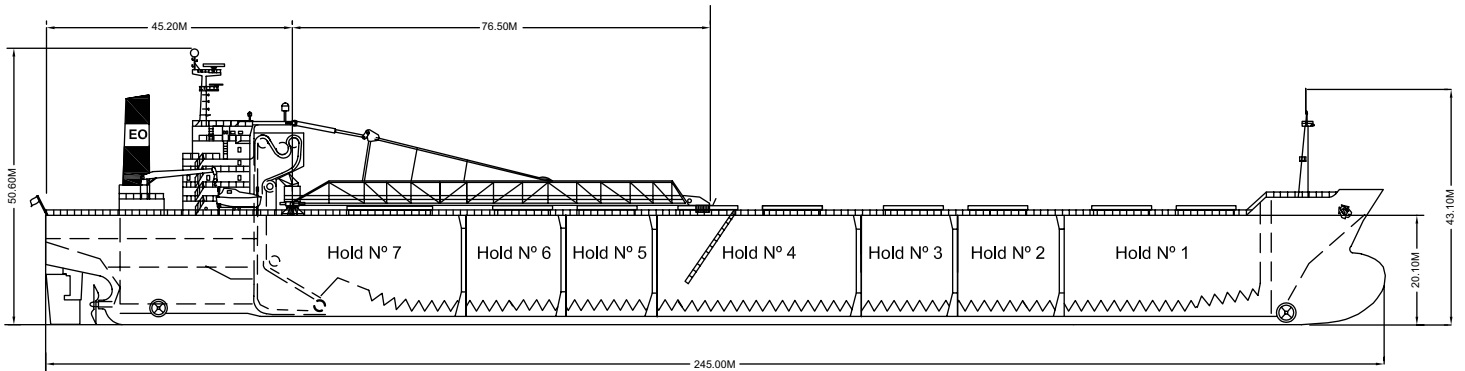
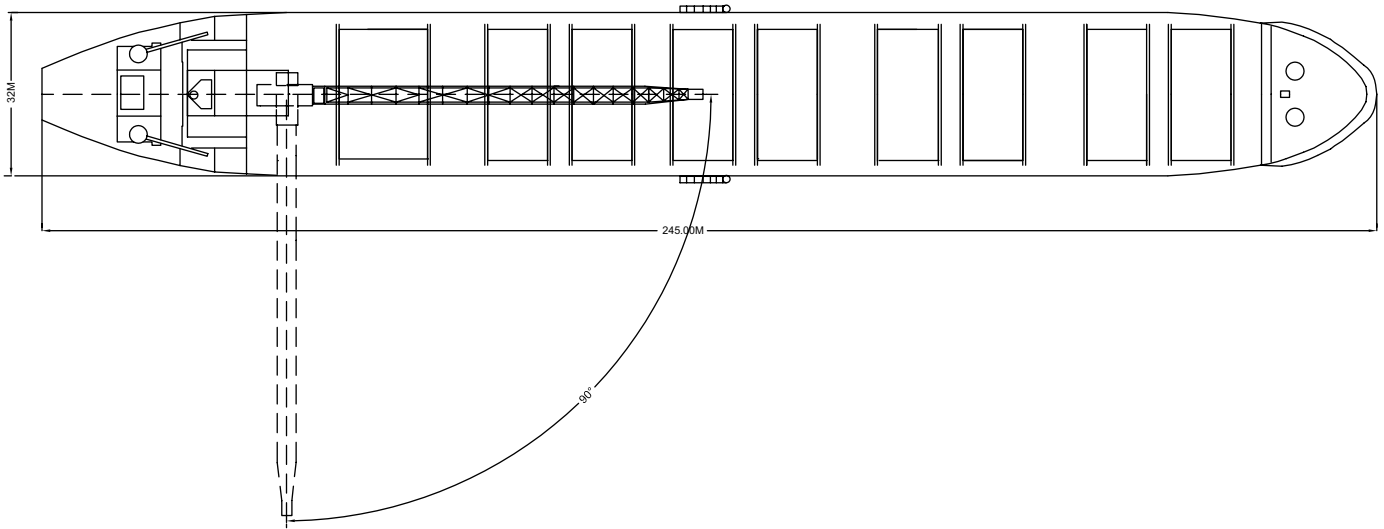
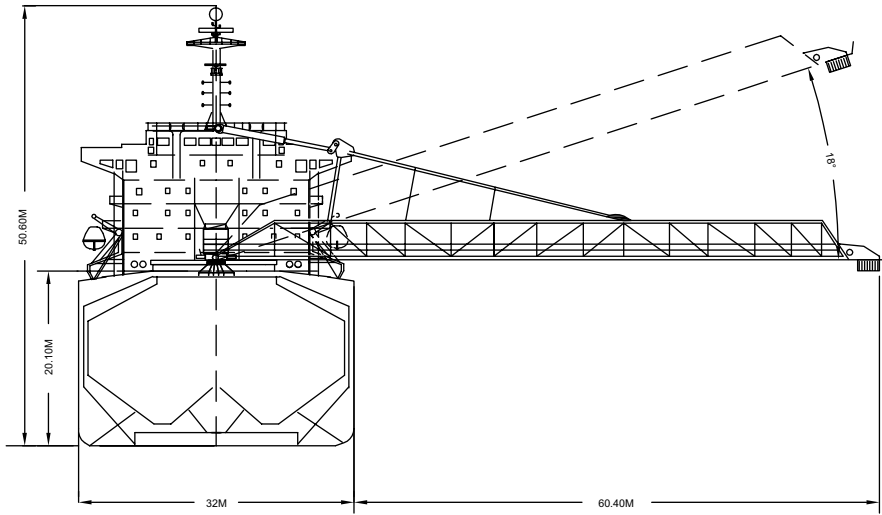




The Bernhard Oldendorff discharges onto an open stockpile at a power plant at Salem, MA.

Built	.....	1991
Classification	.....	DNV+1A1
Length Overall	.....	245.00 metres
Breadth Moulded	.....	32.20 metres
Depth Moulded	.....	20.10 metres
Total Hold Capacity (including hatches)	.....	72,105.7 cubic metres
Deadweight	Summer	77,548.5 tonnes
Draft	Summer	14,017 metres
Gross Tonnage	.....	43,332 tonnes
Net Tonnage	.....	19,471 tonnes
Bow Thruster	.....	1,839 kW
Stern Thruster	.....	1,000 kW
Length of Boom	76.50 metres
Discharge Rate	-Coal	4,000 tonnes/hr
	-Ore	6,000 tonnes/hr



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Air Drafts												
(metres)												
Draft Condition	Stem	Foremast	Hatches			Cargo Gear	Main Mast		Funnel	Stern	Other Obstruction*	Maximum
			Forward	Midship	Aft		Deployed	Lowered				
Keel	20.60	43.10	24.60	22.15	22.15	N/A	50.60	-1.0	43.00	N/A	N/A	50.60
Light Ship	17.00	42.10	23.74	19.78	19.78	N/A	46.40	-1.0	39.20	N/A	N/A	46.40
Normal Ballast 50% Bunker	13.26	37.10	18.81	15.46	15.46	N/A	42.66	-1.0	35.40	N/A	N/A	42.66
Fully Loaded 50% Bunker	7.18	29.10	10.48	8.13	8.13	N/A	36.58	-1.0	29.00	N/A	N/A	36.58

Hatch and Hold Specifications									
Hold Number	1	2	3	4	5	6	7	TOTAL	
Hold Volumes (cubic metres)									
Cubic	14,842.9	8,114.3	7,398.6	15,640.2	8,114.3	7,398.6	10,594.8	72,103.7	
Maximum Grain	14,842.9	8,114.3	7,398.6	15,640.2	8,114.3	7,398.6	10,594.8	72,103.7	
Grain in way of Hatch	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Hold Openings (metres)									
Number of Openings	2	1	1	2	1	1	1	9	
Opening Length	10.20	10.20	10.20	10.20	10.20	10.20	15.30		
Opening Width	14.40	14.40	14.40	14.40	14.40	14.40	14.40		
Coaming Height above Keel	21.50	21.50	21.50	21.50	21.50	21.50	21.50		
Hatch Information (metres)									
Description	Side-rolling Panels Hydraulic	Side-rolling Panels Hydraulic	Side-rolling Panels Hydraulic	Side-rolling Panels Hydraulic	Side-rolling Panels Hydraulic	Side-rolling Panels Hydraulic	Side-rolling Panels Hydraulic		
Operation	2x				2x				
Hatch Length	10.20*	10.20	10.20	10.20*	10.20	10.20	15.30		
Hatch Width	14.40	14.40	14.40	14.40	14.40	14.40	14.40		
Hatch Top Height above Keel	22.15	22.15	22.15	22.15	22.15	22.15	22.15		

*7 Holds, 9 Hatches

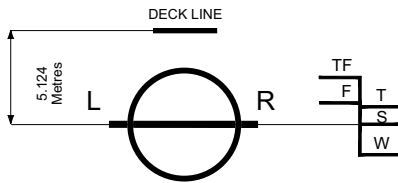
Cargo Handling Equipment
• Unloading Equipment: Consilium System
• Two hold conveyors, two cross conveyors, one lift conveyor and one boom conveyor
• Dust Suppression System: Water Spray System Main Chute & end of the Boom
• Unloader Boom Length: 76.50 metres
• Discharge Rate - Coal: 4,000 tonnes/hr Ore: 6,000 tonnes/hr
• Maximum Boom Outreach: 60.40 metres

Consumption (tonnes per day)				
	Speed		Main Engine	Generators
	Loaded	Ballast			IFO	MDO
Sea	14 knots	14.8 knots	37	0
Port / Anchorage			4	0
Loading / Discharge			8	0.3*

* For start up add Generators.

For more information on this ship please visit www.cslships.com





ASSIGNED DRAFTS			
Season	Draft (metre)	Displ. (tonnes)	DWT (tonnes)
TF	14.63	92,989	79,588
F	14.34	90,948	77,547
T	14.31	93,035	79,635
S	14.02	90,949	77,549
W	13.73	88,867	75,467

DEADWEIGHT SCALE									
DRAFT				DISPLACEMENT	TPC	DEADWEIGHT	DRAFT		
Sea Water		Fresh Water					Sea Water		
(metre)	(feet)	(metre)	(feet)	(tonnes)	(tonnes)	(tonnes)	(feet)	(metre)	
	48	15	48			80,000	48		
14	46		46	90,000			46	14	
	44	14	44				44		
13	42	13	42			70,000	42	13	
	40		40	80,000	70		40	12	
12	38	12	38				38		
	36		36	70,000			36	11	
11	34	11	34				34		
	32		32		68	50,000	32	10	
10	30	10	30	60,000			30	9	
	28	9	28			40,000	28		
9	26	8	26	50,000			26	8	
	24		24		66		24		
8	22	7	22				22	7	
	20		20	40,000			20	6	
7	18	6	18				18		
	16		16	30,000	64		16	5	
6	14	5	14				14		
	12		12			10,000	12	4	
5	10	4	10	20,000			10	3	
	8	3	8		62		8		
4			9						

Light Ship
13,400 tonnes

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