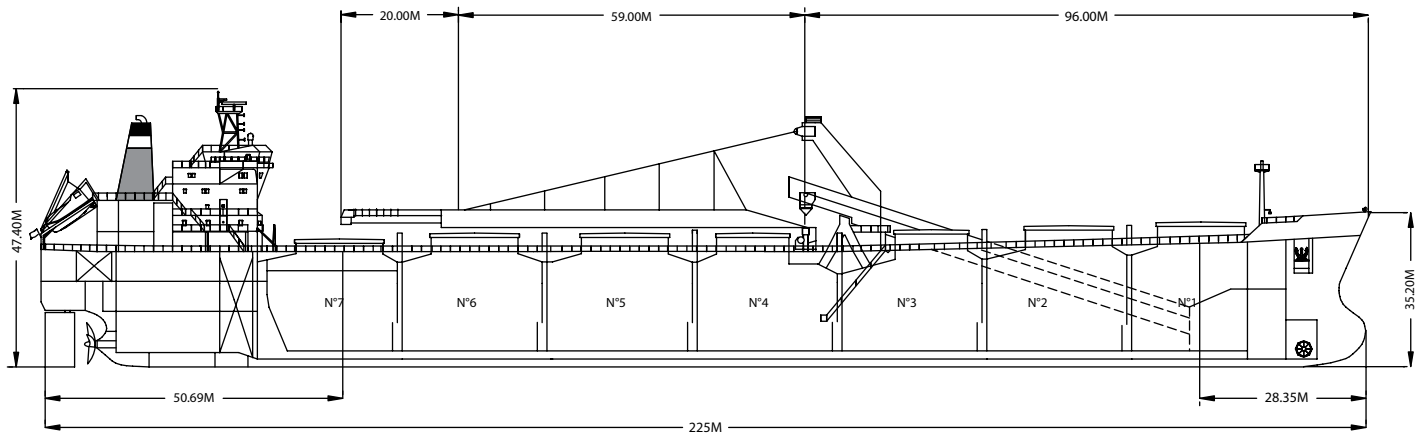
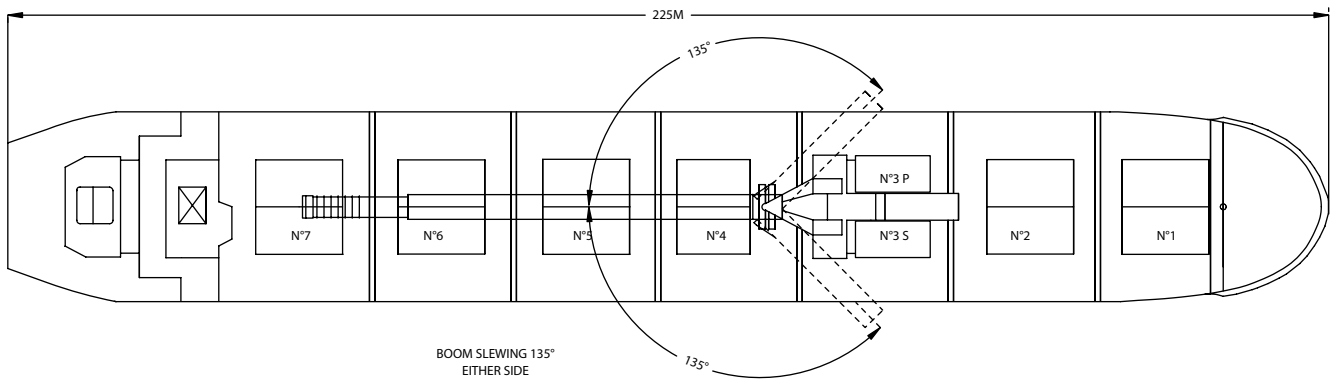
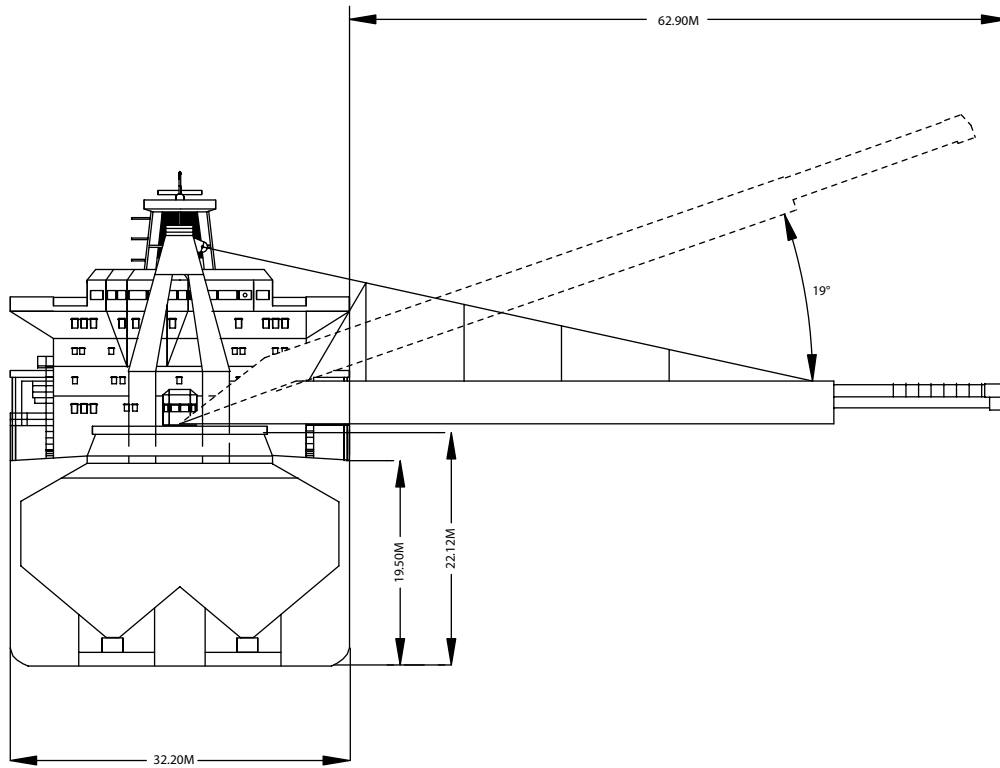




The CSL Spirit unloading at Long Beach, CA.

Built	.....	2001
Classification	.....	DNV + 1A1
Length Overall	.....	225.02 metres
Breadth Moulded	.....	32.19 metres
Depth Moulded	.....	19.51 metres
Total Hold Capacity (including hatches)	.....	66,333.24 cubic metres
Deadweight	.....	70,018 tonnes
Draft	.....	14.42 metres
Gross Tonnage	.....	41,428 tonnes
Net Tonnage	.....	19,172 tonnes
Bow Thruster	.....	1325 kW
Length of Boom	79.00 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	26.36	35.40	24.30	22.46	21.55	43.11	47.28	N/A	42.7	20.00	25.90	47.28
Light Ship	24.55	33.37	22.27	19.00	16.69	40.10	43.05	N/A	38.3	15.34	23.05	43.05
Normal Ballast 50% Bunker	18.71	27.65	16.55	13.53	12.65	34.94	38.54	N/A	33.9	11.10	17.81	38.54
Fully Loaded 50% Bunker	12.21	21.20	10.10	10.11	6.87	28.74	32.67	N/A	28.1	5.32	11.56	32.67

*Incline Belt Gallery max. elevation (above Keel) over aft part of Hold No.3 (may affect loading of the opposite side of the Hold)

Hatch and Hold Specifications									
Hold Number	1	2	3	4	5	6	7	TOTAL	
Hold Volumes (cubic metres)									
Cubic	8,064.2	9,779.9	9,187.7	9,088.4	9,705.0	9,772.2	8664.8	64262.1	
Maximum Grain	8,335.9	10,044.6	9,545.0	9,556.1	9,925.4	9,992.6	8,933.7	66333.2	
Grain in way of Hatch	271.7	264.6	357.3	467.7	220.4	220.4	268.9	2071.2	
Hold Openings (metres)									
Number of Openings	1	1	2	1	1	1	1	8	
Opening Length	14.76	14.76	12.30	12.30	14.76	14.76	14.76		
Opening Width	16.00	16.00	5.80	16.00	16.00	16.00	16.00		
Coaming Height above Keel	23.90	23.20	22.50	22.03	22.10	22.10	21.10		
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	Side-rolling Panels Hydraulic	
Operation Hatch Length	15.06	15.06	12.62	12.60	15.06	15.06	15.06	15.06	
Hatch Width	8.15	8.15	6.12	8.15	8.15	8.15	8.15	8.15	
Hatch Top Height above Keel	24.85	24.15	23.45	22.97	23.05	23.05	22.05	22.05	

Cargo Handling Equipment
• Telescopic boom
• A shuttle-type conveyor is fitted at the toe and extends boom 20m
• Two 3.5 m/s hold conveyors
• Two 4.3 m/s transfer conveyors. One 4.5 m/s inclined belt.
• All belts 1.8m wide with 35 degree trough
• Dust Suppression: All holds and transfer points are fitted with positive air pressure dust collectors plus water sprayers.
• Unloader Inner Boom Length: 59.00 metres
• Discharge Rate - Coal: 4,000 tonnes/hr - Ore: 6,000 tonnes/hr
• Maximum Boom Outreach: 62.90 metres

Consumption (tonnes per day)				
	Speed		Main Engine	Generators
	Loaded	Ballast	IFO	MDO
Sea	15.3 knots	15.9 knots	46	0.1
Port / Anchorage			5	0.3
Loading / Discharge			7	0.3

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



