



## FIN STABILIZER SYSTEMS

### Quiet and precise stabilization

It is important to understand that there are many factors that go in to selecting the optimal stabilizer system. Vessel characteristics such as LOA, weight, displacement, windage, roll period and metacentric height are all critical factors in selecting the best stabilizer system. How and where you Cruise are also important factors in your choice of a stabilizer system.

WESMAR's DSP5000 Wave-Smart uses predictive technology together with actual vessel motion to enhance the stabilization of the vessel. It brings faster response, smoother stops and replaces chasing and wasted energy while minimizing noise.

The DSP500 uses an integrated processor that combines the key elements of interfacing fin position, velocity and acceleration with the characteristics of the vessel. Add WESMAR's legendary rugged and reliable, neutrally buoyant hydrodynamic fins and a whole new level of comfort and control is realized. This new stabilization method delivers maximum comfort, a smooth ride, and quiet operation backed by over 50 years of WESMAR's maritime pedigree.

The DSP5000 control is simple and intuitive with seamless interfaces to today's advanced technologies, such as integration with GPS, CANBUS, alarm suites, and more. The activation of the system is achieved by one touch of a button and is available on-demand with no warm up time.

### Features:

- Programmable and Expandable display / controller with an easy-to-use settings menu.
- Real time graphic display of fin reaction to roll that can be monitored by the end user.
- Ability to add vessel specific custom display screens.
- WESMAR's WaveSmart® control system provides rapid response and control of the hydraulic system resulting in quiet and smooth positioning of the stabilizer fins.
- All system operation data can be down loaded to a flash drive via the onboard USB port if required for system troubleshooting.
- Advanced Display with simple and intuitive User Interface.
- Two modes for beam and following seas.
- NMEA 2000 interface to vessel GPS systems automatically adjusts to boat speed and position.
- CANBUS compatible.
- Advanced proprietary internal electronic gyro provides control feedback for roll and horizon working in conjunction to keep the vessel level in a wide range of conditions.
- System remains stable in turns and remains stable as vessel accelerates or decelerates.
- Rugged, triple layer fin construction features strong and lightweight structural foam.
- Available with single or dual actuators depending on fin size and system configuration.



### Fin Stabilization versus Inertial Gyro Stabilization?

There are two types of stabilization systems commonly in use today: fin stabilization and inertial gyro stabilization. Both have advantages and shortcomings.

Fin stabilization is most effective for stabilization "at speed", typically costs less, adds little weight to a vessel, takes up minimal real estate, has low power consumption, is quiet, and can be activated instantly with a touch of a button. Fin stabilization systems are not as effective for "at anchor" stabilization.

Inertial Gyro technology is new and novel and does a good job at "at anchor" for boaters who often anchor in rough seas. However, they are not as effective for "at speed" stabilization. They have a large footprint, consume more power, require a long warm-up and shut down cycle, and are typically more expensive to purchase, install, and maintain.



Over 50 Years of  
Marine Innovation

## WESMAR STABILIZERS CREATE LOYAL REPEAT CUSTOMERS

In 2010 Captain Scott Nichols installed a WESMAR stabilizer system on his 70-foot Hatteras Motoryacht. He was so pleased with the system that when he purchased his new 85-foot Sea Force IX, custom fishing yacht, the M/Y RUMBERA, he wanted a WESMAR Stabilizer system installed on it as well.

Captain Scott contacted Bob Sentz at WESMAR who put him in touch with Brad Heard at Ramsay Marine Mechanical Services in Riviera Beach, Florida. Ramsay is a factory trained WESMAR dealer, highly qualified and highly capable.

Brad and company installed the popular new WESMAR DSP5000 system with hydraulically driven 9.5 square foot fins, with a 932 dual cylinder actuator. It was part of a complete refit at a boat yard in Stuart, Florida, just 30 minutes up the coast from Ramsay Marine Mechanical Services.

Ramsay is a full service company with 20,000 sq. feet of space for welding/fabrication, machining, mechanical and complete hydraulic repair. They also have extensive mobile capabilities including a satellite office/work shop and three trailers fully equipped with tooling so traveling to the yard in Stuart was no problem for them.

They installed WESMAR's DSP5000, a completely digital system getting strong reviews for its quiet, precise stabilization in all sea states and at all speeds. It provides unmatched performance without adding to the weight of the boat and it is rugged and reliable with the best lift-to-drag ratios.



- Electronic Gyro Upgrades  
A unique WESMAR Retrofit Package allows boat yards and boat owners to upgrade older stabilizer systems to the state of the art electronic gyroscope and controls of the DSP5000.
- The Stabilizer upgrade does not require replacing existing actuators and fins, therefore an expensive haul-out is not required.
- The WESMAR DSP 5000 upgrade works on all models of WESMAR Roll Fin Stabilizers AND those of most other fin stabilizer manufacturers.
- A DSP5000 upgrade can typically be done in less than a day.

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MODEL	FIN SIZE	FIN SHAFT DIAMETER	ACTUATOR CYLINDERS PER FIN
FS175-2.5	2.5 Sq.Ft.	1.75 in	1
FS175-3.5	3.5 Sq.Ft.	1.75 in	1
FS250-4.5	4.5 Sq.Ft.	2.50 in	1
FS350-4.5	4.5 Sq.Ft.	3.50 in	2
FS250-6.0	6 Sq.Ft.	2.50 in	1
FS350-6.0	6 Sq.Ft.	3.50 in	2
FS250-7.5	7.5 Sq.Ft.	2.50 in	1
FS350-7.5	7.5 Sq.Ft.	3.50 in	2
FS250-9.0	9 Sq.Ft.	2.50 in	1
FS350-9.0	9 Sq.Ft.	3.50 in	2
FS350-12.0	12 Sq.Ft.	3.50 in	2
FS350-16.0	16 Sq.Ft.	3.50 in	2
FS550-16.0	16 Sq.Ft.	5.50 in	2
FS550-22.0	22 Sq.Ft.	5.50 in	2
FS550-30.0	30 Sq.Ft.	5.50 in	2

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