

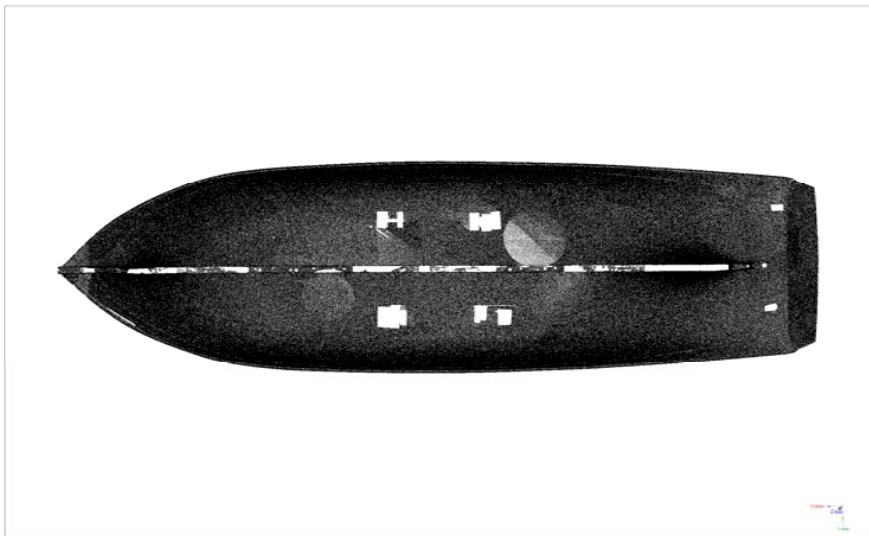


Laser Scanning Case: Ship Stability

- Handmade wooden yacht Alma, 21m
- Stability calculations wanted, no drawings available
- Measuring by laser scanning
- Scanning time 4 hours, both sides
- Scanner Surphaser HS25X, accuracy better than 5mm



Yacht Alma



Cleaned point cloud

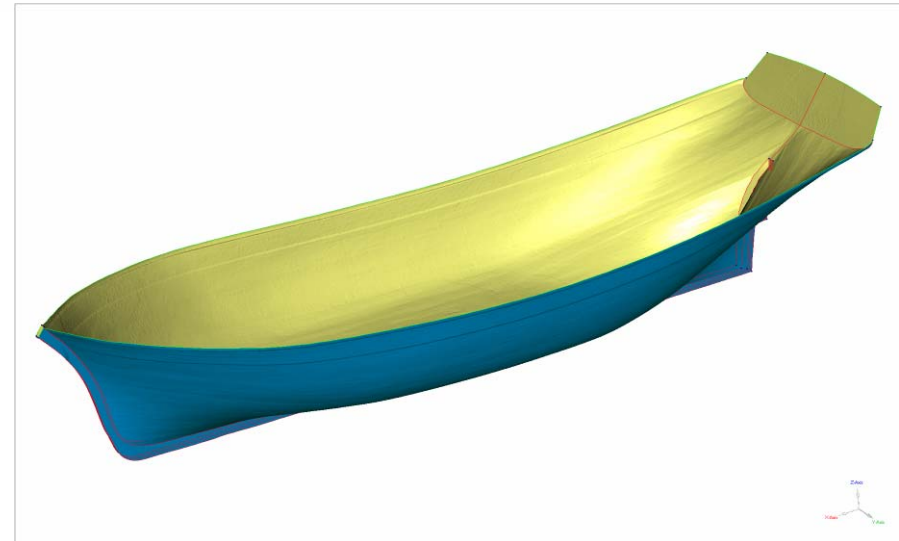


Surphaser HS25X laser scanner

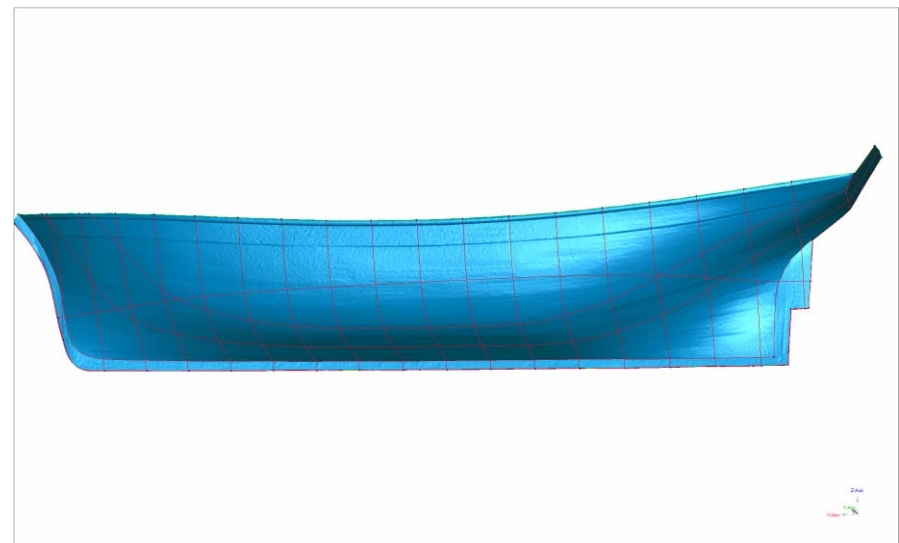


Laser Scanning Case: Ship Stability

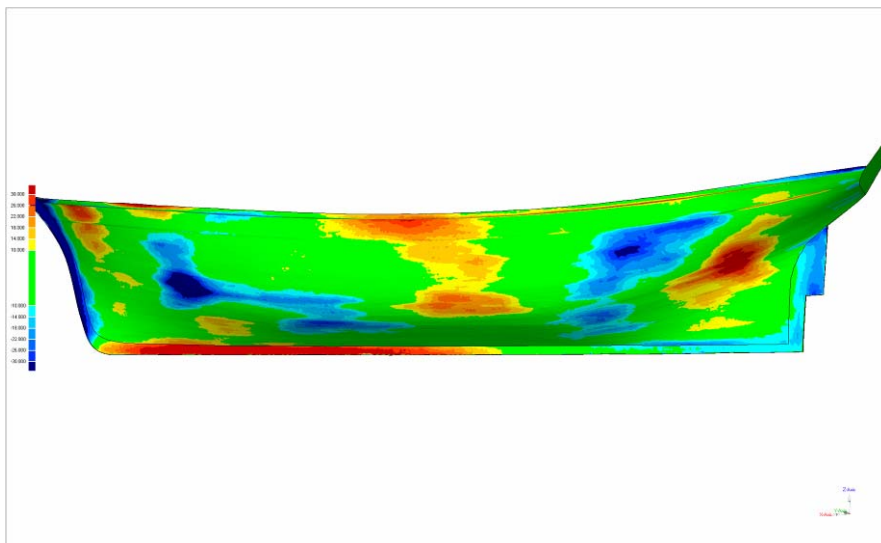
- Point cloud cleaned and edited to mesh
- Shape curves generated according to scanned data
- Symmetry check by mirroring the other side through the center line. Comparison results as a coloured chart
- Office work around 20 hours



Mesh



Shape curves

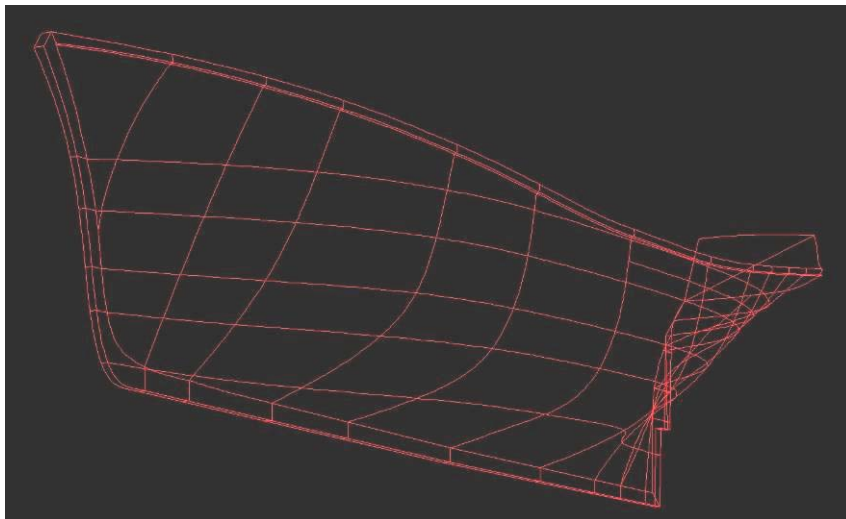


Symmetry check

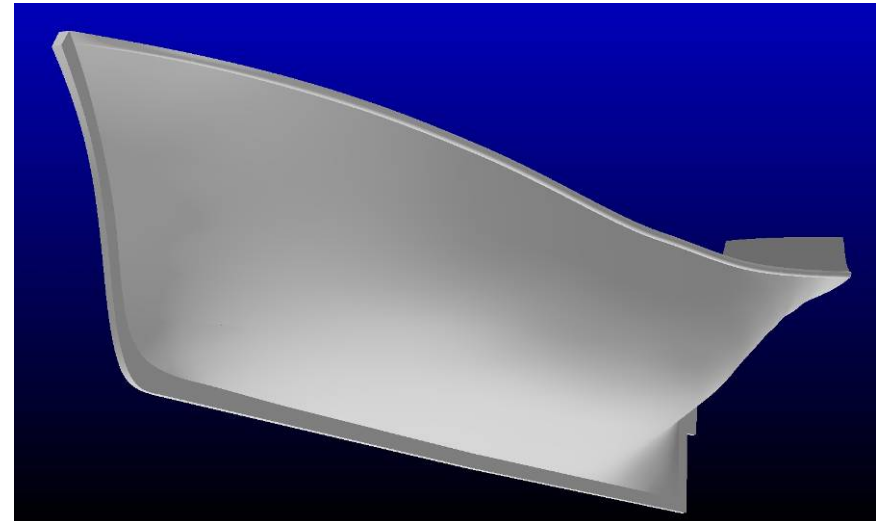


Laser Scanning Case: Ship Stability

- New hull drawings
- Data for further engineering
- Stability calculations
- Applying authority certificate



Grid at NAPA



Rendered view at NAPA