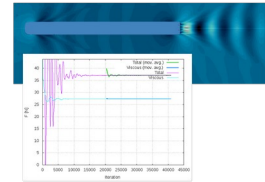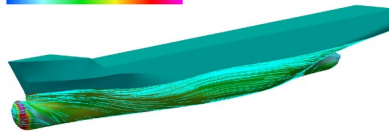# Price List

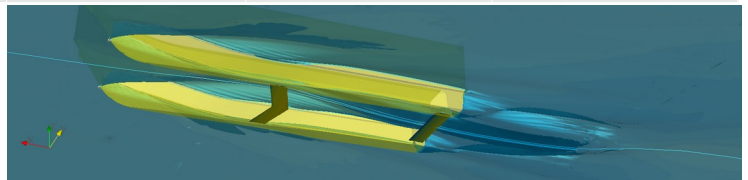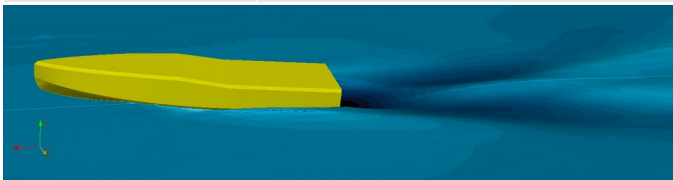## Marine Hydrodynamics Simulations

Ship Resistance

computation of **ship resistance** using OpenFOAM CFD

wallShearStress X
-5.666e-01 2.5   5   7.5   1.193e+01

Analysis Type		Prices (net price excl. tax)		
		First simulation for a geometry		***n* Repetitions** (with the same model but different speed, COG, draft, etc.)
		Geometry: CAD exchange format[1]	**Geometry: simulation-ready STL[2]**	
Ship resistance (fixed attitude)	Surface-capturing RANS simulation with • prescribed fixed sinkage and trim angle • including wave making resistance	700€	400€	250€ [3]Discounts: n>5 : 25% n>10 : 50%
Ship resistance (free trim and sinkage)	Surface-capturing RANS simulation with • solution of sinkage and trim angle	800€	500€	350€ [3]Discounts: n>5 : 25% n>10 : 50%

Scope

- Our simulation method is suited for displacement vessels as well as high-speed planing or hydrofoil vessels.
- Results are documented in an automatically generated report. It includes among others: resistance, trim and sinkage, resistance distribution, pressure distribution on hull, wave pattern, paint flow images.
- For large jobs with many operation points, we offer discounts[3].
- The Price depends on the geometry preprocessing effort. We offer two options:
  - [1] If you provide the geometry in CAD exchange format (IGES, STEP), we clean up the geometry,
  - [2] We can offer considerable discount, if you can provide simulation-ready STL geometries (water tight closed, without self-intersections, one STL file per appendage). If the geometry is insufficient, we will return it to you, until you provide us a sufficient model.
- For the first simulation after a geometry modification (the geometry remains similar to one that was already processed), the price for a simulation-ready geometry is charged.

Further Services

Insight CAE http://sf.net/p/insightcae

We offer our OpenFOAM-based software including support for use at your site or in the cloud, including customization!
Please contact us for more information or a quote.

open source initiative

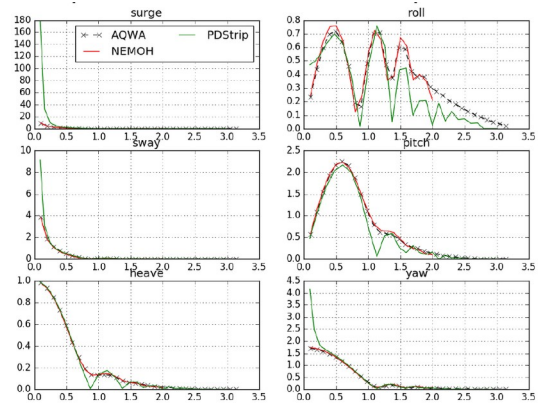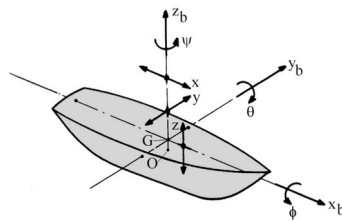http://silentdynamics.de
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Ship Seakeeping

computation of **motion in waves** using the
strip method code PDstrip

Analysis Type			Prices (net price excl. tax)	
			Geometry: CAD exchange format[1]	Geometry: simulation-ready STL[2]
Seakeeping analysis	Seakeeping analysis of a vessel • Roll damping determined by Pdstrip's standard method		900€	700€
Seakeeping analysis + Roll decay simulation	Surface-capturing RANS simulation with • Determination of roll damping in separate URANS analysis		1700€	1500€

Scope

- Our simulation method is suited for displacement vessels.
- The analysis is carried out for a number of vessel speeds and sea states (determined by sea spectrum type, significant wave height and wave period) and the motion is evaluated at a number of points of interest.
- Results are documented in an automatically generated report. It includes among others:
  - RAOs for each speed, global motion, velocity and acceleration for each sea state
  - At all points of interest:
    - Motion, vertical velocity, lateral acceleration, deck wetness index, propeller emergency frequency, motion sickness incidence, motion interruption index
- The Price depends on the geometry preprocessing effort. We offer two options:
  - [1] If you provide the geometry in CAD exchange format (IGES, STEP), we clean up the geometry,
  - [2] We can offer considerable discount, if you can provide simulation-ready STL geometries (water tight closed, without self-intersections, one STL file per appendage). If the geometry is insufficient, we will return it to you, until you provide us a sufficient model.

Further Services

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