

DHI Vessel Hull Data Sheets

Additional Vessels Data Base



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1 Introduction

DHI provides a selection of 12 vessels of different sizes together with the installation of MIKE 21 Mooring Analysis (MA) for free. In addition, DHI obtains a comprehensive collection of additional vessels, which can be purchased from DHI and which cover different sizes and vessel classes. This document contains the data sheets of these vessels.

2 Bulk Carriers

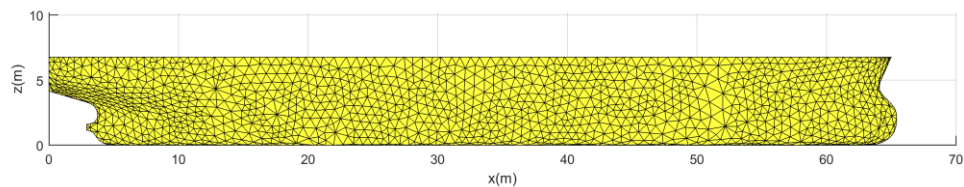
This section of Bulk Carrier represents the vessel characteristics for wave response analyses for 11 bulk carriers, which are representative for new bulk carriers that are scheduled to be built.

All bulkers are generated generically. They are adjusted to fit the main dimensions of the individual new buildings. The geometries are not representing a specific actual vessel.

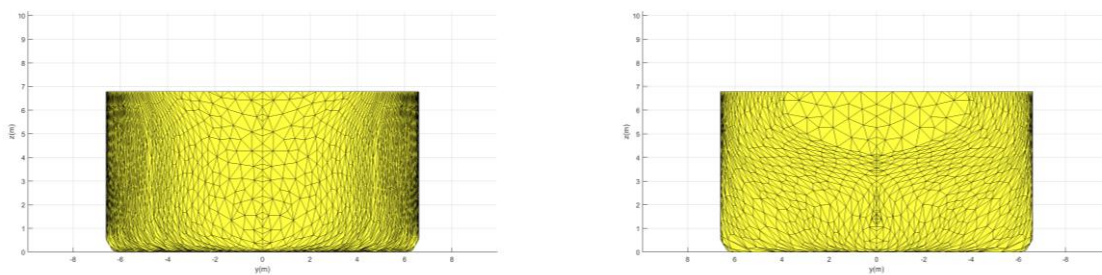
The hydrostatic characteristics such as the longitudinal Center of Buoyancy (LCB) and block coefficients (C_B) have been selected based on /1/ and /2/, respectively.

Vessel ID	Bul-01
Hull file name	Bul-01_Bulker_1840t.hull
Vessel type	Bulk carrier
Length over all (LOA) [m]	68.8
Length between perpendiculars (LPP) [m]	63.0
Breadth [m]	13.2
Design draught [m]	4.4
Height [m]	6.8
Capacity (TEU) [-]	1840
Hydrostatics for design draught	
Volume [m ³]	2662
Longitudinal Center of Buoyancy (LCB) [m]	31.9
Vertical Center of Buoyancy (VCB) [m]	2.31
Longitudinal Center of Floatation (LCF) [m]	29.51
IT	7443.82
IL	178286
Block coefficient c_B [-]	0.72

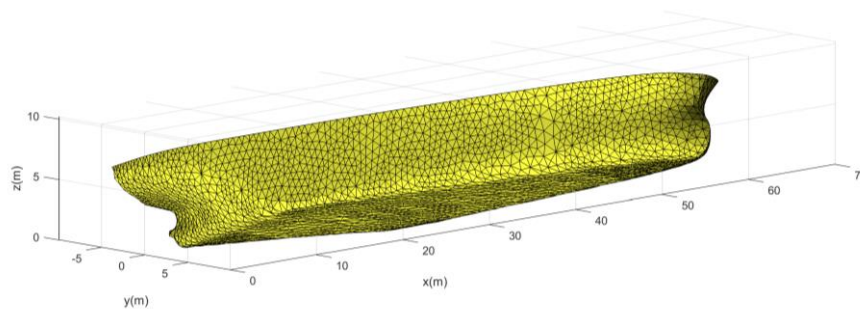
Longitudinal profile



Lateral profile



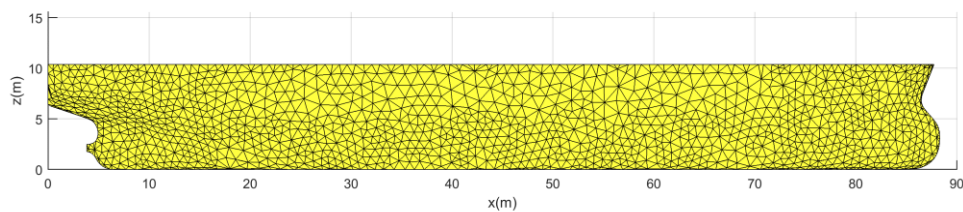
3D view



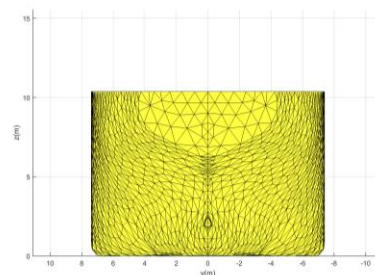
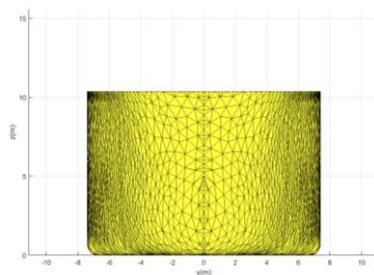
Date	February 2017
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Vessel ID	Bul-02
Hull file name	Bul-02_Bulker_5000t.hull
Vessel type	Bulk carrier
Length over all (LOA) [m]	90.0
Length between perpendiculars (LPP) [m]	85.0
Breadth [m]	14.8
Design draught [m]	6.8
Height [m]	10.4
Capacity (TEU) [-]	5000
Hydrostatics for design draught	
Volume [m ³]	6452
Longitudinal Center of Buoyancy (LCB) [m]	43.7
Vertical Center of Buoyancy (VCB) [m]	3.53
Longitudinal Center of Floatation (LCF) [m]	40.34
Transversal moment of inertia of waterplane area IT [m ⁴]	15820.3
Longitudinal moment of inertia of waterplane area IL [m ⁴]	519502
Block coefficient c_B [-]	0.76

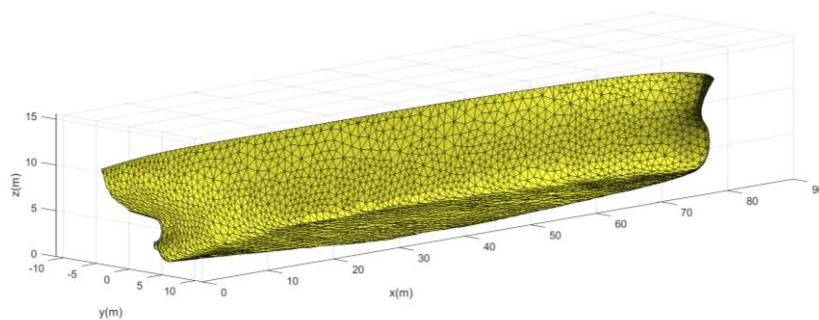
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

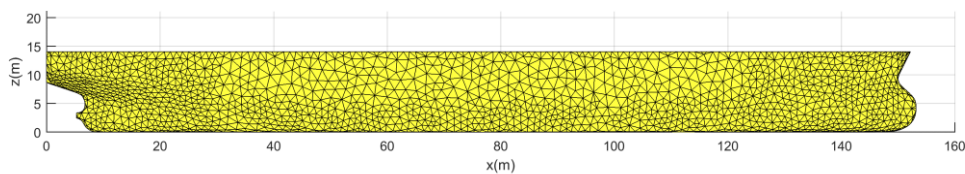


Date

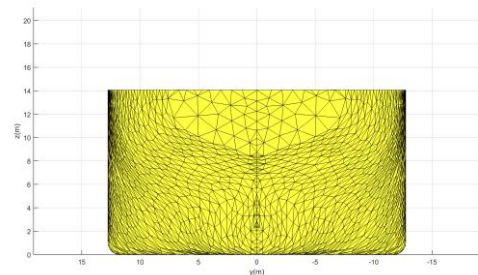
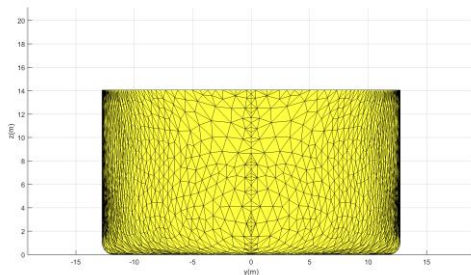
February 2017

Vessel ID	Bul-03
Hull file name	Bul-03_Bulker_20000t.hull
Vessel type	Bulk carrier
Length over all (LOA) [m]	157.0
Length between perpendiculars (LPP) [m]	147.4
Breadth [m]	25.5
Design draught [m]	9.2
Height [m]	14.0
Capacity (TEU) [-]	20000
Hydrostatics for Design Draught	
Volume [m ³]	28016
Longitudinal Center of Buoyancy (LCB) [m]	76.7
Vertical Center of Buoyancy (VCB) [m]	4.76
Longitudinal Center of Floatation (LCF) [m]	71.29
Transversal moment of inertia of waterplane area IT [m ⁴]	158895
Longitudinal moment of inertia of waterplane area IL [m ⁴]	5147130
Block coefficient c_B [-]	0.81

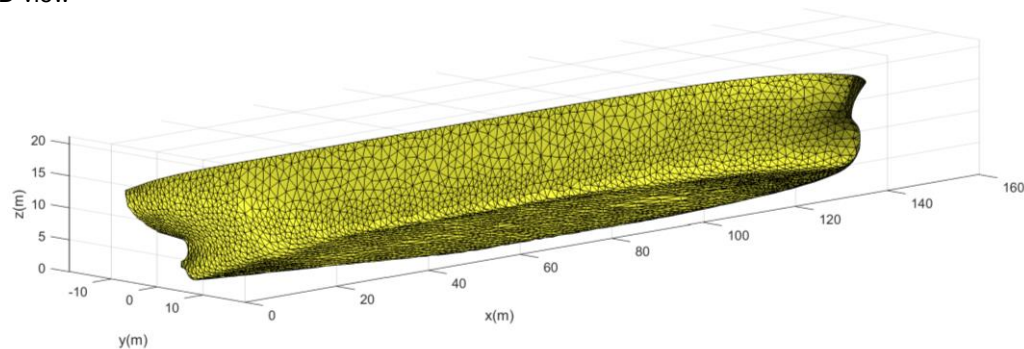
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

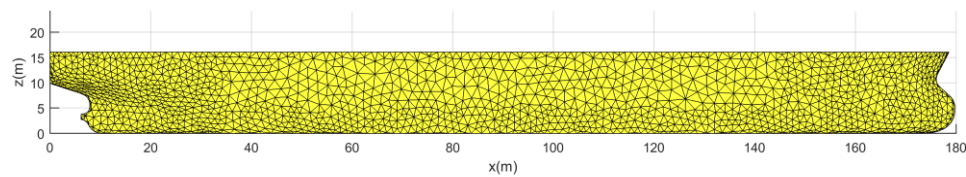


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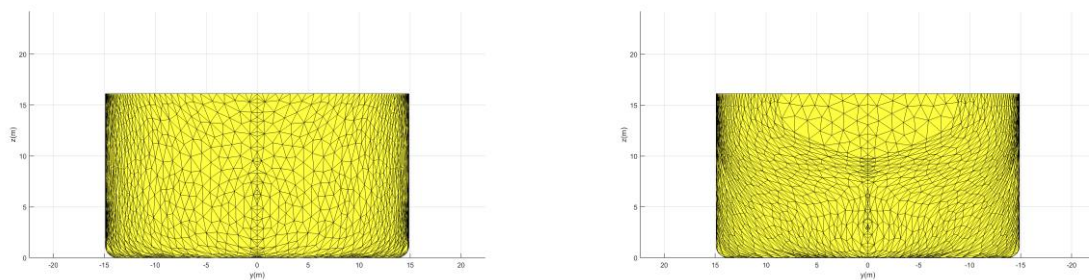
February 2017

Vessel ID	Bul-04
Hull file name	Bul-04_Bulker_37300t.hull
Vessel type	Bulk carrier, Large Handy
Length over all (LOA) [m]	180.0
Length between perpendiculars (LPP) [m]	173.0
Breadth [m]	29.8
Design draught [m]	10.6
Height [m]	16.1
Capacity (TEU) [-]	37300
Hydrostatics for Design Draught	
Volume [m ³]	45146
Longitudinal Center of Buoyancy (LCB) [m]	90.8
Vertical Center of Buoyancy (VCB) [m]	5.44
Longitudinal Center of Floatation (LCF) [m]	84.65
Transversal moment of inertia of waterplane area IT [m ⁴]	310244
Longitudinal moment of inertia of waterplane area IL [m ⁴]	10048600
Block coefficient c_B [-]	0.83

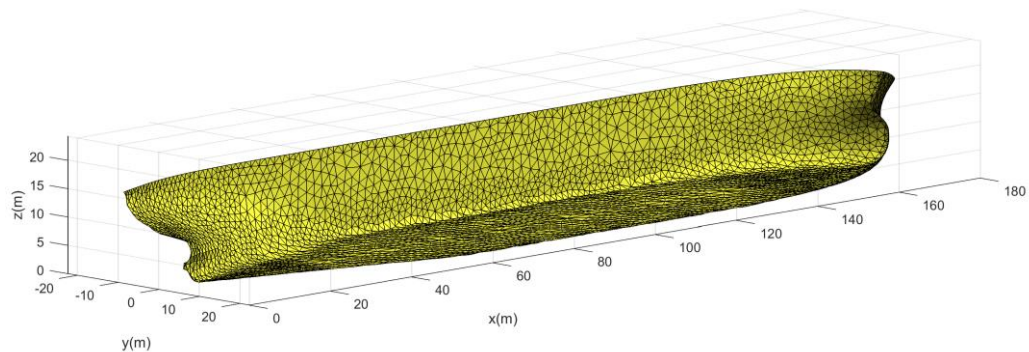
Longitudinal profile



Lateral profile (left: bow, right: aft)



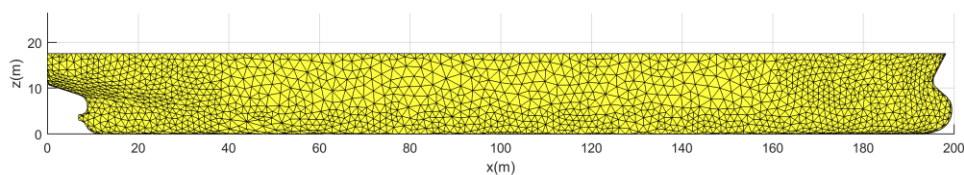
3D view



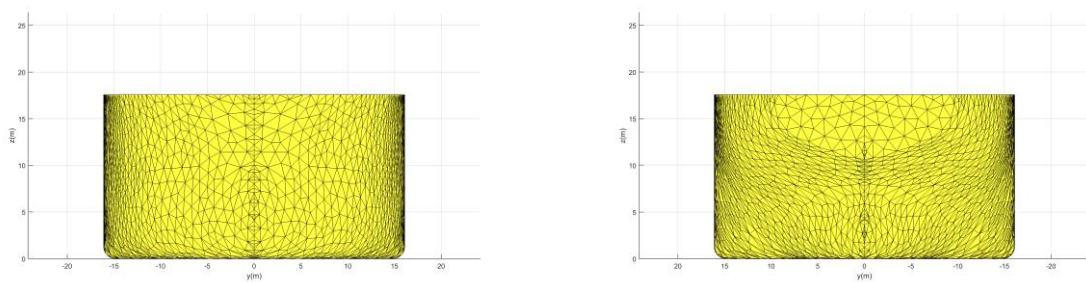
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Vessel ID	Bul-05
Hull file name	Bul-05_Bulker_49300t.hull
Vessel type	Bulk carrier
Length over all (LOA) [m]	199.9
Length between perpendiculars (LPP) [m]	192.0
Breadth [m]	32.2
Design draught [m]	11.5
Height [m]	17.6
Capacity (TEU) [-]	49350
Hydrostatics for Design Draught	
Volume [m ³]	59015
Longitudinal Center of Buoyancy (LCB) [m]	101.3
Vertical Center of Buoyancy (VCB) [m]	5.93
Longitudinal Center of Floatation (LCF) [m]	94.22
Transversal moment of inertia of waterplane area IT [m ⁴]	436330
Longitudinal moment of inertia of waterplane area IL [m ⁴]	14910000
Block coefficient c_B [-]	0.83

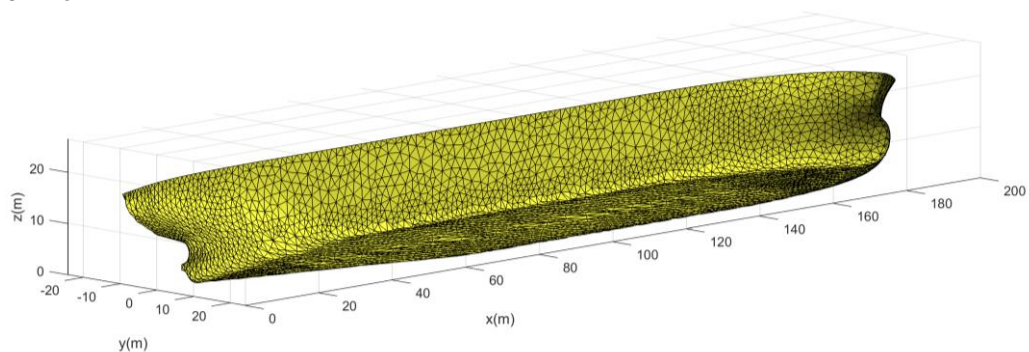
Longitudinal profile



Lateral profile (left: bow, right: aft)



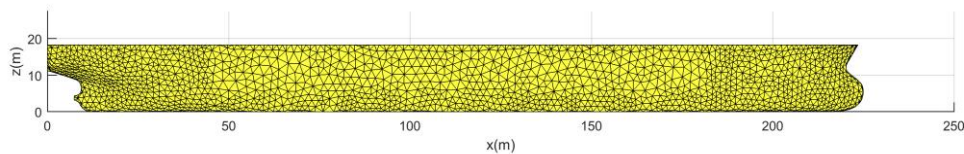
3D view



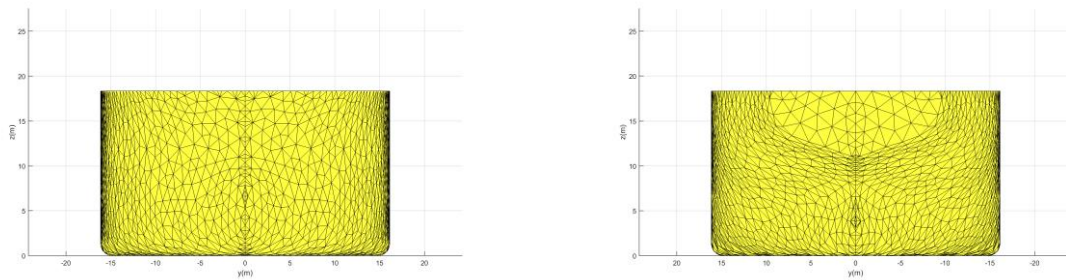
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Vessel ID	Bul-06
Hull file name	Bul-06_Bulker_74000t.hull
Vessel type	Bulk carrier, PanaMax
Length over all (LOA) [m]	225.0
Length between perpendiculars (LPP) [m]	216.0
Breadth [m]	32.3
Design draught [m]	13.9
Height [m]	18.3
Capacity (TEU) [-]	74382
Hydrostatics for Design Draught	
Volume [m ³]	84960
Longitudinal Center of Buoyancy (LCB) [m]	111.1
Vertical Center of Buoyancy (VCB) [m]	7.13
Longitudinal Center of Floatation (LCF) [m]	104.71
Transversal moment of inertia of waterplane area IT [m ⁴]	526820
Longitudinal moment of inertia of waterplane area IL [m ⁴]	23325500
Block coefficient c_B [-]	0.88

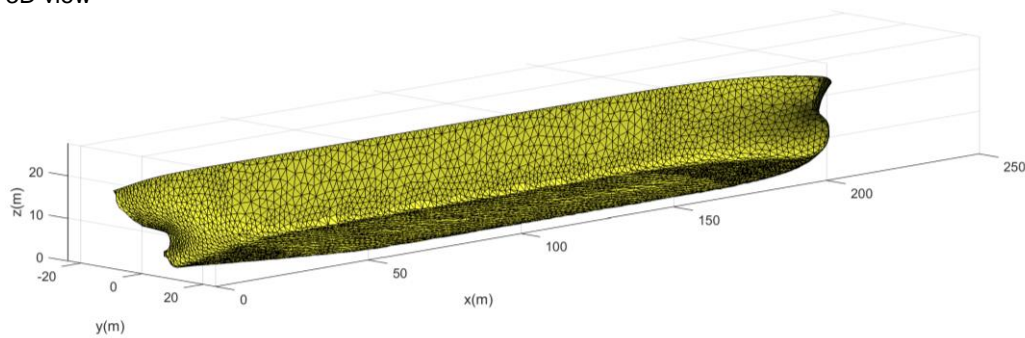
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

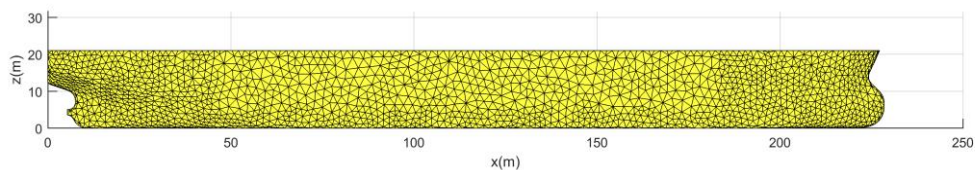


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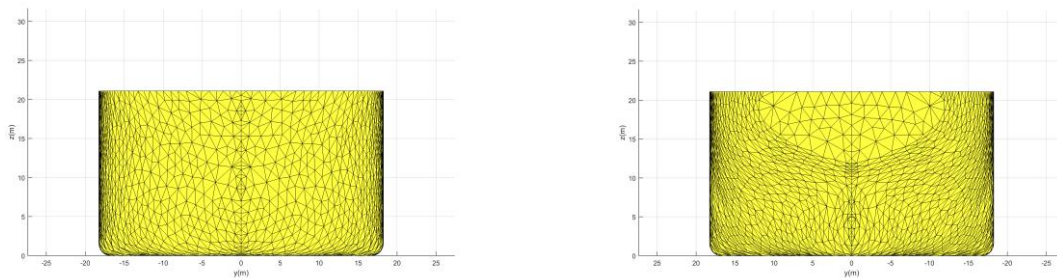
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Vessel ID	Bul-07
Hull file name	Bul-07_Bulker_84000t.hull
Vessel type	Bulk carrier, Kamsarmax
Length over all (LOA) [m]	228.5
Length between perpendiculars (LPP) [m]	223.0
Breadth [m]	36.5
Design draught [m]	13.8
Height [m]	21.0
Capacity (TEU) [-]	84000
Hydrostatics for Design Draught	
Volume [m ³]	95479
Longitudinal Center of Buoyancy (LCB) [m]	117.6
Vertical Center of Buoyancy (VCB) [m]	7.08
Longitudinal Center of Floatation (LCF) [m]	110.42
Transversal moment of inertia of waterplane area IT [m ⁴]	761024
Longitudinal moment of inertia of waterplane area IL [m ⁴]	26920900
Block coefficient c_B [-]	0.85

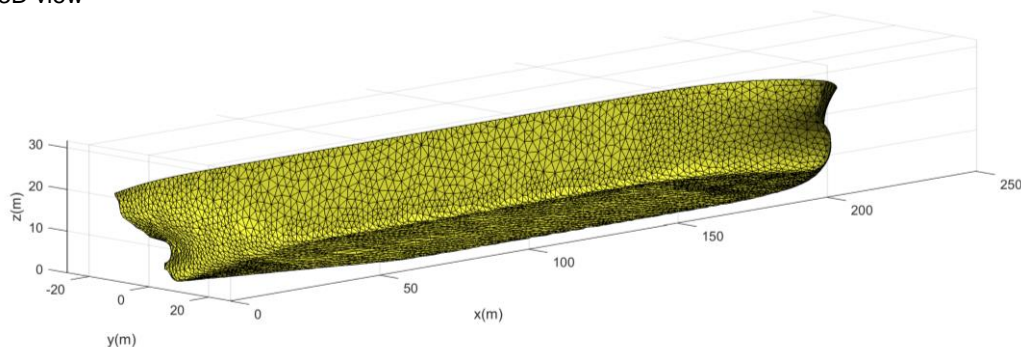
Longitudinal profile



Lateral profile (left: bow, right: aft)



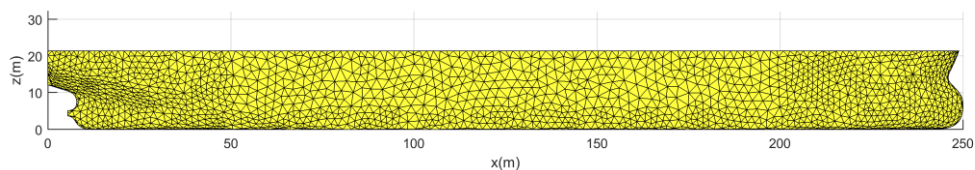
3D view



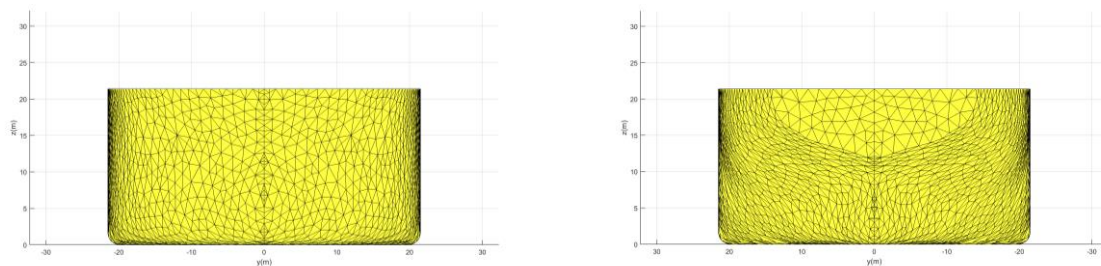
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Vessel ID	Bul-08
Hull file name	Bul-08_Bulker_105000t.hull
Vessel type	Bulk carrier, Mini Capesize
Length over all (LOA) [m]	250.0
Length between perpendiculars (LPP) [m]	245.0
Breadth [m]	43.0
Design draught [m]	14.0
Height [m]	21.4
Capacity (TEU) [-]	105000
Hydrostatics for Design Draught	
Volume [m ³]	124632
Longitudinal Center of Buoyancy (LCB) [m]	129.2
Vertical Center of Buoyancy (VCB) [m]	7.19
Longitudinal Center of Floatation (LCF) [m]	121.32
Transversal moment of inertia of waterplane area IT [m ⁴]	1356300
Longitudinal moment of inertia of waterplane area IL [m ⁴]	41519400
Block coefficient c_B [-]	0.85

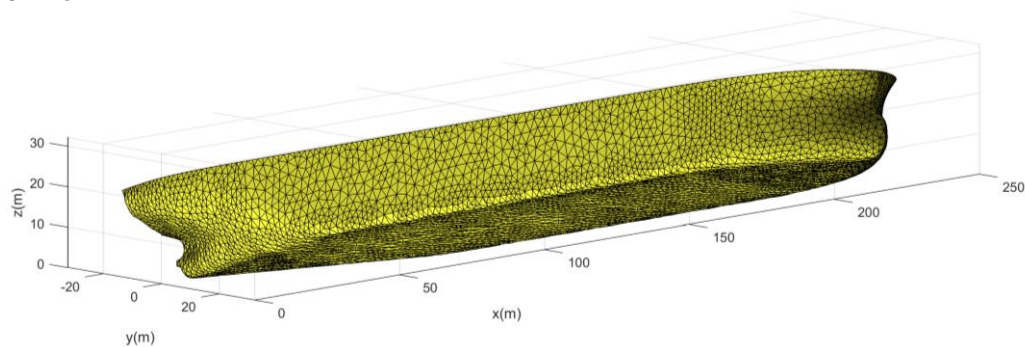
Longitudinal profile



Lateral profile (left: bow, right: aft)



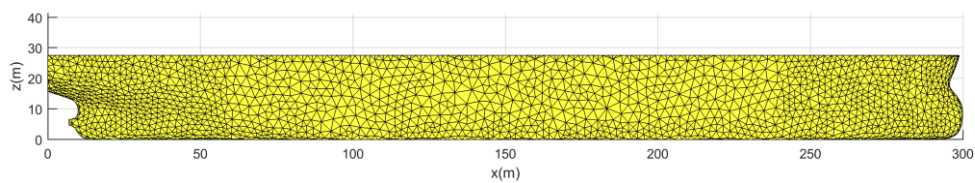
3D view



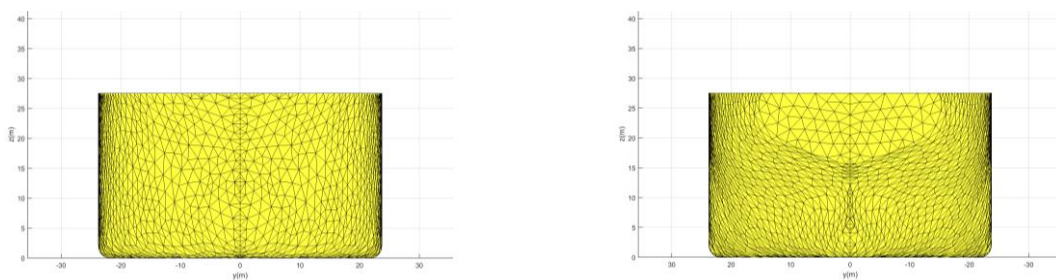
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Vessel ID	Bul-09
Hull file name	Bul-09_Bulker_187000t.hull
Vessel type	Bulk carrier, Capesize
Length over all (LOA) [m]	299.9
Length between perpendiculars (LPP) [m]	294.0
Breadth [m]	47.5
Design draught [m]	18.0
Height [m]	27.5
Capacity (TEU) [-]	187882
Hydrostatics for Design Draught	
Volume [m ³]	213904
Longitudinal Center of Buoyancy (LCB) [m]	155.1
Vertical Center of Buoyancy (VCB) [m]	9.25
Longitudinal Center of Floatation (LCF) [m]	145.74
Transversal moment of inertia of waterplane area IT [m ⁴]	2211730
Longitudinal moment of inertia of waterplane area IL [m ⁴]	80084700
Block coefficient c_B [-]	0.85

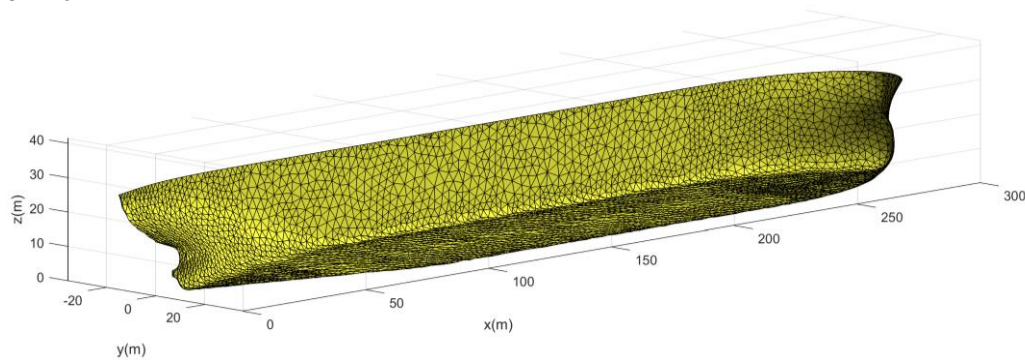
Longitudinal profile



Lateral profile (left: bow, right: aft)



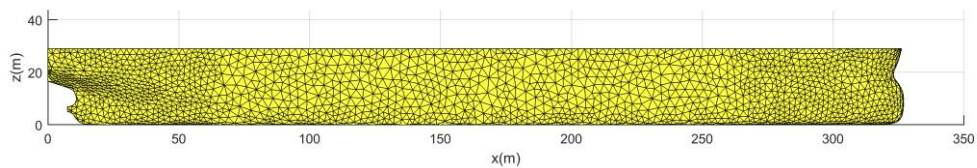
3D view



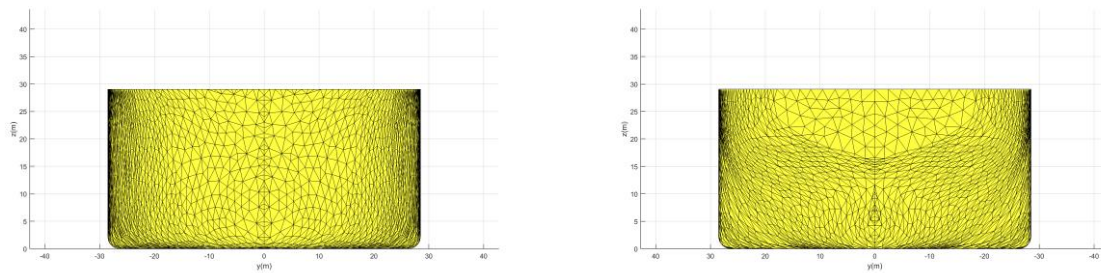
Date	February 2017
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Vessel ID	Bul-10
Hull file name	Bul-10_Bulker_250000t.hull
Vessel type	Bulk carrier, Capesize
Length over all (LOA) [m]	327.0
Length between perpendiculars (LPP) [m]	321.5
Breadth [m]	57.0
Design draught [m]	19.0
Height [m]	29.0
Capacity (TEU) [-]	250000
Hydrostatics for Design Draught	
Volume [m ³]	282080
Longitudinal Center of Buoyancy (LCB) [m]	167.1
Vertical Center of Buoyancy (VCB) [m]	9.81
Longitudinal Center of Floatation (LCF) [m]	156.05
Transversal moment of inertia of waterplane area IT [m ⁴]	3862650
Longitudinal moment of inertia of waterplane area IL [m ⁴]	117593000
Block coefficient c_B [-]	0.81

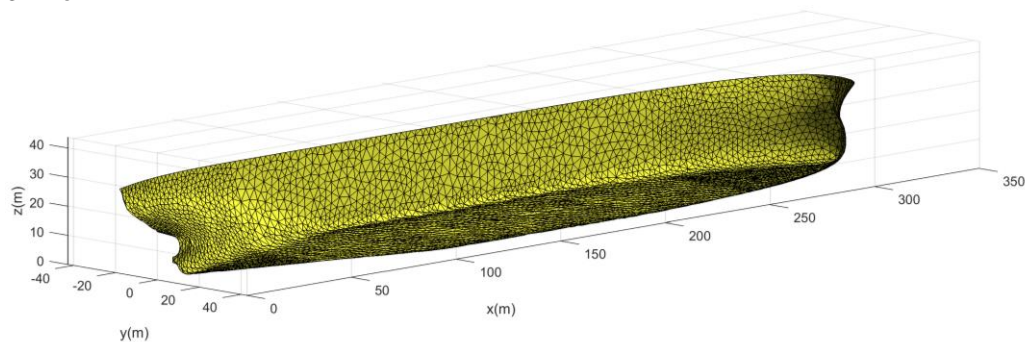
Longitudinal profile



Lateral profile (left: bow, right: aft)



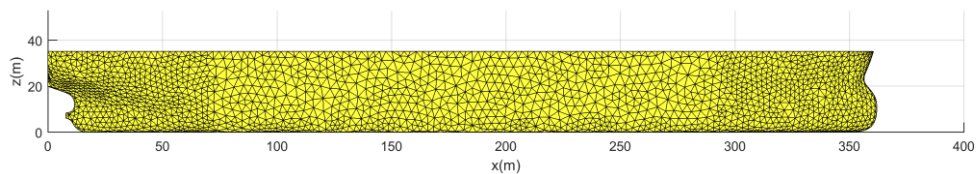
3D view



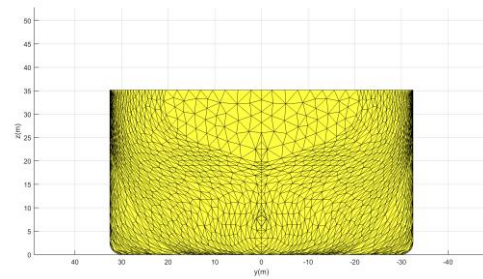
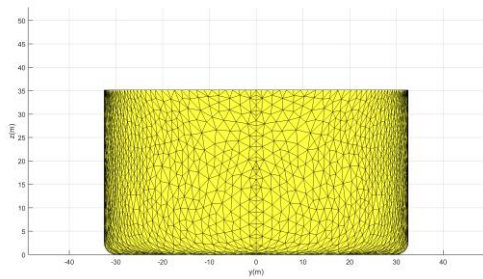
Date	February 2017
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Vessel ID	Bul-11
Hull file name	Bul-11_Bulker_400000t.hull
Vessel type	Bulk carrier, Capesize
Length over all (LOA) [m]	362.0
Length between perpendiculars (LPP) [m]	355.0
Breadth [m]	65.0
Design draught [m]	23.0
Height [m]	35.0
Capacity (TEU) [-]	400000
Hydrostatics for Design Draught	
Volume [m ³]	440522
Longitudinal Center of Buoyancy (LCB) [m]	187.2
Vertical Center of Buoyancy (VCB) [m]	11.85
Longitudinal Center of Floatation (LCF) [m]	174.98
Transversal moment of inertia of waterplane area I_T [m ⁴]	6631150
Longitudinal moment of inertia of waterplane area I_L [m ⁴]	187351000
Block coefficient c_B [-]	0.83

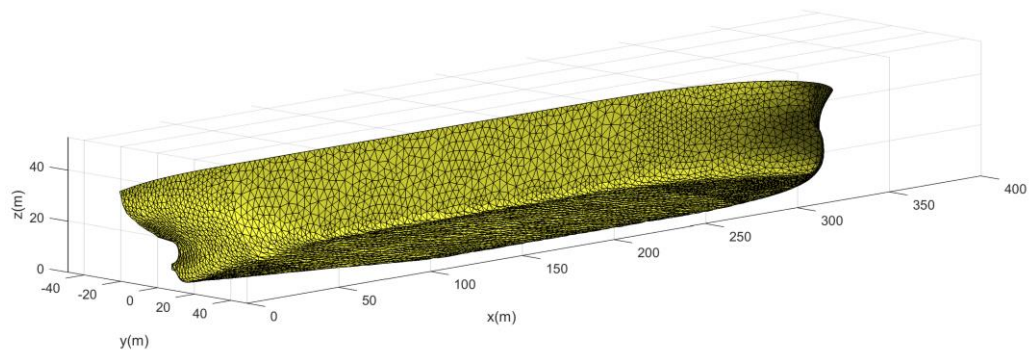
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view



Date

February 2017

3 Container Carriers

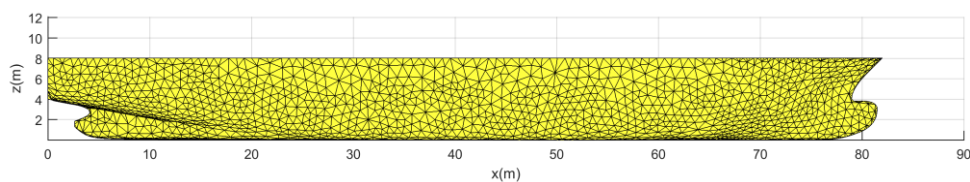
This section represents the vessel characteristics for wave response analyses for 13 single screw container carriers of different size. They are clustered based on global scheduled container vessel new building projects within the next years and represent a variety of many container carrier ship types.

All container vessel geometries are generated generically based on the main dimensions chosen.

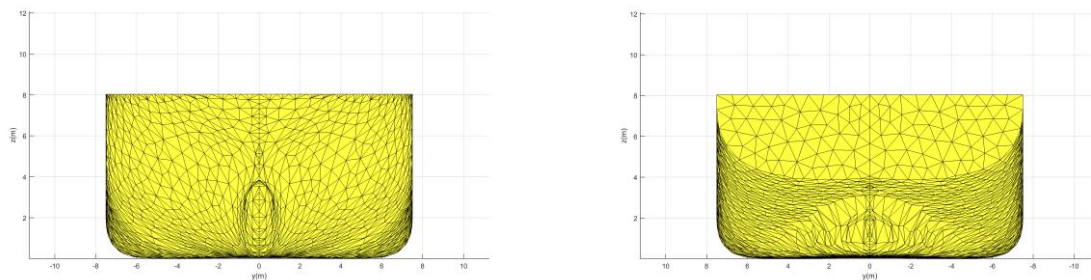
The hydrostatic characteristics such as the longitudinal Center of Buoyancy (LCB) and block coefficients (C_B) have been selected based on /1/**Error! Reference source not found.** and **Error! Reference source not found.**, respectively.

Vessel ID	Con-01
Hull file name	Con-01_Panelfile_160TEU.hull
Vessel type	Container carrier, Small Feeder
Length over all (LOA) [m]	82.0
Length between perpendiculars (LPP) [m]	78.9
Breadth [m]	15.0
Design draught [m]	4.0
Height [m]	8.0
Capacity (TEU) [-]	160
Hydrostatics for Design Draught	
Volume [m ³]	3454
Longitudinal Center of Buoyancy (LCB) [m]	40.2
Vertical Center of Buoyancy (VCB) [m]	2.19
Longitudinal Center of Floatation (LCF) [m]	37.56
Transversal moment of inertia of waterplane area IT [m ⁴]	18445
Longitudinal moment of inertia of waterplane area IL [m ⁴]	463373
Block coefficient c_B [-]	0.73

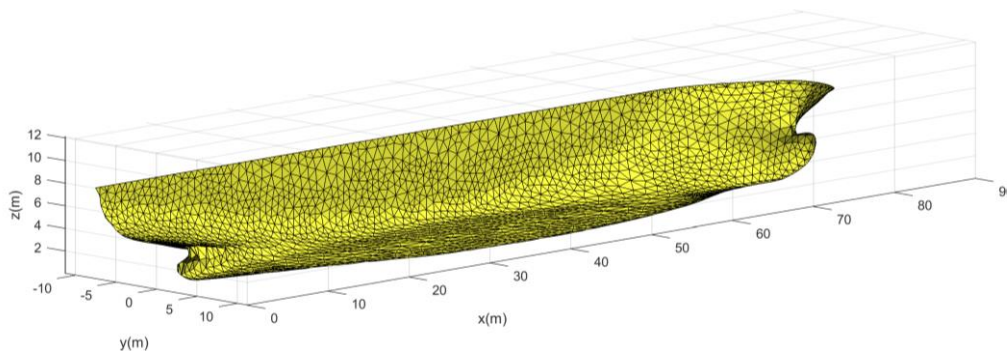
Longitudinal profile



Lateral profile (left: bow, right: aft)



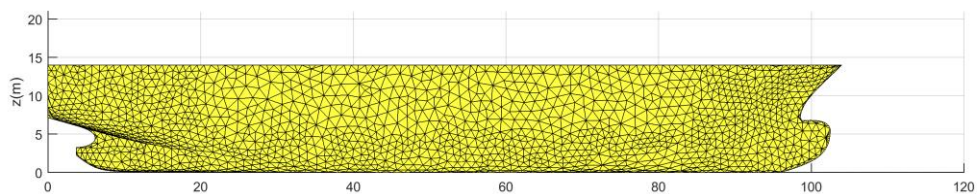
3D view



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Vessel ID	Con-02
Hull file name	Con-02_Panelfile_250TEU.hull
Vessel type	Container carrier, Small Feeder
Length over all (LOA) [m]	104.0
Length between perpendiculars (LPP) [m]	98.0
Breadth [m]	17.5
Design draught [m]	7.2
Height [m]	14.0
Capacity (TEU) [-]	278
Hydrostatics for Design Draught	
Volume [m ³]	8822
Longitudinal Center of Buoyancy (LCB) [m]	49.5
Vertical Center of Buoyancy (VCB) [m]	3.92
Longitudinal Center of Floatation (LCF) [m]	46.50
Transversal moment of inertia of waterplane area IT [m ⁴]	35985
Longitudinal moment of inertia of waterplane area IL [m ⁴]	1020000
Block coefficient c_B [-]	0.72

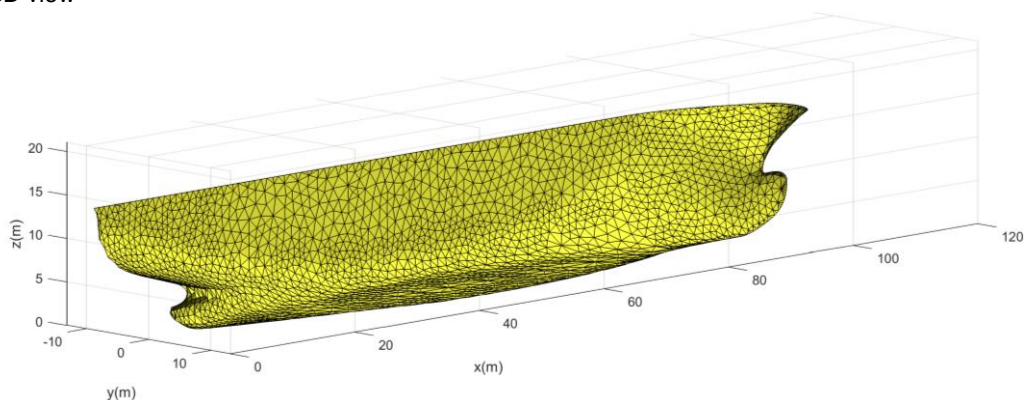
Longitudinal profile



Lateral profile (left: bow, right: aft)



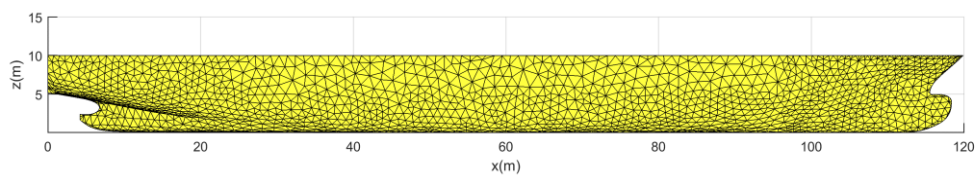
3D view



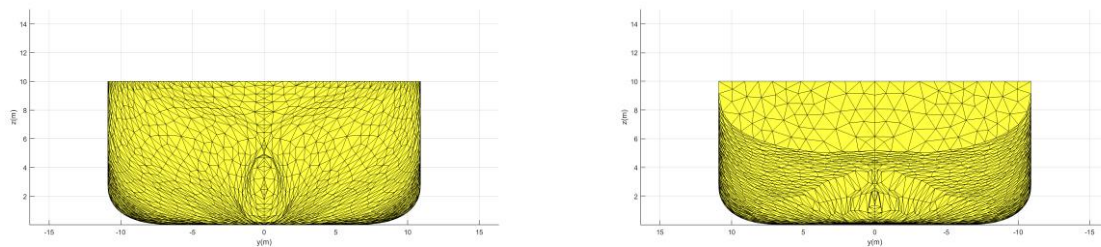
Date	February 2017
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Vessel ID	Con-03
Hull file name	Con-03_Panelfile_500TEU.hull
Vessel type	Container carrier, Small Feeder
Length over all (LOA) [m]	119.9
Length between perpendiculars (LPP) [m]	115.0
Breadth [m]	21.8
Design draught [m]	5.2
Height [m]	10.0
Capacity (TEU) [-]	558
Hydrostatics for Design Draught	
Volume [m ³]	9259
Longitudinal Center of Buoyancy (LCB) [m]	57.5
Vertical Center of Buoyancy (VCB) [m]	2.87
Longitudinal Center of Floatation (LCF) [m]	54.33
Transversal moment of inertia of waterplane area IT [m ⁴]	81157.1
Longitudinal moment of inertia of waterplane area IL [m ⁴]	2020000
Block coefficient c_B [-]	0.71

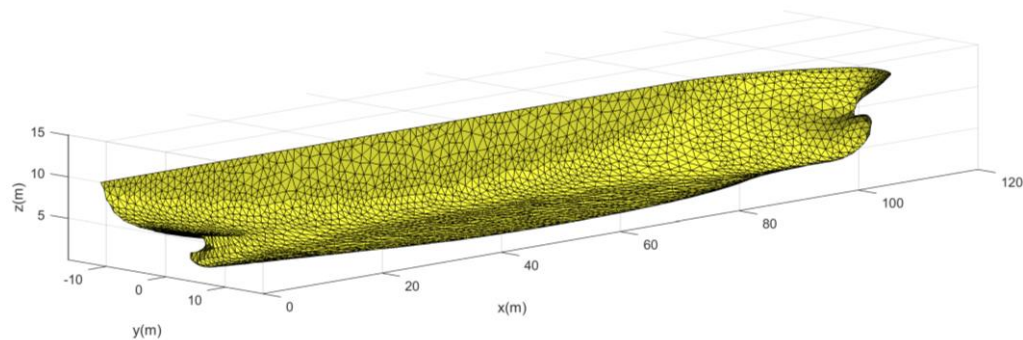
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

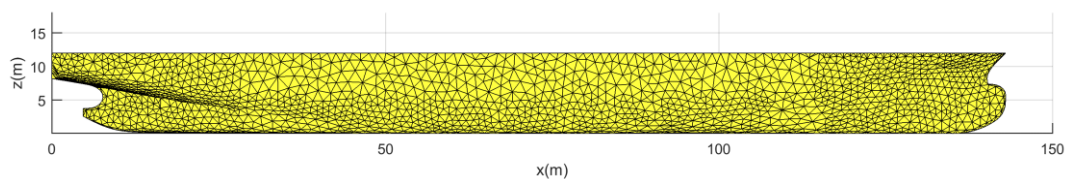


Date

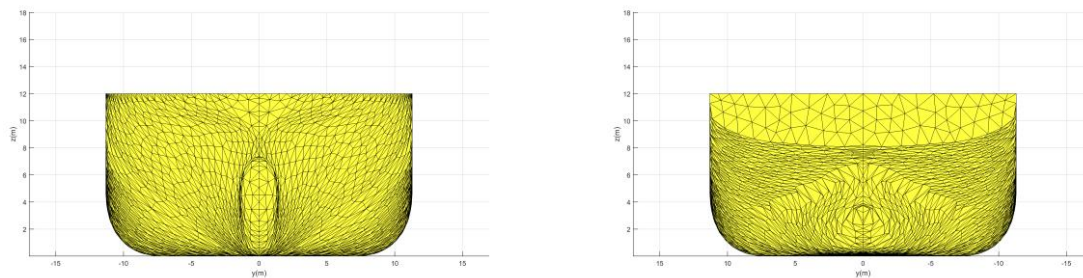
February 2017

Vessel ID	Con-04
Hull file name	Con-04_Panelfile_1000TEU.hull
Vessel type	Container carrier, Regional Feeder
Length over all (LOA) [m]	143.0
Length between perpendiculars (LPP) [m]	140.0
Breadth [m]	22.6
Design draught [m]	8.2
Height [m]	12.0
Capacity (TEU) [-]	1020
Hydrostatics for Design Draught	
Volume [m ³]	17503
Longitudinal Center of Buoyancy (LCB) [m]	69.4
Vertical Center of Buoyancy (VCB) [m]	4.57
Longitudinal Center of Floatation (LCF) [m]	65.19
Transversal moment of inertia of waterplane area IT [m ⁴]	109447
Longitudinal moment of inertia of waterplane area IL [m ⁴]	3680000
Block coefficient c_B [-]	0.67

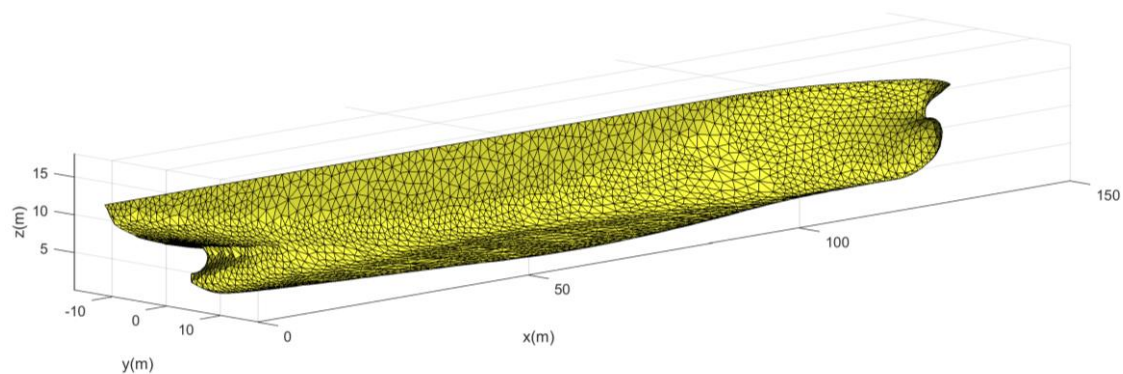
Longitudinal profile



Lateral profile (left: bow, right: aft)



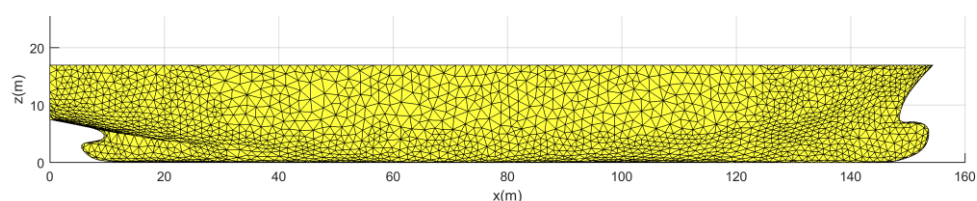
3D view



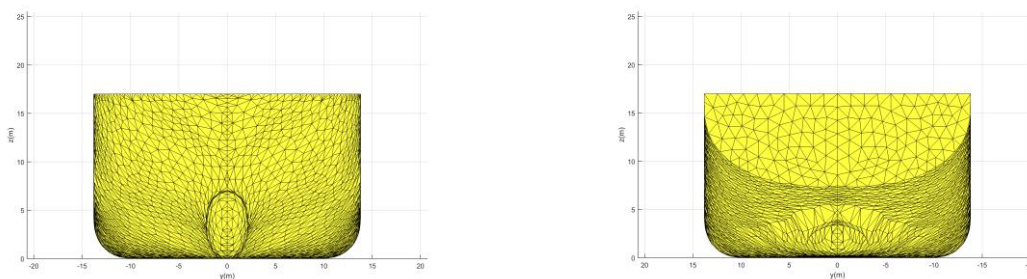
Date	February 2017
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Vessel ID	Con-05
Hull file name	Con-05_Panelfile_1400TEU.hull
Vessel type	Container carrier, Regional Feeder
Length over all (LOA) [m]	153.7
Length between perpendiculars (LPP) [m]	148.0
Breadth [m]	27.6
Design draught [m]	7.4
Height [m]	17.0
Capacity (TEU) [-]	1400
Hydrostatics for Design Draught	
Volume [m ³]	20208
Longitudinal Center of Buoyancy (LCB) [m]	73.3
Vertical Center of Buoyancy (VCB) [m]	4.11
Longitudinal Center of Floatation (LCF) [m]	70.75
Transversal moment of inertia of waterplane area IT [m ⁴]	198747
Longitudinal moment of inertia of waterplane area IL [m ⁴]	4980000
Block coefficient c_B [-]	0.67

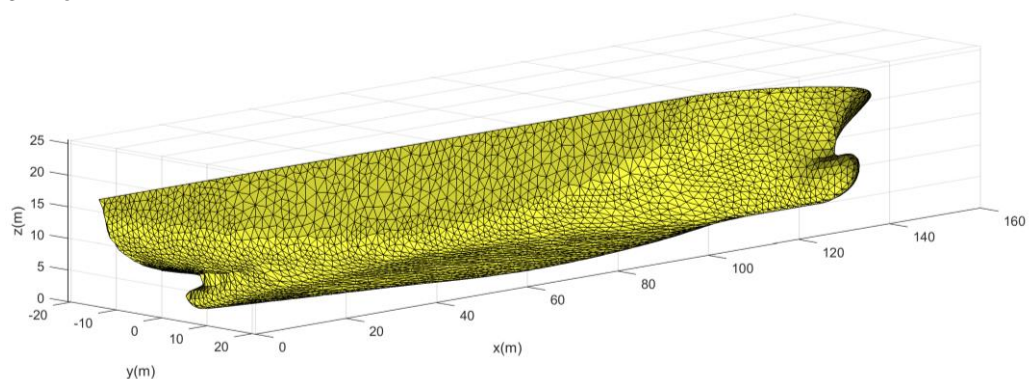
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

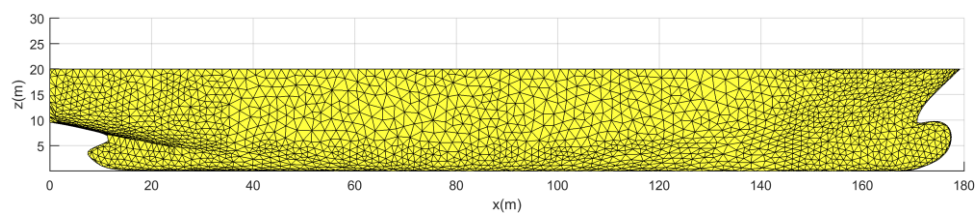


Date

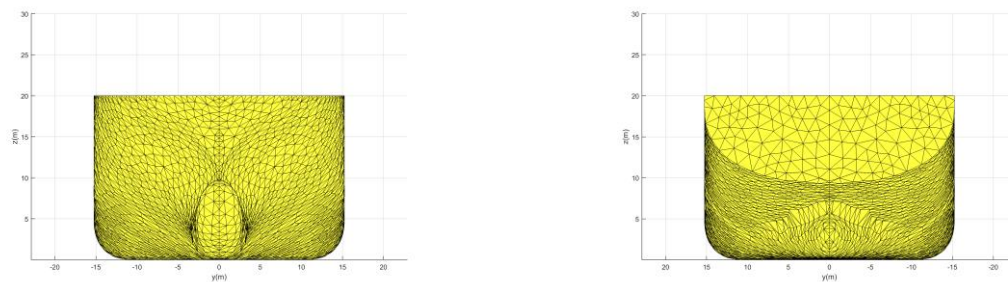
February 2017

Vessel ID	Con-06
Hull file name	Con-06_Panelfile_1900TEU.hull
Vessel type	Container carrier
Length over all (LOA) [m]	177.5
Length between perpendiculars (LPP) [m]	169.0
Breadth [m]	30.5
Design draught [m]	9.5
Height [m]	20.0
Capacity (TEU) [-]	1924
Hydrostatics for Design Draught	
Volume [m ³]	31836
Longitudinal Center of Buoyancy (LCB) [m]	82.2
Vertical Center of Buoyancy (VCB) [m]	5.35
Longitudinal Center of Floatation (LCF) [m]	78.98
Transversal moment of inertia of waterplane area IT [m ⁴]	305336
Longitudinal moment of inertia of waterplane area IL [m ⁴]	8130000
Block coefficient c_B [-]	0.65

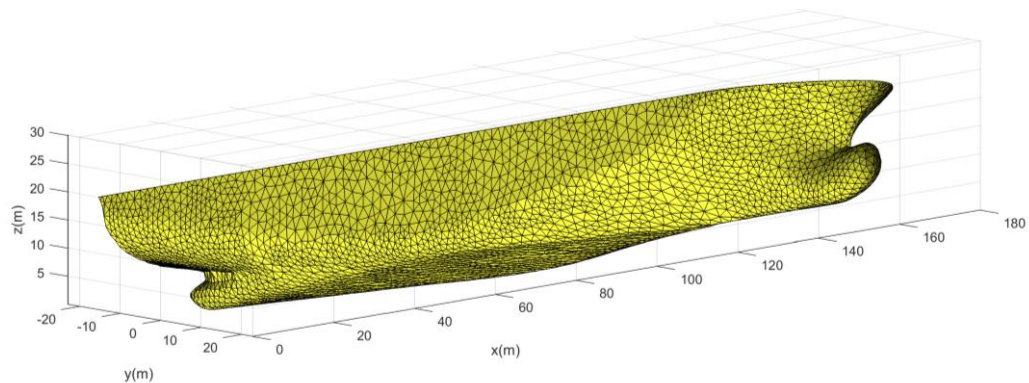
Longitudinal profile



Lateral profile (left: bow, right: aft)



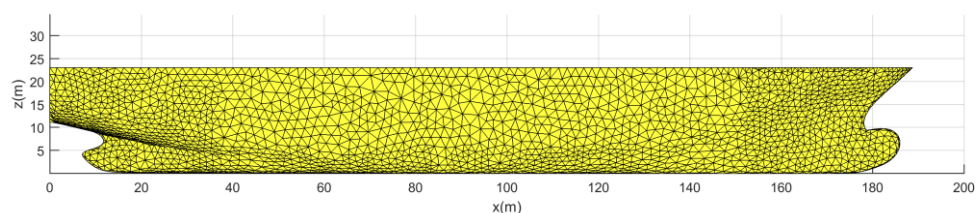
3D view



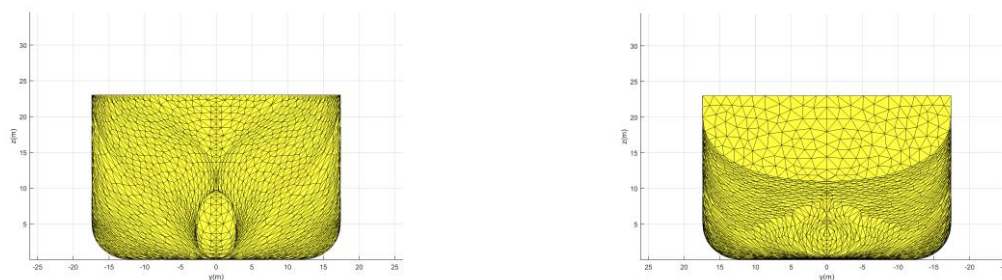
Date	February 2017
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Vessel ID	Con-07
Hull file name	Con-07_Panelfile_2700TEU.hull
Vessel type	Container carrier, Feedermax
Length over all (LOA) [m]	186.0
Length between perpendiculars (LPP) [m]	177.0
Breadth [m]	34.8
Design draught [m]	11.0
Height [m]	23.0
Capacity (TEU) [-]	2708
Hydrostatics for Design Draught	
Volume [m ³]	43513
Longitudinal Center of Buoyancy (LCB) [m]	86.4
Vertical Center of Buoyancy (VCB) [m]	6.16
Longitudinal Center of Floatation (LCF) [m]	82.12
Transversal moment of inertia of waterplane area IT [m ⁴]	460418
Longitudinal moment of inertia of waterplane area IL [m ⁴]	10000000
Block coefficient C _B [-]	0.64

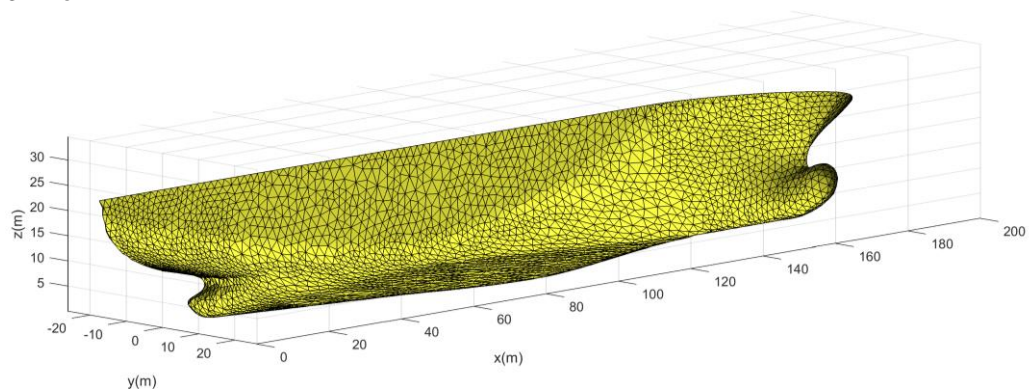
Longitudinal profile



Lateral profile (left: bow, right: aft)



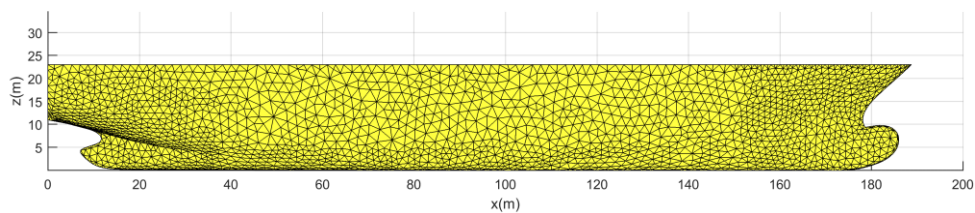
3D view



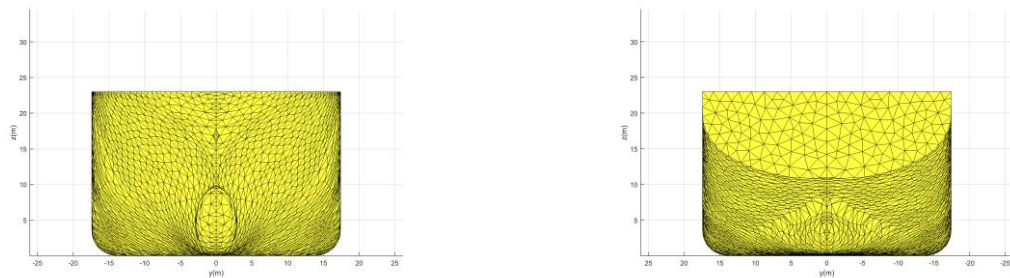
Date	February 2017
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Vessel ID	Con-07b
Hull file name	Con-07b_Panelfile_2700TEU_b.hull
Vessel type	Container carrier, Feedermax
Length over all (LOA) [m]	186.0
Length between perpendiculars (LPP) [m]	177.0
Breadth [m]	34.8
Design draught [m]	11.0
Height [m]	23.0
Capacity (TEU) [-]	2708
Hydrostatics for Design Draught	
Volume [m ³]	45945
Longitudinal Center of Buoyancy (LCB) [m]	87.5
Vertical Center of Buoyancy (VCB) [m]	6.09
Longitudinal Center of Floatation (LCF) [m]	82.79
Transversal moment of inertia of waterplane area IT [m ⁴]	476543
Longitudinal moment of inertia of waterplane area IL [m ⁴]	10700000
Block coefficient c_B [-]	0.68

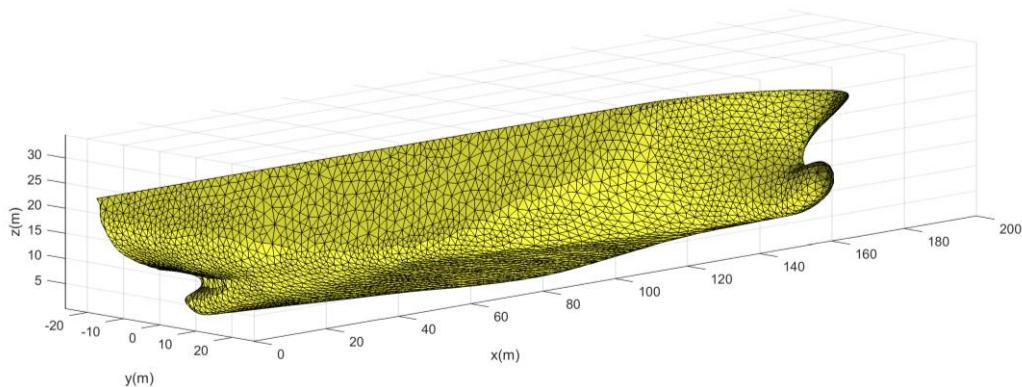
Longitudinal profile



Lateral profile (left: bow, right: aft)



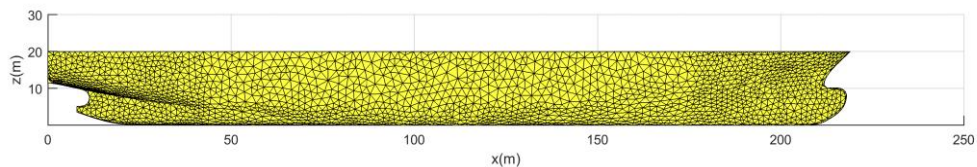
3D view



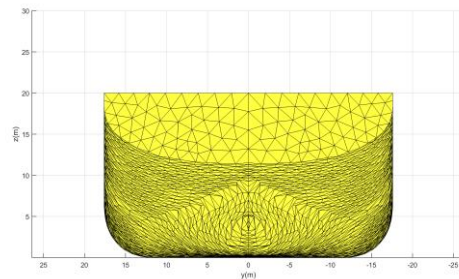
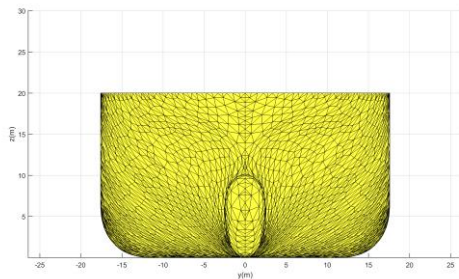
Date	December 2017
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Vessel ID	Con-08
Hull file name	Con-08_panelfile_3300TEU.hull
Vessel type	Container carrier, Baby Post-Panamax
Length over all (LOA) [m]	219.0
Length between perpendiculars (LPP) [m]	210.0
Breadth [m]	35.2
Design draught [m]	11.0
Height [m]	20.0
Capacity (TEU) [-]	3300
Hydrostatics for Design Draught	
Volume [m ³]	53297
Longitudinal Center of Buoyancy (LCB) [m]	102.9
Vertical Center of Buoyancy (VCB) [m]	6.17
Longitudinal Center of Floatation (LCF) [m]	99.05
Transversal moment of inertia of waterplane area IT [m ⁴]	594374
Longitudinal moment of inertia of waterplane area IL [m ⁴]	18100000
Block coefficient c_B [-]	0.66

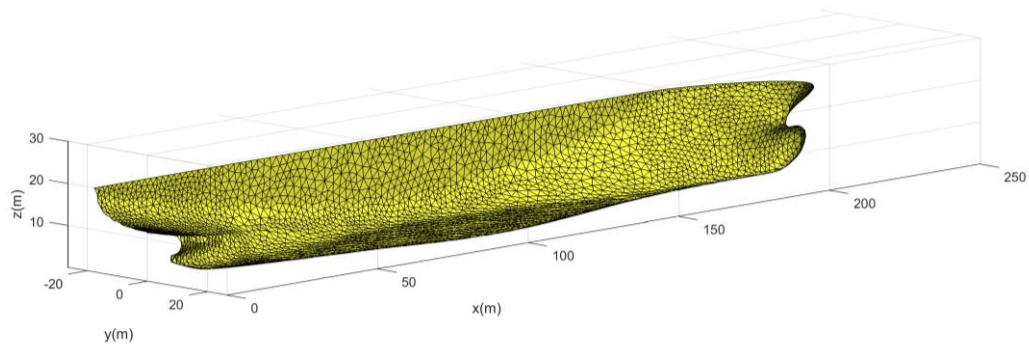
Longitudinal profile



Lateral profile (left: bow, right: aft)



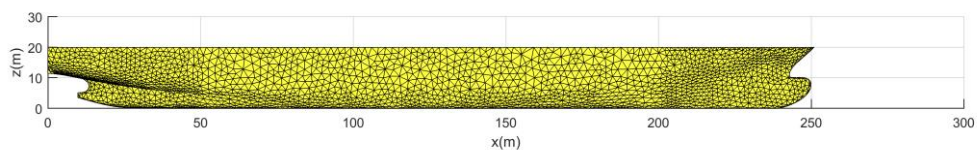
3D view



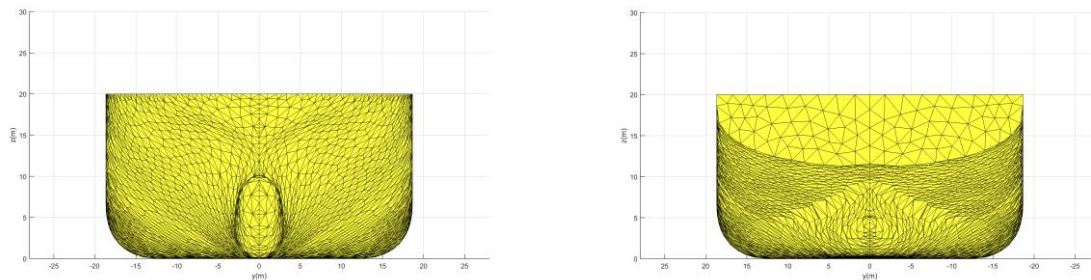
Date	February 2017
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Vessel ID	Con-09
Hull file name	Con-09_Panelfile_4700TEU.hull
Vessel type	Container carrier, Baby Post-Panamax
Length over all (LOA) [m]	251.0
Length between perpendiculars (LPP) [m]	240.0
Breadth [m]	37.3
Design draught [m]	11.0
Height [m]	20.0
Capacity (TEU) [-]	4700
Hydrostatics for Design Draught	
Volume [m ³]	65968
Longitudinal Center of Buoyancy (LCB) [m]	118.8
Vertical Center of Buoyancy (VCB) [m]	6.14
Longitudinal Center of Floatation (LCF) [m]	113.67
Transversal moment of inertia of waterplane area IT [m ⁴]	819234
Longitudinal moment of inertia of waterplane area IL [m ⁴]	29300000
Block coefficient c_B [-]	0.67

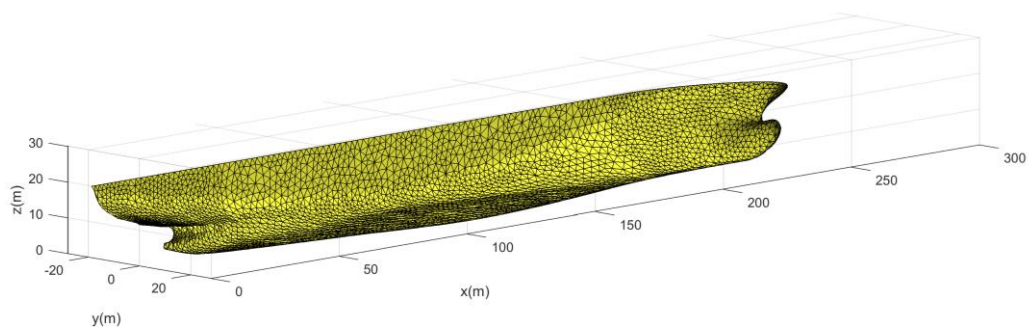
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

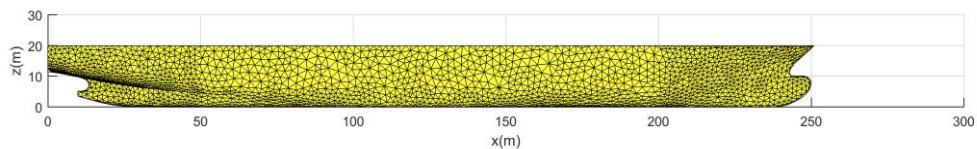


Date

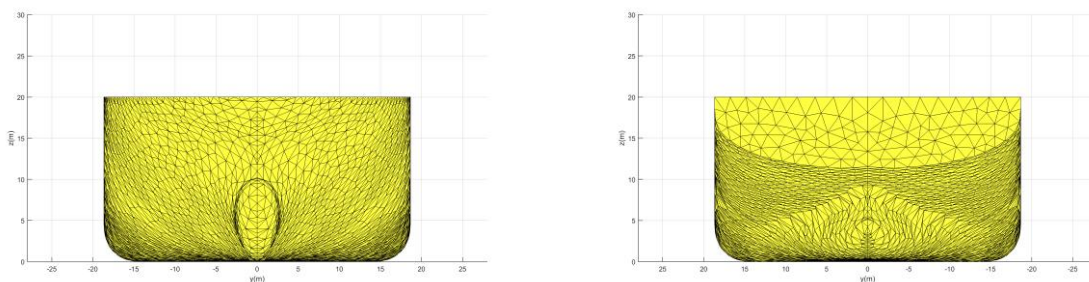
February 2017

Vessel ID	Con-09b
Hull file name	Con-09_Panelfile_4700TEU.hull
Vessel type	Container carrier, Baby Post-Panamax
Length over all (LOA) [m]	251.0
Length between perpendiculars (LPP) [m]	240.0
Breadth [m]	37.3
Design draught [m]	11.0
Height [m]	20.0
Capacity (TEU) [-]	4700
Hydrostatics for Design Draught	
Volume [m ³]	69011
Longitudinal Center of Buoyancy (LCB) [m]	120.0
Vertical Center of Buoyancy (VCB) [m]	6.08
Longitudinal Center of Floatation (LCF) [m]	114.38
Transversal moment of inertia of waterplane area IT [m ⁴]	833778
Longitudinal moment of inertia of waterplane area IL [m ⁴]	30900000
Block coefficient c_B [-]	0.70

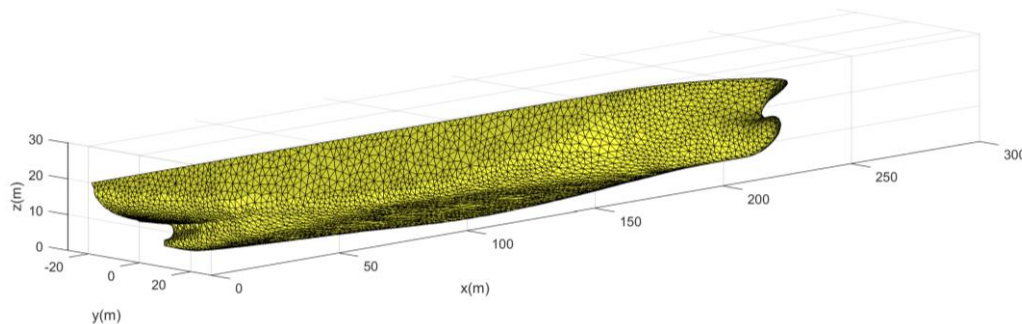
Longitudinal profile



Lateral profile (left: bow, right: aft)



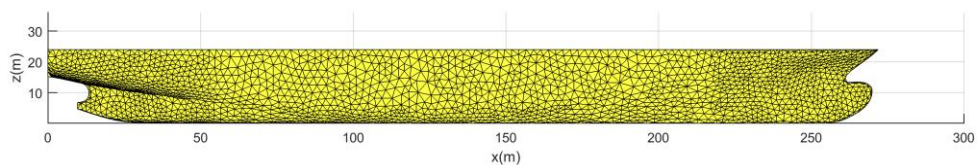
3D view



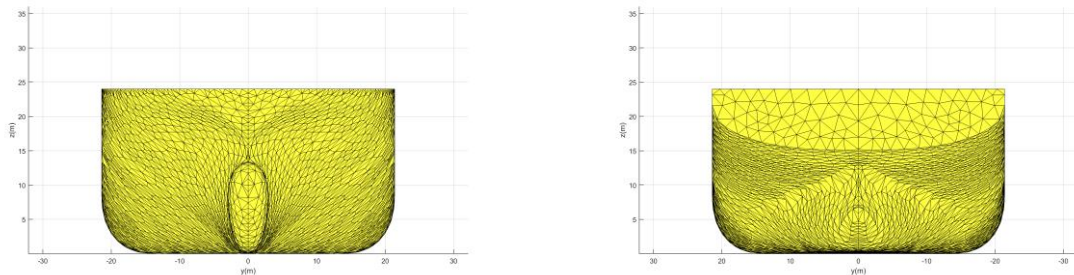
Date	December 2017
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Vessel ID	Con-10
Hull file name	Con-10_Panelfile_6900TEU.hull
Vessel type	Container carrier, Post-Panamax
Length over all (LOA) [m]	270.0
Length between perpendiculars (LPP) [m]	259.0
Breadth [m]	42.8
Design draught [m]	14.5
Height [m]	24.0
Capacity (TEU) [-]	6865
Hydrostatics for Design Draught	
Volume [m ³]	103003
Longitudinal Center of Buoyancy (LCB) [m]	126.0
Vertical Center of Buoyancy (VCB) [m]	8.18
Longitudinal Center of Floatation (LCF) [m]	121.25
Transversal moment of inertia of waterplane area IT [m ⁴]	1320000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	41400000
Block coefficient c_B [-]	0.64

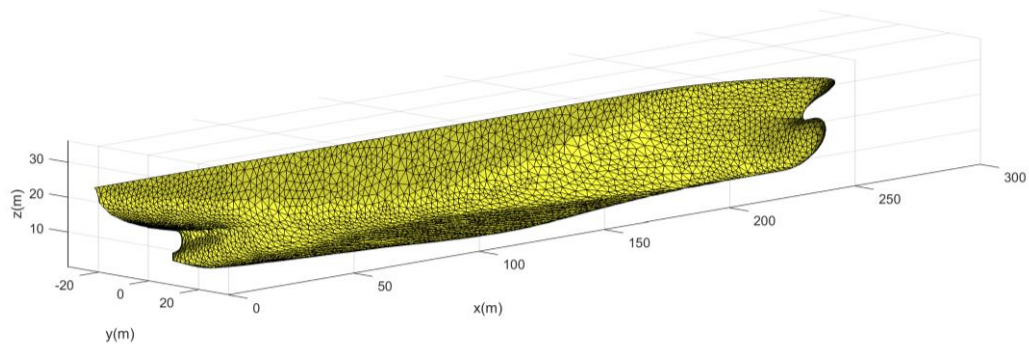
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

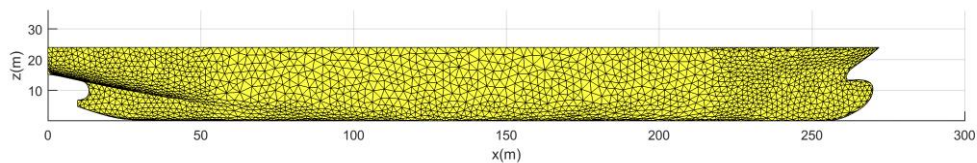


Date

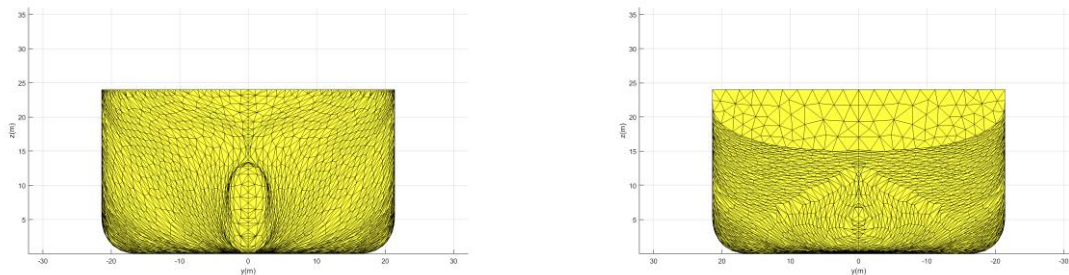
February 2017

Vessel ID	Con-10b
Hull file name	Con-10b_Panelfile_6900TEU_b.hull
Vessel type	Container carrier, Post-Panamax
Length over all (LOA) [m]	270.0
Length between perpendiculars (LPP) [m]	259.0
Breadth [m]	42.8
Design draught [m]	14.5
Height [m]	24.0
Capacity (TEU) [-]	6865
Hydrostatics for Design Draught	
Volume [m ³]	111805
Longitudinal Center of Buoyancy (LCB) [m]	129.0
Vertical Center of Buoyancy (VCB) [m]	7.96
Longitudinal Center of Floatation (LCF) [m]	121.32
Transversal moment of inertia of waterplane area IT [m ⁴]	1330000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	42300000
Block coefficient c_B [-]	0.70

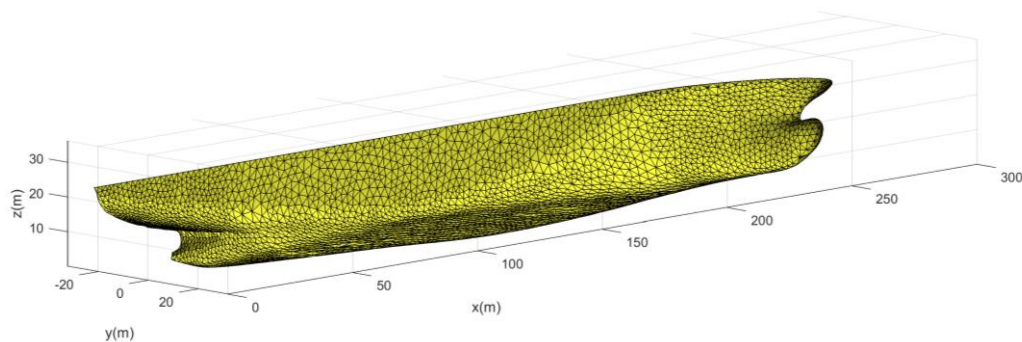
Longitudinal profile



Lateral profile (left: bow, right: aft)



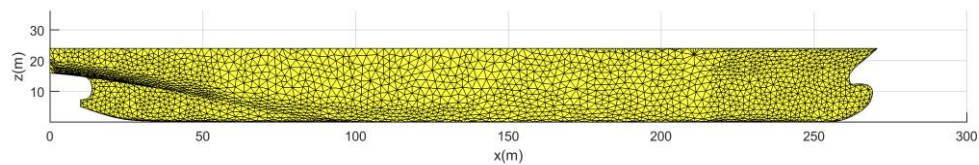
3D view



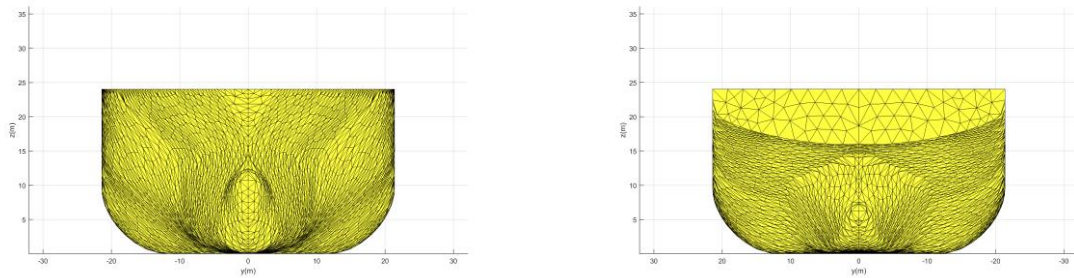
Date	December 2017
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Vessel ID	Con-10c
Hull file name	Con-10c_Panelfile_6900TEU_c.hull
Vessel type	Container carrier, Post-Panamax
Length over all (LOA) [m]	270.0
Length between perpendiculars (LPP) [m]	259.0
Breadth [m]	42.8
Design draught [m]	14.5
Height [m]	24.0
Capacity (TEU) [-]	6865
Hydrostatics for Design Draught	
Volume [m ³]	90240
Longitudinal Center of Buoyancy (LCB) [m]	127.2
Vertical Center of Buoyancy (VCB) [m]	8.22
Longitudinal Center of Floatation (LCF) [m]	117.91
Transversal moment of inertia of waterplane area IT [m ⁴]	1070000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	29600000
Block coefficient c_B [-]	0.56

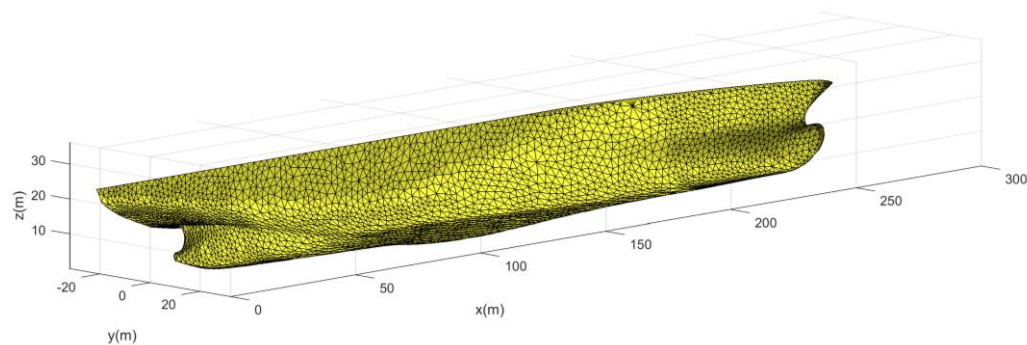
Longitudinal profile



Lateral profile (left: bow, right: aft)



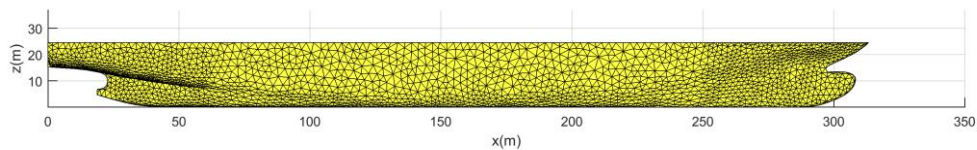
3D view



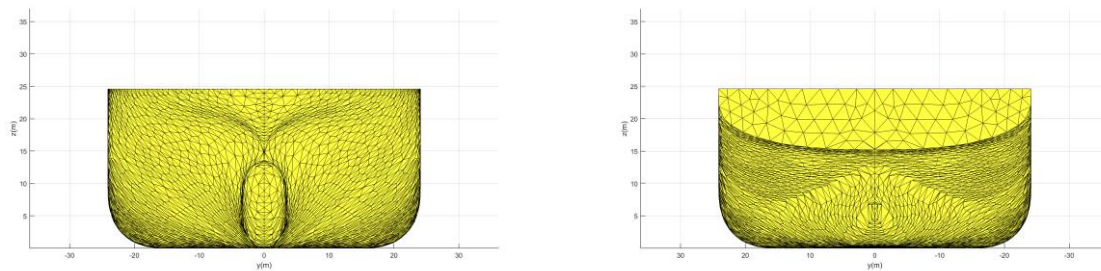
Date	December 2017
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Vessel ID	Con-11
Hull file name	Con-11_Panelfile_10800TEU.hull
Vessel type	Container carrier, ULCS
Length over all (LOA) [m]	314.4
Length between perpendiculars (LPP) [m]	286.4
Breadth [m]	48.2
Design draught [m]	14.6
Height [m]	24.6
Capacity (TEU) [-]	10800
Hydrostatics for Design Draught	
Volume [m ³]	134854
Longitudinal Center of Buoyancy (LCB) [m]	141.7
Vertical Center of Buoyancy (VCB) [m]	8.18
Longitudinal Center of Floatation (LCF) [m]	134.78
Transversal moment of inertia of waterplane area IT [m ⁴]	2150000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	61600000
Block coefficient c_B [-]	0.67

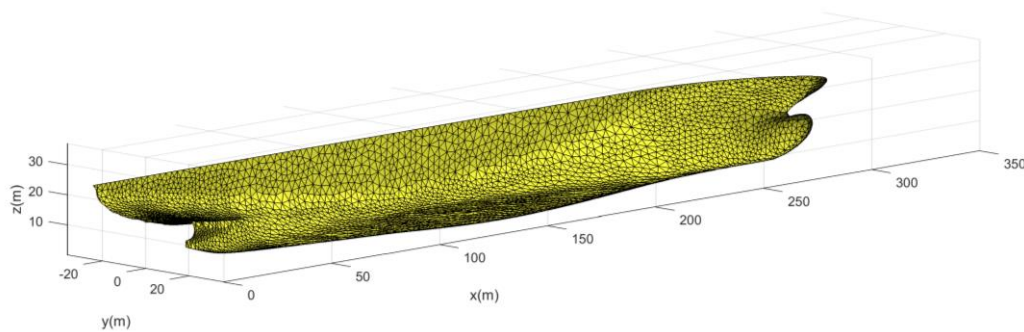
Longitudinal profile



Lateral profile (left: bow, right: aft)



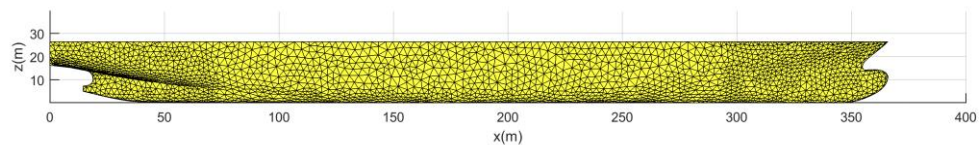
3D view



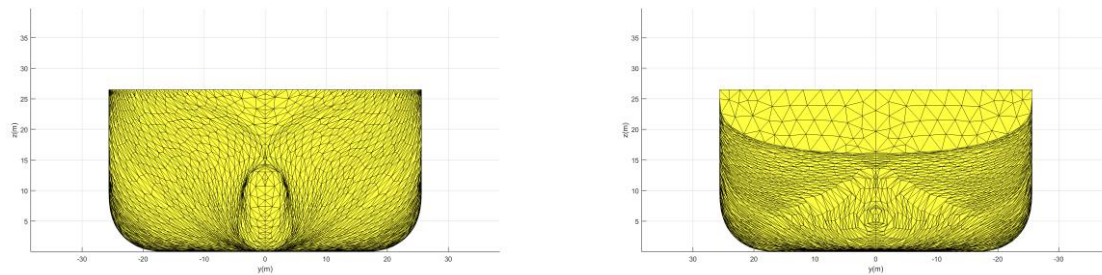
Date	February 2017
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Vessel ID	Con-12
Hull file name	Con-12_Panelfile_14500TEU.hull
Vessel type	Container carrier, ULCS
Length over all (LOA) [m]	366.0
Length between perpendiculars (LPP) [m]	350.5
Breadth [m]	51.2
Design draught [m]	15.5
Height [m]	26.5
Capacity (TEU) [-]	14500
Hydrostatics for Design Draught	
Volume [m ³]	189119
Longitudinal Center of Buoyancy (LCB) [m]	174.3
Vertical Center of Buoyancy (VCB) [m]	8.60
Longitudinal Center of Floatation (LCF) [m]	164.71
Transversal moment of inertia of waterplane area IT [m ⁴]	3080000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	122000000
Block coefficient c_B [-]	0.68

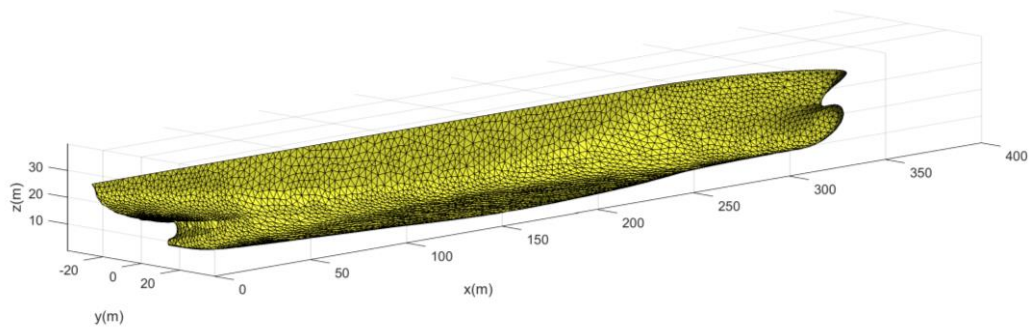
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

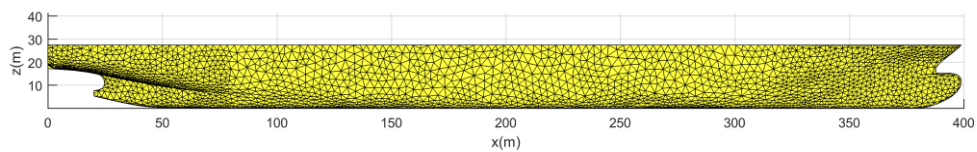


Date

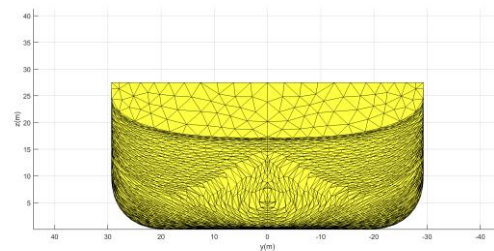
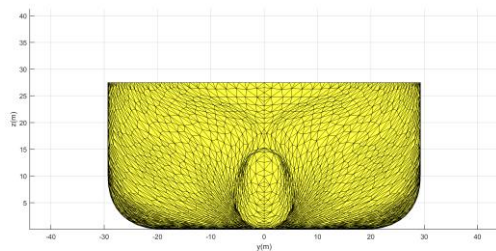
February 2017

Vessel ID	Con-13
Hull file name	Con-13_Panelfile_20000TEU.hull
Vessel type	Container carrier, ULCS
Length over all (LOA) [m]	399.0
Length between perpendiculars (LPP) [m]	378.5
Breadth [m]	58.6
Design draught [m]	16.5
Height [m]	27.5
Capacity (TEU) [-]	19630
Hydrostatics for Design Draught	
Volume [m ³]	252455
Longitudinal Center of Buoyancy (LCB) [m]	188.7
Vertical Center of Buoyancy (VCB) [m]	9.18
Longitudinal Center of Floatation (LCF) [m]	178.78
Transversal moment of inertia of waterplane area IT [m ⁴]	5140000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	186000000
Block coefficient c_B [-]	0.69

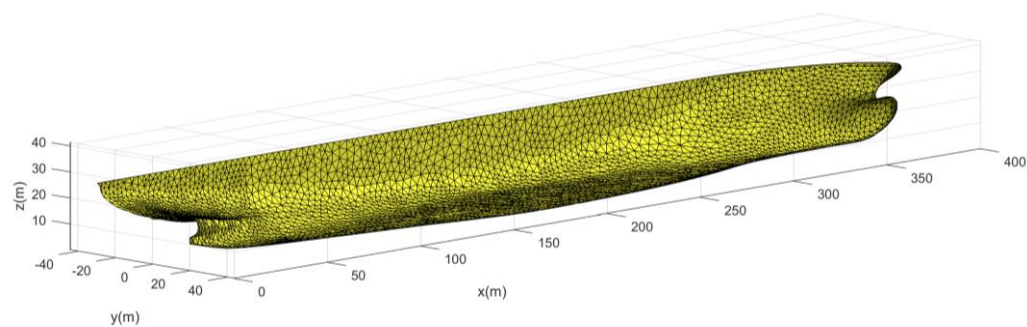
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

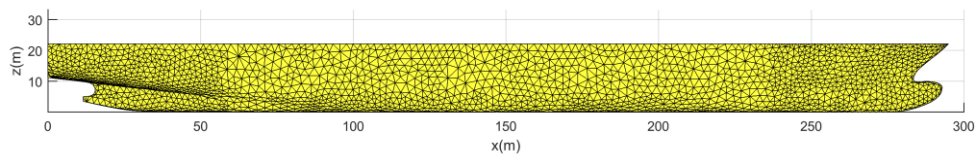


Date

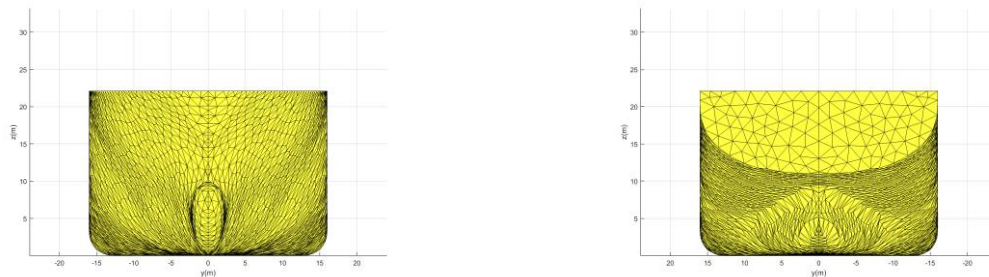
February 2017

Vessel ID	Con-14
Hull file name	Con-14_Panelfile_5040TEU.hull
Vessel type	Container carrier, Panamax
Length over all (LOA) [m]	294.0
Length between perpendiculars (LPP) [m]	280.0
Breadth [m]	32.0
Design draught [m]	10.7
Height [m]	22.1
Capacity (TEU) [-]	5040
Hydrostatics for Design Draught	
Volume [m ³]	65063
Longitudinal Center of Buoyancy (LCB) [m]	139.3
Vertical Center of Buoyancy (VCB) [m]	5.87
Longitudinal Center of Floatation (LCF) [m]	132.0
Transversal moment of inertia of waterplane area IT [m ⁴]	573000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	38400000
Block coefficient c_B [-]	0.68

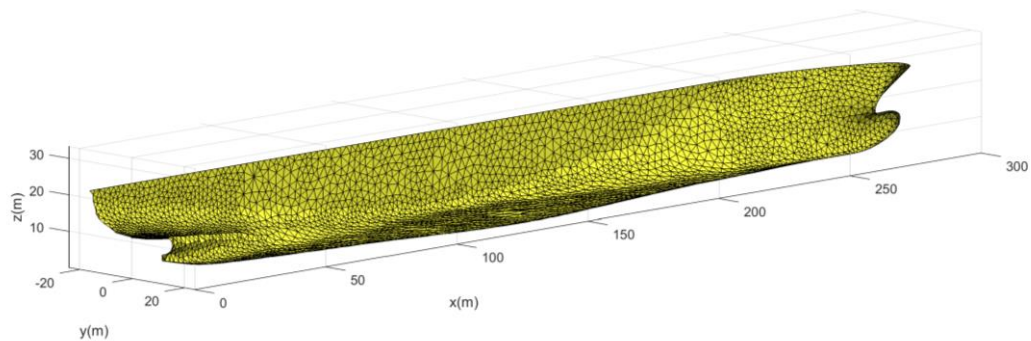
Longitudinal profile



Lateral profile (left: bow, right: aft)



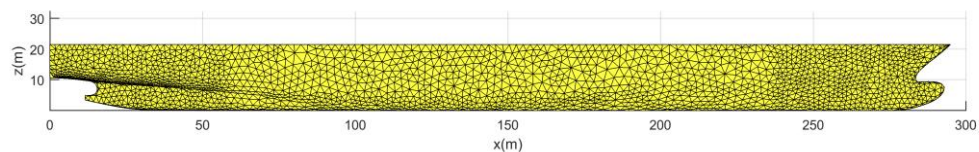
3D view



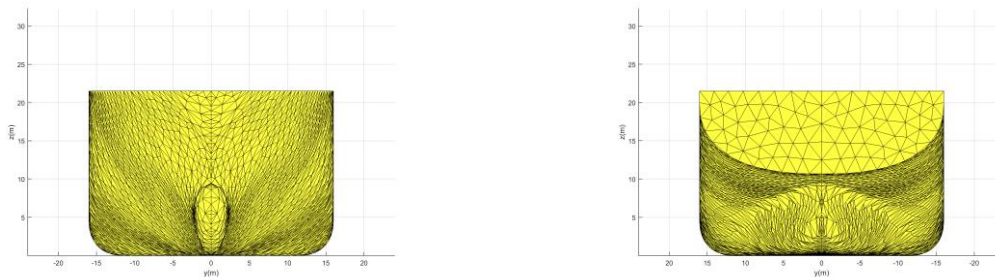
Date	December 2017
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Vessel ID	Con-14b
Hull file name	Con-14b_Panelfile_5040TEU.hull
Vessel type	Container carrier, ULCS
Length over all (LOA) [m]	294.0
Length between perpendiculars (LPP) [m]	280.0
Breadth [m]	32.0
Design draught [m]	10.2
Height [m]	21.5
Capacity (TEU) [-]	5040
Hydrostatics for Design Draught	
Volume [m ³]	57664
Longitudinal Center of Buoyancy (LCB) [m]	138.0
Vertical Center of Buoyancy (VCB) [m]	5.68
Longitudinal Center of Floatation (LCF) [m]	133.23
Transversal moment of inertia of waterplane area IT [m ⁴]	547000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	35800000
Block coefficient c_B [-]	0.63

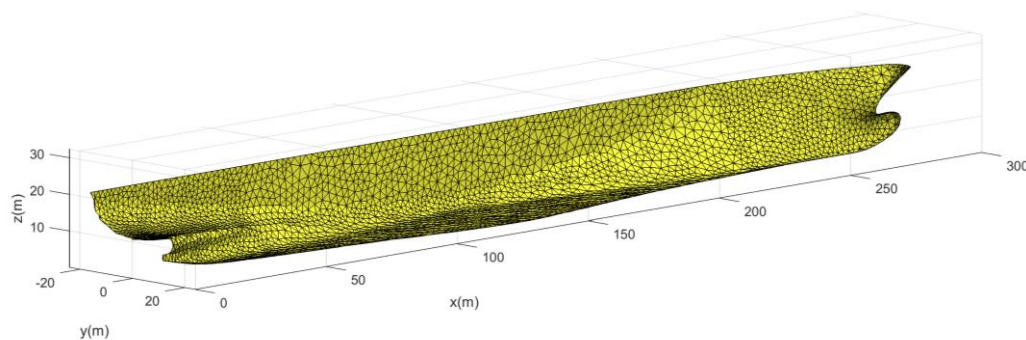
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view



Date	December 2017
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4 LNG Carriers

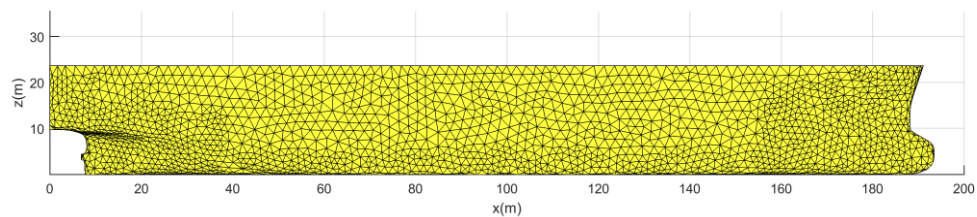
This section represents the vessel characteristics for wave response analyses for 7 single screw LNG carrier new buildings of the next years.

All vessels are generated generically. They are adjusted to fit the main dimensions of the individual new buildings.

The hydrostatic characteristics such as the longitudinal Center of Buoyancy (LCB) and block coefficients (cB) have been selected based on /1/ and /2/, respectively.

Vessel ID	LNG-01
Hull file name	LNG-01.hull
Vessel type	LNG Tanker
Length over all (LOA) [m]	195.2
Length between perpendiculars (LPP) [m]	184.8
Breadth [m]	30.0
Design draught [m]	10.3
Height [m]	23.5
Hydrostatics for Design Draught	
Volume [m ³]	44873
Longitudinal Center of Buoyancy (LCB) [m]	92.4
Vertical Center of Buoyancy (VCB) [m]	5.33
Longitudinal Center of Floatation (LCF) [m]	85.86
Transversal moment of inertia of waterplane area IT [m ⁴]	316000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	10800000
Block coefficient C _B [-]	0.79

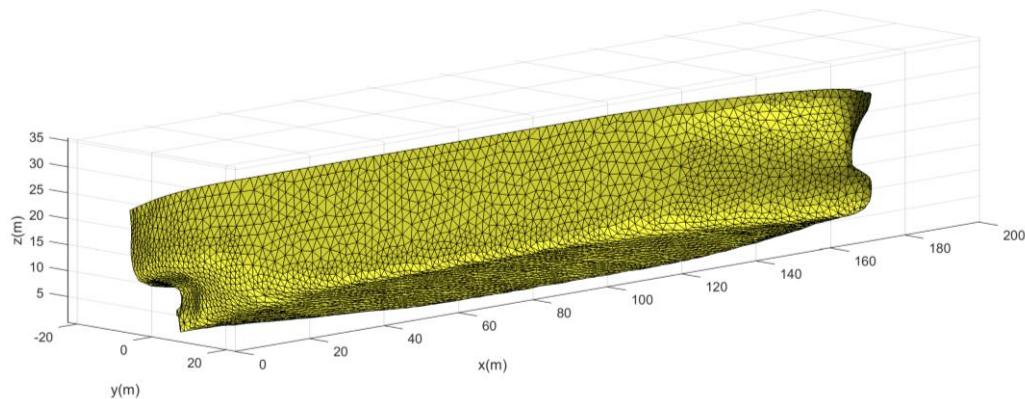
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

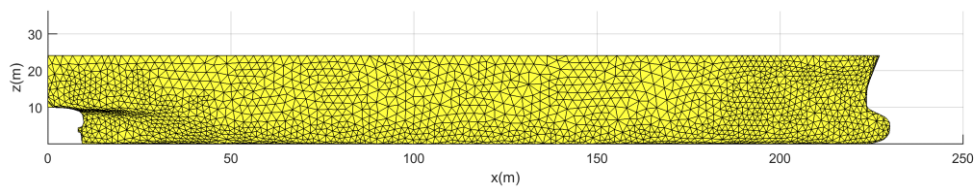


Date

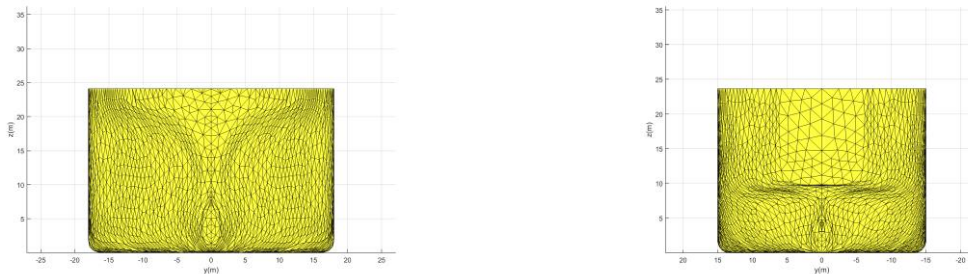
January 2018

Vessel ID	LNG-02
Hull file name	LNG-02.hull
Vessel type	LNG Tanker
Length over all (LOA) [m]	230.0
Length between perpendiculars (LPP) [m]	219.7
Breadth [m]	36.0
Design draught [m]	10.5
Height [m]	24.0
Hydrostatics for Design Draught	
Volume [m ³]	64292
Longitudinal Center of Buoyancy (LCB) [m]	110.0
Vertical Center of Buoyancy (VCB) [m]	5.44
Longitudinal Center of Floatation (LCF) [m]	101.56
Transversal moment of inertia of waterplane area IT [m ⁴]	640000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	21300000
Block coefficient C _B [-]	0.77

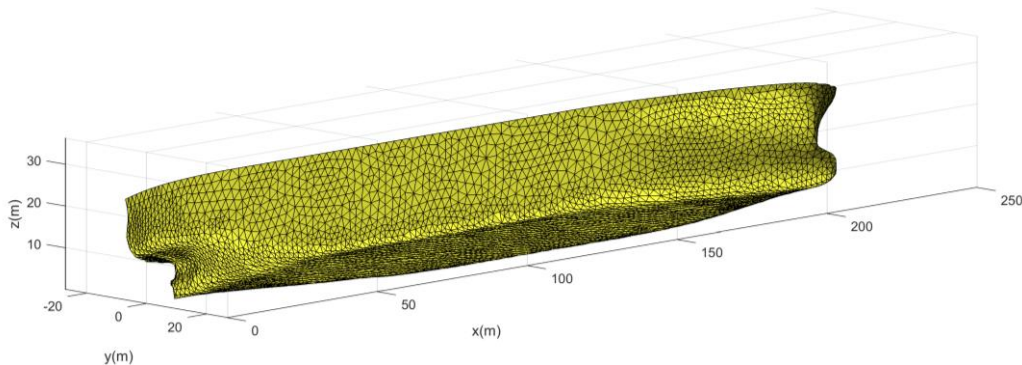
Longitudinal profile



Lateral profile (left: bow, right: aft)



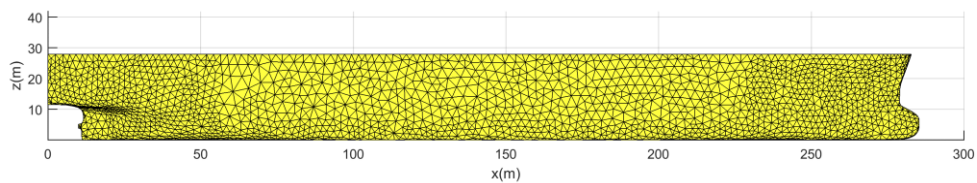
3D view



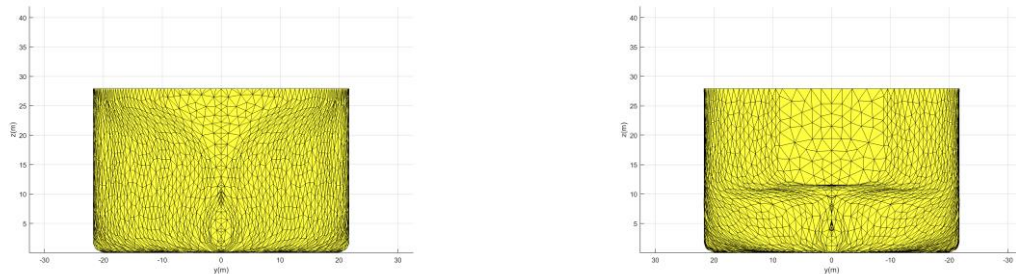
Date	January 2018
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Vessel ID	LNG-03
Hull file name	LNG-03.hull
Vessel type	LNG Tanker
Length over all (LOA) [m]	285.4
Length between perpendiculars (LPP) [m]	274.0
Breadth [m]	43.4
Design draught [m]	12.2
Height [m]	28.0
Hydrostatics for Design Draught	
Volume [m ³]	115717
Longitudinal Center of Buoyancy (LCB) [m]	135.9
Vertical Center of Buoyancy (VCB) [m]	6.26
Longitudinal Center of Floatation (LCF) [m]	127.24
Transversal moment of inertia of waterplane area IT [m ⁴]	1440000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	51900000
Block coefficient C_B [-]	0.80

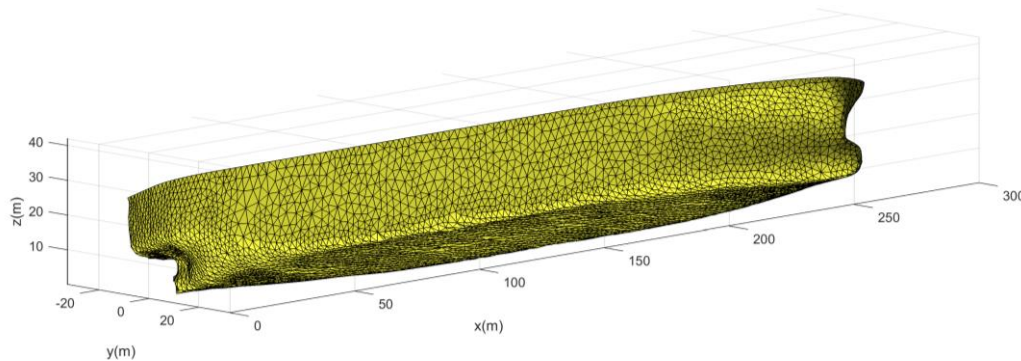
Longitudinal profile



Lateral profile (left: bow, right: aft)



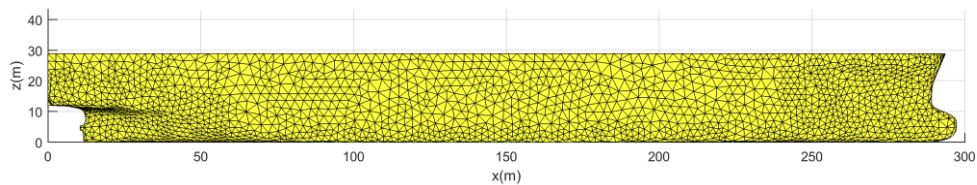
3D view



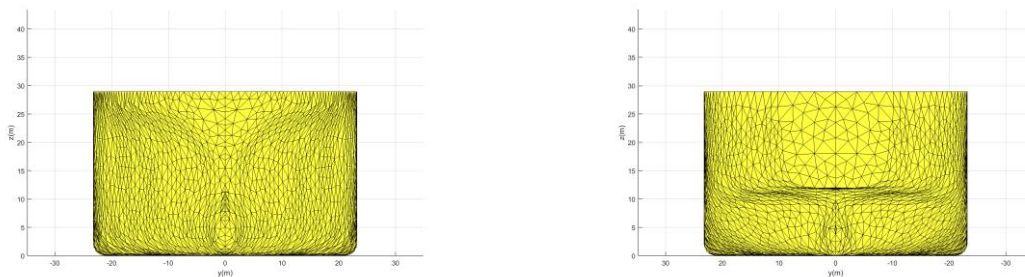
Date	January 2018
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Vessel ID	LNG-04
Hull file name	LNG-04.hull
Vessel type	LNG Tanker
Length over all (LOA) [m]	297.3
Length between perpendiculars (LPP) [m]	284.0
Breadth [m]	46.4
Design draught [m]	12.6
Height [m]	29.0
Hydrostatics for Design Draught	
Volume [m ³]	131623
Longitudinal Center of Buoyancy (LCB) [m]	141.2
Vertical Center of Buoyancy (VCB) [m]	6.50
Longitudinal Center of Floatation (LCF) [m]	131.74
Transversal moment of inertia of waterplane area IT [m ⁴]	1810000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	60700000
Block coefficient C _B [-]	0.79

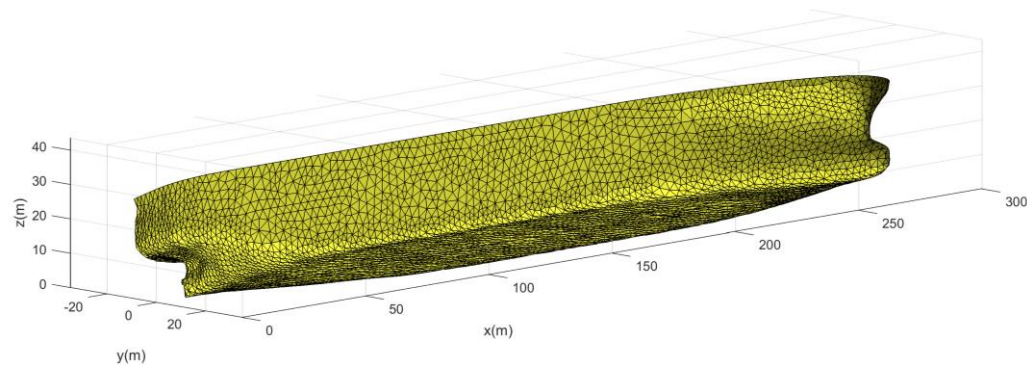
Longitudinal profile



Lateral profile (left: bow, right: aft)



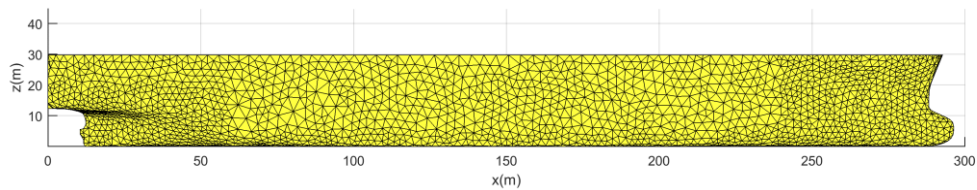
3D view



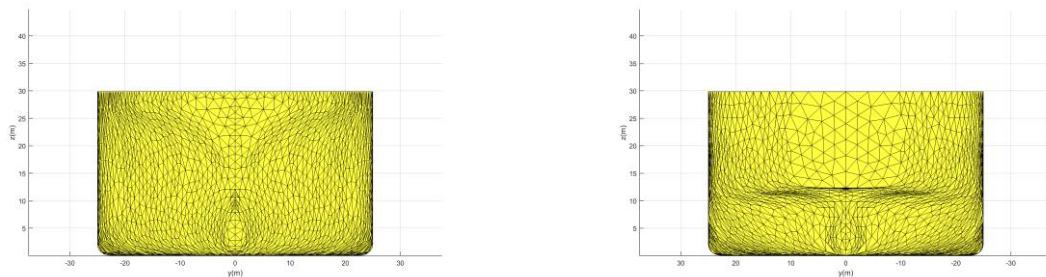
Date	January 2018
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Vessel ID	LNG-05
Hull file name	LNG-05.hull
Vessel type	LNG Tanker
Length over all (LOA) [m]	295.5
Length between perpendiculars (LPP) [m]	283.1
Breadth [m]	50.0
Design draught [m]	13.0
Height [m]	30.0
Hydrostatics for Design Draught	
Volume [m ³]	145028
Longitudinal Center of Buoyancy (LCB) [m]	141.5
Vertical Center of Buoyancy (VCB) [m]	6.72
Longitudinal Center of Floatation (LCF) [m]	131.63
Transversal moment of inertia of waterplane area IT [m ⁴]	2250000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	64800000
Block coefficient C _B [-]	0.79

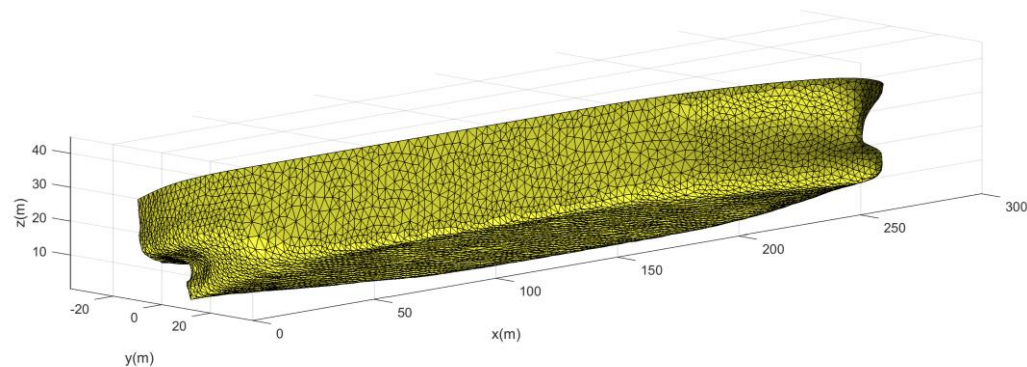
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

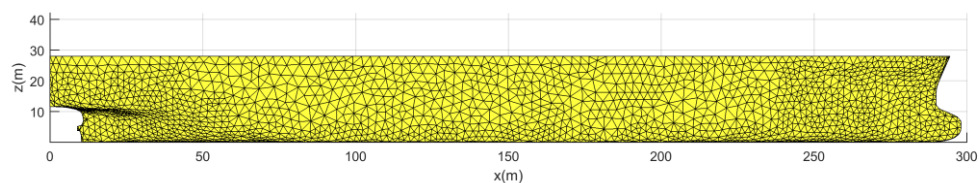


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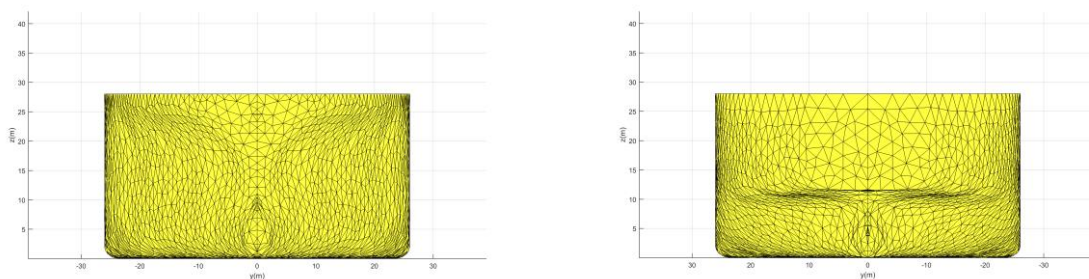
January 2018

Vessel ID	LNG-06
Hull file name	LNG-06.hull
Vessel type	LNG Tanker
Length over all (LOA) [m]	298.2
Length between perpendiculars (LPP) [m]	286.5
Breadth [m]	52.0
Design draught [m]	12.2
Height [m]	28.0
Hydrostatics for Design Draught	
Volume [m ³]	142086
Longitudinal Center of Buoyancy (LCB) [m]	143.0
Vertical Center of Buoyancy (VCB) [m]	6.30
Longitudinal Center of Floatation (LCF) [m]	133.22
Transversal moment of inertia of waterplane area IT [m ⁴]	2530000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	68000000
Block coefficient C _B [-]	0.78

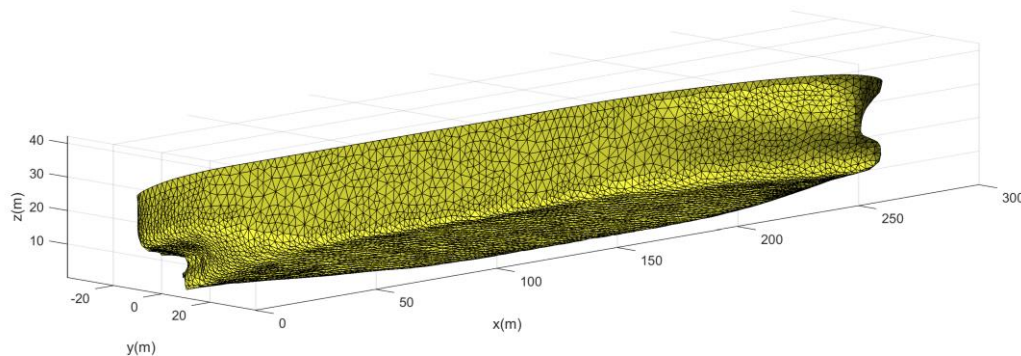
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

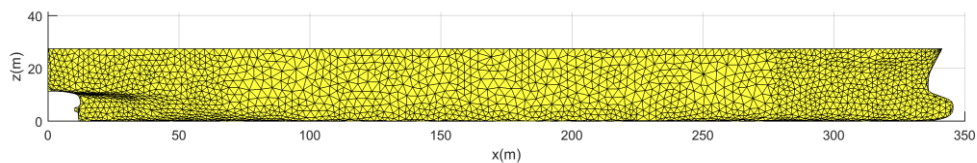


Date

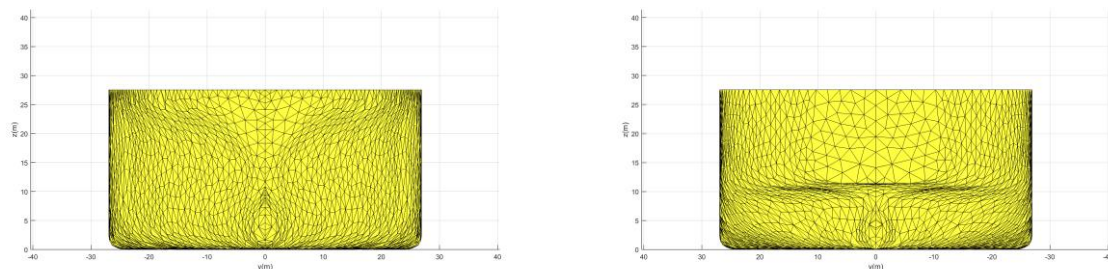
January 2018

Vessel ID	LNG-07
Hull file name	LNG-07.hull
Vessel type	LNG Tanker
Length over all (LOA) [m]	345.0
Length between perpendiculars (LPP) [m]	332.0
Breadth [m]	53.8
Design draught [m]	12.0
Height [m]	27.0
Hydrostatics for Design Draught	
Volume [m ³]	170755
Longitudinal Center of Buoyancy (LCB) [m]	165.7
Vertical Center of Buoyancy (VCB) [m]	6.19
Longitudinal Center of Floatation (LCF) [m]	154.84
Transversal moment of inertia of waterplane area IT [m ⁴]	3320000
Longitudinal moment of inertia of waterplane area IL [m ⁴]	113000000
Block coefficient C _B [-]	0.80

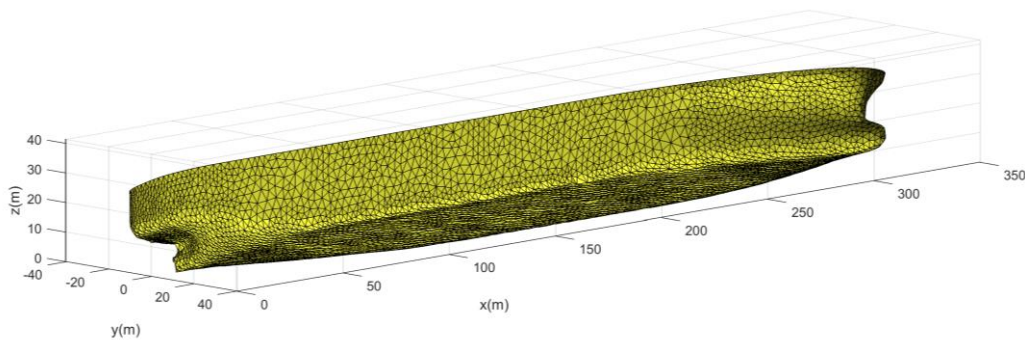
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view



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5 Tankers

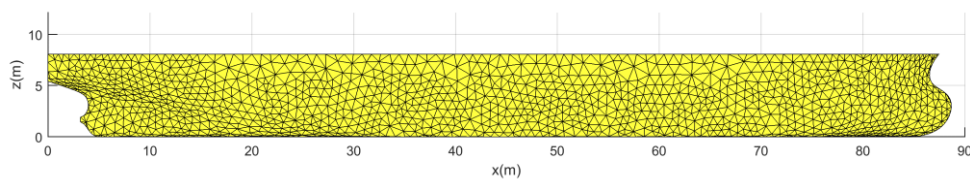
This section represents the vessel characteristics for wave response analyses for 9 representative scheduled tanker new buildings of the next years.

All tankers are generated generically. They are adjusted to fit the main dimensions of the individual new buildings.

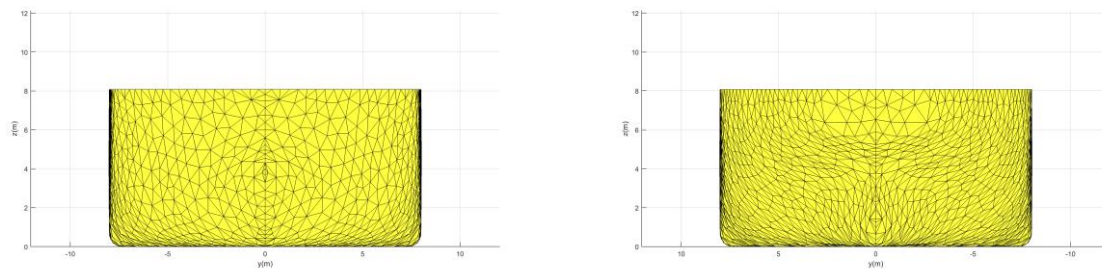
The hydrostatic characteristics such as the longitudinal Center of Buoyancy (LCB) and block coefficients (C_B) have been selected based on /1/ and /2/, respectively.

Vessel ID	Tan-01
Hull file name	Tan-01_Tanker_4500t.hull
Vessel type	Tanker, Small
Length over all (LOA) [m]	90.0
Length between perpendiculars (LPP) [m]	85.0
Breadth [m]	16.0
Design draught [m]	6.0
Height [m]	8.1
Capacity (TEU) [-]	4500
Hydrostatics for Design Draught	
Volume [m ³]	6775
Longitudinal Center of Buoyancy (LCB) [m]	45.5
Vertical Center of Buoyancy (VCB) [m]	3.12
Longitudinal Center of Floatation (LCF) [m]	42.64
Transversal moment of inertia of waterplane area IT [m ⁴]	21458
Longitudinal moment of inertia of waterplane area IL [m ⁴]	647587
Block coefficient cB [-]	0.83

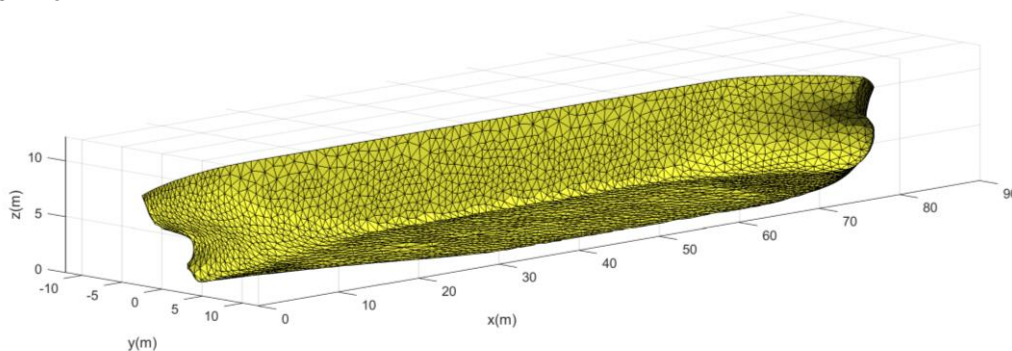
Longitudinal profile



Lateral profile (left: bow, right: aft)



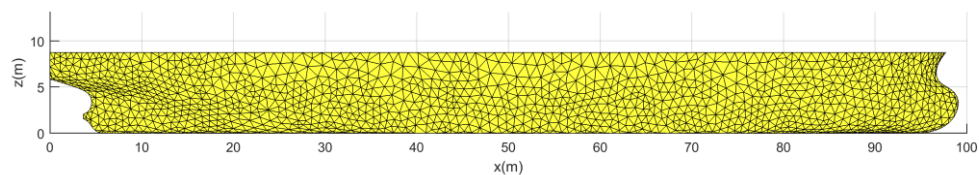
3D view



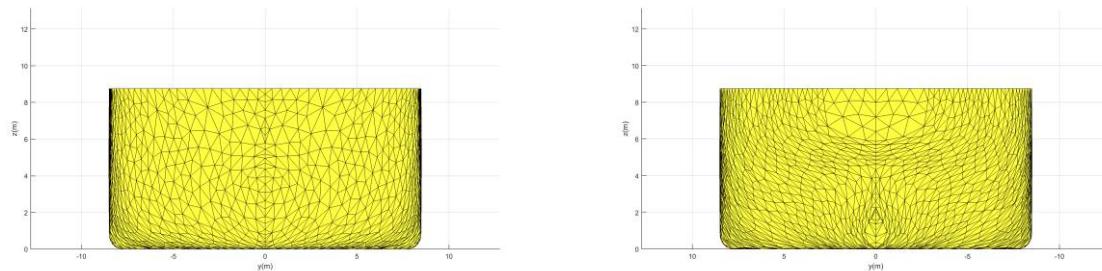
Date	March 2017
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Vessel ID	Tan-02
Hull file name	Tan-02_Tanker_6200t.hull
Vessel type	Tanker, Small
Length over all (LOA) [m]	100.0
Length between perpendiculars (LPP) [m]	95.0
Breadth [m]	17.0
Design draught [m]	6.5
Height [m]	8.8
Capacity (TEU) [-]	6200
Hydrostatics for Design Draught	
Volume [m ³]	8586
Longitudinal Center of Buoyancy (LCB) [m]	50.8
Vertical Center of Buoyancy (VCB) [m]	3.39
Longitudinal Center of Floatation (LCF) [m]	47.60
Transversal moment of inertia of waterplane area IT [m ⁴]	31750
Longitudinal moment of inertia of waterplane area IL [m ⁴]	941860
Block coefficient c_B [-]	0.82

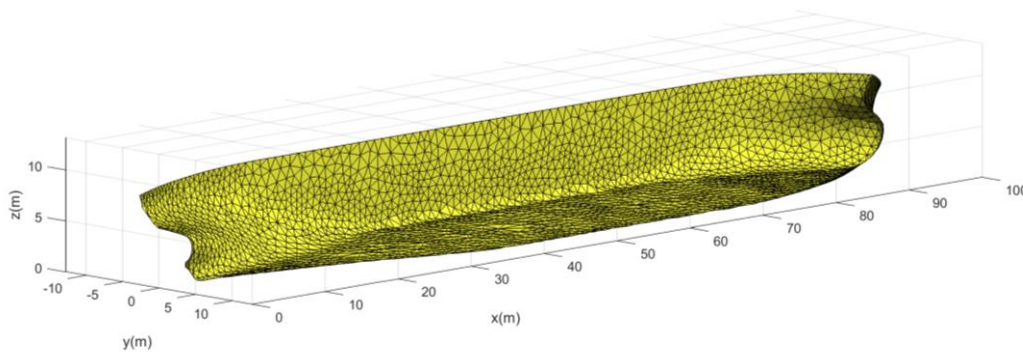
Longitudinal profile



Lateral profile (left: bow, right: aft)



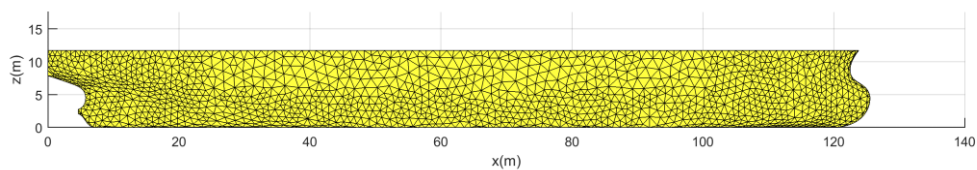
3D view



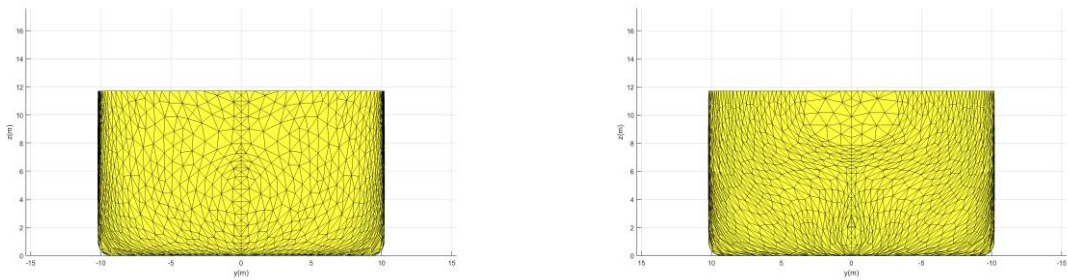
Date	March 2017
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Vessel ID	Tan-03
Hull file name	Tan-03_Tanker_13100t.hull
Vessel type	Tanker, Handy
Length over all (LOA) [m]	128.6
Length between perpendiculars (LPP) [m]	120.4
Breadth [m]	20.4
Design draught [m]	8.7
Height [m]	11.7
Capacity (TEU) [-]	13100
Hydrostatics for Design Draught	
Volume [m ³]	17524
Longitudinal Center of Buoyancy (LCB) [m]	64.4
Vertical Center of Buoyancy (VCB) [m]	4.54
Longitudinal Center of Floatation (LCF) [m]	60.31
Transversal moment of inertia of waterplane area IT [m ⁴]	69770
Longitudinal moment of inertia of waterplane area IL [m ⁴]	2304440
Block coefficient c_B [-]	0.82

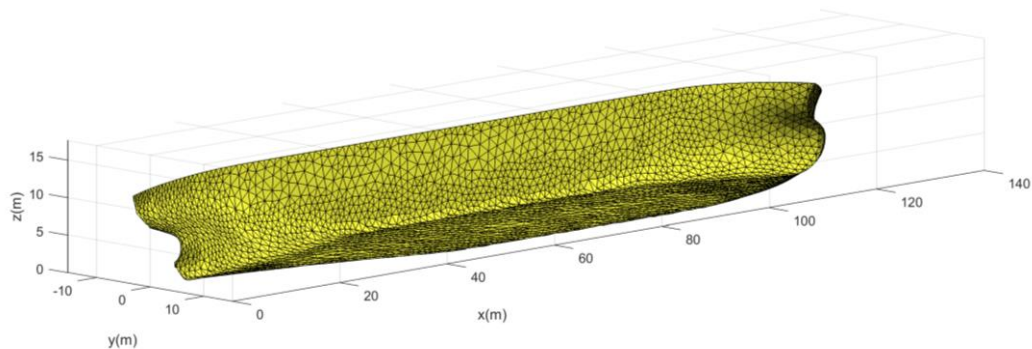
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

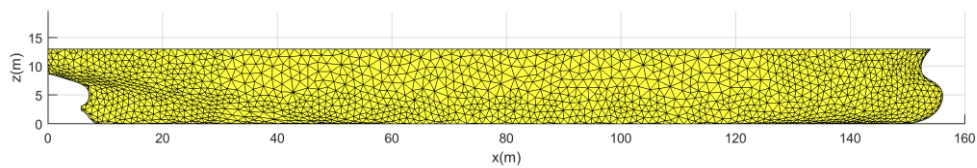


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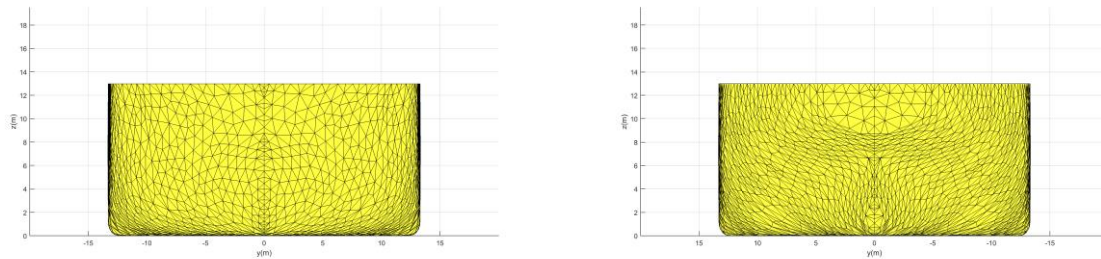
March 2017

Vessel ID	Tan-04
Hull file name	Tan-04_Tanker_25000t.hull
Vessel type	Tanker, Handy
Length over all (LOA) [m]	158.8
Length between perpendiculars (LPP) [m]	149.8
Breadth [m]	26.6
Design draught [m]	9.7
Height [m]	13.0
Capacity (TEU) [-]	25000
Hydrostatics for Design Draught	
Volume [m ³]	31535
Longitudinal Center of Buoyancy (LCB) [m]	80.2
Vertical Center of Buoyancy (VCB) [m]	5.03
Longitudinal Center of Floatation (LCF) [m]	74.99
Transversal moment of inertia of waterplane area IT [m ⁴]	192757
Longitudinal moment of inertia of waterplane area IL [m ⁴]	5778850
Block coefficient c_B [-]	0.82

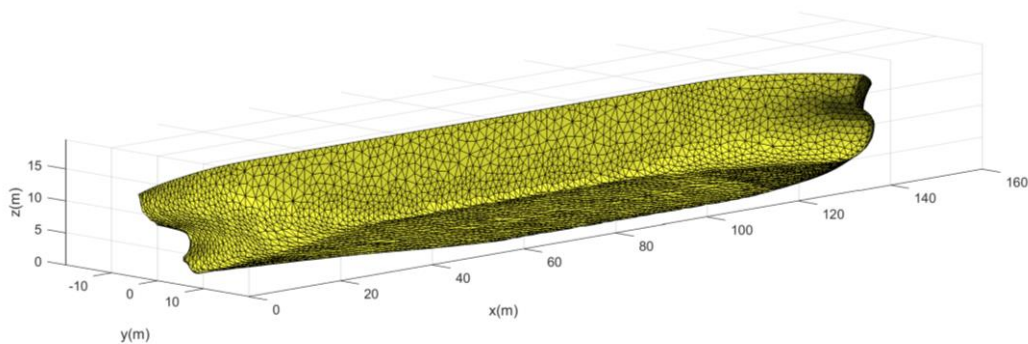
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

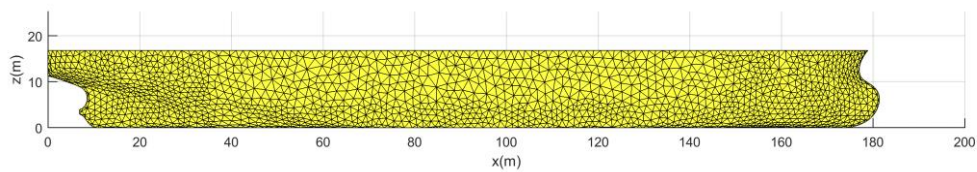


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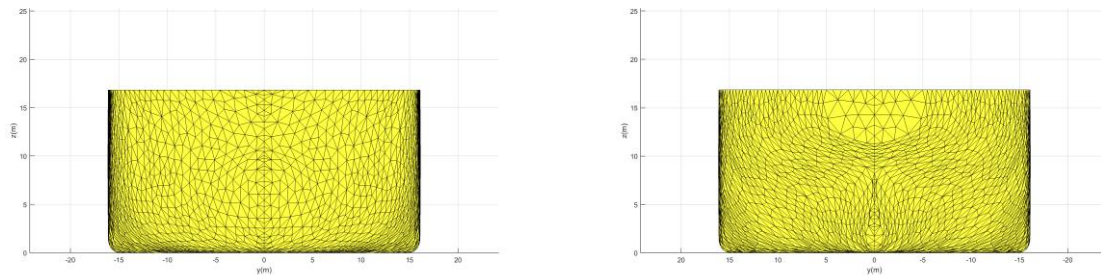
March 2017

Vessel ID	Tan-05
Hull file name	Tan-05_Tanker_47000t.hull
Vessel type	Tanker, MR2
Length over all (LOA) [m]	182.9
Length between perpendiculars (LPP) [m]	174.0
Breadth [m]	32.2
Design draught [m]	12.5
Height [m]	16.8
Capacity (TEU) [-]	47000
Hydrostatics for Design Draught	
Volume [m ³]	56725
Longitudinal Center of Buoyancy (LCB) [m]	92.9
Vertical Center of Buoyancy (VCB) [m]	6.54
Longitudinal Center of Floatation (LCF) [m]	86.89
Transversal moment of inertia of waterplane area IT [m ⁴]	390871
Longitudinal moment of inertia of waterplane area IL [m ⁴]	10799300
Block coefficient c_B [-]	0.81

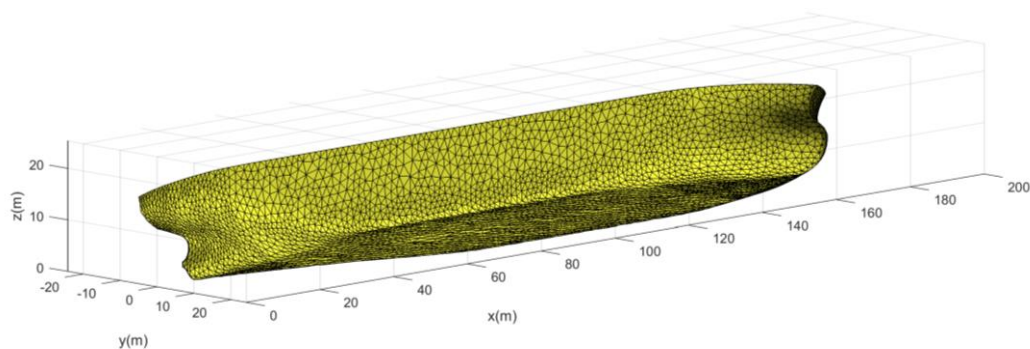
Longitudinal profile



Lateral profile (left: bow, right: aft)



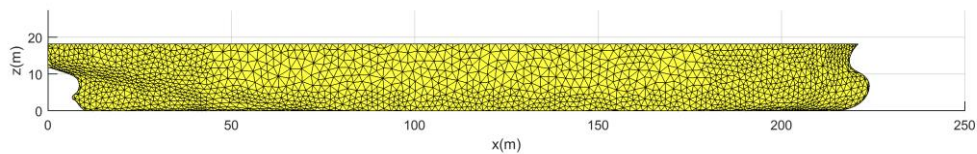
3D view



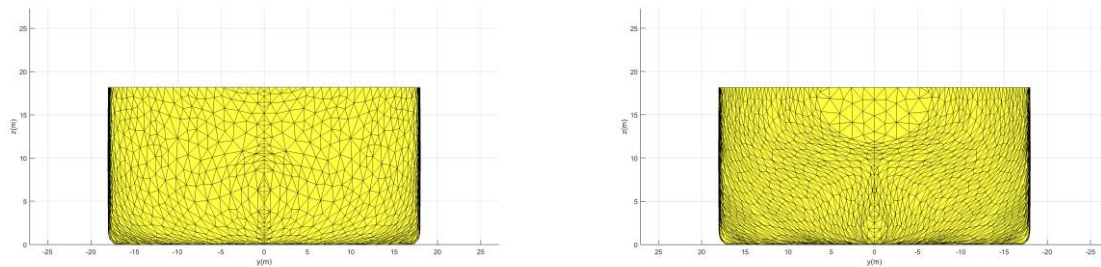
Date	March 2017
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Vessel ID	Tan-06
Hull file name	Tan-06_Tanker_71600t.hull
Vessel type	Tanker, Panamax
Length over all (LOA) [m]	224.0
Length between perpendiculars (LPP) [m]	216.0
Breadth [m]	36.0
Design draught [m]	13.5
Height [m]	18.2
Capacity (TEU) [-]	71600
Hydrostatics for Design Draught	
Volume [m ³]	88110
Longitudinal Center of Buoyancy (LCB) [m]	115.8
Vertical Center of Buoyancy (VCB) [m]	7.01
Longitudinal Center of Floatation (LCF) [m]	108.77
Transversal moment of inertia of waterplane area IT [m ⁴]	710347
Longitudinal moment of inertia of waterplane area IL [m ⁴]	24213100
Block coefficient c_B [-]	0.84

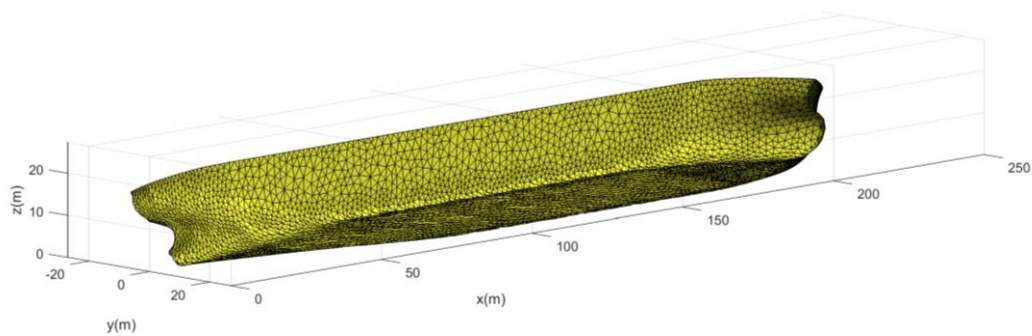
Longitudinal profile



Lateral profile (left: bow, right: aft)



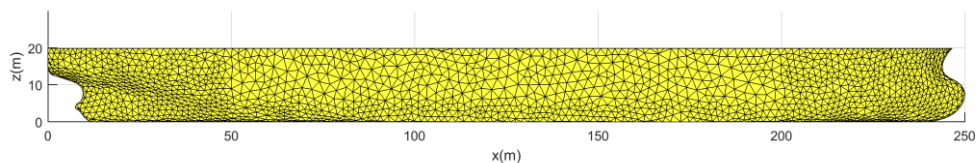
3D view



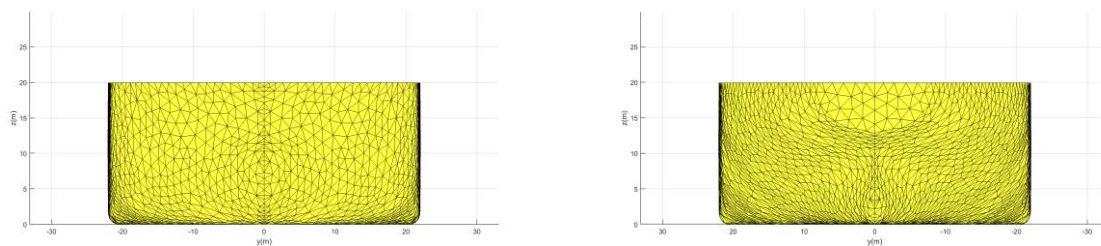
Date	March 2017
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Vessel ID	Tan-07
Hull file name	Tan-07_Tanker_114600t.hull
Vessel type	Tanker, Aframax
Length over all (LOA) [m]	250.0
Length between perpendiculars (LPP) [m]	241.0
Breadth [m]	44.0
Design draught [m]	14.8
Height [m]	19.9
Capacity (TEU) [-]	114600
Hydrostatics for Design Draught	
Volume [m ³]	131818
Longitudinal Center of Buoyancy (LCB) [m]	129.2
Vertical Center of Buoyancy (VCB) [m]	7.68
Longitudinal Center of Floatation (LCF) [m]	121.38
Transversal moment of inertia of waterplane area IT [m ⁴]	1446500
Longitudinal moment of inertia of waterplane area IL [m ⁴]	41024700
Block coefficient c_B [-]	0.84

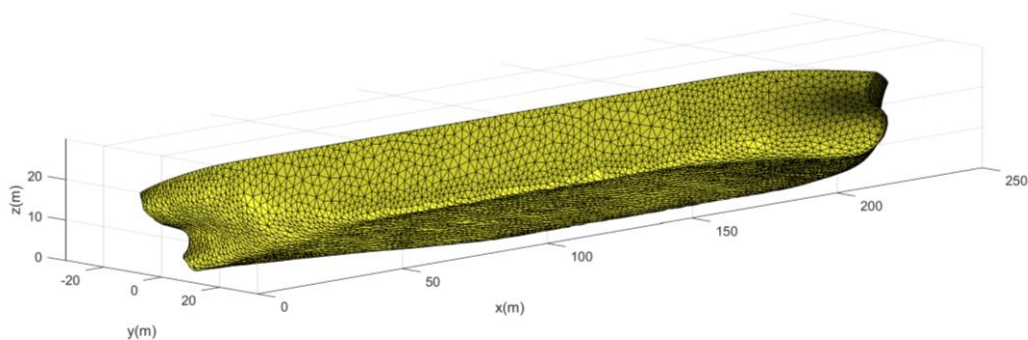
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

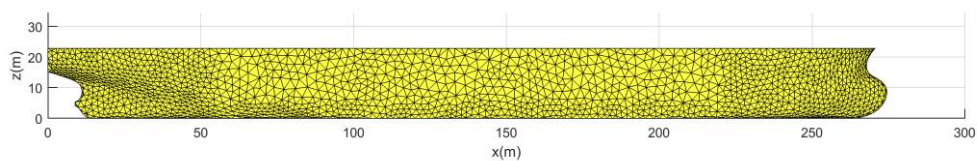


Date

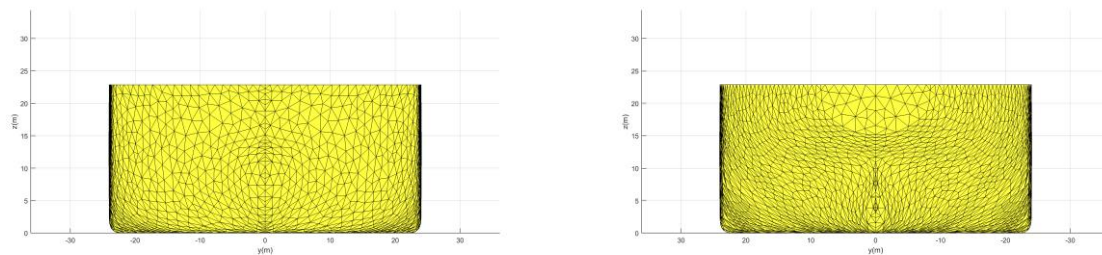
March 2017

Vessel ID	Tan-08
Hull file name	Tan-08_Tanker_156900t.hull
Vessel type	Tanker, Suezmax
Length over all (LOA) [m]	274.5
Length between perpendiculars (LPP) [m]	264.0
Breadth [m]	48.0
Design draught [m]	17.0
Height [m]	22.9
Capacity (TEU) [-]	156900
Hydrostatics for Design Draught	
Volume [m ³]	180934
Longitudinal Center of Buoyancy (LCB) [m]	141.5
Vertical Center of Buoyancy (VCB) [m]	8.83
Longitudinal Center of Floatation (LCF) [m]	132.88
Transversal moment of inertia of waterplane area IT [m ⁴]	2056830
Longitudinal moment of inertia of waterplane area IL [m ⁴]	59000000
Block coefficient c_B [-]	0.84

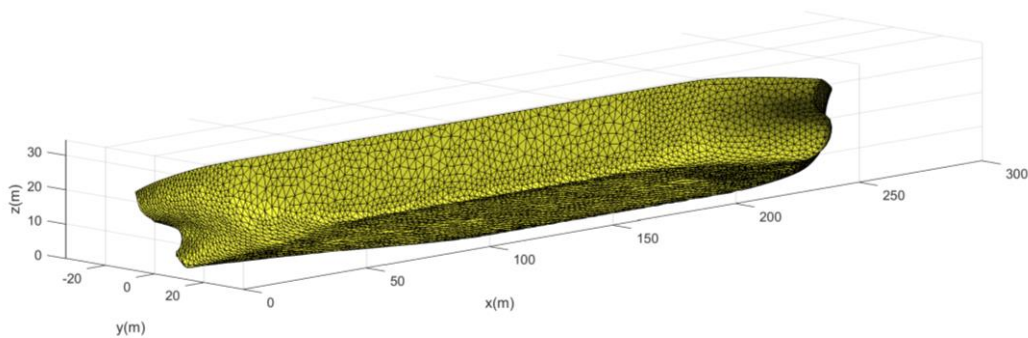
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view

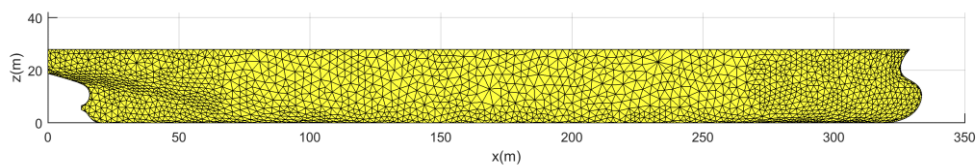


Date

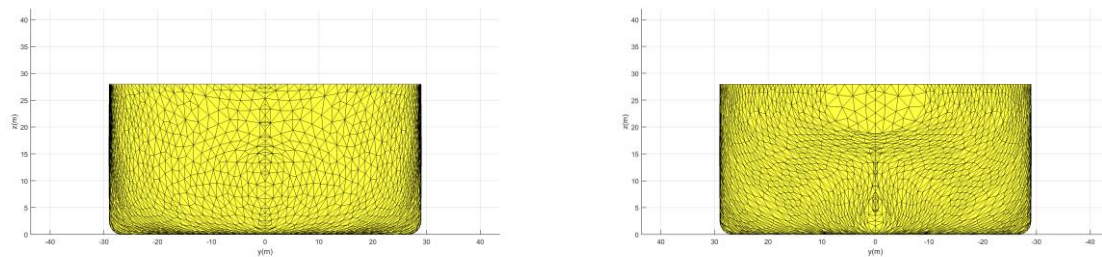
March 2017

Vessel ID	Tan-09
Hull file name	Tan-09_300000t.hull
Vessel type	Tanker, CC
Length over all (LOA) [m]	325.5
Length between perpendiculars (LPP) [m]	320.0
Breadth [m]	58.0
Design draught [m]	20.8
Height [m]	28.0
Capacity (TEU) [-]	300000
Hydrostatics for Design Draught	
Volume [m ³]	322581
Longitudinal Center of Buoyancy (LCB) [m]	171.2
Vertical Center of Buoyancy (VCB) [m]	10.87
Longitudinal Center of Floatation (LCF) [m]	160.14
Transversal moment of inertia of waterplane area IT [m ⁴]	4196290
Longitudinal moment of inertia of waterplane area IL [m ⁴]	120987000
Block coefficient c_B [-]	0.84

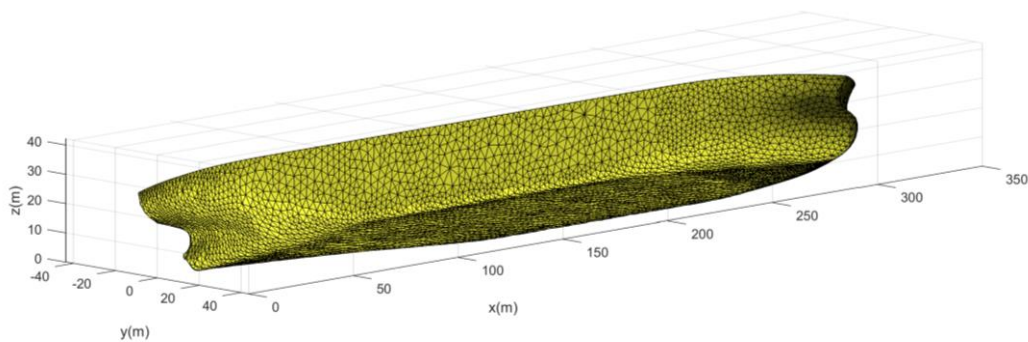
Longitudinal profile



Lateral profile (left: bow, right: aft)



3D view



Date	March 2017
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6 References

- /1/ Practical Ship Design, Elsevier Ocean Engineering Book Series, Vol. 1, D.G.M. Watson, 1998.
- /2/ Determination of Regression Formulas for Main Dimensions of Tankers and Bulk Carriers based on HIS Fairplay Data, DTU, Work Package 2, September 2012.
- /3/ Statistical Analysis and Determination of Regression Formulas for main Dimensions of Container Ships, DTU, 2013.