



## Specific details of the Wolverine Terminals project contributed by MDEM

As we told in the previous publication, MDEM specialists participated in the projects of two marine fuel barges Wolverine Terminals, which construction began at Damen Shipyards in Vietnam. And today we will tell you more about the Transloading Barge Wolverine Spirit 1 – a double-hulled Barge, fully compliant with the requirements of MARPOL, Lloyds Register Class, and Transport Canada for tankers of over 5,000 deadweight tonnes.

This nominal 80,000 bbl capacity Transloading Barge can transport a mix of liquid cargo products, including marine diesel oil (MDO) and fuel oils (FO). The barge is also specially configured to accommodate up to 24 railcars on deck, with track arrangements optimized for efficiency in loading and offloading the railcars at the existing CN Aquatrain terminal in Prince Rupert, British Columbia. The barge's ballast system is also specially configured to maximize loading and unloading windows at the Aquatrain terminal across a wide of a range of tidal conditions.

The Transloading Barge's primary function is to supply marine fuels to the Lightering Barge which has the assignment of delivering the fuels to client vessels in the Port of Prince Rupert. The Transloading Barge will accomplish this by loading and securing tanker railcars at the Aquatrain terminal, and after being shifted by tugs and moored at the Wolverine Terminal approximately 400 meters North, transferring the marine fuels directly from the railcars into its hull tanks. A cargo offloading system will then allow for barge-to barge transfer of these fuel products to the Lightering Barge. Empty railcars will be returned to the Aquatrain terminal, and the cycle repeated.

In addition to its double-hull design, the Transloading Barge incorporates several other features to minimize environmental impacts. These features include catchment basins under each railcar, additional catchment coamings around the periphery of the barge, spill response equipment, and a vapor recovery system.

### »» Dimensions

Length overall	142.0 metres (excluding aft ramp notch)
Length, summer load WL	141.4 metres
Breadth, moulded	30.0 metres
Depth, moulded	7.2 metres
Draft, navigational	5.0 metres at summer load waterline
International Gross Tonnage	8,822

### »» Capacities

Total Cargo Oil Capacity	13863 m <sup>3</sup> (87,196 bbls)
Heavy Fuel oil	up to 11636 m <sup>3</sup> (73,188 bbls)
Marine Diesel Oil	up to 13863 m <sup>3</sup> (87,196 bbls)
Maximum Deadweight	14725 tonnes (approx.) at summer load waterline
Maximum deadweight (oil)	less than 12500 tonnes
Railcars	up to 24 x 29,000 gal DOT-117R, 59'-3½" length over couplers
Fuel Oil Day Tank	13.5 m <sup>3</sup>

### »» Performance

Towed Speed	up to 10 knots (approx.)
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Read about the role in this project, as well as the impressions of MDEM specialists in the next publication.

