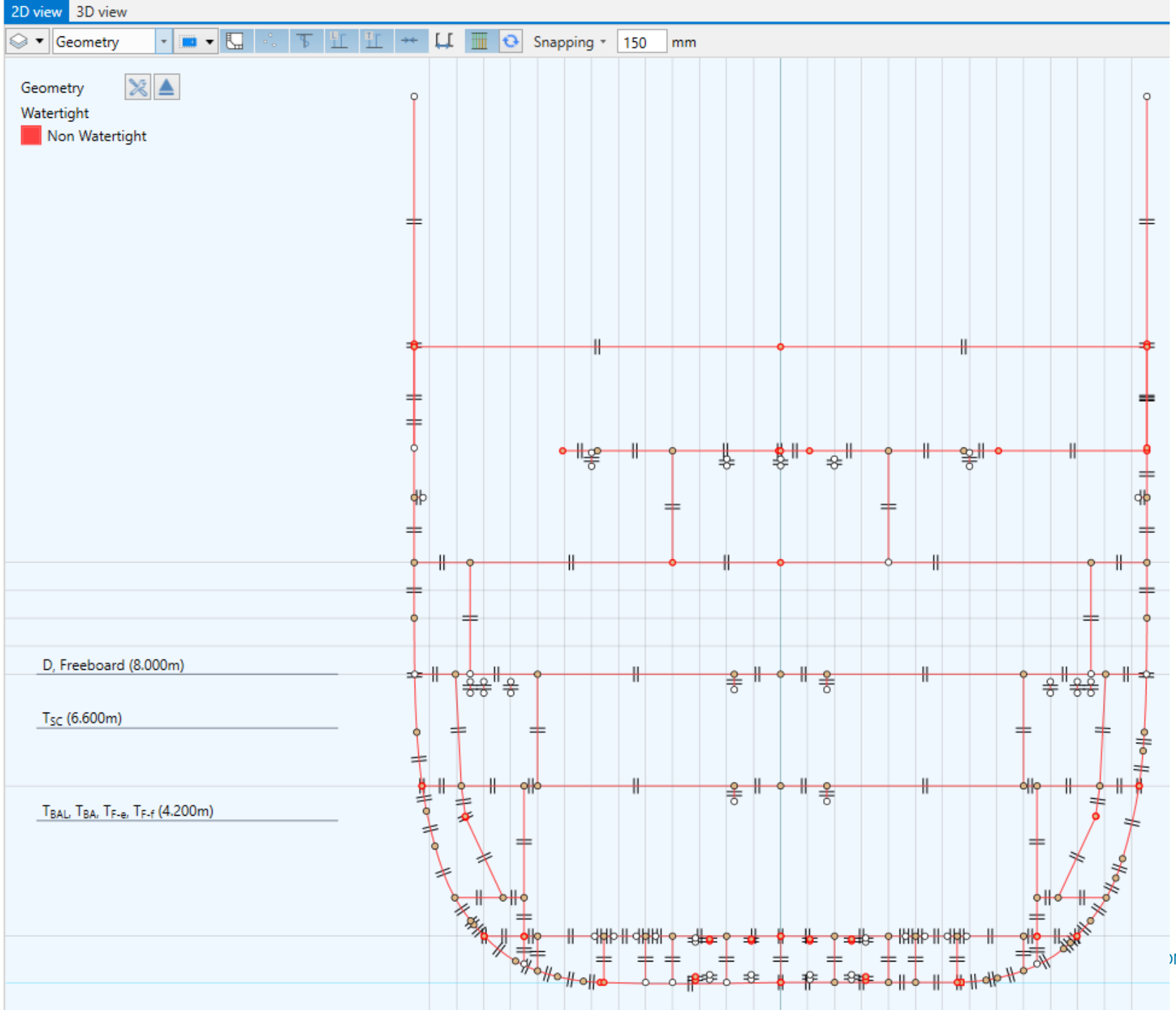


TESTPROJECT

Some findings:

All panels are not watertight.

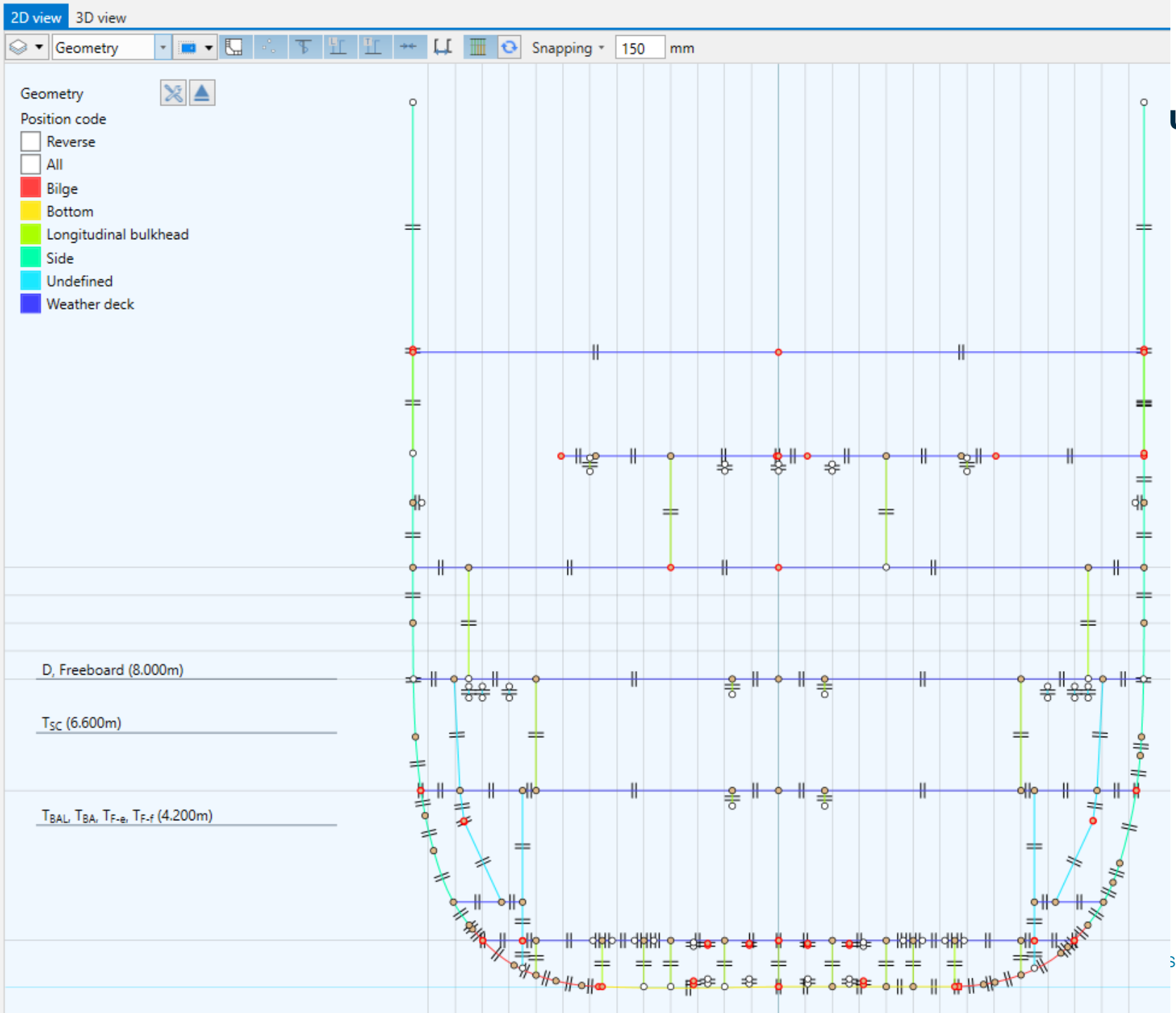
Easy to correct.



TESTPROJECT

Some findings:

Position codes are quite good.



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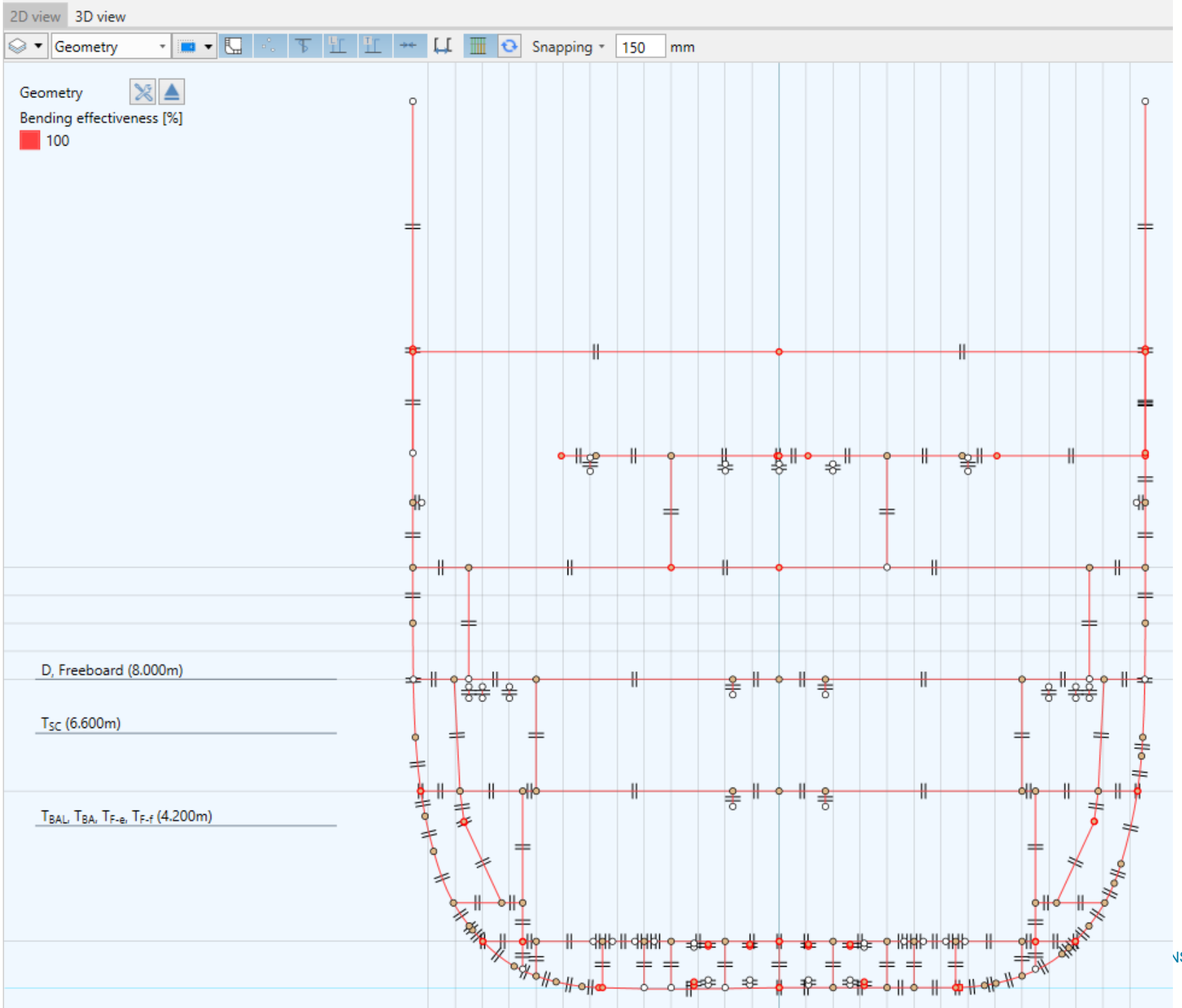
TESTPROJECT

Some findings:

All elements is set to 100% Bending effectiveness.

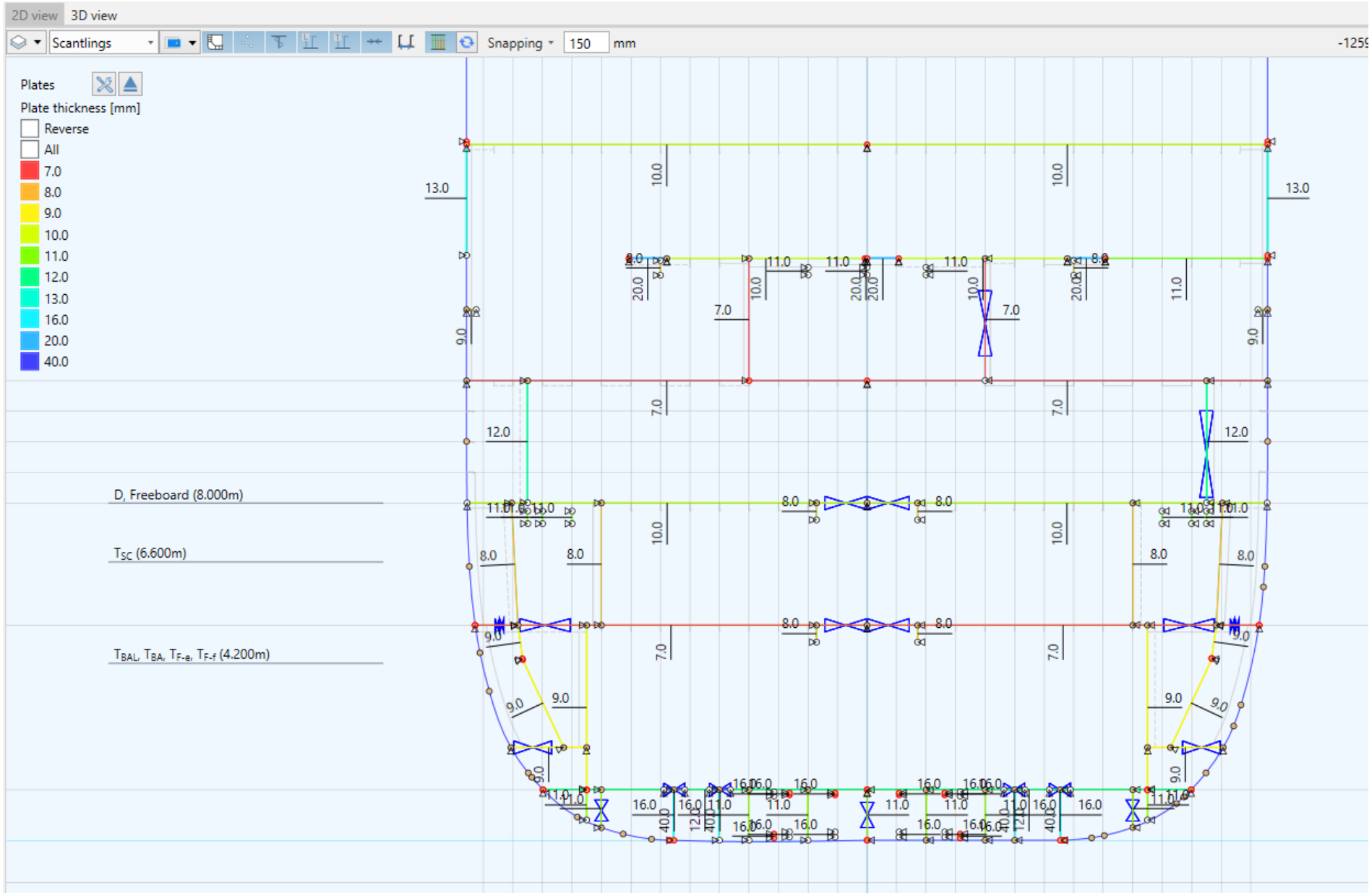
As expected, shall be evaluated panel by panel.



TESTPROJECT

Some findings:

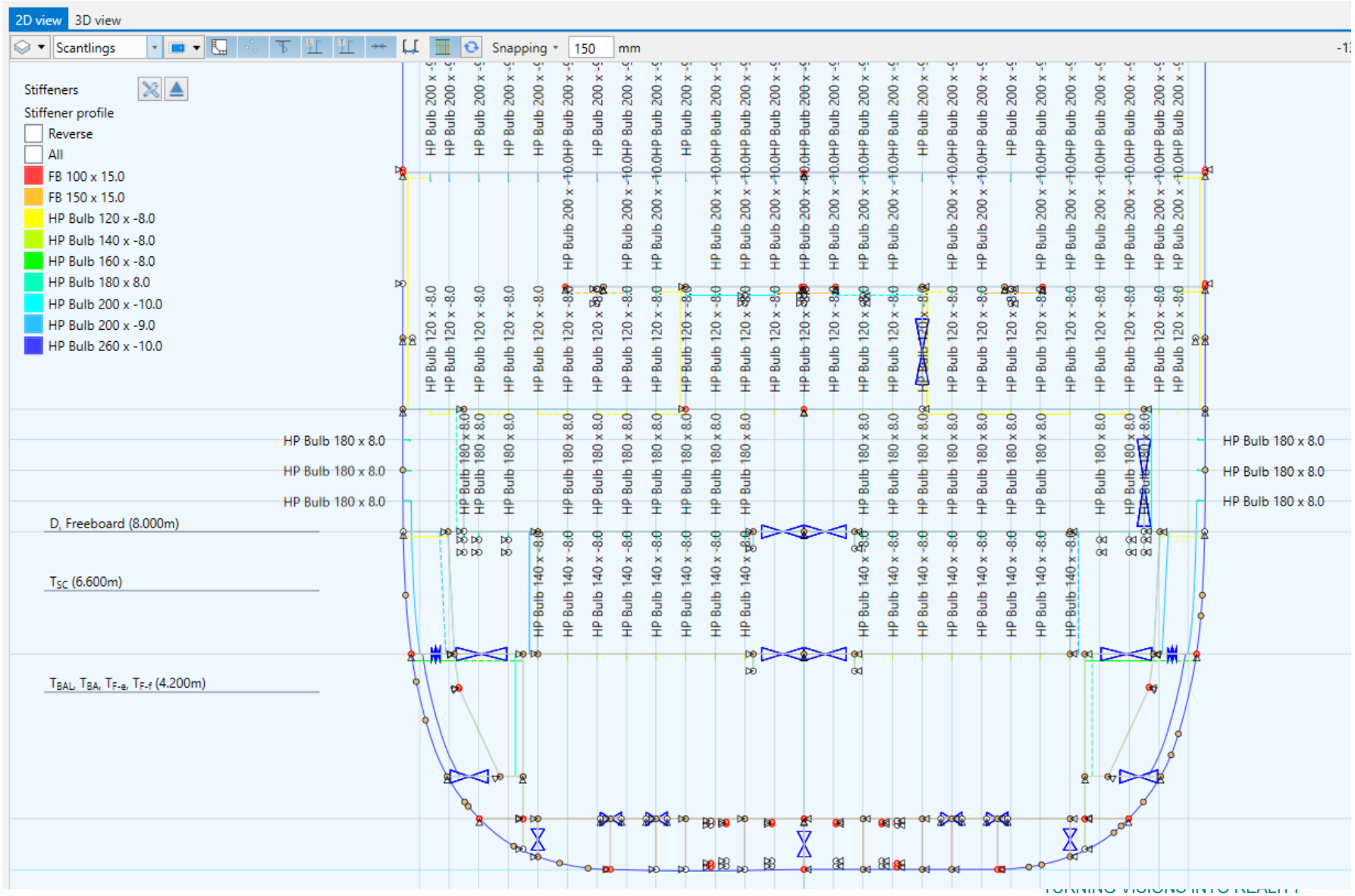
Plate scantlings are all correctly imported



TESTPROJECT

Some findings:

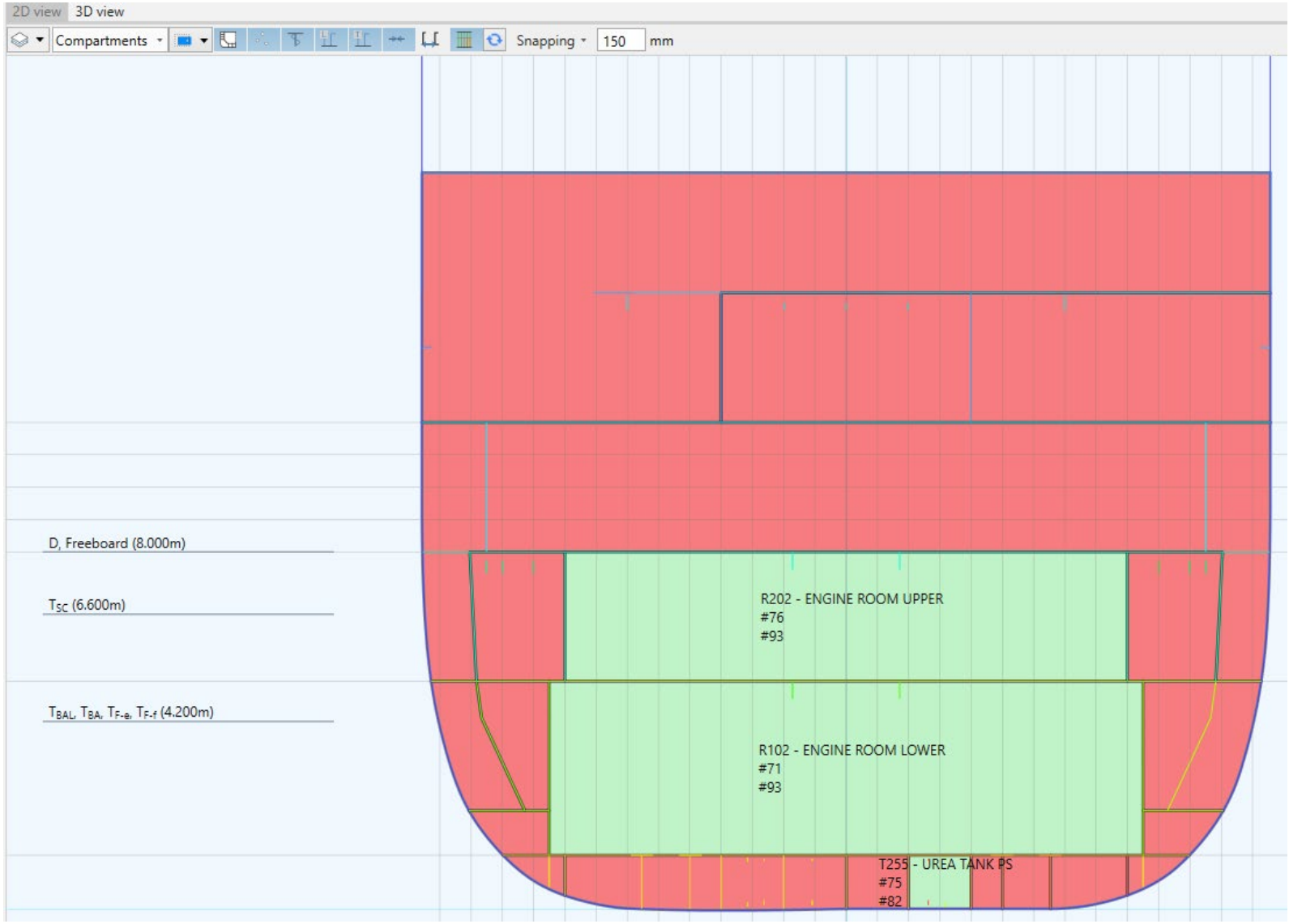
Profile scantlings are all correctly imported



TESTPROJECT

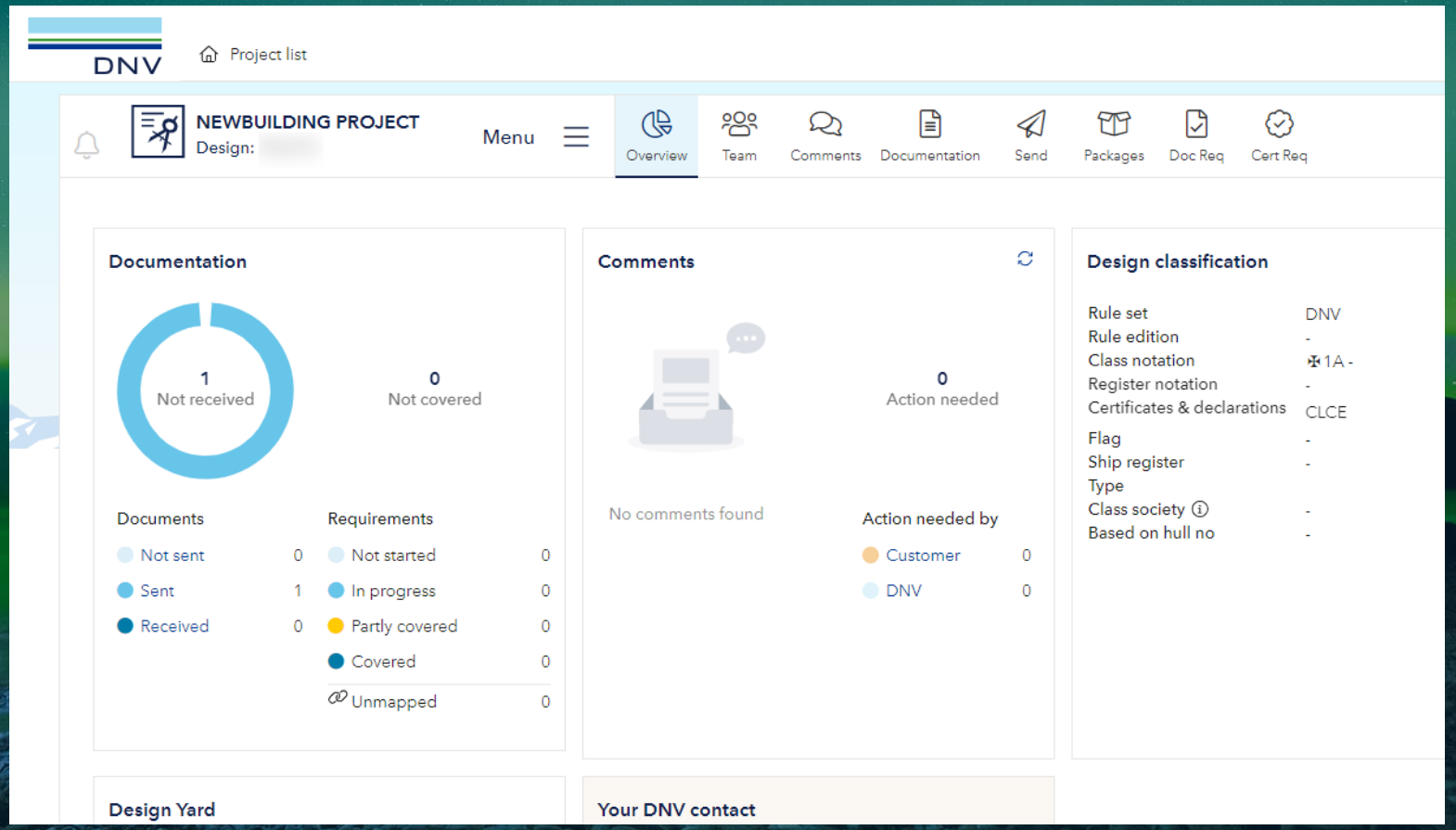
Some findings:

Some compartment are mapped correctly to the already imported compartments from Napa (csv-file).



Submittal to DNV.

- ULSTEIN and DNV have agreed to test a submittal of an OCX-project
- The test project is planned to be submitted to DNV within this year.
- ULSTEIN aim to submit next new project to 3D-approval.



Expectations to the use of OCX:

- Shorter time to do scantling of the vessels
- Shorter approval time by Class
- Better quality of the approval by Class
- Less class comments
- Shorter lead time to production

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Challenges with OCX/3D-approval:

- How will the workflow with class be?
- Shipowners and Flag requirement of available drawings.
- How to apply additional loads and information in the model? (Deckloads, pointloads, moments, equipments).
- Version compability in the future.
- Change management
- Aftermarket use
- Will it reduce workhours?


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