



TECHNICAL SPECIFICATIONS

Built	2001
Classification	Lloyd's Register
Length Overall	197.10 metres
Length B.P. (Lpp)	188.40 metres
Breadth Moulded	32.20 metres
Depth Moulded	17.75 metres
Total Hold Capacity (including hatches)	45,708.60 cubic metres
Deadweight	47,761 tonnes
Draft - Summer	11.517 metres
Gross Tonnage	32,881 tonnes
Net Tonnage	10,246 tonnes
Bow Thruster	1,125 kW
Length of Boom	76.50 metres
Discharge Rate – Coal, Gypsum, Aggregates	2,500 tonnes/hour
Discharge Rate – Iron Ore	3,000 tonnes/hour

MV *CSL Frontier* is a self-unloading bulk carrier with four cargo holds, strengthened for heavy cargoes, loaded through eight hatches.

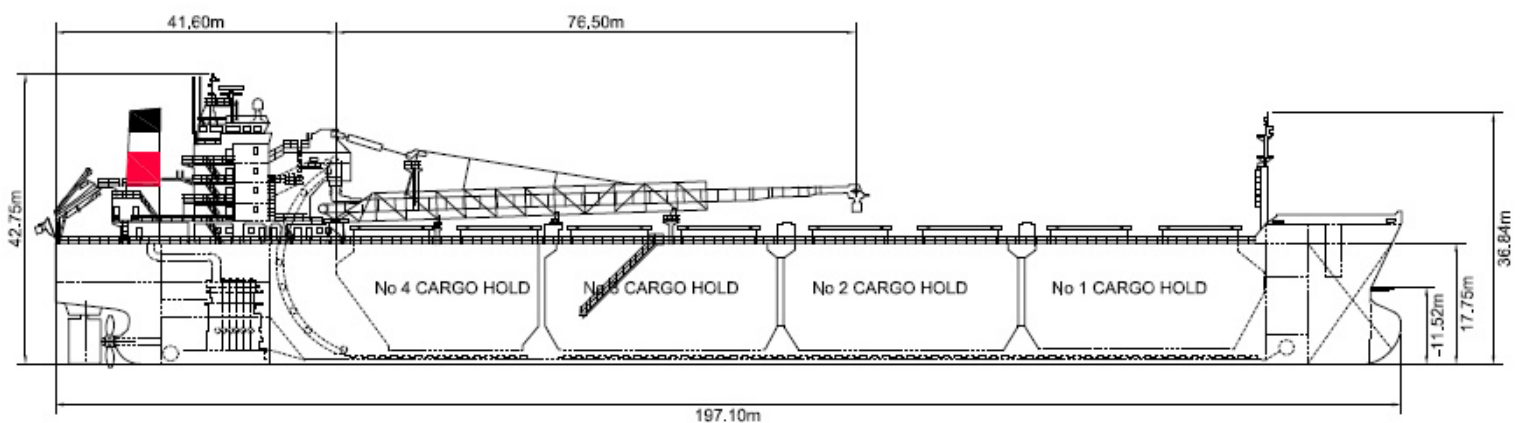
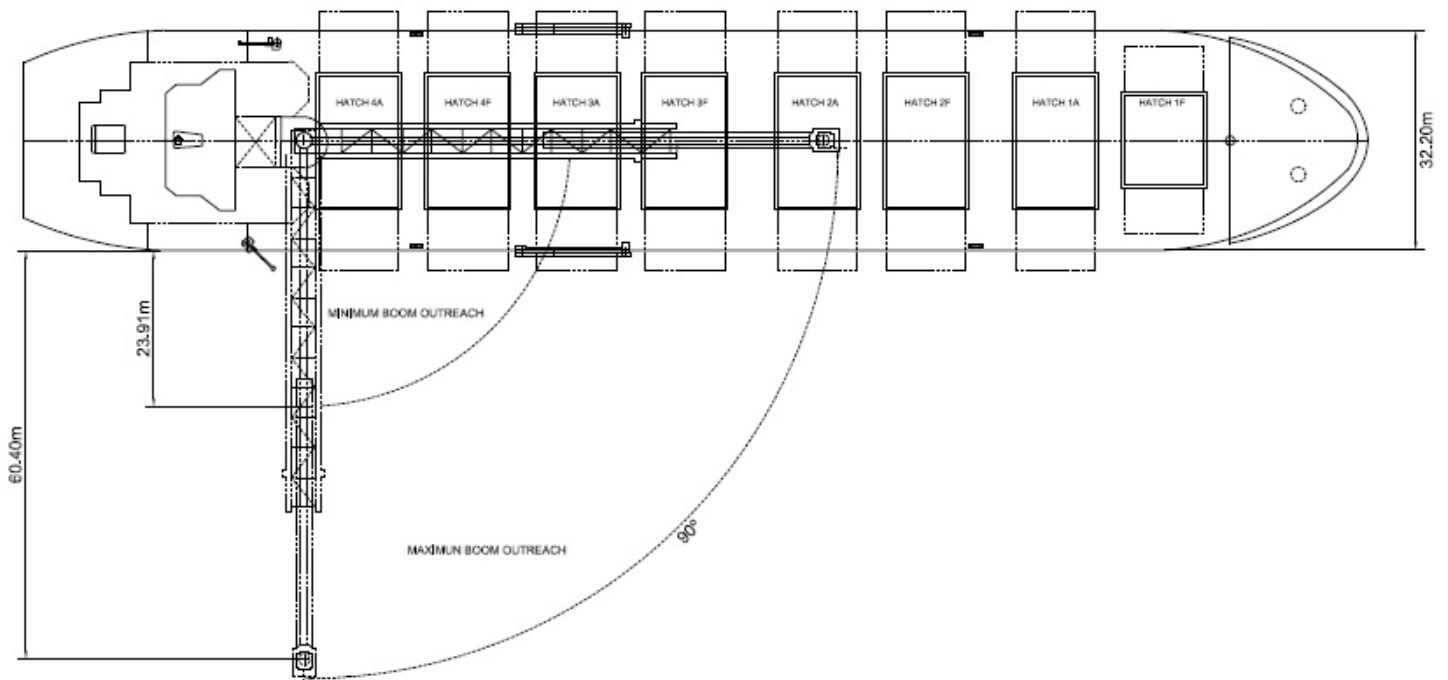
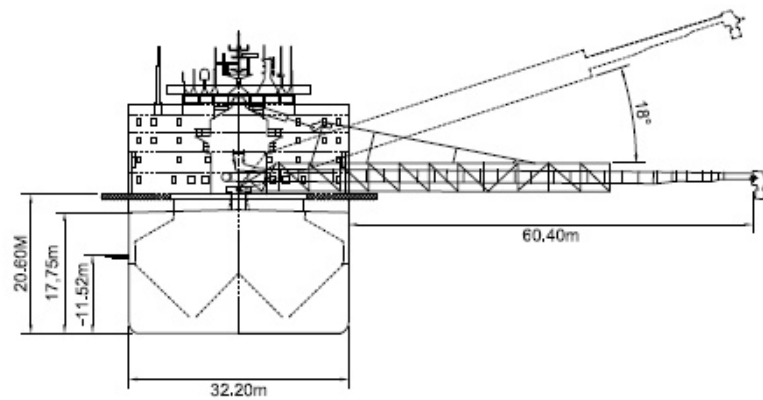
The discharge is gravity fed through the moving hole feeder gate system via two longitudinal conveyor belts feeding to a central C-loop that lifts the cargo onto the telescoping boom conveyor and ashore. Discharge rate is variable to a maximum of 3,000 metric tonnes and 2,500 cubic metres per hour for volumetric cargoes.

Using the flexible boom and precise control of the discharge rate makes the vessel suitable for discharge to almost any receiving facility including enclosed hoppers, barges and trucks.

The vessel is double hulled, including bunker tanks, and utilizes a bow thruster and high-lift rudder to give excellent handling characteristics.

This vessel currently operates on the Coasts of the Americas.

MV *CSL Frontier* is wholly owned and operated by CSL.





LIGHTSHIP
12,398 tonnes

DRAFT				Displacement (Tonnes)	TPC (Tonnes)	Deadweight (Tonnes)	DRAFT	
Sea water		Fresh water					Sea water	
(Meters)	(Foot)	(Meters)	(Foot)				(Foot)	(Meters)
	39					50,000	39	
	38		39	62,000		48,000	38	
	37		38	60,000	59	46,000	37	11
11	36		37	58,000		44,000	36	
	35	11	36	56,000		42,000	35	
	34		35	54,000	58	40,000	34	10
10	33		34	52,000		38,000	33	
	32	10	33	50,000		36,000	32	
	31		32	48,000	57	34,000	31	9
9	30		31	46,000		32,000	30	
	29	9	30	44,000		30,000	29	
	28		29	42,000	55	28,000	28	8
8	27		28	40,000		26,000	27	
	26	8	27	38,000		24,000	26	
	25		26	36,000	54	22,000	25	7
7	24		25	34,000		20,000	24	
	23	7	24	32,000		18,000	23	
	22		23	30,000	53	16,000	22	6
6	21		22	28,000		14,000	21	
	20	6	21	26,000		12,000	20	
	19		20	24,000	52	10,000	19	5
5	18		19	22,000		8,000	18	
	17	5	18	20,000		6,000	17	
	16		17	18,000	51	4,000	16	4
4	15		16	16,000		2,000	15	
	14	4	15	14,000		0,000	14	
	13		14	12,000	50		13	3
3	12		13	10,000			12	
	11	3	12				11	
	10		11		49		10	2
2	9		10				9	
	8	2	9				8	
	7		8				7	
			7					

HATCH AND HOLD SPECIFICATIONS

HOLD VOLUMES (CUBIC METRES)

HOLD NUMBER	1	2	3	4	TOTAL
Cubic Volume (Maximum)	11,905.70	12,382.80	12,382.80	9,037.20	45,708.60

HOLD OPENINGS (METRES)

NUMBER OF OPENINGS	1F	1A	2F	2A	3F	3A	4F	4A
Opening Length	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20
Opening Width	13.40	19.20	19.20	19.20	19.20	19.20	19.20	19.20
Coaming Height Above Keel	19.55	19.55	19.55	19.55	19.55	19.55	19.55	19.55

HATCH INFORMATION (METRES)

DESCRIPTION	Side-Rolling Panels							
Operation	Hydraulic							
Hatch Length	11.47	11.51	11.51	11.51	11.51	11.51	11.51	11.51
Hatch Width	13.76	19.57	19.57	19.57	19.57	19.57	19.57	19.57
Hatch Top Height Above Keel (When Hatch Cover Open)	20.35	20.35	20.35	20.35	20.35	20.35	20.35	20.35

CARGO HANDLING EQUIPMENT

Two Hold Conveyors

Two Transfer Conveyors

One Boom Conveyor

One 'C' Loop Conveyor

All conveyors are driven by single speed motors, gears and couplings.

Discharging is done through hydraulically operated Moving Hole Feeders (MHF), fitted to outlet hoppers in the bottom of cargo holds.

Tunnel Belts: 2,000 mm wide

Boom Belt: 1,600 mm wide

Transfer Belts: 2,000 mm wide

"C" Loop Belt: 2,740/2,590 mm wide

Dust Suppression: Water spray systems on the hold, transfer, C-loop chutes and on the boom end.

Maximum Boom Outreach: 76.20 metres (Telescopic Shuttle Conveyor)

Discharge Rate: 2,500 m³/hr or 3,000 mt/hr, whichever is first reached

SPEED | CONSUMPTION

	SPEED (Knots)		CONSUMPTION (Metric Tonnes/Day)		
	Loaded	Ballast	Loaded	Ballast	Port
At Sea	11.75	12.50	25.75	24.75	N/A
Loading					2.70
Discharge					5.00

ASSIGNED DRAFT

Season	Draft (Metres)	Displacement (Tonnes)	DWT (Tonnes)
TF	12.011	63.698	51.300
F	11.771	61.888	49.490
T	11.757	61.783	49.385
S	11.517	60.159	47.761
W	11.277	58.744	46.246

All specifications are given in good faith but without guarantee.