### **MULTIFUNCTIONAL VESSEL PROJECT**

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## **PROJECT IDEA**

To integrate it into existing and planned direct transportation of the river - sea and sea - river's existing contracts, adapt existing joint project CNF 22 and project Briese - SPT Volgodonmax Open Top.

To make possible to navigate in the Saima waters system of the Inland Waterways of Finland, to cycle voyages under various contracts during of valid navigation in inland waterways in order to minimize ballast mileage and achieve the best financial results.

### ap of the European Inland Waterway Network – Carte du reseau europeen des voies navigables – Карта европенской сети внутренних водных путе

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 Carriage of Project cargo es – RAWI contr Eurrope - South Russia ( river Volga )
New cars accnt Allians ( Nissan , V

Tolyati , Samara , Ulianovsk – to Mo 3. Saima contracts Russia (Volgo-balt ) – Sa (Finland)

4. Finland – Inland – general cargoes

### Project CNF22 Sea-river vessel, multipurpose Ro- Ro universal

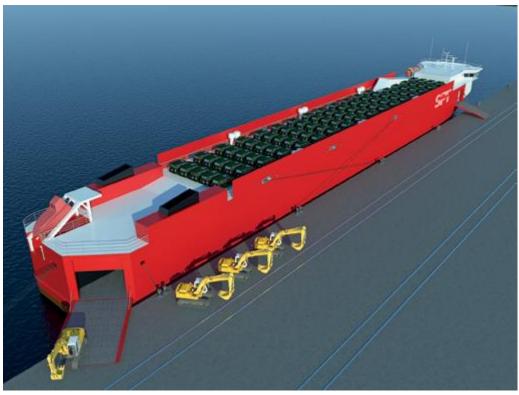


Transportation of wheeled and tracked equipment from Russian manufacturers to main centers domestic distribution and to seaports for export.

Direct, ship-free transportation of design, largesize and heavy-weight cargoes from Europe to recipients located inside the Russian Federation and the Caspian basin (Iran, Azerbaijan, Turkmenistan, Kazakhstan).

Implementation of the water part of transport within the framework of the International Transit Corridor North-SOUTH cargo on route Europe-Iran, India, Pakistan. Transport of freight vehicles with semitrailer and container platforms and containers of the international standard for rolling trailers with imported goods to appointments in the Russian Federation.

### **PURPOSE of the VESSEL**



The vessel is designed to carry general cargo and containers, all types of vehicles, including Trucks with 12 (13.5) m semi-trailer furs and container platforms, various wheeled equipment.

## **TYPE of VESSEL**



- Rolling vessel with combined (horizontal and vertical) cargo handling scheme,
- With ice category "Ice2" with two closed and one open cargo decks, with two
- Detachable car decks, with aft angular and fore side ramps, with
- Fore location of residential superstructure and aft engine room, with diesel
- Propulsive unit with nose steering device.

### Brief technical description

- Main Partruculars
- Maximum length, m 140.00
- Width, m 16.60
- Board height, m 5.50
- Height of the side to the upper deck, m 13.00
- Settlement by HPC, m 3.20
- Settlement by LGVL, m 3.60
- Surface dimension (at draught 3.20 m), m 13.50
- Load capacity (length of lanes for
- Rolling cargoes), m 2970
- Main engine power, kW 2x1200
- Full stroke speed,
- Operating speed in full load,
- Crew number, persons. 14
- Number of seats for passengers 12
- Estimated range of navigation with full reserves
- Fuels and oils, 4,000 nautical miles.
- HULL
- The hull of the vessel shall be designed with
- Taking into account the requirements of RS Rules for ice vessels
- categories "Ice2".
- Cargo space under main deck
- Is divided into 2 holds. In interbilge cross
- Bulkhead is provided with cuts for passage
- Motor vehicles with waterproof closure
- At lower deck and lower removable levels
- automobile deck.
- Design loads on cargo decks:
- Main (including hatch closures) and lower
- (cargo) decks:

- Uniformly distributed load 3.5 t/m2.
- Permissible load of wheeled equipment on axle:
- 4 wheels on axle 12 t;
- 2 wheels on axle 10 t.
- Upper (open) deck (including hatch
- Closes): evenly distributed load -
- 2.6 t/sq.m.
- Removable car decks:
- Evenly distributed load -
- 0.2-0.5 t/sq.m.
- Permissible load of wheeled equipment on axle -
- 1.15-1.7 t;
- Power station
- The main power plant (MPP) consists of
- Of 2 internal combustion engines operating
- throughpeдукторы на винты фиксированного шага.
- ГЭУ работает на тяжелом топливе.
- При эксплуатации в Балтийском море и других
- районах с ограничениями по выбросам в атмосферу
- - в качестве топлива применяются судовое топливо с
- температурой вспышки более 60 ОС и содержанием
- серы не более 0,10% по массе
- The main power plant (MPP) consists of
- Of 2 internal combustion engines operating
- Through reduction gears to fixed pitch screws.
- MPP operates on heavy fuel.
- When operating in the Baltic Sea and other
- Areas with emission restrictions
- Ship fuel with
- Flash point more than 60 ° C and content
- Sulphur not more than 0.10% by weight.



As example cargo plan of roro / containerized cargoes in vessels compartments

# **THANK YOU for YOUR ATTENTION**

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