



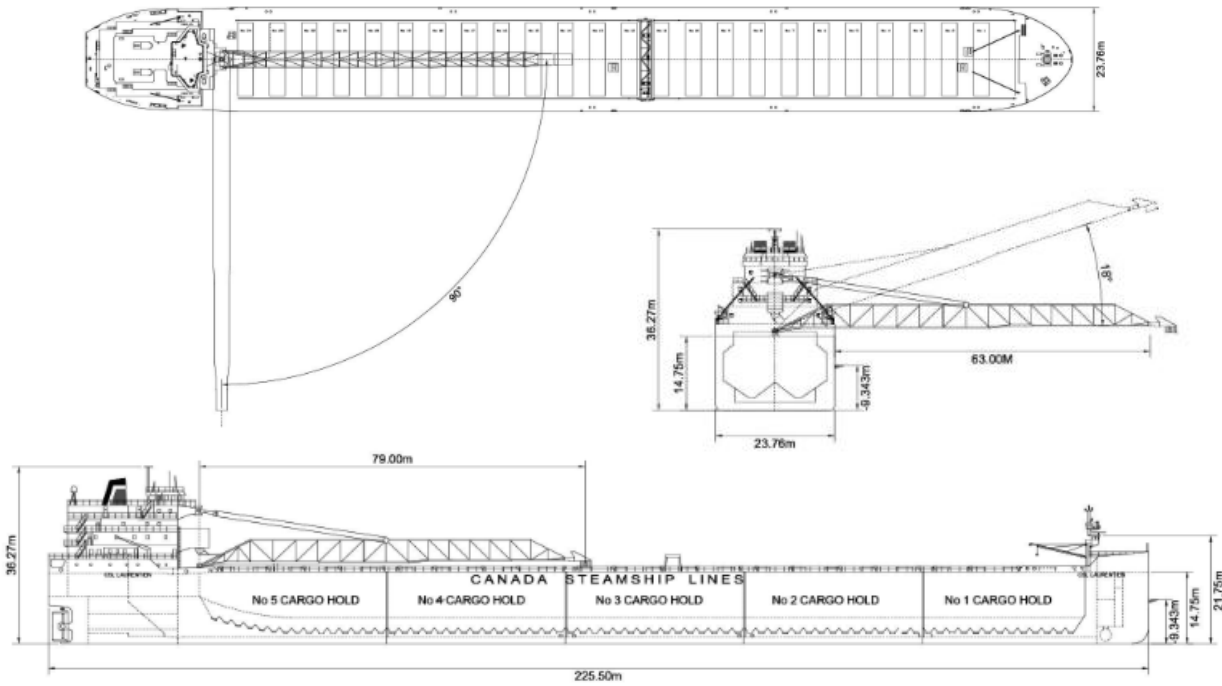
## TECHNICAL SPECIFICATIONS

Vessel type	Self-Unloading Bulk Carrier
Deadweight (DWT)	36,674 tonnes
Built	1977, converted in 2001
Classification	+ 100 A1
Length Overall	225.50 meters
Breadth Moulded	23.77 meters
Total Hold Capacity (including hatches)	40,206 cubic meters
Gross Tonnage (GT)	24,024 tonnes
Net Tonnage (NT)	8,478 tonnes
Thrusters	Bow and Steering nozzle
Horsepower	BHP: 8999   kW: 6711
Length of boom	79.00 meters
Average Unloading Rates (mt/hr)	Ore: 5,200   Coal: 4,000

MV *CSL Laurentien* is one of Canada Steamship Line self-unloading Lakers. She was built in 1977 and converted to a self-unloading vessel in 2001.

The equipment onboard consists of hoppers with 35-degree slopes and hydraulically operated roller track gates. Two tunnel conveyors run the length of the vessel and feed two cross conveyors that run toward the ship. A single loop belt elevating system raises the material to the main deck and onto the vessel's unloading boom. Self-contained PC workstations connected to a network permit remote control and automation of both the unloading and ballast systems.

The *CSL Laurentien* is fitted with a dust covering and a fixed spill tray on the unloading boom. Wash down holding tanks retain cargo hold residue and wash down water. The unloading tunnel is ventilated for coal and is fully explosion-proof. Tunnel gates are operated by remote control.



## DRAFT AND DEADWEIGHT

MARK (IN FW)	DRAFT		DEADWEIGHT	
	Meters	Feet	Tonnes	LT
Summer	9.343	30' 7-10/12"	37,203	36,617
Midsummer	9.576	31' 5"	38,402	37,796
Intermediate	9.237	29' 3-8/12"	36,658	36,081
Winter	9.13	29' 11-5/12"	36,108	35,540
Seaway	8.08	26' 6"	30,708	30,223

## HOLD CAPACITIES

COMPARTEMENT	Cubic Meters	Cubic Feet
Hold # 1	7,311	258,185.5
Hold # 2	8,331	294,206.5
Hold # 3	8,331	294,206.5
Hold # 4	8,331	294,206.5
Hold # 5	7,902	279,056.5
Net Hold Capacity	40,206	1,419,861.5

## PRINCIPAL DIMENSIONS

DESCRIPTION	Meters	Feet
Length Overall	225.48	739' 09"
Length B.P.	222.52	730' 00"
Breadth	23.77	77' 11"
Depth	14.75	48' 04"

## TPC AND TPI (AT SEAWAY DRAFT)

TPC (t/cm)	51.35
TPI (t/in)	128.38

## HATCH DIMENSIONS

LENGTH		WIDTH	
Meters	Feet	Meters	Feet
3.35	10' 99"	16.46	54' 00"