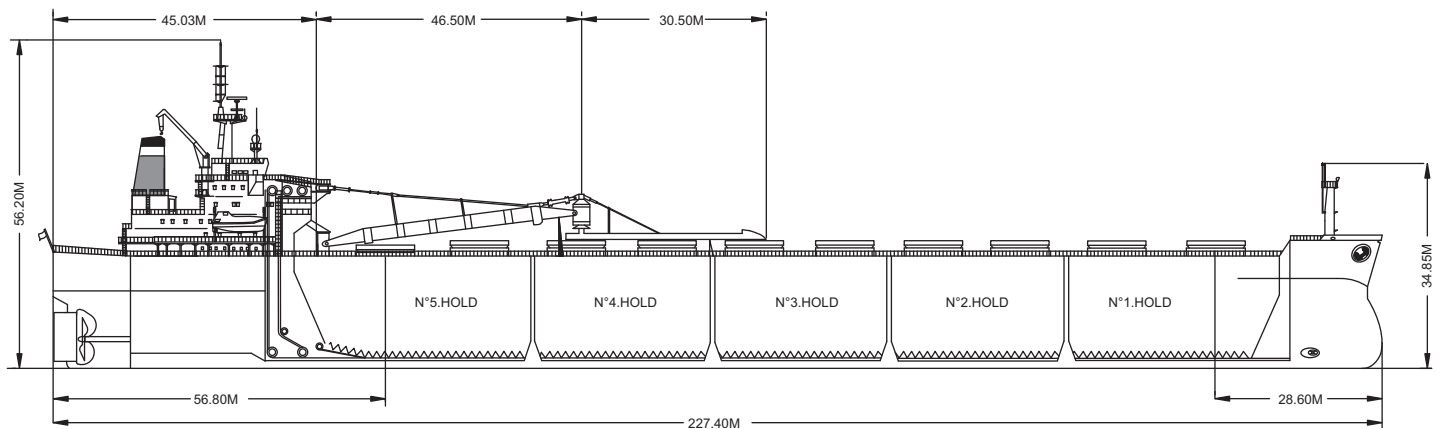
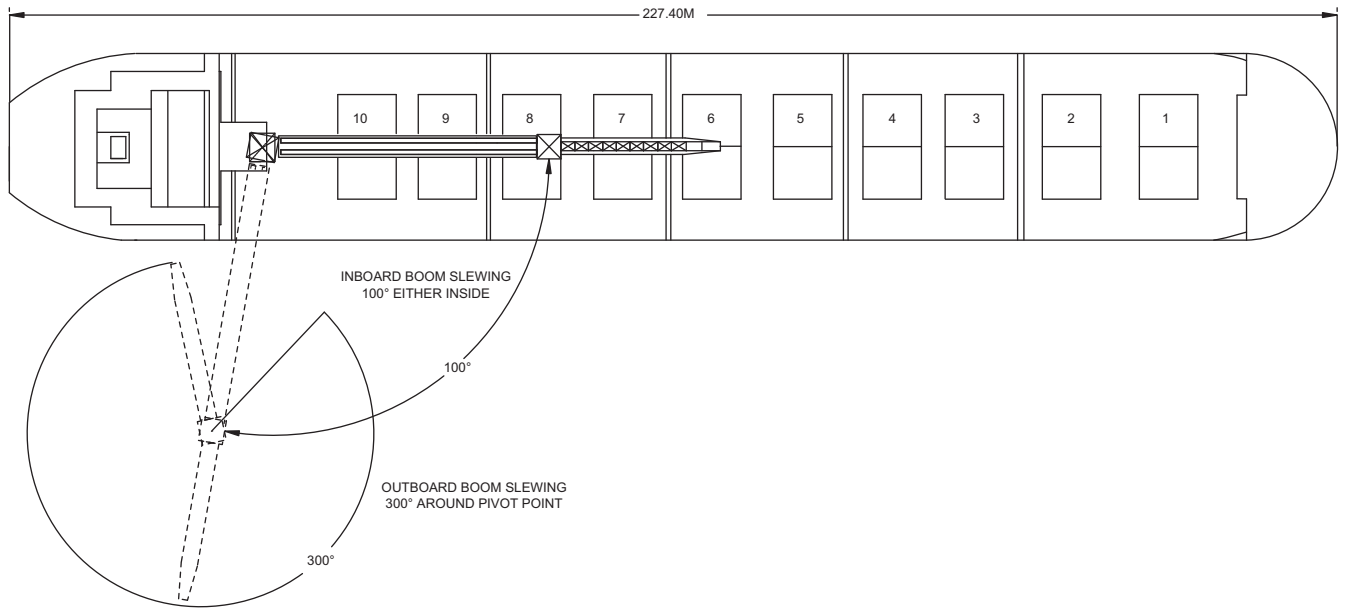
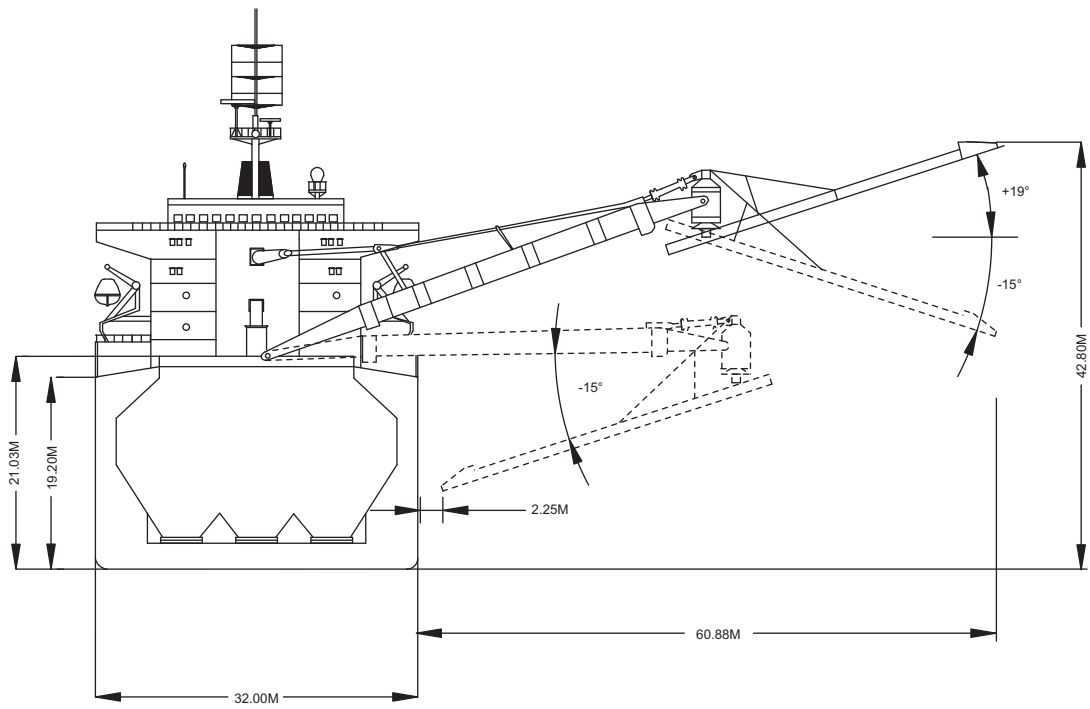




The CSL Atlas uses her articulated boom to unload into a gearless bulker alongside.

Built	.....	1990
Classification	.....	Lloyds +100 A1
Length Overall	.....	227.40 metres
Breadth Moulded	.....	32.00 metres
Depth Moulded	.....	19.23 metres
Total Hold Capacity (including hatches)	.....	70,737 cubic metres
Deadweight	.....	67,634 tonnes
Draft	.....	13.418 metres
Gross Tonnage	.....	41,173 tonnes
Net Tonnage	.....	21,901 tonnes
Bow Thruster	.....	1100 kW
Length of Boom	.....	77.00 metres
Discharge Rate	-Coal	3,000 tonnes/hr
	-Ore	4,500 tonnes/hr

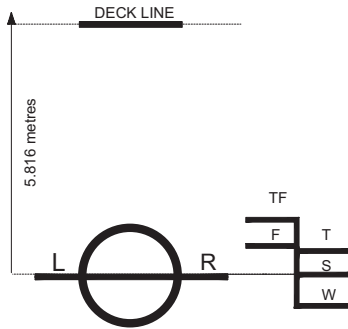


Air Drafts												
(metres)												
Draft Condition	Stem	Foremast	Hatches			Cargo Gear	Main Mast		Funnel	Stern	Other Obstruction	Maximum
			Forward	Midship	Aft		Deployed	Lowered				
Keel	24.05	34.20	22.60	22.00	22.00	42.80	54.90	48.40	43.00	19.80	top of mast lowered	48.40
Light Ship	23.97	33.40	21.50	19.00	17.00	40.00	49.50	43.30	38.00	14.80	top of mast lowered	49.50
Normal Ballast 50% Bunker	15.44	27.34	15.09	14.23	13.39	35.00	46.51	40.01	36.32	11.19	top of mast lowered	46.51
Fully Loaded 50% Bunker	12.58	21.60	10.20	8.80	7.80	29.40	40.80	34.60	29.40	13.89	top of mast lowered	34.60

Hatch and Hold Specifications									
Hold Number	1	2	3	4	5	6	7	TOTAL	
Hold Volumes (cubic metres)									
Cubic	16,403.0	12,334.0	12,334.0	12,316.0	14,625.0				68,012.0
Maximum Grain	16,983.0	12,914.0	12,914.0	12,896.0	15,030.0				70,737.0
Grain in way of Hatch	580.0	580.0	580.0	580.0	405.0				2,725.0
Hold Openings (metres)									
Number of Openings	2	2	2	2	2				10
Opening Length	9.96	9.96	9.96	9.96	9.96				
Opening Width	18.00	18.00	18.00	18.00	18.00				
Coaming Height above Keel	22.00	21.40	21.40	21.40	21.40				
Hatch Information (metres)									
Description	Two sections Side rolling	Two sections Side rolling	Two sections Side rolling	Two sections Side rolling	Two sections Side rolling				
Operation	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic				
Hatch Length	10.30	10.30	10.30	10.30	10.30				
Hatch Width	9.17	9.17	9.17	9.17	9.17				
Hatch Top Height above Keel	22.30	22.00	22.00	22.00	21.80				

Cargo Handling Equipment
• Articulated Boom
• 3 horizontal conveyor belts, 2 vertical elevator belts, articulated slewing boom, hydraulic vibrators on alternate gates, hopper slopes of 45 degrees
• Dust Suppression: Water Spray System
• Unloader Boom Length: 77.00 metres
• Discharge Rate - Coal: 3,000 tonnes/hr - Ore: 4,500 tonnes/hr
• Maximum Boom Outreach: 60.88 metres

Consumption (tonnes per day)				
	Speed		Main Engine	Generators
	Loaded	Ballast		
Sea	13.5 knots	14 knots	45	0.5
Port / Anchorage			3	0.5
Loading / Discharge			0	5.3



ASSIGNED DRAFTS			
Season	Draft (metre)	Displ. (tonnes)	DWT (tonnes)
TF	14.01	85,526	89,446
F	13.73	83,714	67,634
T	13.70	85,568	69,488
S	13.42	83,714	67,634
W	13.14	81,865	65,785

Light Ship
16,080 tonnes

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		
14	46		48	90,000			46	14	
	44	14	46			70,000	44		
13	42		44	80,000	66		42	13	
	40	13	42			60,000	40	12	
12	38		40				38		
	36	12	38	70,000			36	11	
11	34		36			50,000	34		
	32	11	34				32	10	
10	30		32	60,000			30	9	
	28	10	30		64	40,000	28		
9	26		28	50,000			26	8	
	24	9	26			30,000	24	7	
8	22		24				22		
	20	8	22	40,000		20,000	20	6	
7	18		20				18	5	
	16	7	18	30,000			16		
6	14		16		62	10,000	14	4	
	12	6	14				12		
5	10		12	20,000			10	3	
	8	5	10				8		
4			8		60				

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