

Yacht Azipod Geometrical Inspection and Total Dimension Measurements



Field work: 1 day, 2 staff members

Office work: 2 days, 1 staff member

Deliverables:

- Marking of azipod centre and steering directions for future testings
- Technical Report with measurement procedures description and measurement results

Advantages:

- Accurate and fast geometry inspection and ship dimensioning
- Possibility for the examination of different scenarios (as far it concerns azipod directions)

Scope of Work

METRICA S.A. was contracted to complete geometrical inspection of an Azipod propulsion system as also to project crucial Azipod points on floating dock deck. Additionally, there were taken dimensional measurements of overall length, length between perpendiculars, length of waterline, ship's width and height. METRICA S.A. utilized a high accuracy industrial Total Station **Leica TDRA 6000**.



Total Station
Leica TDRA 6000

Measurement Service Description

With the **TDRA 6000** total station (**Leica Geosystems**) all important ship's attributes were measured. These were taken points on ship center line, waterline, draft marks, hull, Azipod systems and on floating dock deck. **Leica AXYZ 1.4.3.** software was then used to establish the ship's coordinate system and to adjust the geodetic network. After that mathematical best fitting evaluations (circle, cylinders, planes, lines) were calculated to compare ship's attributes to nominal tolerances. In addition, with this software was determined ship's overall length and width, length between perpendiculars, length at waterline and ship's height. The results about Azipod axes and ship's center line were found to be parallel. Projection of Azipod center of rotation and on different directions were marked on the floating dock deck.



Azipod



TDRA 6000 in action

- when it has to be right

Leica
Geosystems