

# SHYMGEN

## Fuel Saving Solution for Vessels

### POWER CONVERTER SYSTEM FOR VOLTAGE FREQUENCY CONTROL

#### FUEL SAVING SOLUTION FOR VESSELS

Power generation onboard is normally carried out by diesel engines driving constant speed synchronous generators either as shaft generators or auxiliary diesel generators.

Diesel engines operate more efficiently at variable speed, also controllable pitch propellers show a better hydrodynamic performance than constant rpm operation, mainly due to the higher pitch setting for a given load.

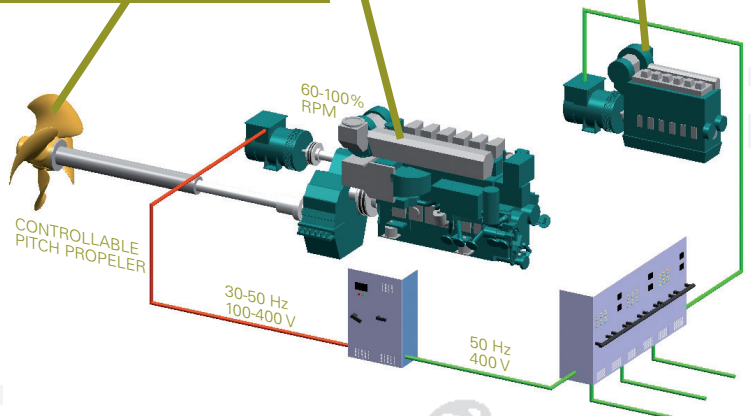
The SHYMGEN system is a power conversion solution able to control the voltage and frequency of the power generation systems onboard.

It allows the generators and drive train to be run at variable speed, thus optimizing the efficiency of both diesel engines and propeller.

### IMPROVED HYDRODYNAMIC PERFORMANCE: EFFICIENCY & CAVITATION

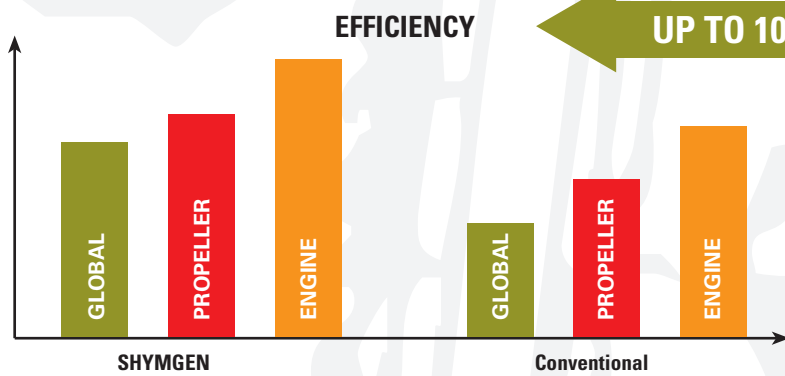
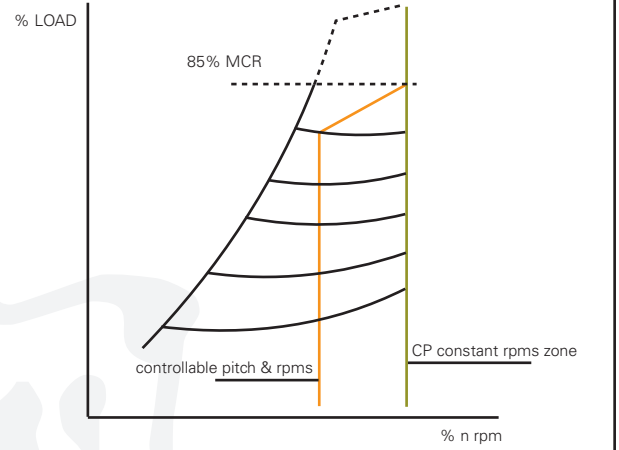
### SPECIFIC FUEL OIL CONSUMPTION REDUCED BY 5-10%

### ALSO SUITABLE FOR DIESEL GENERATORS WITH LOAD SHARING OPERATION



**ADVANTAGES**

- Fuel consumption reduction
- Payback time less than two years
- Less pollutants emission (NOx, CO2, ...)
- Turbocharger performance improved
- Shaft generator not affected on rough weather conditions
- Less wear of engine and propeller components
- Reduce service maintenance
- Propeller efficiency increased on every operating condition
- Cavitation, vibration and noise significantly reduce


**PROVEN SYSTEM**

"Since we installed the SHYMGEN system, we have reduced our fuel consumption by 10% . We are very happy with the performance of the unit both in terms of energy efficiency and comfort on board; the crew noticed an important reduction of the vibration level due to the operation in combinator mode.

Due to these outstanding results, we have already placed an order for installing this solution in the rest of our fleet."

Alfonso Iglesias. Shipowner FARPESPAN

All information within this brochure is based on general performance characteristics. Changes may be made by EMENASA from time to time to any information contained herein.