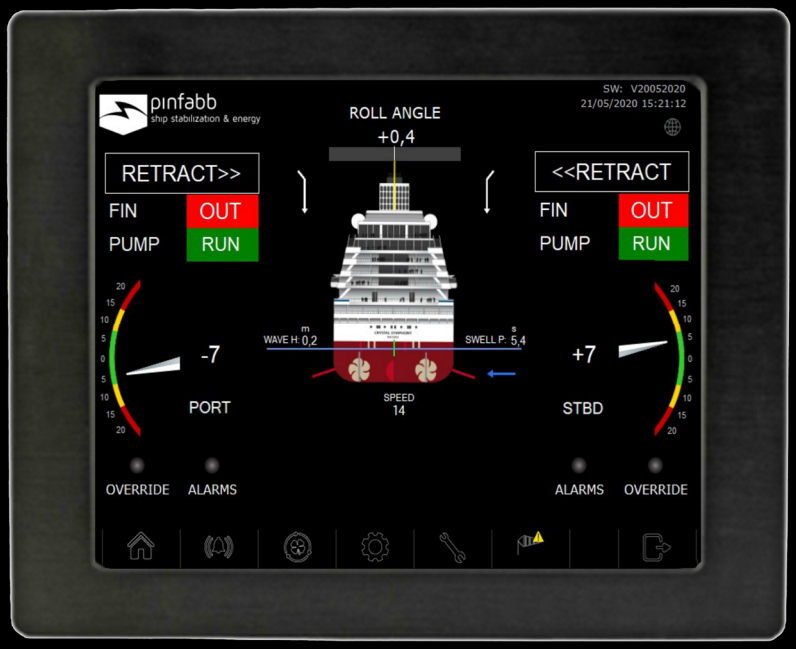
Pinfabb POSEIDON^4

Advanced retrofit for stabilizing fins



✓ ***ENERGY EFFICIENCY***

Reduces up to 60% stabilizers drag and consumption
Reduces fuel and CO2 emissions up to a general 2%
Can be added to the SEEMP

✓ ***SIMPLICITY***

Perfect retrofit for your stabilizers plant, avoids any expensive and obsolete spare parts
Easy to install on any fins control unit
Installation can be performed also during ship operation
100% compatible with all stabilizers plant

✓ ***SUPPORT***

24h/24 phone and mail support Maintenance Package offers peace of mind
Care for ALL plant aspects (MECH, HYDR, ELEC).
Remote diagnosis and assistance over internet connection

✓ ***ARTIFICAL INTELLIGENCE***

Dynamic Fine Adjustment
Revolutionary weather data integration
Dynamic Stabilization Parameters
Big Data

STABILIZERS DIGITAL TRANSFORMATION. THE SMART WAY.

DISCOVER POSEIDON

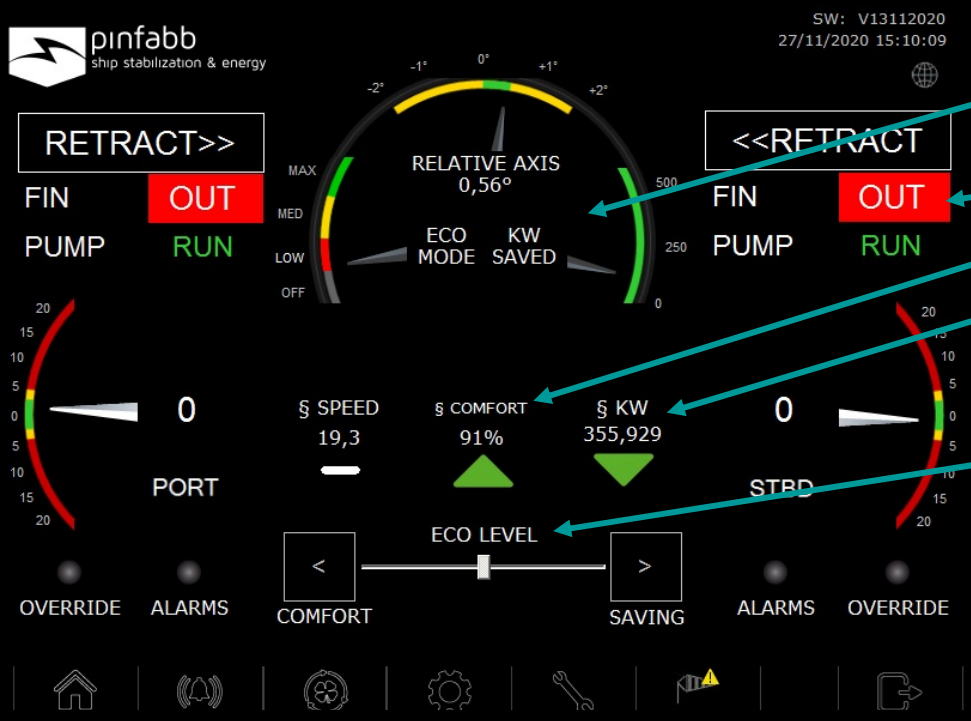
Stabilizing Fins and Comfort-on-board are Pinfabb Srl core business: we repair any type of stabilizers since 1981.

From this experience we developed the 4th generation of POSEIDON, a compact and High-Tech Stabilizing Fins Control projected and designed with the state-of-the-art technology. It is suitable to control fins for both small and large ships, adapting itself to the existing mechanical, hydraulic and electrical parts of any stabilizing plant. The system is equipped with a special Energy Saving Software, capable to reduce the stabilizers drag and consumption up to 60%, improving ship efficiency up to 2%, and with a Remote Monitoring Facility.

✓ ENERGY EFFICIENCY

RENOVATION AND INNOVATION: THINK GREEN

Owners who choose POSEIDON demonstrate their propulsion in the improvement of the maritime technology, their attention to the environment and their attention in the passengers' comfort and safety on board their ships.



-Saving Energy out from stabilizers drag.

-Both fins out and ship stabilized.

- Improved OnBoard comfort index.

-POSEIDON proved to reduce up to 60% of the fins drag and consumption, improving the ship speed up to 0.35 knots.

-ECO LEVEL can be adjusted by the operator in intuitive way depending on the target of the moment (example: night navigation, passengers' dinner, bad weather, etc…)

✓ SIMPLICITY

Are you experiencing one of the below problems with your stabilizers system?

- **x** Difficulties to find old and expensive spare parts?
- **x** Not proper function of the stabilizers?
- **x** High maintenance costs?
- **x** Energy/speed consumption related to the stabilizers?

...then, you need to retrofit your stabilizers with POSEIDON.
The idea behind Poseidon is to create a modern, robust and digital system capable to retrofit **very easily** any stabilizers control, resolving all the active problems and bringing to the ship-owner/management some important advantages, like:

- ✓ Renovation of the entire plant with few, modern and reliable components.
- ✓ Removing obsolete units, the crew operations become smoother.
- ✓ Maintenance costs are reduced.
- ✓ Stabilizers efficiency is improved, and their consumption reduced up to 60%.

We believe in systems which are simple, composed by few and very robust plug-&-play components, and this philosophy is behind the design of POSEIDON.

POSEIDON[4] INSTALLATION

BRIDGE CONTROL UNIT

PIFABB CORE

PINFABB MAIN UNIT

ETHERNET CABLE

PORT LOCAL UNIT

STBD LOCAL UNIT

ON BOARD

WHEELHOUSE

PINFABB BRIDGE MONITOR

10" touchscreen with dimmer facility, it is usually installed on the same position as the old existing stabilizers panel.
Poseidon Kits gives the possibility to install the system using the existing Mechanical Frame.
Stabilizers status and understanding real time vessel roll movement and behavior are displayed on the screen.

ENGINE CONTROL ROOM

PINFABB MAIN UNIT

It is usually installed in the Engine Control Room.
Directly connected via Ethernet with Port & Stbd Local Unit and via USB to the motion sensor unit.
Diagnostic tools are available on the screen, including the revolutionary remote assistance /monitoring software and the maintenance scheduler to keep under control the condition-based maintenance.

FINS LOCAL

LOCAL UNITS

There is one LOCAL UNIT for each fin (PLU & SLU) and from this cabinet it is possible to operate the relative fin locally.
The local systems have been designed with attention to all the diagnostic and service procedures both for crew and technicians' use.
Each LU is composed with industrial and military grade components, which give superlative precision and velocity in the stabilizers movements.

✓ SUPPORT

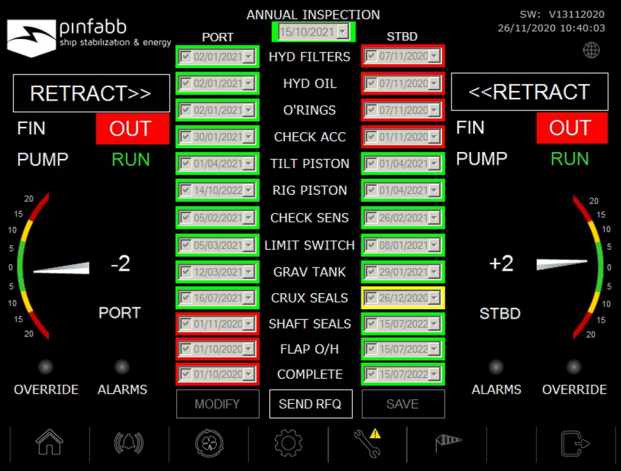
At Pinfabb we go proud for the support that we reserve to all our clients worldwide in different ways.

Service requests have a reply time of less than 24h and when service engineers cannot inspect vessels physically, a practical alternative for clients is to use Remote Service Sessions. During the years customers joining this tool have been more and more, proving it is a very reliable and useful tool to solve tasks remotely, avoiding costs as travel, engineers on place, etc.

The Maintenance Scheduler integrated into POSEIDON helps in better manage the ordinary maintenance needed for ensure an uninterrupted functionality of stabilizers.

Remote Service Sessions thanks to the Remote Maintenance Package and system connectivity.

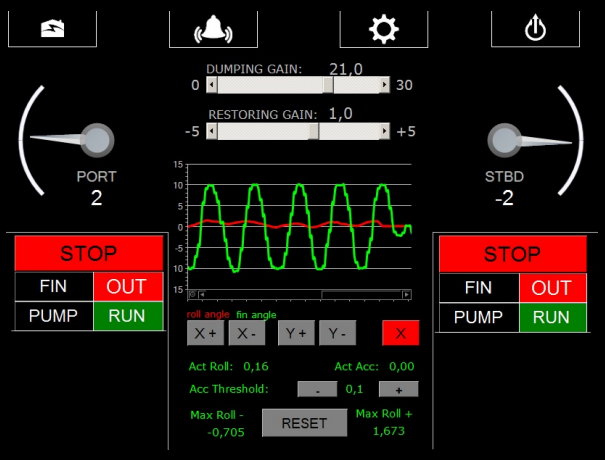
On board Service with specialized service engineers tuning Stabilizers Power Unit

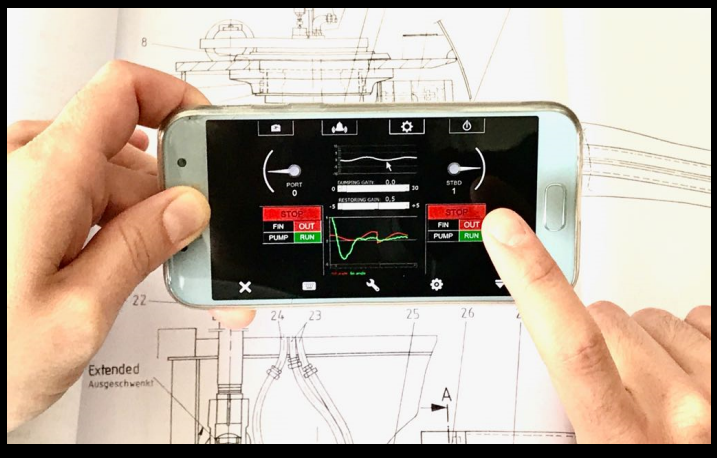


Plant Maintenance Scheduler integrated into POSEIDON is based on real condition of the plant.

SEA TRIALS AND RESULTS

After every installation, Pinfabb Engineers follow the ship in one navigation to test the system with the collaboration of the ship crew.
During the sea trials engineers and Captain/Crew exchange their experience and technical point of view in order to find the most effective and efficient tuning of the fins.
As Poseidon is the most advanced stabilizers system in the market, from its tuning page it's possible to tune the fins reactions and behavior, in order to find the custom stabilization and obtain the perfect comfort.

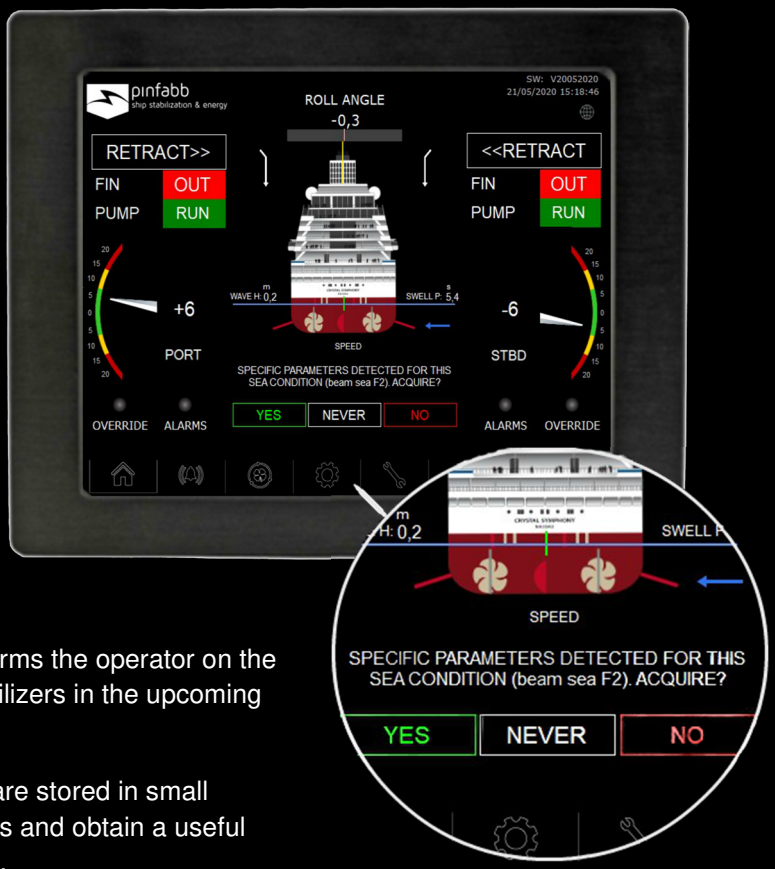




In some case Remote Commissioning Session can also be performed simply using the POSEIDON REMOTE CONNECTION, simplifying the process and without travel cost for boarding engineers when the weather conditions are perfect for a commissioning session.

✓ ARTIFICAL INTELLIGENCE

It is commonly known that different weather situations, as different swell directions, need different stabilization method to obtain the best available OnBoard comfort. By integrating weather data collected by our weather partner WWO (weather info and forecast for any geo-point in the world with a model which run along with other meteorological models like world meteorological organizations, NASA weather satellite imagery and NOAAGFS2), POSEIDON is capable today to identify the various weather conditions where the ship is sailing, create a ship motion profile and learn the best way to stabilize the ship in each condition, suggesting to the operator the acquisition of dedicated parameters.



This technology has been called DSP (Dynamic Stabilization Parameters)
This integration also gives the possibility to offer the best comfort and the best energy saving, according with the dynamic conditions where the vessel is operating.

Basing on actual speed and course, POSEIDON also informs the operator on the weather condition expected and the necessity to use stabilizers in the upcoming 12 hours.

Big data related to the use of stabilizers and ship motion are stored in small format file which can be used to define ship motion profiles and obtain a useful telemetry of the stabilizers use and their energy efficiency.

PINFABB PROVIDES STABILIZERS SPARE PARTS AND SERVICE WORLD-WIDE

Head Office:
Genoa, Italy

Service Point:
Genoa, Italy
Naples, Italy
Lisbon, Portugal
Piraeus, Greece
Buenos Aires, Argentina

Commercial Agencies:
Tallinn, Estonia
Singapore
Miami, Florida

PINFABB SRL
Via Borzoli 90E r 16153 Genova
Ph: +39 010 881 426 Fax: +39 010 813 271 E-mail: info@pinfabb.com
www.pinfabb.com