WÄRTSILÄ SHIP DESIGN
REFERENCES

Conversions/ upgrades/ modifications
SK 4209 BIT VIKING

SCOPE OF SUPPLY
- Ship Design
- Engine conversion
- LNGPac system (2 x 500m3)
- Gas supply units
- Torque meter for power measurement
- Bunkering system
- Gas piping (single and double walled)
- Exhaust system
- Fire-fighting upgrade
- Gas detection system
- Electrical system

ADDITIONAL
- NOx measurement during sea trial DF and
- LNGPac training for personnel
CALA SERIES

HIGHLIGHTS
- Reefer vessels (4 no.’s)
- Lloyd Werft Bremerhaven GmbH (Germany)

WSD SCOPE
- Basic design
- Detail design
- Steel production documentation

CONVERSION SCOPE
- Lengthening for increase of cargo capacity
HIGHLIGHTS
• OBO carrier, 54,500dwt conversion to 65,000 DWT Crude oil tanker

CONVERSION SCOPE
• Lengthening for increase of cargo capacity

WSD SCOPE
• Basic design
• Detail design
• Steel production documentation
HIGHLIGHTS
- Product/Crude oil tanker
- 82,000 DWT

CONVERSION SCOPE
- Conversion to buoy loader/shuttle tanker

WSD SCOPE
- Basic design
- Detail design
- Steel production documentation
M/T NCC ARAR, M/T NCC ASIR, M/T BOW HUNTER

HIGHLIGHTS
• Chemical tankers
• 22,500 DWT

MODIFICATION SCOPE
• Refitted with innershell

WSD SCOPE
• Basic design
• Tender documentation package
M/T JO BREVIK, M/T JO CLIPPER, M/T JO LIND, M/T JO BIRK, M/T JO OAK

HIGHLIGHTS
• Chemical tankers
• 33,000 DWT

MODIFICATION SCOPE
• Refitted with new tanks
• Increased cargo subdivision

WSD SCOPE
• Basic design
• Tender documentation package
MS TRANS CARRIER

HIGHLIGHTS
- RO/RO container carrier
- 7,300 DWT

CONVERSION SCOPE
- Rebuilding/elongation
- Lengthening 18.9m

WSD SCOPE
- Basic design
- Tender documentation package
**HIGHLIGHTS**

- General cargo carrier / tanker for coal tar pitch

**MODIFICATION SCOPE**

- Modification of cargo tanks to comply with IMO II
- Centre bulkhead inserted in independent cargo tanks for liquid tar pitch

**WSD SCOPE**

- Feasibility study
- Basic design
- Tender documentation package
M/V OHM EXPRESS

HIGHLIGHTS
• Paper carrier

CONVERSION SCOPE
• Conversion to Seismic/survey/research vessel

WSD SCOPE
• Feasibility study
• Basic design
• Tender documentation package
M/V OHM LEADER

HIGHLIGHTS
• Paper carrier

CONVERSION SCOPE
• Conversion to Seabed logging vessel

WSD SCOPE
• Feasibility study
• Basic design
• Tender documentation package
**M/V BULK SATURN**

**HIGHLIGHTS**
- Bulk carrier

**CONVERSION SCOPE**
- Conversion to combined bulk/tanker
- Three cargo-holds into combined bulk and tank-rooms for Caustic soda carriage

**WSD SCOPE**
- Feasibility study
- Basic design
- Tender documentation package
M/V IBIS ARROW

HIGHLIGHTS
- General cargo carrier /tanker for coal tar pitch

MODIFICATION SCOPE
- Supporting Structure for hose handling Crane
- Extension of deckhouse for new generating set

WSD SCOPE
- Feasibility study
- Basic design
- Tender documentation package
HIGHLIGHTS
• Totally enclosed bulk carrier

CONVERSION SCOPE
• Conversion to juice carrier
• Supporting Structure for hose handling Crane

WSD SCOPE
• Basic design
PANAMAX TANKER

HIGHLIGHTS
• Panamax tanker for oil and caustic soda
• Pno: 10166

SCOPE
• Feasibility study
• Basic design
• Yard specification
• Tender documentation package

CONVERSION SCOPE
• Conversion to bulk carrier
SUEZMAX CRUDE OIL TANKER

HIGHLIGHTS
- Suezmax Crude oil tanker
- Pno:10255

CONVERSION SCOPE
- Conversion to DP2 shuttle tanker

SCOPE
- Basic design
- Yard specification
- Tender documentation package
M/V BGP PIONEER

HIGHLIGHTS
• Stern trawler (F/V SJØVIK)

CONVERSION SCOPE
• Converted to 8 streamer 3D seismic research vessel
• Sponsoons added
• Seismic hangar
• Seismic equipment
• Helideck

SCOPE
• Feasibility study
• Basic design
• Yard specification
• Tender documentation package
M/V GEOWAVE CHAMPION

HIGHLIGHTS
• Fishing vessel

CONVERSION SCOPE
• Converted to 12 streamer 3D seismic research vessel
• Sponsoons added
• Seismic hangar
• Seismic equipment
• Helideck

SCOPE
• Feasibility study
• Basic design
• Yard specification
• Tender documentation package
HIGHLIGHTS
• Cable Laying Vessel

CONVERSION SCOPE
• Converted to into Flexible Pipe-Laying Vessel (vertical flex-lay)
• Extended beam for lay tower
• Storage of products in 2 circular tanks
• A-frame

SCOPE
• Feasibility study
• Basic design
• Yard specification
• Tender documentation package
HIGHLIGHTS
• Offshore construction vessel

CONVERSION SCOPE
• Converted Construction / PLV
• ROV support
• Construction, Maintenance and Installation Capabilities using Crane lifting 250 t / 2500 m water depth
• Vertical Laying System
• Subsea Maintenance and Installation

SCOPE
• Feasibility study
• Basic design
• Yard specification
• Tender documentation package
SAIPEM FDS

HIGHLIGHTS
- Offshore construction vessel/Pipelay

UPGRADE SCOPE
- Retrofit of swell compensation system for main crane
- Storage winches and hang-off system for deep-sea piling
- Crane capacity upgrade
- J/Lay tower upgrade
- Retrofit of larger A&R winch system

SCOPE
- Feasibility study
- Basic design
- Yard specification
- Tender documentation package
HIGHLIGHTS
- Offshore construction vessel
- Cablelaying – stern operation
- Capacities cable tanks
- 2 x 3000 tonnes for fibre optic cable
- 2 x 250 tonnes spare tanks
- Bouy handling
- 2 x 100 Repeater stacks
- Fully integrated fibre optic laying system including
- Upgradeable to large offshore crane

CONVERSION SCOPE
- Conversion to Cable layer
- Capacities cable tanks
- 2 x 3000 tonnes for fibre optic cable
- 2 x 250 tonnes spare tanks
- Bouy handling
- 2 x 100 Repeater stacks
- Fully integrated fibre optic laying system including

SCOPE
- Feasibility study
- Basic design
- Yard specification
- Tender documentation package
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HIGHLIGHTS
• RO-RO

SCOPE
• Feasibility study
• Basic design
• Yard specification
• Tender documentation package

CONVERSION SCOPE
• Conversion to Cable layer
• Cablelaying – stern operation
• Handling any type of underwater telecommunication cable
• Handling repeaters up to 380mm diameter
• Storing of maximum 15 repeaters
HIGHLIGHTS
• Research/Survey (Veritas Viking II)

CONVERSION SCOPE
• Conversion to accommodation vessel for windmill support
• accommodation and hotel facilities for 125 people
• heave compensated gangway
• SPS

SCOPE
• Feasibility study
• Basic design
• Detail design
• Yard specification
• Tender documentation package
• Site supervision
VESTLAND CYGNUS

HIGHLIGHTS
• Platform Supply Vessel (PSV)

CONVERSION SCOPE
• Conversion to offshore wind farm service vessel
• accommodation module for 134 people
• 100 ton offshore crane with a range of 40 metres
• Gangway for transferring personnel to offshore fixtures

SCOPE
• Feasibility study
• Basic design
• Yard specification
• Tender documentation package