

## YACHTS FOR SALE

by Andrea Mancini

Italy currently represents more than a third of the world's production of superyachts. This is undeniably true just as much as is the reason for this occurrence: The uniqueness of the Italian style, taste and design work which highlight made in Italy brands. But when talking yachts you cannot overlook the overall complexity of an object for which its design and style alone do not quite suffice and therefore are not enough! You also need a quality product which is equally attractive from a technological view point because first and foremost a yacht sails and crosses oceans and must do so while guaranteeing all round safety as well as maximum comfort for those on board. There are dozens of shipyards in Italy that are not only widely

appreciated for their looks and style and sport great craftsmanship as well as absolute excellence with nothing to envy of the most renowned shipyards in Northern Europe.

One such yard is Codecasa a name which has played a major role in yachting history in Italy and internationally and is today one of the major players in the world's superyacht market with an enviable track record which over the past 45 years to date has clocked up 62 yachts (63 when the next one hits the water construction F76) measuring between 35 and 65 metres. We went to Viareggio to have a look for ourselves at the historical shipyard where every Codecasa yacht's design sports Italian craftsmanship, hi - level technology and quality. In fact the



**I Cantieri Navali Codecasa S.p.A.**, were set up in Viareggio back in 1825 by Giovanni Battista Codecasa a master shipwright by trade. The family has always been running the yard which evolved from being a small yard building sailing ships to an internationally renowned shipyard, specialised in building luxury motor yachts in steel and aluminium alloys from 30 to 70 metres long.

The company's mile stones over almost two centuries:

**1825** - Giovanni Battista Codecasa born in 1803 starts working as shipwright in Viareggio.

**1902** - Giovanni Battista Codecasa, nicknamed Tistino born in 1875 carries on with the family tradition setting up a shipyard with his father Antonio in which to build sailing vessels. The family obtains a grant to use 1,258 square metres of public property East of the Lucca docks in Viareggio where the "Antonio Codecasa e Figli" shipyard is situated.

**1946** - With more than 50 sailing vessels

built in addition to fishing boats, pontoons, supply ships and not counting other types of boats as well, Giovanni Battista Codecasa retires and steps down from running the family owned company which by then is situated at the Darsena Toscana. His sons Ugo and Sandro take over.

**1973** - Fulvio Codecasa takes over management of the shipyard handed to him by his father Ugo and begins building work boats as well as luxury motor yachts.

**1977** - The company goes public and Cantieri Navali Ugo Codecasa S.P.A. are set up in the Nuova Darsena di Viareggio.

**1982** - The preceding Cantieri Navali Codecasa situated in the Darsena Toscana change name into Società per Azioni Codecasa Due S.P.A.

**1987** - Cantieri Navali Codecasa Tre S.P.A. move into the Nuova Darsena di Viareggio.

**2011** - Some of the production is moved over to a new production site at the Darsena dei Navicelli in Pisa.



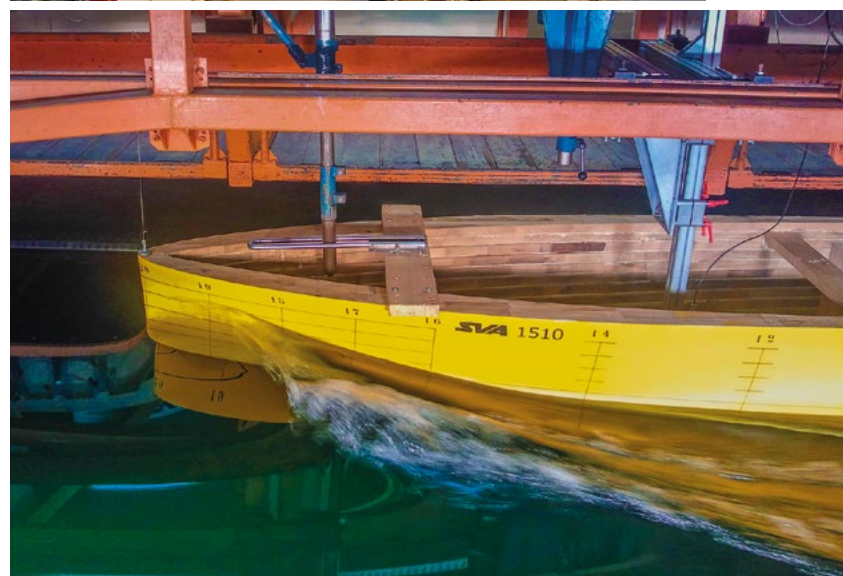
F76 Codecasa 43

# Codecasa

*Superyacht* shipyards

## yachts for sale

Viareggio Darsena hosts Codecasa's yachts prior to their delivery. Launching here is done according to tradition no travel lifts are deployed nor basins flooded, you'll see a yacht sliding down slowly with timeless elegance off the slip and into the awaiting waters a rare and moving sight today. It is here on the same spot that yacht construction coded F76 (a 45 metre Vintage series) was in the process of being finalised when we met up with Gianluca Imeri and Marco Esposito naval engineers. They follow up and supervise each step of the construction phase of each Codecasa yacht from the cutting of the steel sheets in Pisa's Navicelli yard to launching. One of Codecasa's main features concerning production is the capacity this yard has in checking the quality of each phase since each piece is either built or assembled on the premises. This way each construction phase can be easily controlled for quality and work can be better optimised to deliver excellent final results. The brief time we had with both engineers was not enough for us to have a full overview of what it takes to produce such high quality. Nevertheless we managed to perceive, thanks to their descriptions, a number of details even small ones which normally go into the construction of Codecasa's quality yachts. After all, care for detail is synonym for high quality standards. Whenever conversation turns to yachts and more especially to superyachts it's common place to hear: Italian yachts are "beautiful", and those from North Europe are "quality yachts". Is it in your opinion true or is it a misconception? Were we to compare a Codecasa yacht to one from a North European yard, say a Lürssen one rather than a



Feadship or an Amels one which have been stripped of their emotional parts, furnishings, colours, which then are the differences between the two yachts in terms of technical quality?

Who can give you an answer to this question - answers Mr Esposito - is not us since we don't personally know these other two but surely the yards carrying out refits can as they're the only ones that have worked on a Codecasa yacht as well as on a Lürssen rather than a Feadship and can therefore give you an adequate answer. However a number of yards specializing in refit work have informed us that in terms of quality a Codecasa yacht has nothing to envy of these more aristocratic shipyards, on the contrary. To give you an example the technical spaces on a Codecasa are technically functional and very well finished, in other words space is not sacrificed as can happen on other yachts where perhaps the space adjacent to the wheel is so small it is virtually impossible to work there. These aspects

Codecasa F74 prog.65 m



are purely "naval" ones which generally only a technician can appreciate, nevertheless they make a difference. To tell you the truth - says Mr Imeri - surveyors are also in a position to give you a comparative technical evaluation because they're often following up on yacht construction work from the initial phases. And since all Codecasa yachts are built to MCA (Maritime and Coastguard Agency) standards, the surveyors following up on Codecasa yachts also do the same for other yards' yachts including ones built in North Europe. The inspecting surveyors have often congratulated us for the way we build and for the

Left, the Ponticelli Plant.

The quality of a yacht starts from its inception, from a sound project and before that from the grace of its lines and hull shape which are optimised and checked in testing tanks. The pictures show a 50 metre model undergoing tank testing in Potsdam Germany. Tank testing also means optimising hull performance. The picture shows the 50 metre model after the "paint test" which highlights streamline. Right after the test the appendices (stabiliser fins, bow thrusters) are set in the position which offers minimum drag.

importance of the plants we install which they refer to as being for "ships" and moreover take Codecasa yachts as model yachts in terms of quality. This is a great and satisfying achievement for us.

And where do these positive judgements derive from?

From the initial steel cutting phase, surveyors can appreciate and judge sound well carried out project work which can be seen only during actual construction work since once plants, furniture, panels and accessories have all been installed little else is visible any more. Technical aspects are essential yet they're at the same time the hidden "dark" ones meaning the ones that are rarely taken for what they really are and represent. That all gear, plants, are properly installed, that the yacht sails well that noise levels are low are aspects which are simply taken for granted while much more importance is given to aesthetics and fun things such as entertaining gizmos and water toys.

Very true, quality in a yacht is much more than design work and comes from way back, from a good project and prior to that from its sea kindly hull lines. How would you guarantee the sort of quality we're looking at? How would you best define a hull and lastly what checks are carried out in terms of quality control?

Well for example- says Mr Imeri - hull forms of the 43 metre yachts currently being built represent a natural evolution from the two preceding yachts and of a 50 metre one which was delivered no later than last year which sports a vertical bow and taught lines which are typical of fast displacing vessels which deliver enhanced hydrodynamic performance through

Codecasa 43 FB Hull F76



water. Our technical office with studio PLANA belonging to Mr Ausonio a consultant of ours for the hydrodynamics came up with the design work. We took to testing in naval tanks to check out the hull's performance in water following CFD simulations.

**What data did you obtain from tank tests?**

Thanks to them we could accurately quantify required power with which to propel the vessel and above all to check out equally important aspects for example as to where to position anti roll winglets, stabilising fins, bow thrusters' power units, or optimise dynamic trim by trying out different configurations of stern wedges installed near the transom acting as rigid flaps. We then proceeded to check out the positioning and shapes of immersed exhaust pipes' terminals and corresponding buds. **Talking of immersed exhausts: why was this solution chosen?**

Immersed exhausts represented an important upgrading which we've fine tuned on our latest yachts and we're now propos-

ing them also to new owners as well. Several years ago stern exhaust systems had large diameter tube like sections running from the engine room through the hangar/garage to the transom. Instead nowadays the main fully immersed exhaust section exits directly from under the engine room below the hull, while the engine is just ticking over and the rpm are low, the exhaust fumes flow out from an aperture in the rubbing strake along the topsides of the yacht. Everything will work properly provided the buds are well designed and create the needed depression to suck back the exhaust fumes. This aspect has called for detailed attention to shape which has been obtained through CFD and tank testing.

**What happens once the hull's project design and appendices have been accomplished?**

That's when we begin to build says Mr Esposito and to follow up from there on through every phase: from sheet cutting to launching all of which is carried out at our premises. In the new production areas situated in Pisa's docks is where carpen-

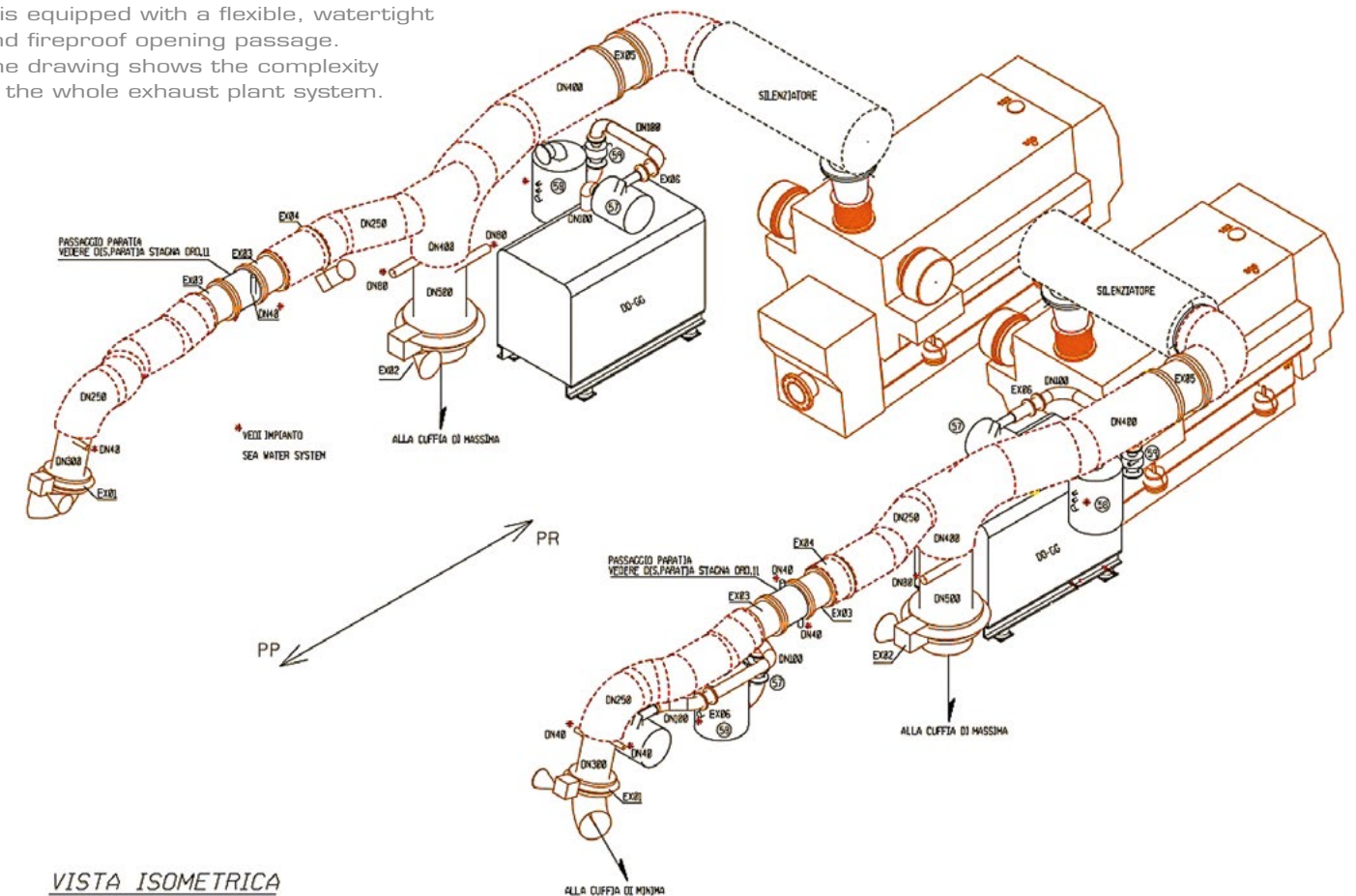
The more sensitive to stress zones are protected by a Belzona cycle which fights corrosion with epoxy based structural fillers. This way treated parts such as exhaust pipes, rudder stocks, aligned drive shafts' stuffing boxes and plummer blocks are further protected (view of construction F76 in the photo).



Left, Construction C122 with stabiliser fin with work in progress: Once terminated damp absorbing, rust preventing material which blocks oxidation will be applied to each component thereby lengthening overall life span.



Above, Mr. Esposito is showing the exhaust pipe in the area where it passes through a bulkhead. It is equipped with a flexible, watertight and fireproof opening passage. The drawing shows the complexity of the whole exhaust plant system.



try work is carried out while plants and interiors are installed and assembled here in Viareggio. This allows us to constantly monitor work in progress and to pass necessary data on to the companies to which we outsource. All of these aspects go into ensuring quick decision making to resolve any problem which may arise for whatever reason and to always maintain very high quality standards in every construction phase.

**What features do the plants installed on a Codecasa yacht possess?**

Well - says Mr. Imeri - we like to overkill on this theme too in fact the plants installed are more suited to ships' heavy duty and only technicians can fully appreciate what this really means. First and foremost the plants we install are designed to be deployed on ships, they're solid, long lasting and easy to get to when maintenance is required. Furthermore there are several doubles meaning if one set of pumps breaks down for example, it is by passed onto another which is on standby. And secondly our installation team is highly qualified and equally reliable, we spend perhaps a little more but quality pays you back always. Sea trials are never extensive because everything usually works perfectly well right from the initial trials. When we deliver our yachts to their owners they are ready to sail around the world without problems and there is a good number of them currently sailing the seven seas.

**When talking about ships and the protection of their structures as well as the materials used are very important aspects. And how important is it for Codecasa's yachts?**

We're highly focused on these aspects says Mr. Imeri each steel sheet is treated with a specific product. Detailed care is dispensed to tanks in terms of treatment according to the liquids they will be carrying. For example all Codecasa yachts

have several ballast tanks to ensure best trim and consequent optimised cruise performance and control. Since these tanks contain sea water they must be treated with due care much in the same way as waste water and sewage tanks that are also very corrosive. Both waste water and sewage tanks' strengthening ribs are soldered externally thus the interiors are perfectly smooth, and the degrees of the angles are reduced to a minimum so as to facilitate treating the interiors with specific protective products. All this means that all internal surface areas are treated properly thereby reducing any risk of omitting this or that part and possible consequent leaks. As for the ballast tanks they are further protected by the addition of zinc anodes while fresh water tanks are lined with magnesium anodes. These further precautions are designed to lengthen the duration of the treatments and therefore extend the life span of the tanks themselves.

**And what's envisaged for the protection of the hull?**

Protection from galvanic currents is ensured by ICCP (impressed current cathodic protection) systems- says Mr. Esposito as he continues to explain - deploying cathodic protection transformer- rectifier units means that classic zinc sacrificial anodes are no longer necessary as the system's anodes are connected to a DC power source. Anodes for ICCP systems are available in a variety of shapes and sizes they are constructed with a relatively inert material such as platinised titanium. Anode cables are introduced into the hull via a compression seal fitting and routed to the DC power source balancing the hull's electric potential to that of the external marine environment. ICCP anodes are flush mounted to minimize the effects of drag on the hull and are located accordingly below the waterline in an area to avoid mechanical damage. Where the areas above the waterline are concerned which are nevertheless constantly exposed to atmospheric agents and/or wear and tear, such as bulwarks above the topsides or the areas reserved to host mooring lines and other heavy duties, galvanised steel is replaced by stainless so as to reduce maintenance. Even if this translates into higher initial or set up costs but again it reduces maintenance work and lengthens the yacht's life span.

**We've clearly seen the degree of attention paid to those areas that are typically naval and practical, as precautionary double plants are for instance and installations and the protection of structural materials. But what is Codecasa's policy in terms of advanced technology the kind other brand names sport unabashedly just in order to add value to their products?**

To clarify – says Mr. Esposito – we could adopt and apply special ultrasound wave anti-fouling to the main sea-cocks from where sea water is taken on board to supply different on board utilities well explains Codecasa's views. Up until now we've been using a classic antifouling system which is made of



Above, Step by step direct overall control since yacht inception right from the first steel sheet to completion at the Darsena dei Navicelli in Pisa is one of the main features which makes Codecasa stand out. The picture shows the bow end of the C122 being built. The rendering right, Immersed exhausts have been an important evolution for Codecasa. Fine tuning of this aspect was possible thanks to detailed project design work and also in the perfect shaping of the buds.

a bi-anode through which low voltage electricity flows which prevents vegetation, barnacles and more from forming. Obviously the bi-anode needs to be replaced periodically. It also deposits residue in the filters installed behind sea-cocks and which therefore require regular maintenance. An ultrasound anti-fouling system has been on the market for some time now which does not wear out or expire as it simply causes vibration within steel piping thereby avoiding the forming of vegetation but without leaving residues which translates into zero maintenance. However prior to switching from the bi-anode system to the ultrasound one on all our yachts we will carry out a realistic test by asking one of our clients to have one installed on his yacht for a year. In this way we'll really know how efficient the system is before installing it on our yachts. Well this is how we do things here at Codecasa, we like to make sure!

And the same principle has been applied to technical novelties and upgrades as for example stabiliser fins triggered off by electric controls which we'll be installing into construction number C122 which is scheduled for launching next year. Up until now we've been installing hydraulically deployed stabiliser fins even if we were very attracted by the development curve of this new technology which certainly features a number of advantages, they're quieter, simpler, requiring less maintenance and less space But we were not 100% sure they were reliable, so we waited until the market tested them and now the technology seems mature enough and we'll be switching to electrically actuated stabiliser plants.

**Obviously this choice probably wouldn't go down so well with those wanting the latest of everything but it is equally true that in the case in point you would avoid unpleasant surprises. But let's get back to those "invisible" technical aspects that only technicians discerning eyes can appreciate, and not every time. We're talking about specifics that often enough attract little interest but when summed together they can affect the quality level of the final product.**

Well yes indeed we focus on delivering a better product, which lasts longer. For example to make skegs, rudders stabiliser fins un-reactive or corrosion free also because they're below the

waterline and therefore less accessible we treat them with special humidity absorbing, rust preventing products which also block oxidizing agents. Still on a preserving life theme specific areas of the yacht are treated with a Belzona cycle which is made up with epoxy base fillers which prevent corrosion. Well we're talking about stainless exhaust pipes the terminals of which are internally treated by this cycle to further protect them from corrosion caused by gas and sea water. In fact stainless tends to lose some of its corrosion resisting properties when it is exposed to temperatures exceeding 60 – 70 degrees centigrade in damp surroundings. We also treat rudder stocks, the stuffing boxes and plumber blocks on drive shafts with this cycle to reduce excessive wear. Imagine this product is also used to repair the tubes of hydro-jets that have been damaged by cavitation, which means that steel or aluminium soldering need not be applied. All of these tricks that I believe no one else does are costly but they certainly contribute in lengthening a yacht's life cycle!

**Dedicated care for detail, direct step by step quality control: but when all has been said and done how much time does it take to build a Codecasa yacht?**

We manage to build very high quality yachts – says Mr. Imeri – but in smaller time frames, perhaps in as much as half the time taken by other shipyards including North European ones. We can deliver 50 metre yachts in under two and a half years from inception. Notwithstanding optimised time, these yachts are problem free. We're currently finalising a 43 metre of ours construction F76 which is scheduled for delivery at the beginning of the summer season and another 43 metre Construction code C122 will be ready by the following summer. We've also finalised preliminaries for a couple of new yachts a 65 and a 70 metre. In the course of our extended visit we witnessed the degree of passion and pride that Messrs. Imeri and Esposito have put into their work in building ships prior to building large yachts. And probably Codecasa Yachts owes much of its uninterrupted success thanks to its technical capacity and solidity flanked by "made in Italy" design and taste and the yard can afford to build in times such as these 40 to 50 metre yachts like the ones currently in construction without a firm order to back them: A simple Ad. "yachts for sale" is enough and the boat are sold!

