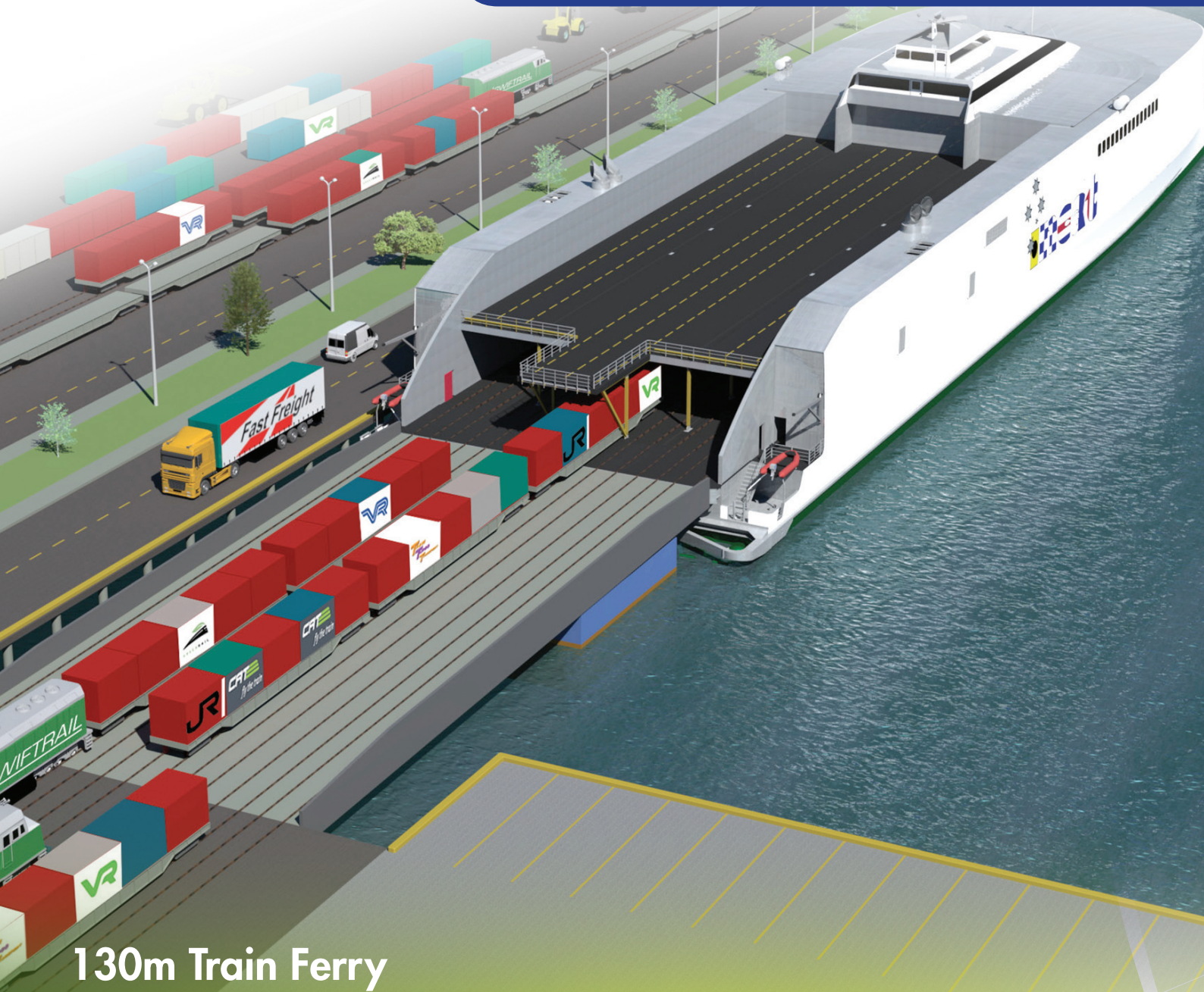




130m Train Ferry



130m Train Ferry

Train ferry use has been in decline. Half a century ago they provided luxury travel for passengers uninterrupted by the sea journey as the Pullman carriages were shunted aboard ship. The aeroplane put an end to that era. Today freight containers on rail still need to cross water. Incat has solutions to move 44 loaded wagons efficiently over water, deep or shallow.

130m Train Ferry

POWER PACKAGE

Main Engines

Four resiliently mounted MAN 28/33D 20V or equivalent marine diesel engines, rated 9000kW each at 100% MCR.

Water Jets

Four Wartsila LJX 1500 SR waterjets configured for steering and reverse. Waterjets will be fitted with standard outboard hydraulic steering and reverse actuators.

Power Transmission

Four ZF gearboxes, with reduction ratios suited for optimum jet shaft speed. A flexible coupling approved by the engine manufacturer will be fitted between each engine and gearbox. Shafting (gearbox to jet) can be steel or composite.



PRINCIPAL PARTICULARS

LOA – 130m
L canoe body – 123.6m
LWL (Design) - 120.9m
BOA (moulded) – 31.9m
BOA – 32.4m
BWL – 6.0m (each hull)
Draft, max – 4.0m
Frame Spacing 1.2 m

Maximum DWT – 1700 tonnes

Machinery – 4 x 28/33D @ 9000 kW
- 4 LJX 1500 Jets

ELECTRICAL SYSTEM

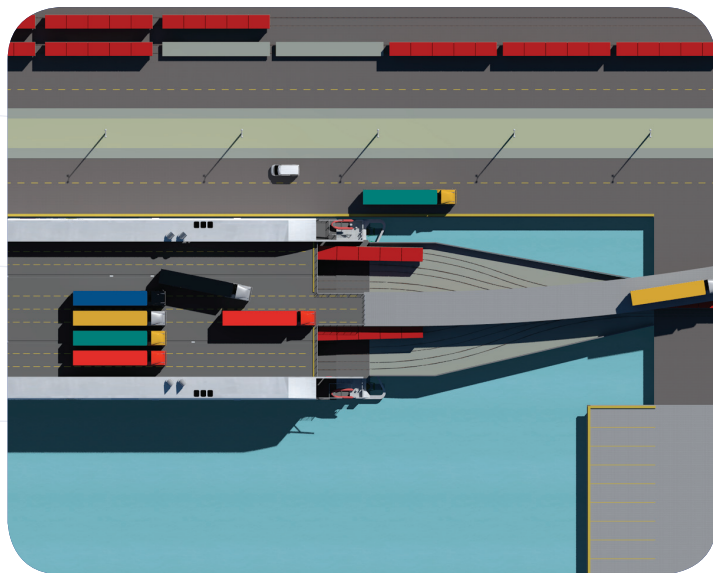
Four marine diesel generators rated at 360 ekW each.

415V, 50 Hz, 3 phase, 4 wire distribution with neutral earth allowing 240 volt supply using one phase and one neutral with distribution via distribution boards adjacent to, or within, the space they serve.

Two main switchboards, one in each ante room. Each main switchboard is fitted with a load preferential trip system which automatically sheds non essential loads.

RIDE CONTROL SYSTEM

A 'Maritime Dynamics' active ride control system is fitted to maximise passenger comfort. This system combines, active trim tabs aft with an optional retractable T-foil located at the aft end of the centre bow.



PERFORMANCE PREDICTIONS AT 100 % MCR

- 39+ knots @ 200 tonnes deadweight
- 30.4+ knots @ 1700 tonnes deadweight.

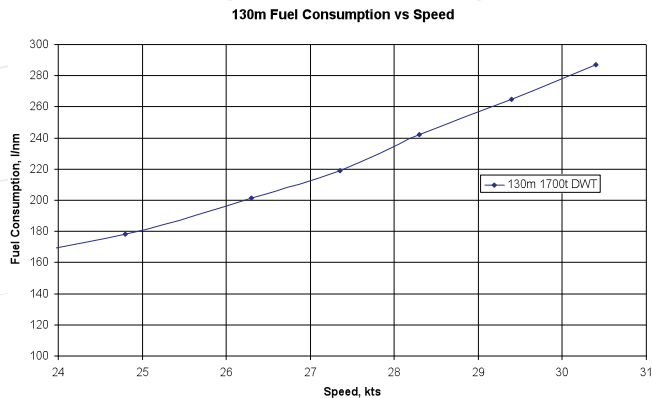
APPLICABLE REGULATIONS

The 130m vessel is designed and built in accordance with the following regulations for use on short international and domestic routes:

- DNV High Speed and Light Craft (HSLC) Rules.
- IMO High Speed Craft Code (HSC 2000) and applicable IMO regulations in force at time of signing contract.

130m Train Ferry

FUEL CONSUMPTION VS SPEED



Deep water estimated Fuel Consumption 130m WPC, 4 X 9000 kW, LJX 1500

TANKAGE

Fluid	Capacity (Litres)
Fuel Oil (main storage)	2 x 150,000
Fuel Oil (main engine header tanks)	2 x 1,240
Fuel Oil (generator header tanks)	2 x 1,240
Fresh Water	1 x 5,000
Black & Grey Water	1 x 5,000
Lube Oil	2 x 1000
Engine Room Oily Water	4 x 160
Aft Hydraulic Oil	2 x 500*
Fwd Hydraulic Oil	1 x 350*

(Note: *denotes tank content excluded from deadweight)

VEHICLE AND RAIL CAR ACCESS

Rail cars unload from shore based ramps over the stern. Tier 2 vehicles are unloaded utilising shore based upper level ramps over stern or stern quarter.

RAIL DECK

- 900 rail lane metres
- 25 tonne axle load
- 4.6 metre clear height

VEHICLE DECK

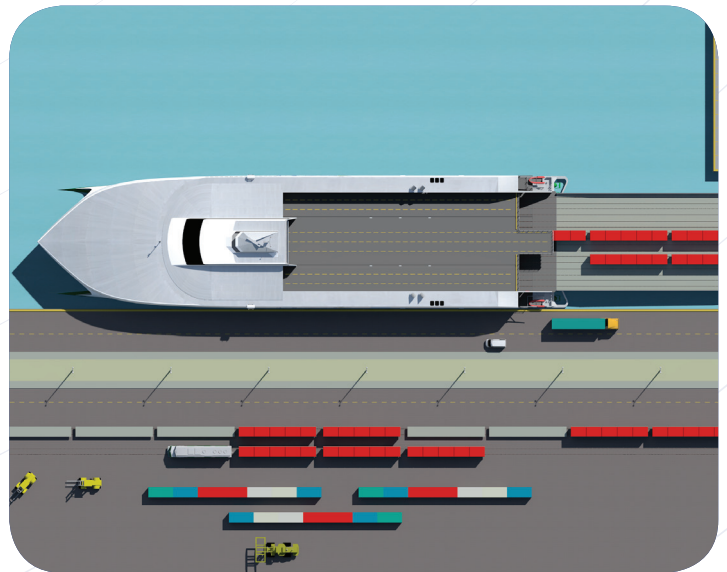
- 570 rail lane metres
- 13 tonne axle load
- UNLIMITED clear height
- 2.3 metre lane width

SAFETY AND ESCAPE

Two Marine Evacuation stations (MES), each capable of serving up to a total of 200 persons under normal evacuation, are located on the Tier 2 Passenger Deck (one port and one starboard).

One SOLAS semi-rigid inflatable dinghy with 25hp motor located outboard AFT with Incat standard approved launch/recovery davits.

Lifejackets, fitted with lights and whistle devices, are provided in accordance with international regulations for passengers and crew, including children. Lifebuoys, smoke flares and immersion suits are also provided in accordance with international regulations.



INTERIOR LAYOUT

The passenger accommodation is located on Tier 2 deck, with facilities for up to 200 persons (passengers and crew).

- Alternative arrangements with up to 1500 persons are possible with this design.

130m Train Ferry

130m Train Ferry

