#### **MAN Energy Solutions**

Future in the making



# MAN 175D

for ferry application





# **MAN – Ferry Applications**



2 x D2862, each 749 kW

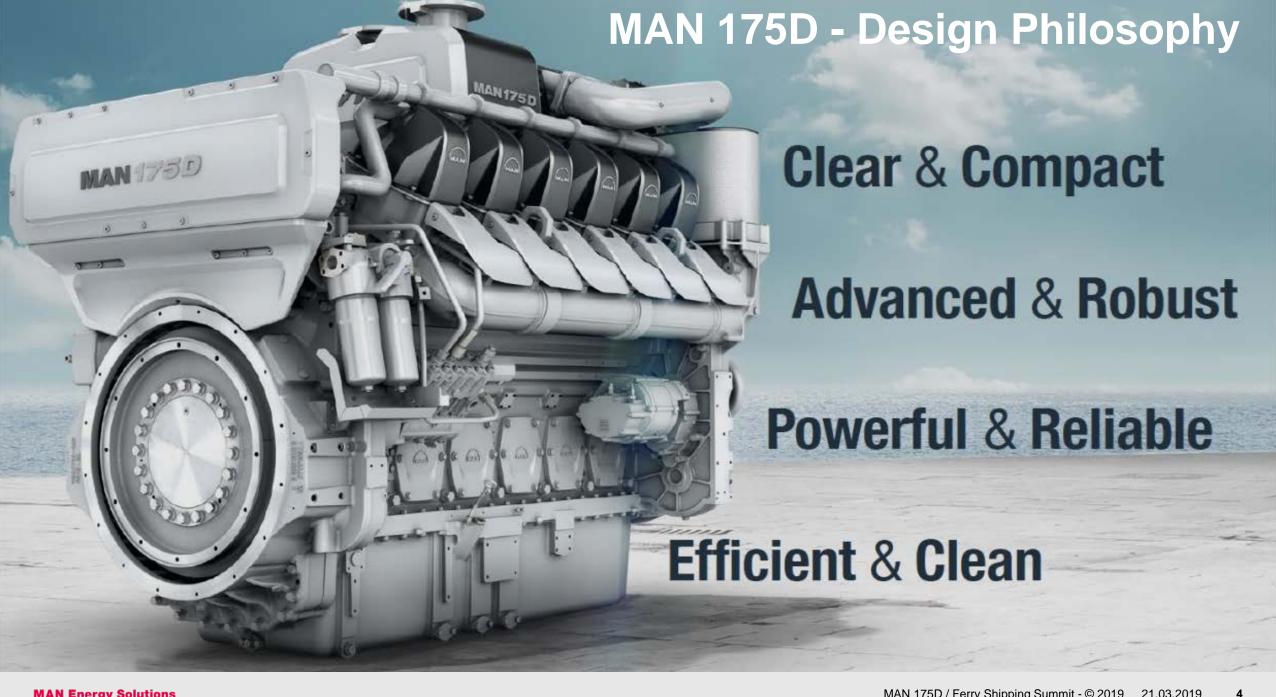
Vision of the Fjords, Brodrene

2 x 12V175D-MM, each 2220 kW

Oceanna, Pt. Palindo

4 x 20V28/33D-STC, each 9100 kW

Fjord Line, Austal

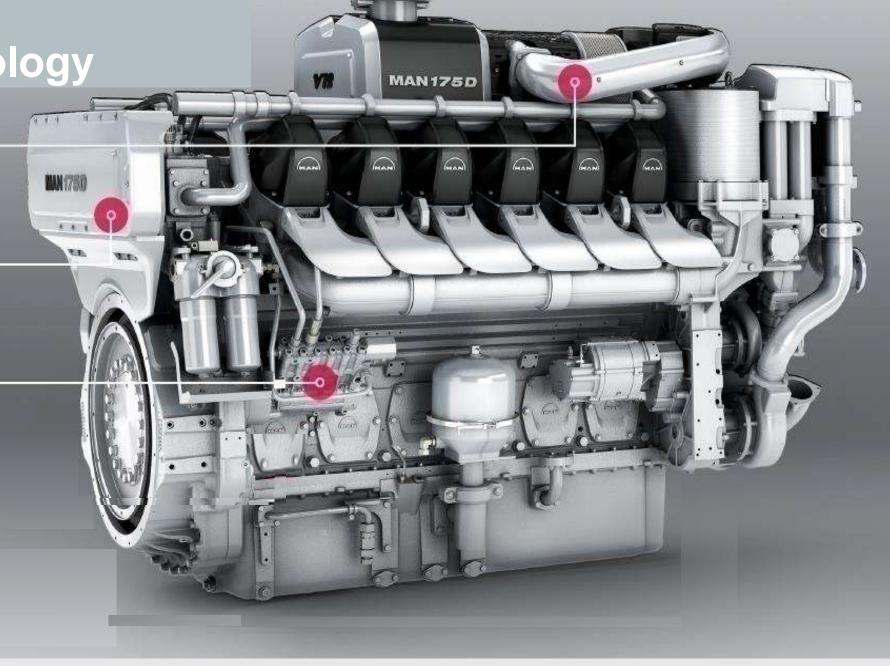


MAN 175D -Modern Technology

**High-Efficiency** MAN Turbocharger

**Engine-Mounted** MAN Engine Control System

Proven Common Rail Fuel Injection Technology -



**MAN Energy Solutions** MAN 175D / Ferry Shipping Summit - © 2019 21.03.2019

## MAN 175D – Basic design data

12V175D 16V175D

20V175D

Output: 1,500 - 2,220 kW

2,000 – 3.000 bhp

2,000 - 2,960 kW

- 4000 bhp

3,100 - 3,700 kW **- 5000 bhp** 

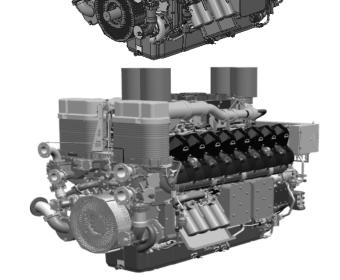
**Speed:** 1,500 - 1,900 rpm

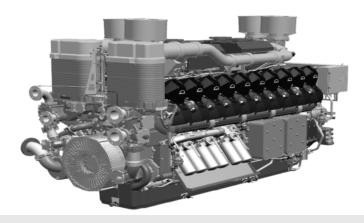
Fuel: MGO (EN590)

Emission: IMO Tier II

IMO Tier III with SCR

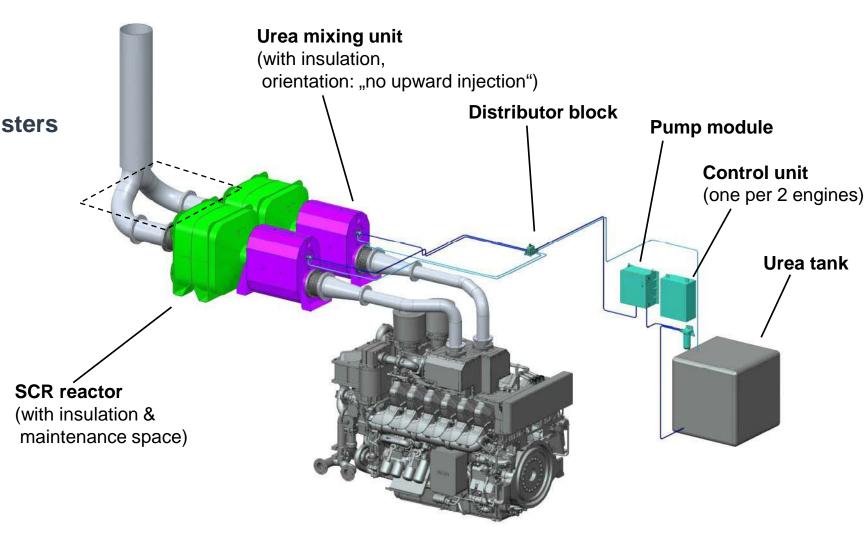
**TBO:** 24,000 h - 30,000 h





# MAN 12V175D - Compact SCR for IMO Tier III

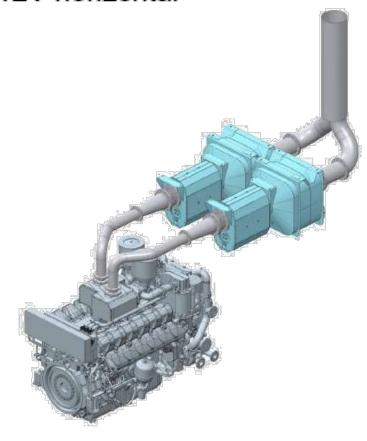
- Highest compactness
- Free arrangement of SCR canisters
- Closed loop control system with variable urea dosing
- No compressed air needed
- "Single supplier" solution Scheme A certification
- Long catalyst lifetime

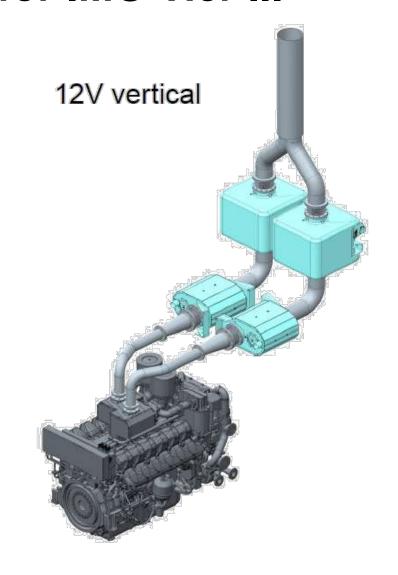


## MAN 12V175D – SCR solution for IMO Tier III

Flexible installation

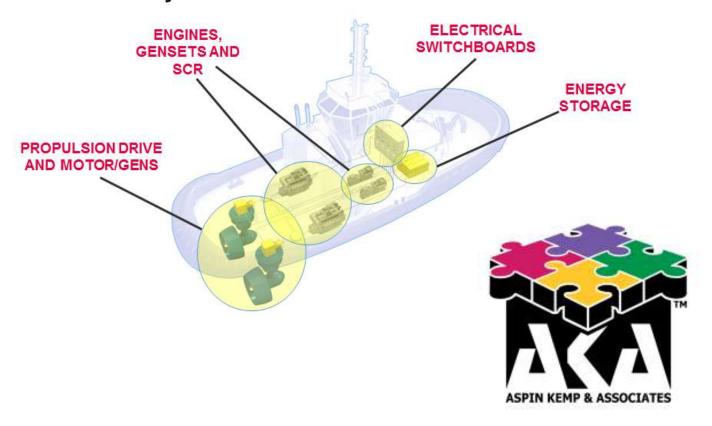
12V horizontal





## Highly-efficient battery-hybrid propulsion systems

#### MAN 175D – Hybrid Solution

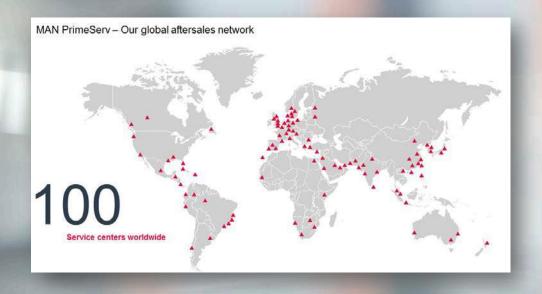


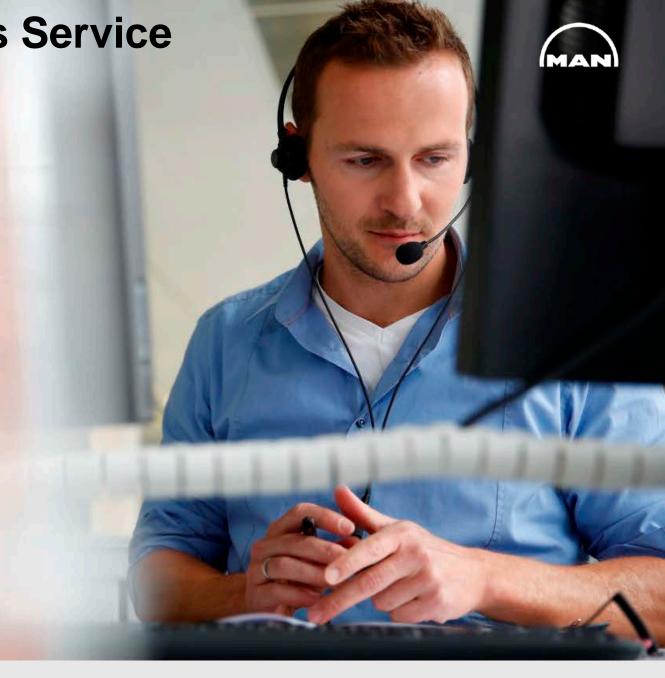


PrimeServ - MAN After Sales Service

#### **MAN PrimeServ Assist**

- Remote Monitoring
- Cloud based MAN CEON platform
- Expert analysis of data and technical support and maintenance advice





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# MAN 175D Example – Propulsion on Fast Ferry





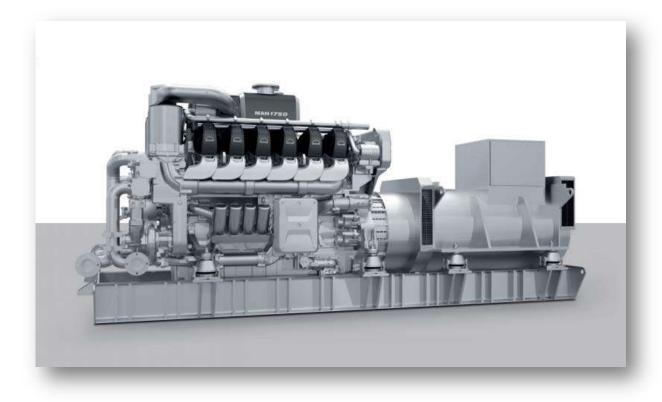
Vessel type: 400 Pax Fast Catamaran Ferry "OCEANNA"

Engine: 2 x 12V175D-MM, 2,220 kW at 1,900 rpm

Diesel-mechanic propulsion, FPP, max. Speed 35 kn

# **MAN 175D Example – Genset Operation**





Vessel type: Support Vessel

Engine: 2 x 12V175D-MEL (1920 kW, 1800 rpm)

Diesel-electric marine genset with SCR

### **MAN 175D**

#### **Increased diesel performance**

- Reliable and robust high speed engine
- Improved operating costs
- Improved fuel comsumption
- Highest power density

#### **Increased potential for**

- Combination of variable speed gensets with DC hybrid systems
- Auxiliary power generation with cleaner fuels



Future in the making



# Thank you



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Depending on the subsequent specific individual projects, the relevant data may be subject to changes and will be assessed and determined individually for each project. This will depend on the particular characteristics of each individual project, especially specific site and operational conditions.