

```
#LNG #LBG #LEG #projects
#2025 #modern #shipyard
#GTT-membrane
#STS #ShiptoShip
#TrucktoShip
#Action #RealAction
```





# 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



## **LNG technologies**Global growth in vessels using LNG as fuel

Global growth in vessels using LNG as fue for reducing emission to air

## LBG technologies

Regional growth amongst LNG propelled vessels for mixing LNG with renewable LBG

QUALITY ON-TIME ALWAYS





## LNG – a Highly specialized area

Service and maintenance of LNG tank membranes provided by Gaz-Transport & Technigaz SA (**GTT**) is a high-competence demanding task that is not for any shipyard.

Extreme focus on handling, safety and cleanliness is required.

As one of few shipyards in Europe, FAYARD, has a **T**echnical **S**ervice **A**greement – **R**epair (TSAR) with **GTT**, in securing Owners, the right service infrastructure for the I NG Fleet.

FAYARD is the most northern located shipyard in the GTT service net.

For shipowners this means that not only are technologies for using LNG as a fuel now available.

You can also rest assured that you in FAYARD have an effective partner for service and maintenance of your LNG-fueled vessels, in a North European shippard located close to the main shipping routes.

**Quality - On-time - Always** 





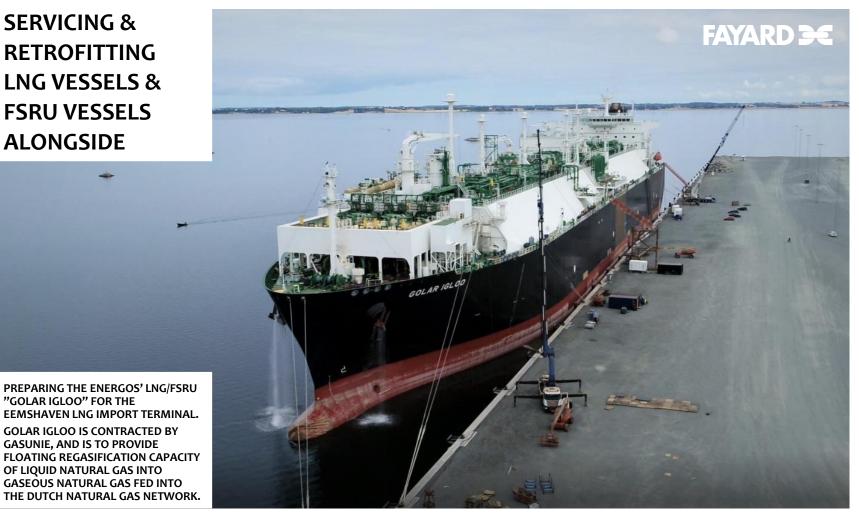


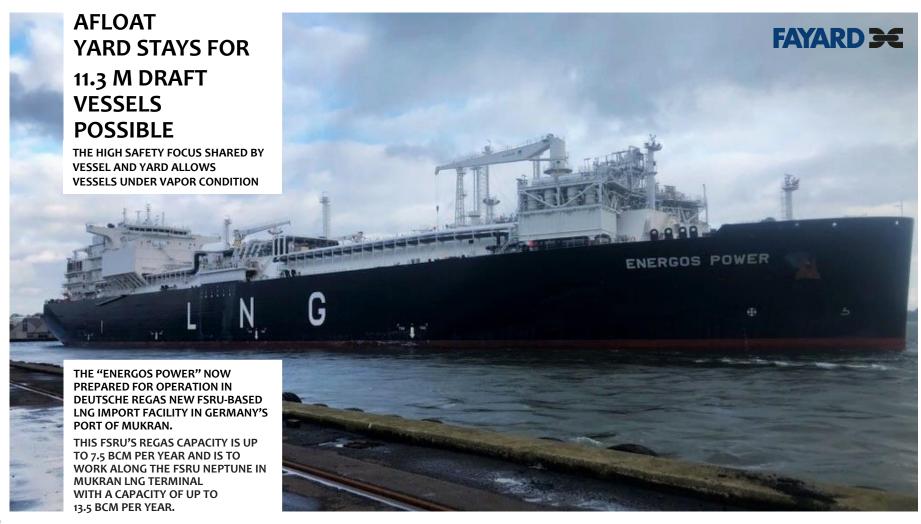




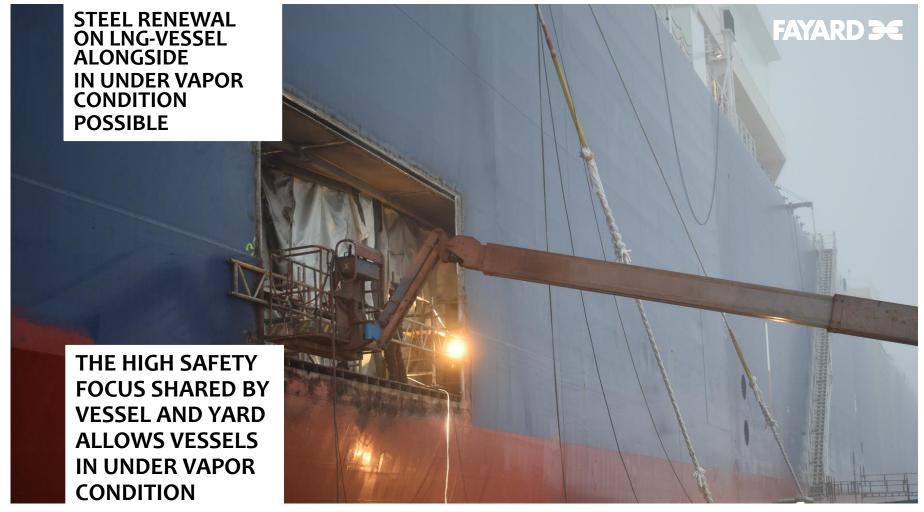
**SERVICING &** RETROFITTING LNG VESSELS & **FSRU VESSELS ALONGSIDE** 

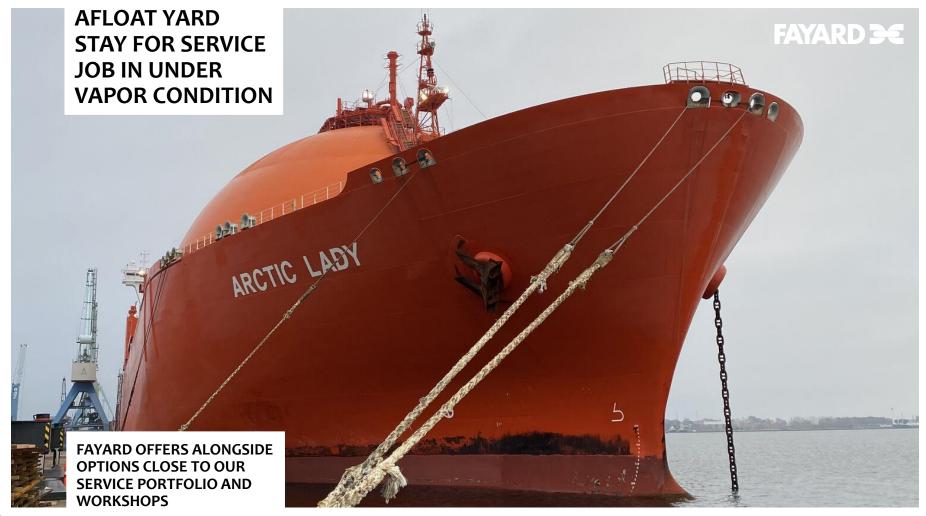
PREPARING THE ENERGOS' LNG/FSRU "GOLAR IGLOO" FOR THE EEMSHAVEN LNG IMPORT TERMINAL. **GOLAR IGLOO IS CONTRACTED BY** GASUNIE, AND IS TO PROVIDE FLOATING REGASIFICATION CAPACITY OF LIQUID NATURAL GAS INTO **GASEOUS NATURAL GAS FED INTO** 

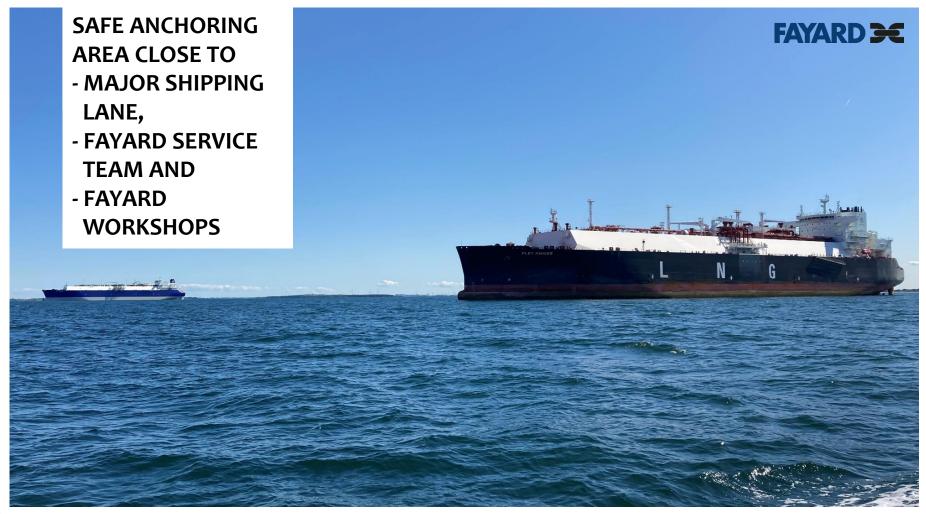




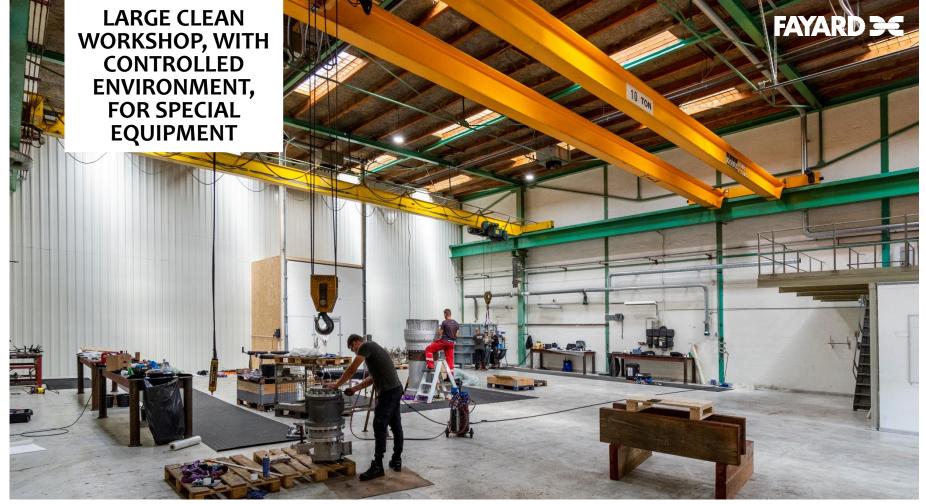


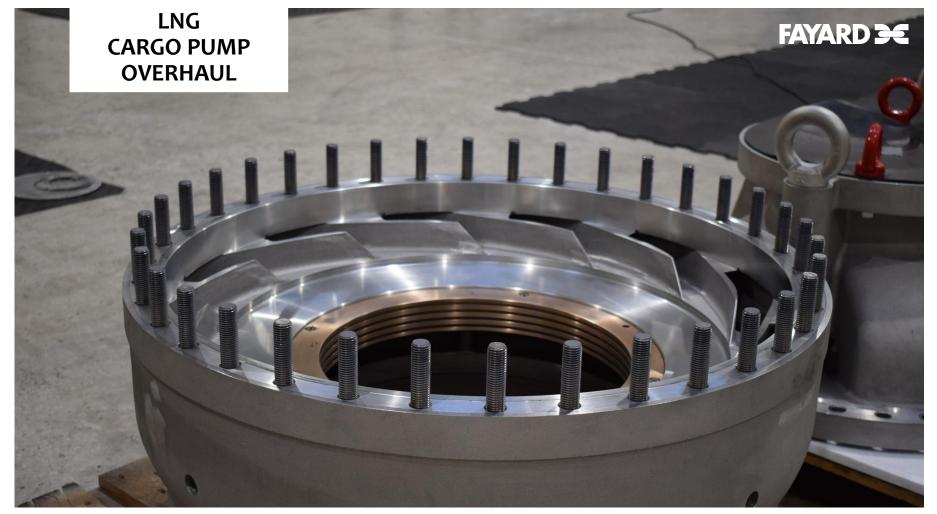






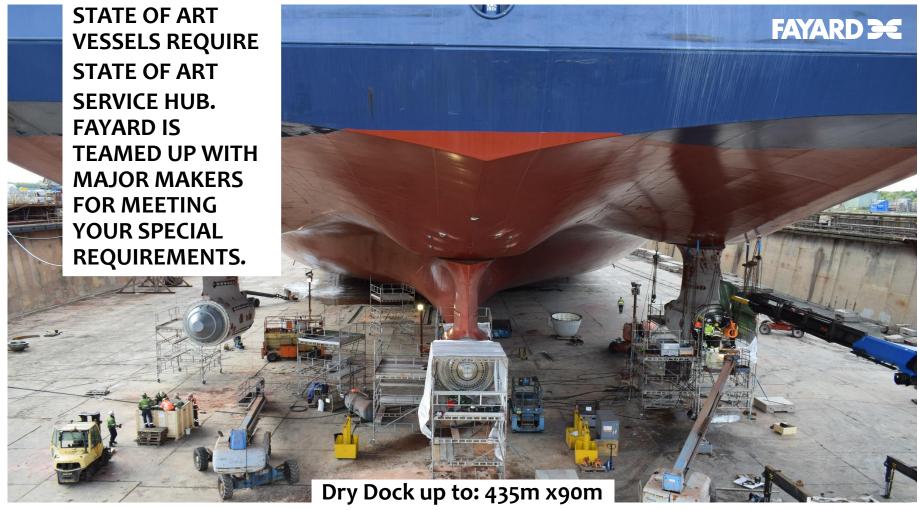










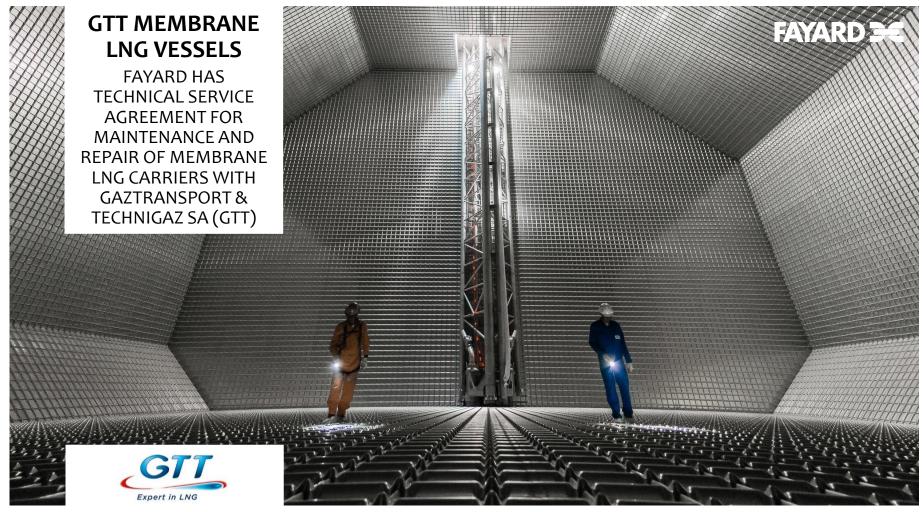




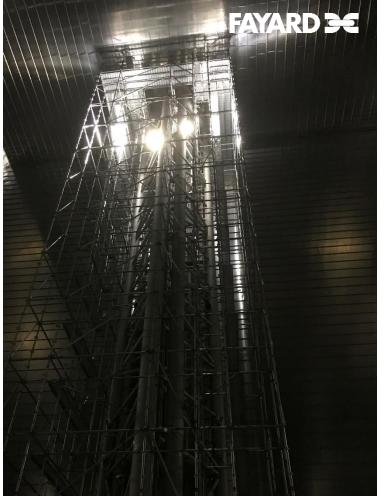


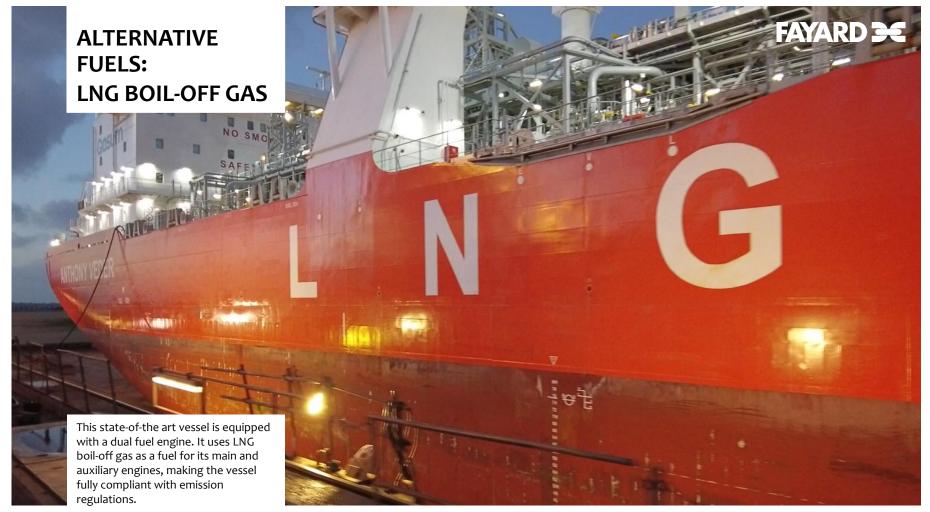




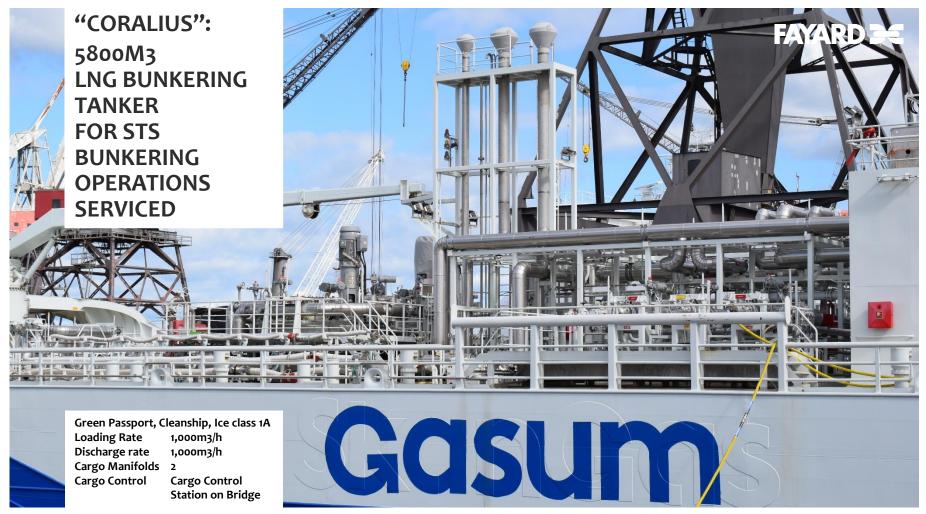














## LNG, a marine fuel for all segments

With the Global Sulphur Cap 2020, the latest regulation adopted by the International Maritime Organization (IMO), merchant vessels' owners must comply with new Sulphur oxide emissions of not more than 0.5% worldwide since January 1st 2020, against 3.5% previously.

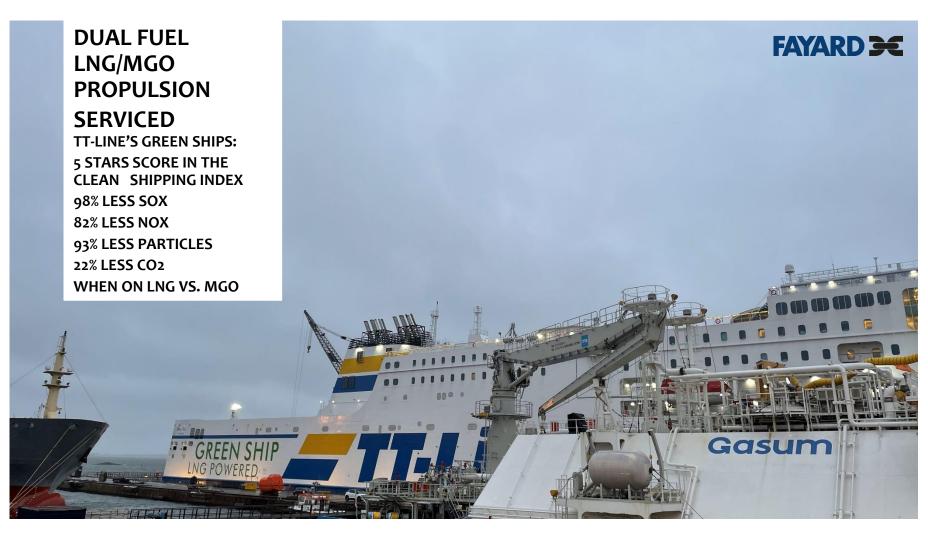
Compared to Heavy Fuel Oil (HFO), the use of LNG allows substantial reductions of more than 99% of Sulphur emissions, 80% for nitrogen oxides, most particulate matters, and also up to 20% for carbon dioxide.

LNG is thus considered as green fossil energy, and a real technological breakthrough to reach compliance and maintain competitiveness at the same time.

- LNG as fuel is available for all shipping segments, such as container ships, tankers, bulkers, car carriers, cruise vessels, etc.
- Membrane tank volumes can vary from 1,000 m³ for passenger ships, to 10,000 m³ for tankers, and close to 20 000 m³ for very large container vessels.
- The increasing demand for LNG as a fuel goes hand in hand with a developing supply and service chain.
- GTT provides on-site technical support for inspection, maintenance and repair
  of its tanks thanks to a worldwide network of approved repair yards, trained
  and qualified by GTT.



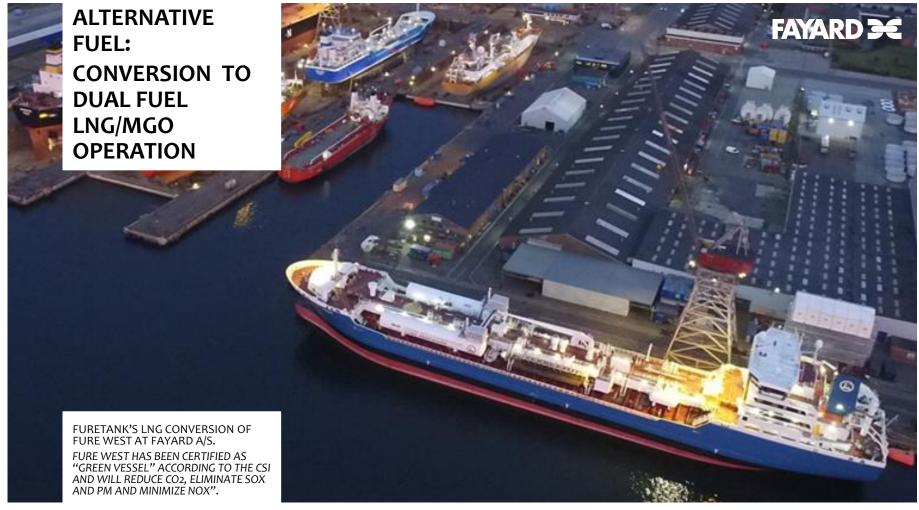














**2024 DOCK UTILIZATION** 



## THE NUMBERS

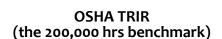


LNG 13%

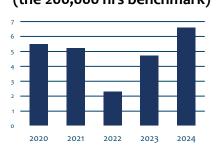
**DELIVERED ON-TIME** 

100%

**PART OF TURNOVER** FROM RETURNING CUSTOMERS



FAYARD 🗲





**DOCK AVAILABILITY** 

Meets requested service slot































6 CLEAN WATER AND SANITATION



## Making Global Goals Local Business

We are fully committed to conducting our activities in an environ-mentally responsible manner. In our attempt to run a yard that is as environmentally friendly as possible we have amongst others Implemented:

- All Dry Docks are environmentally Closed Loop systems
- Hull Cleaning preferable by Water Jetting
- Shore Power availability for reducing of vessel emissions
- Tank Washing Water Receive System (Slop)
- Vessels in Inerted condition allowed reduces emissions
- Lower VOC Emission to air than allowed quota
- Waste Management System in operation
- All Chemicals are stores in Secured areas
- Recycling of scrap materials to high extend
- LED-bulbs used where applicable for energy savings
- EU-approved Ship-recycling facilities in Dry Dock up to 415mx90m







#### **FACILITIES**

Our easily accessible and efficiently organized area includes 4 dry docks, 6 cranes, 3 construction & assembly halls, modern disposal facilities and on-site workshops.

#### **DRY DOCKS**

Dock 1 303 x 45 x 7

Dock 2 280 x 44 x 7 dock-pit 6.2 x 6.2 x 2.4 m Dock 3 335/415 x 90 x 8 dock-pit 14.0 x 6.0 x 3.5 m

9.0 x 6.0 x 3.5 m

(at each dock)

400 V - 50 Hz

**TOTAL AREA** 

165,000 m<sub>2</sub>

**ELECTRICAL SHORE POWER** 

1000 A - 440 V - 60 Hz 1200 A -

Dock 4 145 x 30 x 8 dock-pit 6.2 x 6.2 x 2.4 m

#### **CRANES**

Capacity up to 1,200 tonnes

#### **REPAIR BERTHS**

Max. draught 7m - 11 m

## CONSTRUCTION & ASSEMBLY HALLS

32,000 m2

## TANK WASHING WATER DISPOSAL FACILITIES

Up to 600 m<sub>3</sub>

#### MODERN DRY DOCKS

In 2011, we invested in 3 modern dock gates and an upgrade of the pumping systems for the docks with dock-pits to increase the docking efficiency.

Due to these upgrades, we can start working on your

can start working on your vessel only 3-4 hours after your arrival.

The dock gates in 3 of our docks open or close in just 4 minutes.

## BERTH AND OTHER FACILITIES

For offshore platforms and semi-subs, we have the required berth facilities.

Jacking-up is possible.

Berths are used for the type of work that does not specifically requires dry docking.

#### **ENVIRONMENT**

We are fully committed to conducting our activities in an environmentally responsible manner.

In our attempt to run our yard as environmentally friendly as possible we have invested in - two state-of-the-art wastewater treatment facilities with connections in the dock, for e.g. tank washing water. One set of tanks is connected to 3 of our docks and the other is connected to the large Dock 3. UHP water jetting capacity for fast hull process in all docks

#### **MANAGEMENT SYSTEM**

Certified to the ISO 9001, 14001 & 45001 standards by Bureau Veritas



### **Quality - On time - Always**





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