



TECHNICAL SPECIFICATIONS

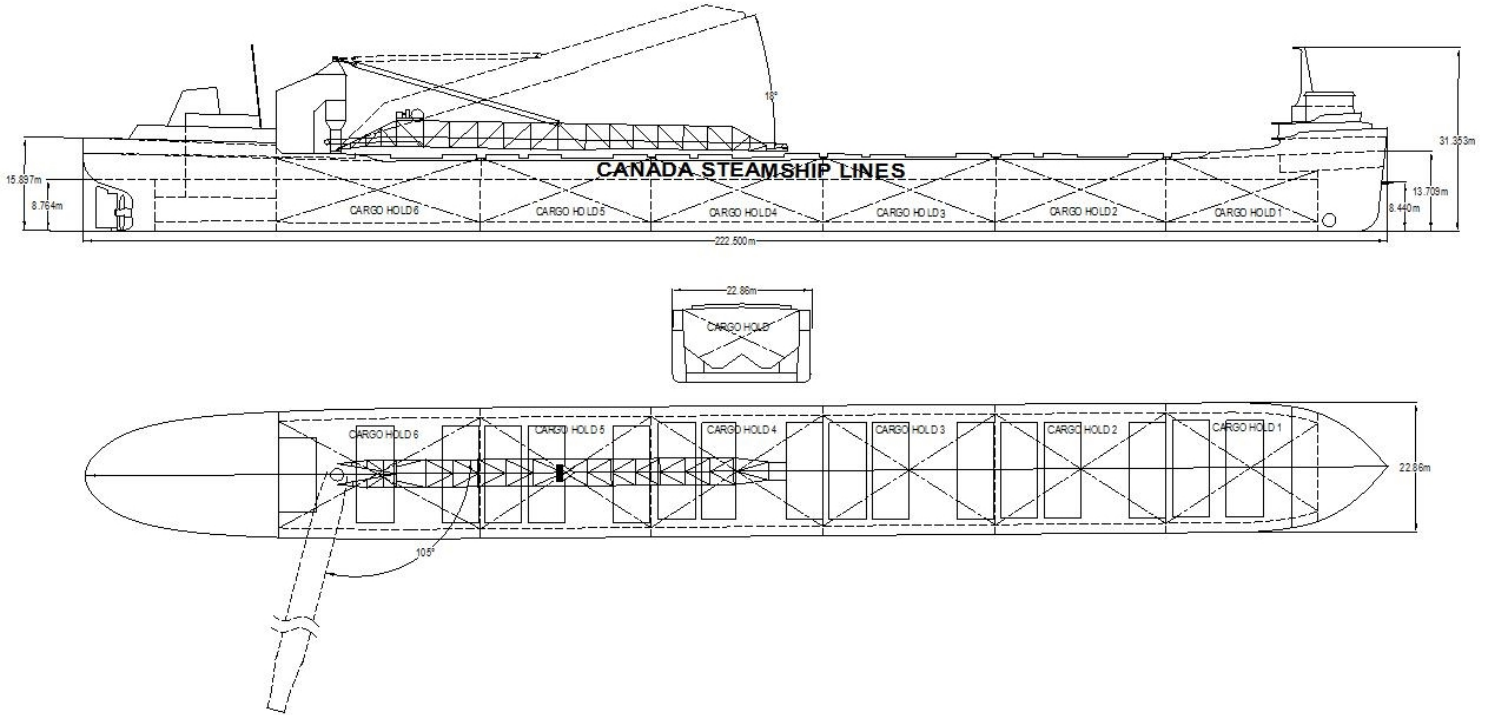
Vessel type	Self-Unloading Bulk Carrier
Deadweight (DWT)	26,365 tonnes
Built	1968, converted in 1973
Classification	+ 100 A1
Length Overall	222.50 meters
Breadth Moulded	22.86 meters
Total Hold Capacity (including hatches)	24,539 cubic meters
Gross Tonnage (GT)	17,808 tonnes
Net Tonnage (NT)	13,496 tonnes
Thrusters	Bow
Horsepower	BHP: 9600 kW: 7159
Length of boom	76.84 meters
Average Unloading Rates (mt/hr)	Ore: 5,500 Coal: 3,000

MV *Frontenac* was built by Davie Shipbuilding in Lauzon, Quebec, Canada as a straight deck bulk carrier in 1968, and converted to a Self-Unloader at Collingwood Shipyards in 1973. It is a maximum size Great Lakes / St. Lawrence Seaway size Self-Unloader and is fitted with a bow thruster and a variable pitch propeller with conventional rudder.

The equipment onboard the *Frontenac* consists of hopper type cargo holds which feed material through a series of hydraulically operated cargo gates. The material is then fed onto two continuous loop belt conveyors that run the length of the vessel and elevate the cargo to the main deck and onto the vessel's stern unloading boom of 76.84 m in length. This vessel is also fitted with an environmental containment and recovery system (ECARS) that significantly reduces the amount of dust and other particles during unloading.

FRONTENAC

SELF-UNLOADER



DRAFT AND DEADWEIGHT

MARK (IN FW)	DRAFT		DEADWEIGHT	
	Meters	Feet	Tonnes	LT
Summer	8.24	27' 03"	26,365	25,950
Midsummer	8.44	27' 8"	27,381	26,950
Winter	7.90	25' 11"	24,689	24,300
Seaway	8.08	26' 6"	25,600	25,197

HOLD CAPACITIES

COMPARTEMENT	Cubic Meters	Cubic Feet
Hold # 1	3,382	119,500
Hold # 2	4,549	160,727
Hold # 3	4,549	158,867
Hold # 4	4,549	160,727
Hold # 5	4,549	160,727
Hold # 6	3,751	132,530
Net Hold Capacity	25,249	893,078

PRINCIPAL DIMENSIONS

DESCRIPTION	Meters	Feet
Length Overall	222.5	729' 11"
Length B.P.	215.72	707' 8"
Breadth	22.86	75' 00"
Depth	12.09	39' 8"

TPC AND TPI (AT SEAWAY DRAFT)

TPC (t/cm)	44.5
TPI (t/in)	113

HATCH DIMENSIONS

LENGTH		WIDTH	
Meters	Feet	Meters	Feet
5.94	19' 6"	16.46	54'