

CMC MARINE

Superyacht

companies

THE ELECTRICAL REVOLUTION

by Silvia Montagna

CMC Marine opened the doors of the new HQ situated in Cascina Italy to which the company moved to in the beginning of 2017. The move was dictated by the impellent need to face up to the substantial increase in production and by the need to take on more staff to be ready for the world's international yacht shows with new revolutionary nautical items dedicated to the yachting world.

CMC is planning to present three innovative systems to broaden the firm's current range, by transferring Stabilis Electra technology (electric stabilisers) to yachts under 20 metres with Short Range plants as well as HS, High Speed and LR Long Range ones. These have all been specially designed to suit planing yachts with speeds in excess of 24 knots, semi-displacing ones and considerably slower displacing ones too. This new machinery derives from much of the experience gained in recent years when Stabilis Electra first began to hit the market with a small but considerable revolution in 2009: to overcome the problem of low efficiency mechanical, hydraulic gyros applicable to smaller yachts, with a new electrical actuator which moves stabilising fins generated by DC electric motors which are lighter, highly efficient and more compact than previous systems. CMC's intuition paid off and they are now the most important company in the sector.

The range of Stabilis Electra – SE models has been



growing exponentially since 2013. Today there are about 30 possible configurations thanks to 7 diverse series of actuators coupled to as many as 14 different sizes of fins and to 12 classes of motors. SE systems can currently be installed into a wide range of diverse yachts from fast planing ones to slow displacing ones measuring from just 20 metres up to 80. Latest generation engineering means that SE guarantees easier to install more flexible systems. The latest series sports an auto or self adapting software under Italian patent called Dialogue which guarantees excellent performance and enhanced efficiency. Since Dialogue possesses more versatility it can integrate SE stabiliser systems with other CMC Marine

gear such as electric thrusters of the company's Dualis Electrica series run through a single CMC Marine control station situated in the wheelhouse. This presents obvious advantages in terms of ease of use and monitoring. The integration into a single control station translates into accrued efficiency which is energy saving. At entry level of the SE range there's the 40 model for yachts between 20 to 25 metres through to the largest 200 SE which is dedicated to yachts from 60 metres up with fins which vary accordingly from 0.4 square metres to 5.00 square metres.

Flanking this, CMC Marine as mentioned earlier, to satisfy growing requests has produced three diverse systems divided



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into three separate categories: the SR Short Range, the HS High Speed and the LR Long Range.

The SR Short Range – registered in 2016 currently covered by temporary patent is suitable for yachts less than 20 metres. This product features great innovation, it involves a Brushless Torque electrical engine coupled to a reducer (There are three different power houses available). The design is unique, compact, weight saving, of low consumption and is easy to install. The system can also be powered by 24V DC.

The HS system has been designed for planing yachts with cruising speeds above 24 knots. This latest, sports several novelties when compared to the previous range among which: optimized profiling of the fins which perform better and reduce drag. The adoption of new smaller more performing electronic components which can monitor the position of rudder blades and other performance related surface areas as well as the stabilizing fins themselves.

The new LR system is ideal for displacing and semi-displacing yachts. Here again more performing and more compact actuators by comparison to previous SE systems



delivering the same output offer obvious advantages flanked by new fin designs for displacing yachts with surface areas of up to 5 square metres. Thanks to new electronics offering more capacity it is now possible to integrate, monitor and run up to 8 separate moving parts below the waterline such as two pairs of stabiliser fins, rudder blades and so on. Sensors to



monitor Roll, Pitch and Yaw can also be installed on request so as to further optimize the degree of comfort perceived on board.

Alessandro Cappiello MD at CMC Marine commented as follows: "The new systems derive from constant feedback, owners' requests and shipyards' requests have highlighted their need for what was up until very recently an unaddressed request in the field of stabilisers. Well CMC Marine took on the challenge and responded by creating three specially devised new lines. When I mention my electrical plants I always say there are three advantages to be had:

one for the shipyard, one for the end user and one for us. The yard because in installing electric stabiliser systems is by comparison easier, time saving in man hours. To which we can add lower consumption, less purchase cost, less bulk. For owners this last point is also relevant when



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talking about size which plays a much more important role than otherwise. The owners find themselves with easy to run, cheap to use in terms of consumption, little maintenance and last but not least low noise levels. Talking of which, our plants' average noise levels measured in decibel are around 40/45 decibel, which is considerably less than the 58/60 decibel hydraulic stabilising plants produce. But what's important to us what is a great advantage for CMC is to have been able to produce a reliable long lasting product, which is also easily adaptable to diverse types of yachts, and is also simple enough to handle in terms of servicing".

CMC Marine plants have already been chosen among the most renowned Italian shipyards as Benetti, Sanlorenzo and Rossinavi, Azimut, Mangusta and Overmarine and by some European ones like Moonen and Sunseeker.

For further information www.cmcmarine.com

The Mangusta Grandsport 54 which is currently in construction at the Overmarine Pisa shipyard, is the first flag ship initialled by Alberto Mancini and is due to hit the water in mid 2018. It has been installed with CMC Marine electric stabilisers and bow thrusters. The advantages reported by the shipyard, highlight the low noise impact first and foremost since the noise levels near the guests' quarters don't exceed 45 decibels while preceding hydraulic models produced 80 decibels.

