



HyPS

HYBRID POWER SYSTEMS

Carefree sailing with HyPS hybrid power and propulsion

The Company

HyPS is a Netherlands based company specialising in the design, development, delivery and service of marine hybrid power and propulsion systems. The HyPS team combines enthusiasm for this exciting technology with extensive experience in shipbuilding, power and propulsion system design, electrical and mechanical engineering and system integration. Our team is dedicated to fulfilling the expectations of our customers. We are ready to discuss

your wishes and to customise our solutions to meet your specific requirements.

HyPS was founded in 2014 as a spin-out company from a yacht builder and a marine electro technical system integrator. The HyPS engineers have a longstanding experience with hybrid systems. They have been involved in hybrid projects for yachts, tugs and other commercial vessels.

The HyPS Hybrid System

Hybrid propulsion system

The term hybrid propulsion system refers to a system that has two independent drive systems for the propulsion. In most cases these are a diesel engine together with an electric motor.

Hybrid power system

The main characteristic of a hybrid power system is that it uses more than one energy source to generate power, e.g. diesel fuel, electric shore power, wind power, solar power, hydrogen or power generated by the yacht's propeller while sailing. The electric power can be stored in batteries, in a supercapacitor or be utilized instantly by electrical equipment.

What you can expect from a HyPS hybrid system

Performance

- Increase in propulsion performance and vessel speed
- Increase in range and autonomy
- Weight reduction

Economic operation

- Reduction in operational fuel costs
- Reduction in maintenance costs of main engines and DG sets
- For sailing yachts: wind power recovery

Environment

- Reduction of environmental impact
- Compliant to regulations of Emissions Controlled area's
- Zero emissions operations (with all diesels shut down)

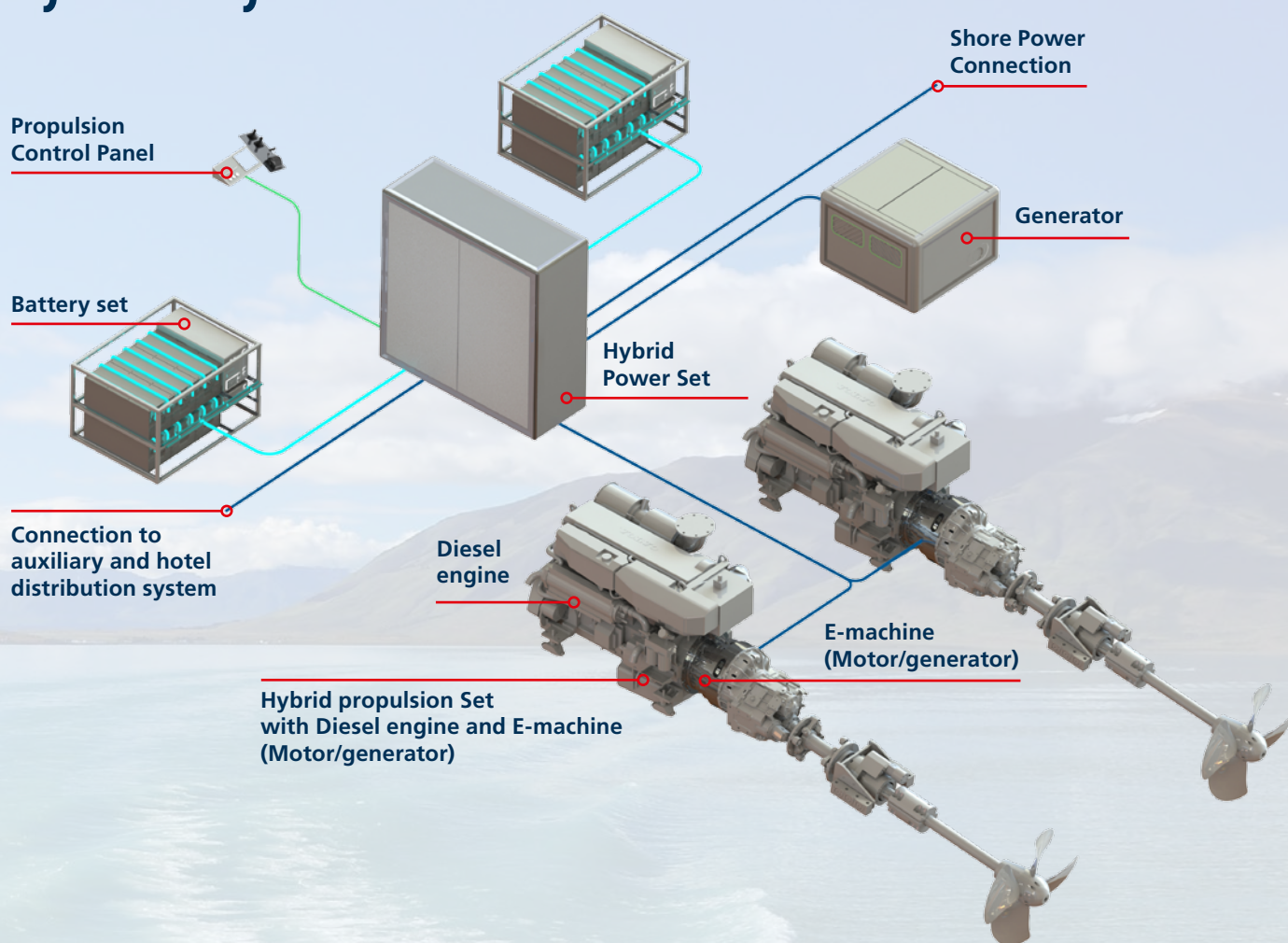
Comfort

- Zero emissions operations (with all diesels shut down)
- Silent cruising (with all diesels shut down)
- Quiet cruising (with main engines shut down and only the gensets on)
- Silent and zero emission berthing or anchoring

And...

A highly innovative look and feel

System Lay-Out



Products

HyPS has developed a hybrid power and propulsion system range that is compact, light and versatile. The main building elements are:

- One or two Hybrid Propulsion Sets
- One or more Battery Sets
- One or more Variable Speed Gensets
- The Hybrid Power Set
- The Propulsion Control Panel

These HyPS elements interface with the ship's propulsion, power, alarm and monitoring, ICT and navigation and communication systems.

Our hybrid systems can manage electric propulsion and power ranging from 75kW to 2MW.

The energy storage in the battery sets is scalable from 28 kWh up to more than 1000 kWh.

The HyPS system includes a Hybrid Automation System. The HAS manages propulsion commands and selects the most efficient propulsion and power modes. It also takes care of power and energy management including battery conditions. This results in optimal performance, long lifetime of equipment and low operational costs.

HyPS uses selected rugged, high-quality components with proven performance in the marine environment. We have combined these components to create systems with best in-class properties for performance, reliability, weight and volume, optimal cost of ownership and minimal environmental impact.

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Contact

HyPs offers hybrid power and propulsion systems for a wide range of marine applications, from motor and sailing yacht to inland ships and patrol vessels. Please contact our office if you would like to find out what we can do for your vessel. Our team will analyse your wishes and requirements, and we will discuss the possibilities with you.

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