INGEMAR

Ingegneria Marittima

NEWS 2010

Another positive twelve months for Ingemar ending 2009 more than satisfactorily, despite the ongoing economic crisis. Furthermore, completed commissions during the first half of 2010, together with ongoing orders, predict a positive result for this year as well.
So far in Italy the sector does not appear to have lost vigour and many projects are either nearing completion or are at an advanced stage of completion: international opportunities are numerous and Ingemar is well placed in the market to be competitive. In addition, the company's R&D endeavours have resulted in the production of a new design of Heavy-Duty aluminium pontoons, the study of modular floating breakwaters with high performance characteristics and the technical updating and re-styling of service bollards and harbour services.
As far as Ingemar's qualifications are concerned, the company has extended its SOA registration to level VII for public works up to a value of Euro 15 million as well as updating the quality certification to the new ISO9001:2008.
The company's experience in executing highly complex projects, using breakwaters and a wide range of floating pontoons, has resulted in the acquisition of important commissions such as the floating harbour of the Club Nautico Marina di Carrara, the new yacht marina of Porto Mirabello at La Spezia and the landings for the Cantiere Bellini on Lake Iseo.
The new Heavy-Duty pontoons in aluminium have been used in the new Marina at Rhodes, Greece, and the floating piers with steel frames have improved capacity at the Port of Tivat in Montenegro.
Aluminium pontoons of the standard series were supplied to the Marina Andalous at Tripoli, steel King-size elements were supplied to the fishing port of Stora in Algeria and in Venice continuous floating pontoons in concrete are currently being installed.
In short, a wide range of solutions for different requirements in Italy and abroad.

Porto Mirabello e Assonautica - La Spezia

LIBIA

At Tripoli aluminium floating pontoons for the pioneers of Libyan nautical tourism

International tourism discovered Libyan archeological assets some time ago: this means that, with the opening up of the country, their coastline could well be a new attraction for yachting tourism.
Following a commission to supply pontoons for the Marina of Hammamet in Tunisia in 2003 for Etraph, the Tunisian ports' contractor, Ingemar had the opportunity of putting their mark on the first Libyan tourist ports' venture: aluminium pontoons, with concrete floaters elements, have been constructed for the new marina of Tripoli, part of a new modern hotel and residential complex at Citè Andalous.

SAVONA

The walkway over the water in the historic dockyard is to be extended

The Port Authorities continue the work of reassessing the port area in the heart of Savona. Twelve years after their first project, Ingemar has this year built a floating walkway which extends the pedestrian pathway along the harbour waterfront. This is a made-to-measure structure, designed for use by the public, and will be anchored by a system of vertical sliding devices to the pillars of the bridge of state road. This is a low cost solution with little environmental impact and will ensure both safety and easy walking on the part of the general public.

LA SPEZIA

Porto Mirabello is undergoing expansion: breakwaters, jetties and floating pontoons are under construction

Porto Mirabello is getting there fast! It is incredible how quickly work has finished - and development is still ongoing. Inauguration coincides with the beginning of work on a new floating marina which will be outside the main wharf of the Porto Mirabello.
Following the commission to build fixed pontoons within the port, ITN (the construction company) underlined their confidence in Ingemar by appointing them to install 240 mts of breakwaters (a turnkey operation) to protect the 700 mts of 3 mt wide floating pontoons with a central pier 6 mts wide.
This is a new floating landing for nearly 700 yachts belonging to the residents La Spezia and is the concrete result of the concessionary obligations accepted by ITN with the Port Authority of La Spezia.
For Ingemar this has been, and will continue to be, a rewarding collaboration working with a dynamic and skilled partner.

FIUMARETTA (SP)

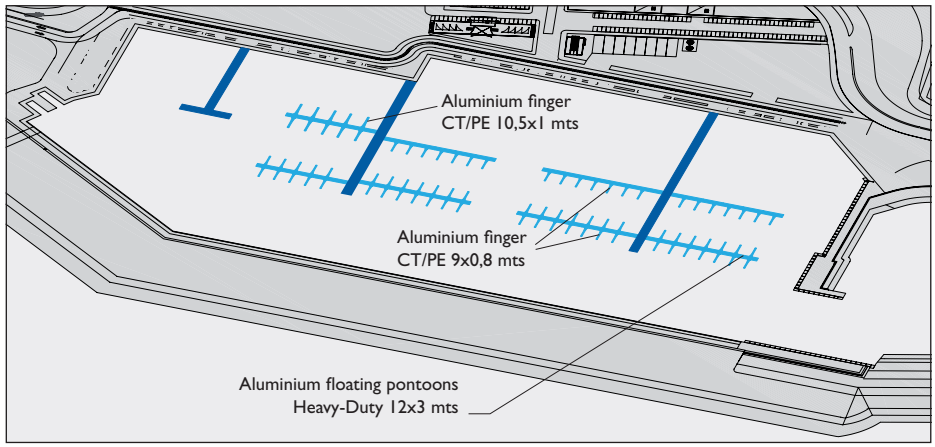
New moorings in the Natural Park of Montemarcello-Magra

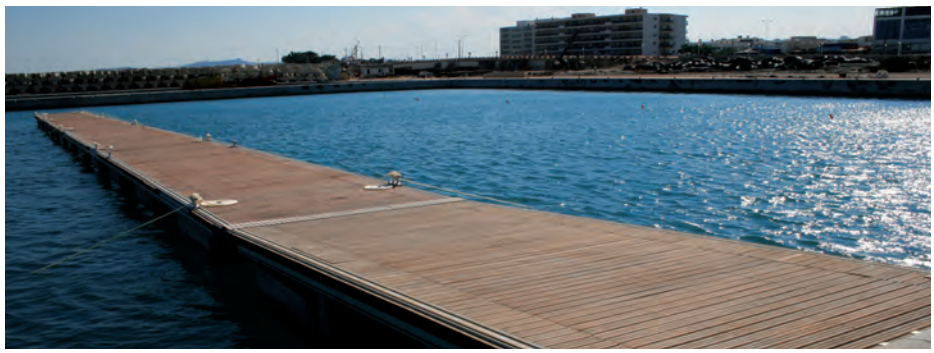
River estuaries are an extremely important resource for the creation of yachting harbours: limited swell means an appreciable reduction in both construction costs and the problems of environmental impact. The park of Montemarcello-Magra, situated on the borders between Liguria and Tuscany, is an area of outstanding natural beauty: attractive landings, surrounded by nature, have developed along the river banks. This year Ingemar is supplying a new installation for Foce del Magra: a series of pontoons moored with pilings and sliding devices to counteract the strong currents at high tide.

GRECIA

New installations on the islands of Cephalonia, Rhodes and Salamis

This year Greece has been, for Ingemar, a market showing a timid comeback from the economic crisis which hit the country and the repercussions, not yet altogether absorbed, of the enormous investments made for the Olympic Games in 2004. The restructuring and enlargement at Fiscardo – considered the Portofino of Cephalonia – and the pontoons on the island of Salamis demonstrate the continuity of commercial promotion in Greece by Ingemar and ITI (their Greek partner). The most important illustration of this, and of great satisfaction to Ingemar, is the appointment to supply floating structures to the new port at Rhodes: 520 mts of Heavy-Duty pontoons with aluminium frames, of the reinforced series with concrete floaters, complete with fingers, these too of the new series, but with floaters in rotomouldet polyethylene. The pontoons are currently being installed and will give the port a capacity of 400 boats of between 10 to 25 mts in length.





PORTO S.MARGHERITA (VE)

Fixed and floating pontoons for restructuring Marina 4 at Caorle

Marina 4 was one of the first marinas in the northern Adriatic and was conceived along the lines of French examples, with canals and inland basins at the service of new yachting tourist resorts. After 40 years of operations, it was decided to renew the pontoons with a layout more suitable to mooring the size of today's yachts.
The work programme, which will also modernise some of the port structures, will be finished by next summer. Ingemar has been commissioned to construct a new pre-fabricated wharf as well as some fingers and floating pontoons.

MONTENEGRO

New floating piers and numerous moorings for superyachts, plus harbour services

Work at the Port of Montenegro continues with great vigour and the first phase of constrution is now nearing completion: furthermore, the demand for new berths has surpassed even the most optimistic forecast. Successful sales figures have encouraged investors to continue with the schedule and the summer season has seen the moorings extended to 100 berths. Ingemar, the tried and tested partner for supplying harbour fittings, have had their mandate extended beyond the supply of new floating pontoons, to supplying the mooring systems and installing harbour services for 52 superyachts within the newly renovated dockyard. This commission, where supplying floating structures represents just a small part of the overall project, demonstrates Ingemar's capacity to broaden their expertise over and above the straightforward construction of pontoons and breakwaters, encompassing all the problems related to the moorings for superyachts and their service equipment.

ANCONA

Marina Dorica chooses Ingemar to up the number of its moorings

Marina Dorica is the largest yacht harbour along the central Adriatic coast. Nearby is the Riviera del Conero and the Dalmatian coastline is not far either, both of which are popular attractions for all yachting enthusiasts. The reorganisation of the port-owning company has injected new vigour and the first results of this can be seen in the extension and restyling of moorings and land resources.
Because of the high quality of the port and the extreme wear and tear conditions, it was decided to use Ingemar pontoons of the FE/IG type with robust steel structures, floating units with reinforced concrete keels and tropical hardwood decking: all the berths are provided with mooring fingers 13.5 mts in length.

PORTO LEVANTE e CASIER

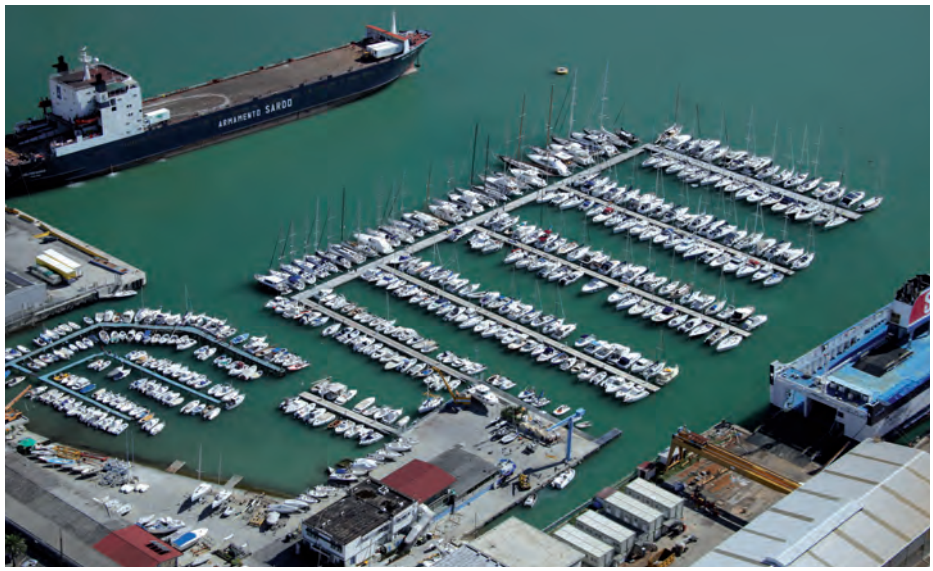
Fully equipped berths for houseboats

River tourism is becoming popular in Italy: lakes and rivers abound with natural resources and the banks are rich in history and architecture. The most popular form of transport to explore these inland treasures is the houseboat with its gentle progress and unhurried views of the landscape. House Boat Italia is the sector's leader and in Ingemar has found the ideal partner to solve the special mooring requirements for it's boats. Two new floating landings are now operative from this year at Casier, on the River Sile, and at Porto Levante on the Po delta.

MARINA DI CARRARA

The Yacht Club refurbishes their mooring structures - with floating elements this time

In the autumn of 2009 the Yacht Club of Marina di Carrara (awarded the Stella d'Oro by CONI for Sports achievements) made the decision to replace all the old fixed mooring pontoons which were more than 30 years old. The need to optimise all available space and the considerable swell within the harbour, demanded highly efficient breakwaters and robust mooring pontoons, all of which had to follow a precise and well-constructed layout.
This was a prestigious and complex commission which Ingemar proudly won after a strongly competitive international competition. Once more it was Ingemar's long experience of running large turnkey operations and their design skills combined with the enormous diversification possibilities of their production line.
The commission involved defining the working plans of the new assignment, following the designs of Ing. Fabio Telara, their layout and the anchorage and mooring systems, demolition of the existing fixed pontoons and the turnkey installation of the new floating structures.
Work within the shipyard was conditioned by the need to keep interference to the ports' daily activities to a minimum and limit the removal of yachts from their moorings.
Work began in December 2009 and was completed within just four months, with the handover of 262 new berths, up to 20 mts in length, on pontoons and floating breakwaters.
Layout of the new installation is in the shape of an F where the outer sections (opposite the harbour entrance) have been built using floating breakwater elements of reinforced concrete, type F/CA, of 3 and 4 mt widths and concrete finishing.
Overall there are 240 mts of breakwaters which shelter 5 right-angled piers the FE/IG series, for a total of 364 mts with reinforced frame in galvanised steel, concrete floating units and tropical wood decking.
The floating structures are anchored to the sea-bed using a system of chains and deadweights; the boat mooring-systems have double tackle on the bow and on the strern of each boat.
Several months after completion there has been much positive feedback regarding both the practical functioning of the installation and, in particular, with regard to the reduction in swell thanks to the installation of the floating breakwaters.
For Ingemar this is a valuable and important reference from a competent and prestigious client, as well as being a great work experience in an atmosphere of enthusiasm and collaboration.



Floating breakwater F/CA/20x4

Floating breakwater F/CA/12x3

ALGERIA

Steel pontoons for fishing boats and yachts at Stora: a positive step for yachting

Algeria too is following the current interest in developing tourist harbours which other North African countries began a while ago. The rebuilding and enlargement of the fishing port at Stora, 450 kms east of Algiers, demonstrates a new interest in yachting tourism.
Ingemar's working relations with the contractors of the entire complex, Ingra of Zagabria (Croatia), who have been working in Algeria for some years, was fundamental in acquiring the supply contract.
The new port will have a capacity for 320 craft, will include an inner basin exclusively for fishing boats, and an outer basin for tourist yachts. The pontoons of approximately 300 mts are the King Size and FE/IG types, with galvanized steel frames and concrete floaters.

CROAZIA

The marinas of Biograd and Luka Volme: new berths - again on Ingemar pontoons

Croatia has become an important destination for international yachting. Ingemar, together with their Croatian partner, Marmontis, has played an important role over the years in the development of ports and harbours.
This year two new amplification projects at Biograd and Luka Volme are testimony to their clients' satisfaction. Notwithstanding the difficulties of the economic crisis and strong competition in the market, the future looks promising as far as growth is concerned.

CLUSANE D'ISEO (BS)

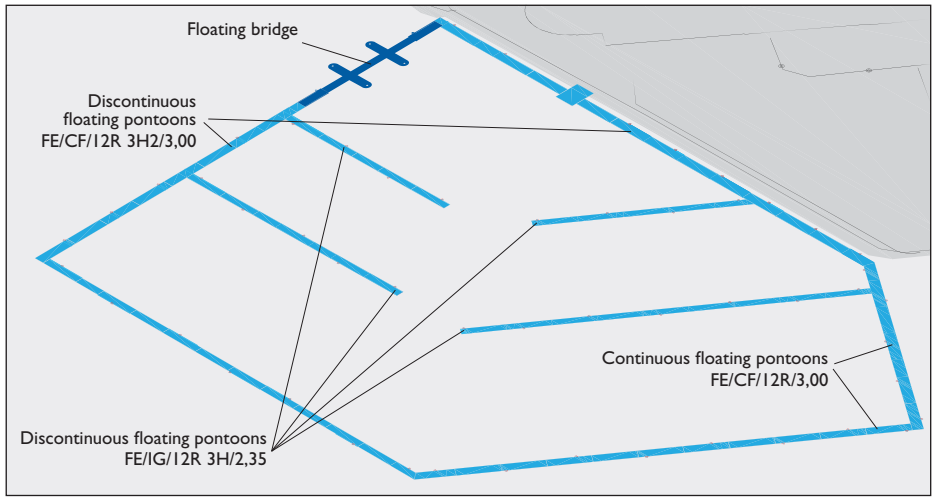
Floating structures and "Greenwood" to enlarge the landings of the Cantiere Bellini

This is a tailor-made commission using breakwaters, slim-size pontoons and fingers, for the historic boatyard Bellini at Clusane on Lake Iseo. It is also a very diverse project, especially for the mooring solutions employed where both fixed pilings to the lake bed and vertical beams fixed to quai have been used.
The minimum width of the pontoons, only 1.2 mts, meant employing a new system of sliding devices on two levels, which stabilise the structure crosswise.
The decking is built of planks of "Greenwood", a new high-tech wood made from a mixture of wood flour and polypropylene, produced by extrusion, with exceptionally high mechanical characteristics, stability and age-resistance. This is an ecologically compatibile solution which reduces the use of wood, ensures recycling and does not release toxic substances into the atmosphere.

VENEZIA

A floating port for commercial craft on the island of Tronchetto

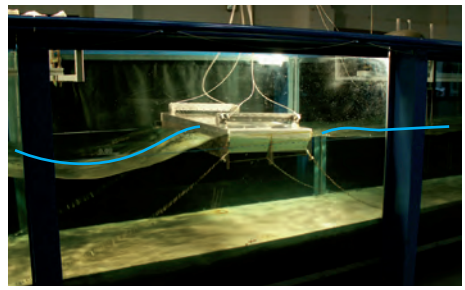
Venice and its Lagoon are ideal locations for employing floating structures because of the very hight tide varation. The very low environmental impact of the pontoons, thanks to their modest size and constant free board on the water surface, together with the system of pilings for anchorage to minimise interference with the lagoons' delicate hydraulic equilibrium, means that they have been used progressively in numerous and successful applications. Ingemar's work can be seen throughout the Lagoon, not only in tourist harbours but also for those of the vaporettos, mega-yachts and also for cruise ships. The efficiency of the breakwaters and the practicality of the floating crossings and pontoons for ferry landings, have all contributed to overcome the traditional distrust by the administration and Venetian public and have induced technicians to adopt floating fixtures in many innovative public works.
On the island of Tronchetto where Insula are developing the infrastructures, Ingemar has been awarded, by the contractors Sarti and Acco, the prestigious job of building all the floating elements at the new port for smal commercial boats.
This will be a large, interconnected set-up, with a series of different structures forming the outer perimeter of part of the Lagoon, between the island and the bridge which connects Venice to the mainland.
The different sections employed will be chosen according to specific functional requirements and conditions of use. They will all have galvanized steel structures and reinforced concrete floating units with polystyrene core; they will differ however according to the strength of the framework, the floating type (continuous or discontinuous) and the width of the walkways (from 3 to 2.35 mts).
Access to the port, enclosed on all four sides, will be over a floating bridge similar to the one built to connect the two banks of the Canal Grande for the Festa della Salute.
The port will be for the use of the commercial motor boats (known as "topi veneti") which are used to deliver merchandise within the historic centre of Venice and to the islands in the Lagoon. These boats, up to 20 mts in length, are moored from the prow using the traditional 'briccola', or Venetian pole, with two poles between the moorings. Overall there will be approximately 250 moorings on almost 900 mts of floating pontoons for these commercial boats.
This is another excellent example of diversifying structures according to needs, and is yet another testimonial to Ingemar's capacity to build over water - not only in tourist ports.

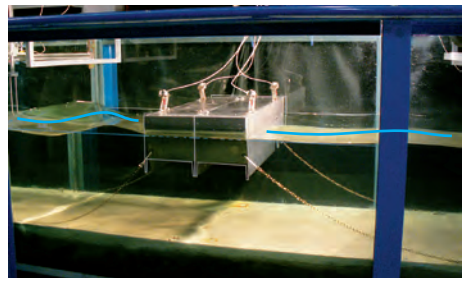


NEW

Floating breakwaters: applications and hydraulic tests for the new modular mega elements

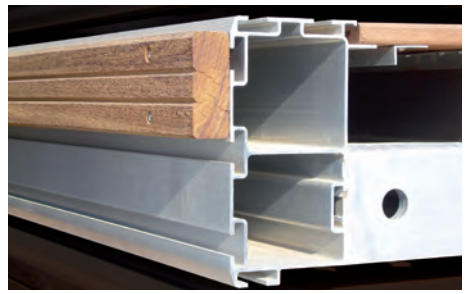
The growing interest in floating breakwaters, which allow more space for moorings, combined with research on how to overcome the current limits of application and operational performance, motivated research into finding new structures with dimensions, displacement and freeboard, much greater than those currently on the market.
To obviate the enormous costs of transporting these new structures (sizes are expected to be 20x6x3.4mts with a freeboard of 1mt and weighing approx. 180 tons), construction will be in modular elements of reduced size and assembled on site.
Ingemar is convinced that it will be best to produce these structures in the factory and equip them with valid filling materials: this will ensure quality and especially safety with regard to their flotation.
Testing was done, as usual, in collaboration with the I.M.A.G.E. department of Padua University. The tests demonstrated a significant capacity in wave motion mitigation of the structures - even with wave periods of up to 4 seconds and heights of up to 1.5 mts.
These characteristics open up a whole new spectrum of possibilities in the application of these structures for protected harbours, large ports and inland basins.





Floating pontoons and finger: new Heavy-Duty type in aluminium

The use of aluminium pontoons in Italy has always been limited, mainly due to a lack of knowledge about the material itself and how it should be applied, often in somewhat unprotected ports or harbours.
The new range of aluminium heavy duty pontoons and fingers, destined for large yachts, has great structural characteristics, is lightweight and functional, overcoming applicational limits of the usual aluminium peers ensures a similar performance to that of steel pontoons and has a potential that would otherwise be impossible. In particular, utilising aluminium and extruded profiles ensures a long operative life and functional optimisation of the elements, with predisposed runners to attach the fingers, accessories and lateral protective elements.
It is also possible to link them to more traditional concrete floaters, as well as lighter ones in rotomouldet polyethylene; they are practical to transport as well as to install, all of which make them much more suitable for seasonal installations. The new profiles for the fingers allow the mooring of very large yachts but without the necessity of anchoring pile at the finger head.
This solution means considerable savings in construction costs and also allows mobility of the fingers along the pontoons when carrying out re-positioning, without the expense of moving the piles.
The new designs of yachts and boats, often with very broad sterns, has mean a restyling of fingers to limit their splay, allowing the boat to close to the pontoon thus gaining space for manoeuvres.



Port services: restyling and technical innovations for marina services

Port services and facilities for yacht moorings have become much more complex and now play a major role in determining the success or otherwise of a marina.
The consumers demand for electricity and water has grown enormously as a result of the increased dimensions of the boats, consequently the economic implications have meant greater attention to calculating consumption.
The new series of Eromar 3 service bollards is Ingemar's answer to these requirements. Each boat is managed by electronic controls which regulate and record both water and electricity consumption (even for high voltage demands) with either a pre-paid system or by remote monitoring. This restyling, combined with led lights, makes for a more modern and functional appearance.
Concerning environmental aspects, the collaboration with Ecomarina, specialists in the technological aspects relating to safeguarding water and the overall port environment, has meant rapid technical evolution and more incisive commercial efforts.
The new vacuum pump-out systems with single or multiple terminals and new design to disguise the controls and tubing, are all part of the natural technological evolution in design for this sophisticated apparatus which today is an essential part of marina service accessories.

Factory, technical and commercial offices
Via Martin Luther King, 50 - 31032 Casale sul Sile (TV)
Tel. 0422 702412 - Fax 0422 820673
treviso@ingemar.it www.ingemar.it

INGEMAR

Registered offices and administration
P.zza IV Novembre, 4 - 20124 Milano
Tel. 02 67078528 - Fax 02 67380242
milano@ingemar.it www.ingemar.it