FEEDERDOCK

NEXT GENERATION OFFSHORE WIND LOGISTICS

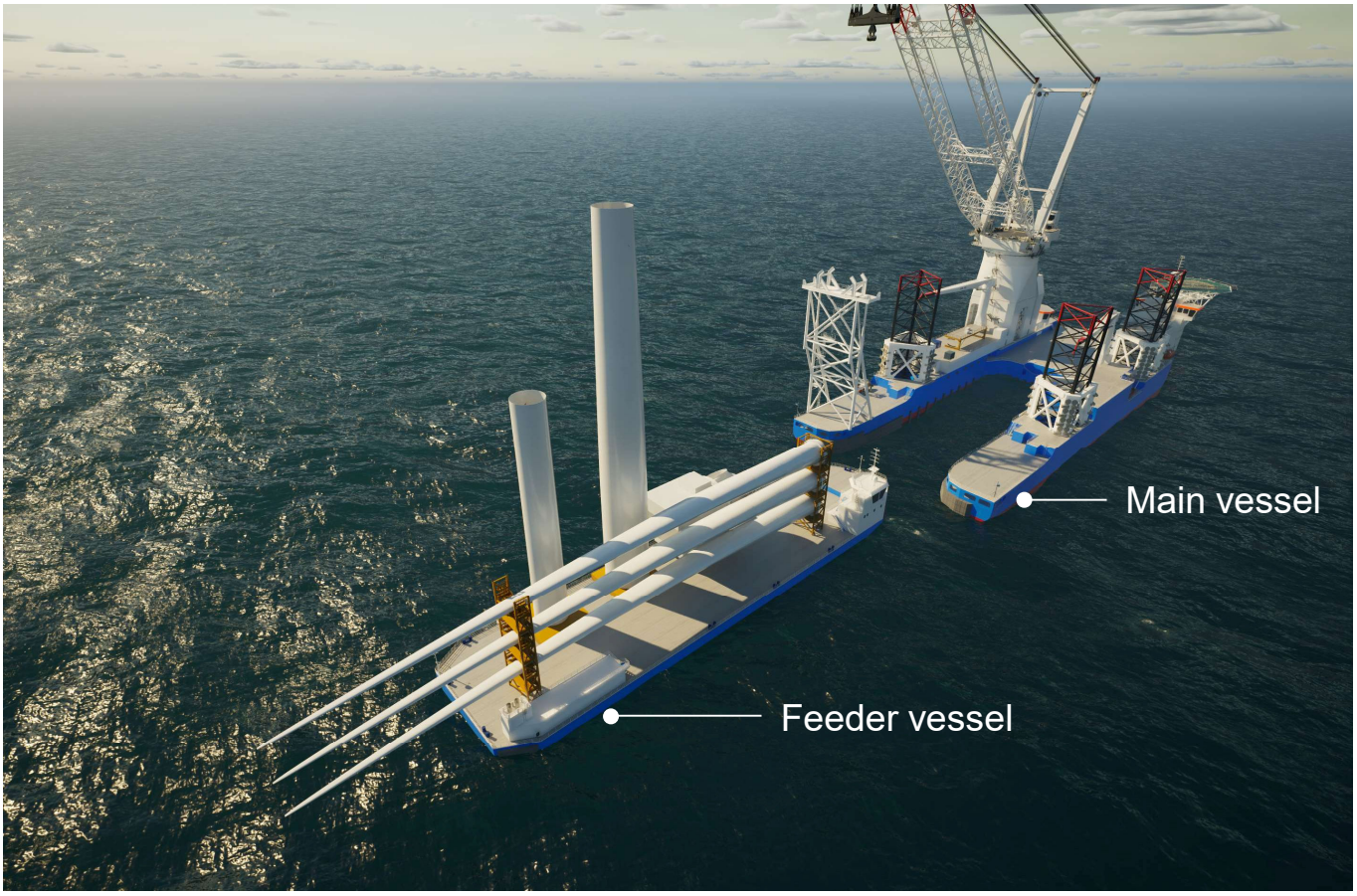
ONP
Management

Renewable
Resources
International

FEEDERDOCK

The innovative Jones Act compliant and global marine logistics solution, powered by feeder vessels docking into a heavy lift jack-up vessel, delivers a fixed-to-fixed installation methodology. Designed for the next generation of offshore wind turbines, capable of installing foundations of up to 2,800 t and wind turbines in the 25+ MW class.

- Addressing the global bottleneck of suitable installation equipment for the next generation wind turbine class from 2030 onwards
- Allowing access to ports with logistical restrictions
- Unlocking cost reduction potentials in marine logistics for wind turbines



Why FEEDERDOCK

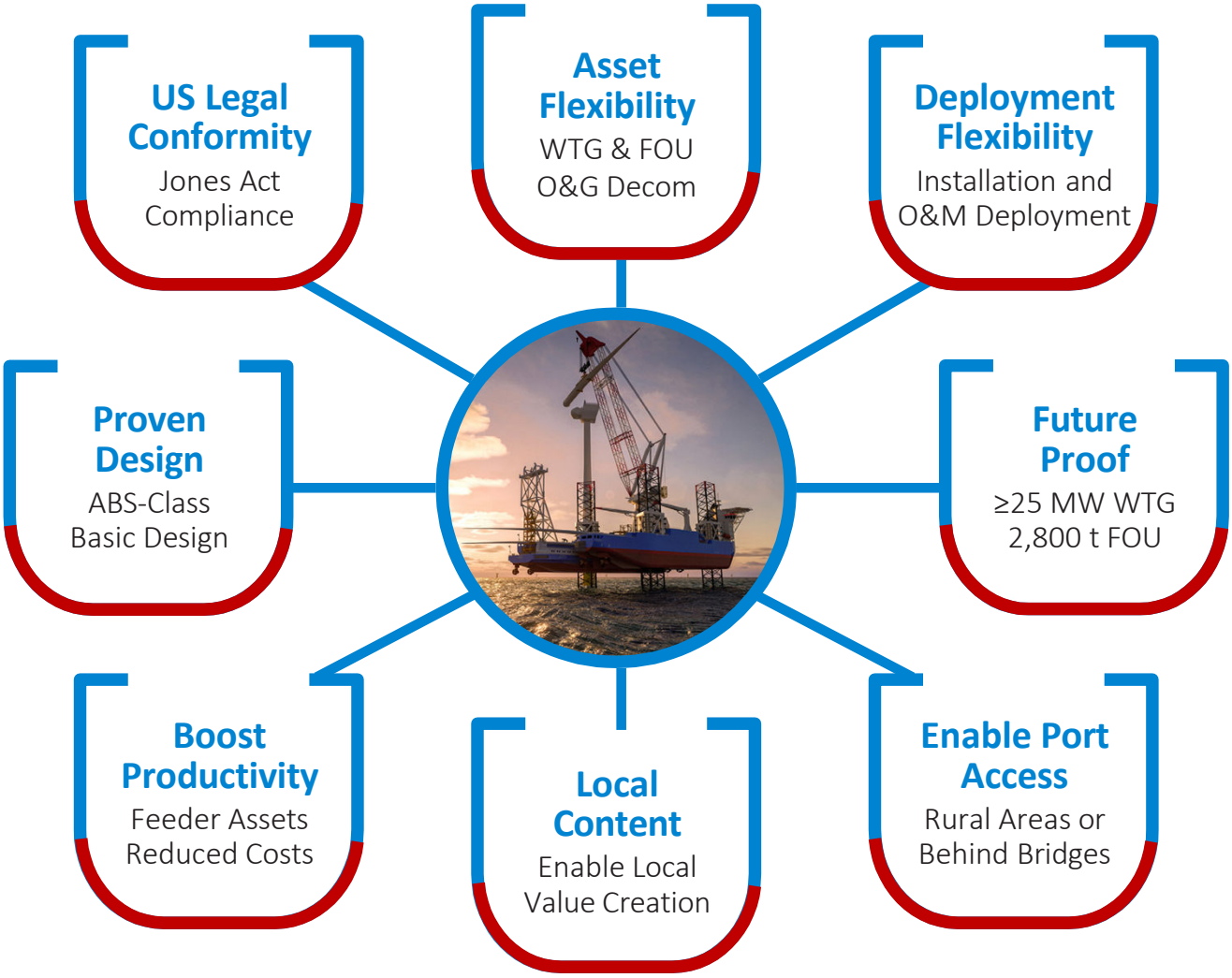
30-50% productivity advantage in offshore installation

Proven technology meets cutting-edge innovation

Ready for all global markets, including USA

US Jones Act compliant

Future proof



Operating Principle

Main vessel

- U-shape jack-up with moonpool
- Stays on construction site, installing permanently
- Operating material supplied by feeders

Feeder vessel

- Two feeder vessels commuting between port and site
- Feeder docking into the moonpool
- Jacking-up as ONE unit
- Fixed-to-fixed installation method
- Continuous feedering process

Main Properties

Main vessel

L / B	200 m / 67.2 m
Legs	131 m
Main crane	3,200 t
PoB	110
Operational water depth	70 m

Feeder vessel

L / B	122 m / 31 m
PoB	14
Transit speed	10-12 kts
DP capability	DP 2
Full scantling draft	6.2 m

Competitive Edge

Efficiency advantage

- The feeder solution performs 30-50% faster than conventional methods (HLJV commuting between site and port)
- Performance benefits increase with growing distance between site and port and number of WTGs

Commercial advantage

- Superior installation performance
- Earlier power feed-in (early completion revenues)
- Reduced interest during construction and operation period
- Minimized project costs (spread, port logistics, project teams)

Technical advantage

- Flexible to install both foundations and wind turbines
- World-class main system suppliers integrated
- Solution provides highest workability under broad wave spectrum, proven by tank tests (hs, wave period)
- Strong sheltering effect by main vessel enables smooth feeder docking process and grants high operational robustness
- State-of-the-art design supported by incorporation of European Learning Curve of project partners (15 yrs of HLJV design, construction, operation)

Infrastructure advantage

- Small, light-draft feeders replace conventional large heavy lift jack-up vessels to enter ports, translating into minimum infrastructure- & port requirements
- Enabling port utilization also in rural areas due to minimum draft requirements of the feeder vessels (6m)
- Reduction of extensive CAPEX investments in port build-out measures

Commercial Merits

Cost saving potential

- ~400 kUSD/day cost saving potential through shortening of construction time for the entire offshore wind project, compared with a traditional solution

Example:
A project with 100 WTGs can save up to 200 days of installation time, equaling 80 mUSD overall cost reduction for the entire offshore wind project

Customer base

- Leading European developers indicate strong interest in the solution
- Pipeline of designated United States FEEDERDOCK customers covers 5-6 GW of offshore wind projects
- Pipeline materializing in four years of utilization once US-market picks up again
- Strong customer interest in offshore wind O&M and Oil & Gas decommissioning

Engagement opportunities

- FEEDERDOCK development buy-out
- Vessel charter with buy-option
- Co-investment, complementing existing equity investor

Project Owner

ONP Management
[Hamburg, Germany]

European Learning Curve; multiple HLJV expertise (design, construction and operation e.g. "INNOVATION", "VOL AU VENT"); port logistics expertise (design, construction and operation e.g. "Bremerhaven", "Gdansk"); offshore wind expertise (installation of OWFs e.g. "Global Tech 1", "Baltic II", "Merkur", "HeDreiht", "Arcadis Ost")

Renewable Resources International
[Boston, United States]

US offshore wind development; State regulatory and strategic planning; US EPC project execution expertise; supply chain and infrastructure experience (e.g. OWF "Block Island")

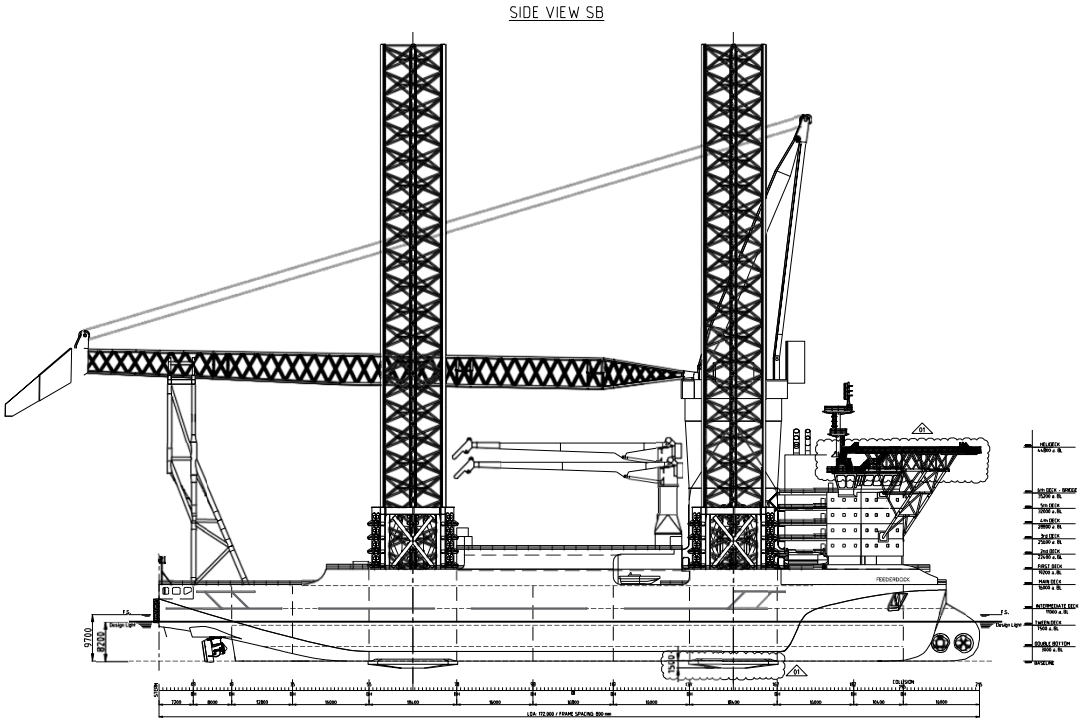
FEEDERDOCK development, design funding and execution is supported by a leading US-based private equity firm with significant involvement in energy transition & expansion.

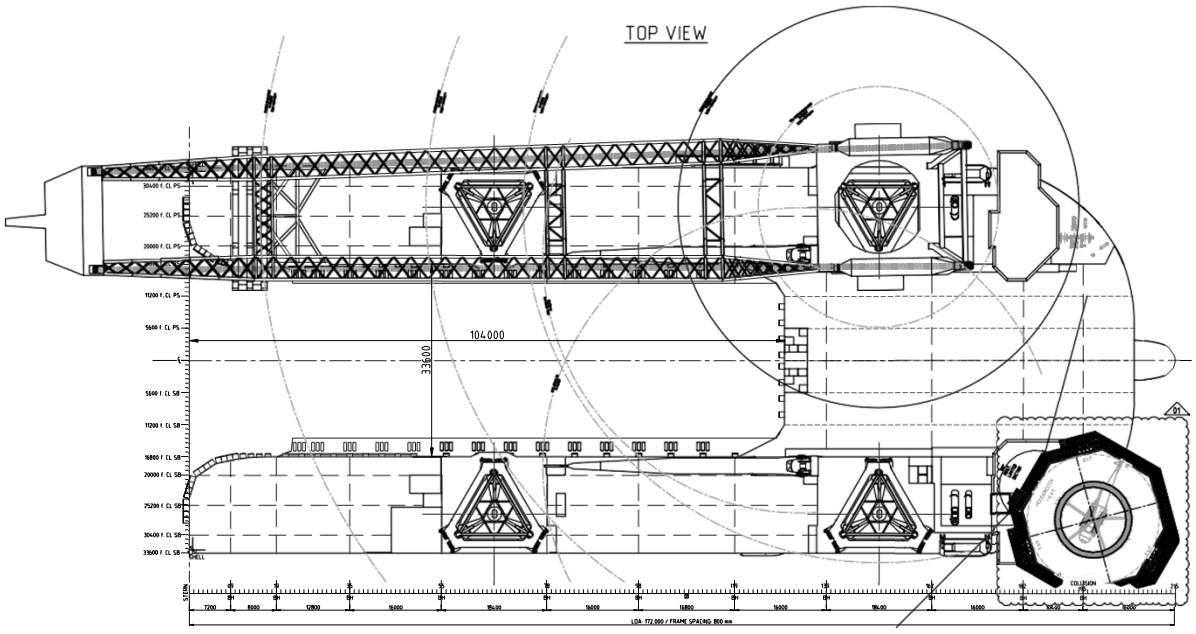
Summary

FEEDERDOCK is a game changing development for the global offshore wind sector, addressing all future technical challenges arising from technology development of foundation structures and wind turbines. The solution unlocks ground-breaking costs saving potentials enabled through its unrivalled operational efficiency. All supply chain partners are fully integrated in the technical development and the project is ready to enter the construction phase. The unique design is protected by international intellectual property rights and patents. We offer a variety of engagement options to interested parties.

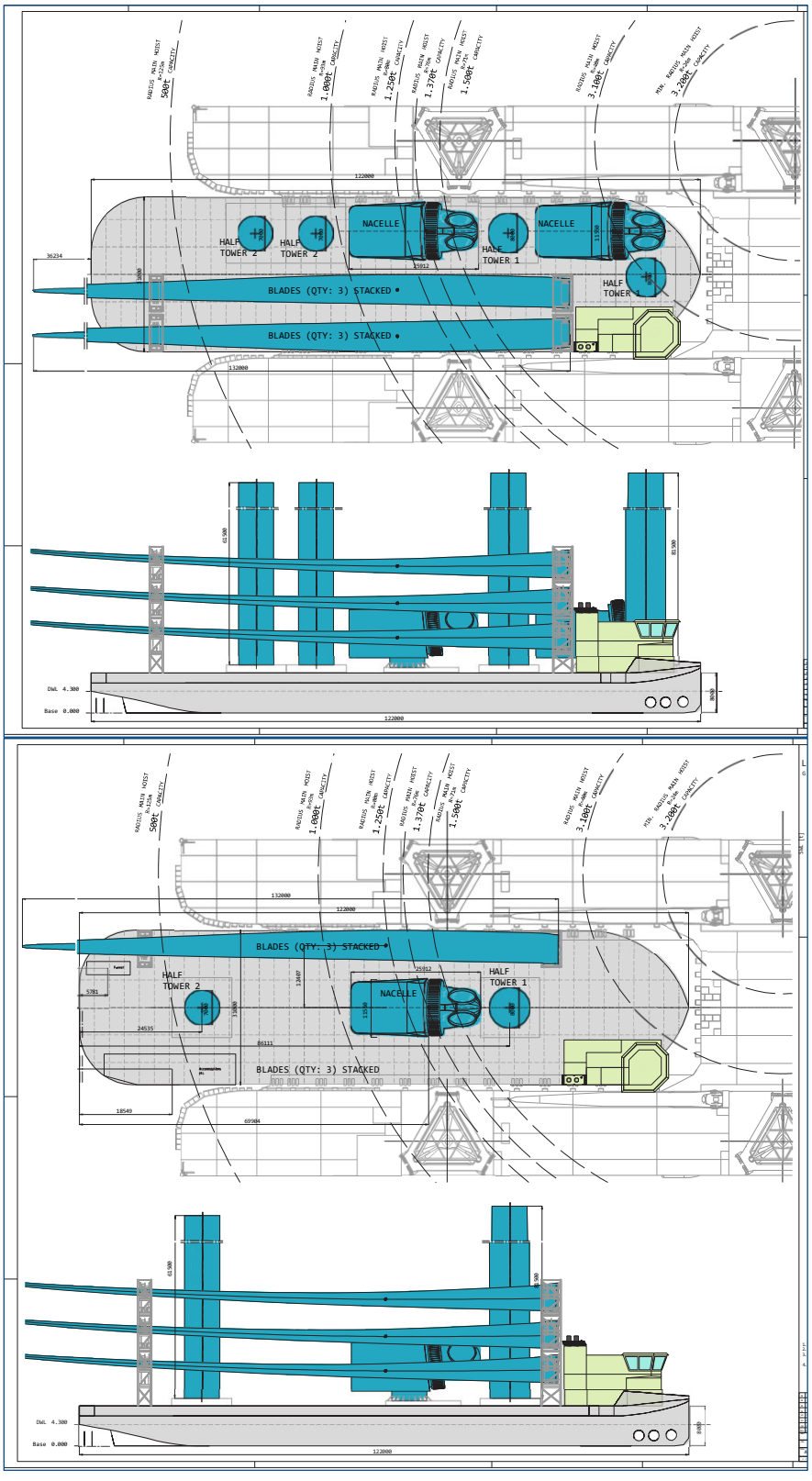
FEEDERDOCK video-link: ONP-management.com

Main Vessel – GA Plan





Feeder Vessel – Loading Options



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