

Color Hybrid

Ro-Pax



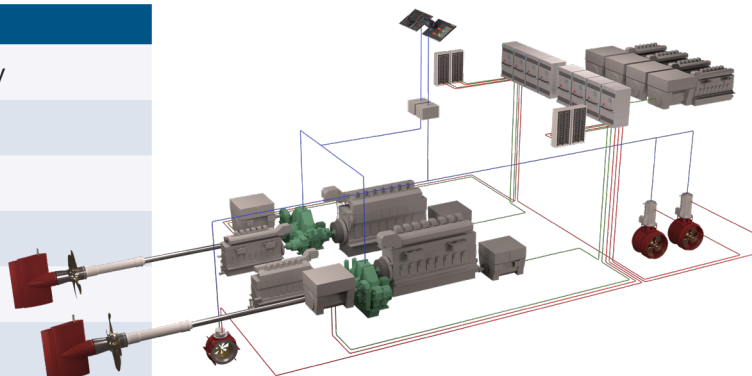
Photo: Brick / Color Line

VESSEL INFORMATION

Owner	Color Line Marine AS, Norway	
Shipyard	Ulstein Verft AS, Norway	
Hull Number	331	
Year Built	2019	
IMO Number	9824289	
Ship Design	Fosen Design, Norway	
Class	DNV - Ice 1B	
Prime mover	Diesel Mechanical	
Type: B33 45L6P	Power: 3600 kW	RPM: 750
Type: B33 45L8P	Power: 4800 kW	RPM: 750

BRUNVOLL SUPPLY

Reduction Gear	ACG TS1400 Coax600 & SA600	
PTO/PTI	SA600	
Propellers	ECP 115, diameter 4600 mm, 30-120 RPM, with Integrated Costa Propulsion (ICP)	
Rudder	Van der Velden® TTA Rudder, and Steering gear type COMMANDER™ BRV 630-45	
Tunnel Thrusters	Bow: FU100 LTA 2750 x 2 Stern: Rim Driven Thruster RDT 1800 F	
Control System	Brunvoll Controls for Propulsion, Thruster & Steering Gear	



Hybrid CP Propulsion

A Hybrid system enables ships with variable power requirements to run at high propeller efficiency. A large number of operational modes are available in the complex configurations, enabling the engines and propellers to run optimally over a wide power range.

This configuration is designed for dual fuel or battery electrical drive. In such a system design the vessel can utilize the power required for the specific operation in pure electric mode, or in dual fuel mode, or in a boost mode or peak shaving by engaging both systems.

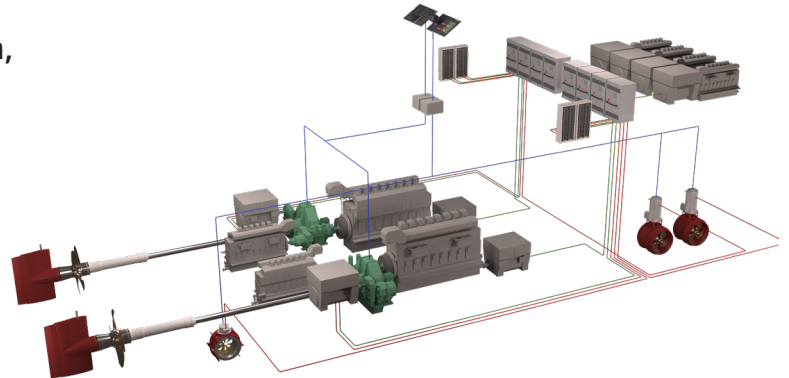
A hybrid system configuration is a fuel efficient and flexible system, with high redundancy. The system allows the engines to run in optimized load condition, and the most efficient way in respect of energy consumption.

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Brunvolls supply consist of propulsion, manoeuvring and control systems for efficient and sustainable operation.

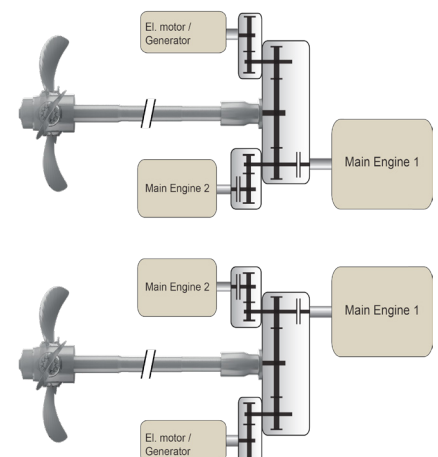
The system is optimised to the operation profile of Color Hybrid.



Reduction Gearbox for Hybrid Propulsion

Flexible gearbox designed for the possibility of a high number of operational modes;

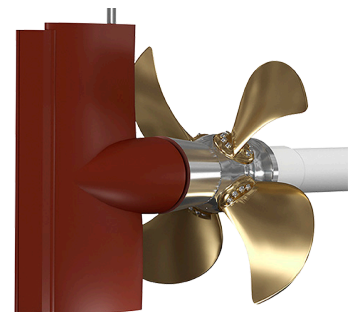
- Hybrid system prepared for multiple engines and energy sources
- Efficient power distribution from a wide range of power input and power output (PTI/PTO)
- Compliant with all types of future energy sources
- Compatible with all engine makes
- Configured to your specific needs and operating profiles
- High quality in materials and a robust design



Integrated Costa Propulsion (ICP)

ICP consists of a twisted leading-edge rudder and a hub cap acting as one system. ICP improves energy efficiency and reduces fuel consumption;

- Significantly increased propulsion efficiency
- Reduced noise, pressure pulses and cavitation
- Robust and reliable construction
- Improved low-speed manoeuvrability



Rim Driven Tunnel Thruster (RDT)

Sustainable tunnel thruster with motor and propeller in one compact unit;

- Efficient operation
- High degree of manoeuvrability
- Low noise and vibration
- Compact design with savings in weight and space
- No transmission losses
- Reduced cost by system simplicity

