# **INGEMAR**

## news2006

Ingegneria Marittima



Twelve months of intense activity for Ingemar, during which important orders have been commissioned and a significant increase in turnover has been achieved. This demonstrates the ever-growing interest by both the public and private sectors in the pleasure craft industry and its receptive facilities. The decisive factors for the companys' success have been their decision to invest in production facilities, in manpower and in research and development which, together with the reorganisation of its commercial activities in cooperation with Ingemar Trading & Services, has ensured

the necessary capabilities and energy to successfully compete at international levels.

After 27 years of activity, today Ingemar is an industrial company with notable design capacity and flexible production procedures, meaning a highly qualified technical partner for its investors and a reliable and accredited supplier. The ISO 9001 certification for quality and the SOA licence for public works confirms the company's operative competence, vaunting client satisfaction as the best testimonial as well as its successful completion of ever more complex assignments. The completion of the floating

structures for the Marina at Genoa and the turnkey projects for the construction of pontoons and equipment at the new Marina at Stabia, are a feather in their cap during a year which has seen the company committed, both in Italy and abroad, to carrying out new tourist landings and special made-to-measure recreation structures and river navigation. Ingemar's visibility was further reinforced by the installation of pontoons for the boat shows at Genoa and Venice, as well as the breakwaters for the Boat Show at Split and its participation as technical sponsor for major water-sports events.



#### **PORTOVENERE (SP)**

## A service platform on pilings in the heart of Le Grazie

As part of an ambitious restructuring programme, Ingemar has been appointed by the Società Agonistica Pesca Sportiva Golfo dei Poeti di Le Grazie to produce the final plans for, and build, a new structure on the seashore destined to be a service centre and clubhouse for members. This will be a platform of 330 m² resting on pilings fixed to the sea bed, made of steel elements with a walkway in exotic hardwood, supported by girders and capitals. This is a new venture in the made-to-measure sector where Ingemar's technical capacities and experience prove to be a winning formula.



#### **ROVIGNO - CROAZIA**

## Ingemar pontoons for the reorganisation of the marina

Following completion in spring of the Marina Novigrad with nearly 400 berths for boats over 12 m, in July a new project on the Istrian coastline was begun, in the beautiful town of Rovigno, for the reorganisation and enlargement of the ACI Marina Rovini.

Marmontis d.o.o., Ingemar's Croatian partner, was fundamental to the successful outcome of the international competition for the supply of new mooring structures: more than 400 m of FE/IG/R pontoons, with reinforced steel structures which have been successfully used in other, equally difficult, projects and which are certified by the Croatian Naval Register. This is another prestigious appointment which, together with the enlargement of the private landings of Volme and the supply of breakwaters to the Split Boat Show, brings continuity to the growth and development of Ingemar and Marmontis in Croatia.





#### **JESOLO (VE)**

## Marina di Cortellazzo: an original port

The restructuring of the historic marina at the mouth of the river Piave is completed. The new owners have carried out a truly original facelift: in summer this is a pleasing marina for boats of up to 16 m and in winter, by modifying the layout, the marina provides protection for larger boats which remain in the water. This is an innovative solution, set up in conjunction with lngemar and made possible by using made-to-measure floating structures so as to meet the different and specific installation requirements, in particular the strong current - 15 km per hour - and the considerable range in levels of the river.



#### **CASTELLAMMARE DI STABIA (NA)**

## Pontoons and plant installations for central-southern Italy's largest marina

The acquisition of this extremely important commission, following a strict international competition, is both a great success and a great undertaking. The fitting out of the new port at Marina di Stabia will be a big responsibility, followed closely by and in the company with, the sectors' top professionals.

The new Marina di Stabia, situated on some of the most beautiful sailing routes and close to the Amalfi coast and the Flegree islands, aims to become the largest and best equipped marina in southern Italy with a capacity for more than 1,300 boats between 12-80 m, moored to fingers, the shoreline keys and the main jetty. Ingemar has been entrusted with the turnkey implementation of all the floating mooring structures, service bollards, mooring systems along the keys and all accessories for berths in the marina. The first allotment, currently under way, comprises delivery of 1,600 m. approximately of floating pontoons and 340 fingers, for a total of 920 berths of up to 40 m. The layout of the outer basin, for larger boats, is currently under definition. The new floating pontoons, following indications by Studio Conti & Associates from Udine who are the designers, are 12x3 continuous floating modules in reinforced concrete and polystyrene. The loadbearing structure is in galvanised steel and the walkways are in exotic hardwoods from certified sustainable forests (CSF).

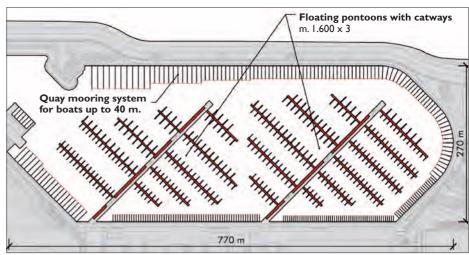
Anchorage of the elements is by fixed pilings to the sea bed and vertical sliding devices ensuring their resistance to all weather conditions and maintaining their trim; combined with the use of fingers they drastically reduce maintenance requirements. Stability of the structures in water is excellent and their characteristics ensure great comfort and an aspect equal to that of traditional fixed pontoons. All berths are supplied with pre-payment

All berths are supplied with pre-payment service bollards with up 400 amps for maxi yachts.

On completion of work, re-contruction of the waterfront designed by Massimiliano Fuksas will begin.

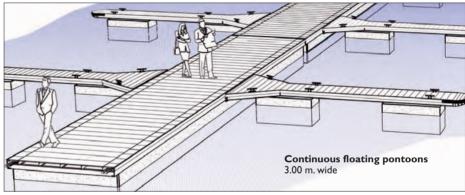
A futuristic multi-functional structure will be built on the site of old factories and will connect to the city centre providing new meeting places and re-generating commercial activity.

Ingemar is especially pleased to be part of this very important project and to join forces with the other principal team members of this initiative.













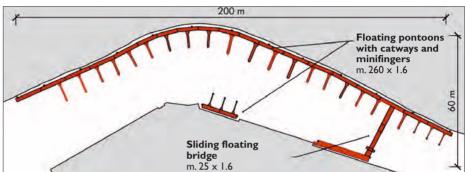
#### **VENEZIA**

## Vento di Venezia: a new nautical attraction on the island of Certosa

A new nautical centre has been created at Venice with a depot, shipyard, sailing school and guest quarters, in conjunction with the prestigious French association of Glenans, and a well equipped tourist landing place. On the island of Certosa, only a few hundred meters from Piazza San Marco, an abandoned area has been reclaimed by the local authorities and existing buildings have been extended.

This is an ambitious project implemented by a group of young Venetian sailing enthusiasts determined to create a new sailing centre which today, after only 15 months from its beginnings, employs 24 people from young apprentices, carpenters and contract workers. For Ingemar this was a made to meausure project: following the shoreline on both sides of the canal and creating a connecting element, that could be opened, between the two shores. The limited space available meant using Slim size pontoons, 1.60 m. in width, using fingers to ensure simple moorings, comfortable stability and ease of access.





#### **GRANDI FIUMI**

## Pleasure-craft and passenger boat landings

Ingemar has a great deal of experience in the field of floating platforms on rivers and lakes for mooring small pleasure-craft as well as passenger boats. These often have to be multi-functional (passenger boats and small craft) and are subjected to severe conditions (currents, water levels) and complex problems relating to access and anchorage as well as the dimensions of the passenger boats. In 2006, following the more than 35 installations by the company along Italy's major rivers and in the Venetian lagoon, another 8 landings have been added: on the Po delta between Venice and Rovigo, on the upper Po near Pavia, on the river Tanaro in the province of Alessandria and on the Adda close to Lecco.









#### **MARANO LAGUNARE (UD)**

## Floating quays and mini mooring platforms

Marano Lagunare has for some time been carrying out a programme to restructure the moorings of the fishing boats along the canal banks of the town centre. The latest project, in 2006, has seen Ingemar supplying a long pontoon parallel to the quay with three floating walkways placed at right angles and anchored by pilings and vertical beams fixed to land. Boat moorings are by means of wooden poles to the bows and a series of small platforms fixed to the pontoons which assist boarding procedures and provide them greater transversal stability.



#### **GENOVA**

### 6,350 m<sup>2</sup> of floating structures for the 2006 Boat Show

Following the successful installation of the pier for large yachts at the 2005 Boat Show, the positive cooperation with the Fiera di Genova SpA was re-confirmed for 2006. After careful examination of the layout with the technicians of the Fiera di Genova and UCINA, Ingemar (again in record time) carried out the final planning, implementation and completion of the worlds' largest floating exhibition facility. In only a few months the marina was fitted with a "floating thoroughfare" in the middle of the port 300 m long and 9 m wide with space for 32 special exhibition stands. On one side is the approach landing for maxi-yachts and on the other are 6 transverse mooring pontoons, totalling 575 m by 6 m in width.

Overall there are more than 6,000 m.<sup>2</sup> of floating surface space with a displacement of 1,570 tonnes and the stability, freeboard and overload are comparable to more traditional fixed structures (an overall weight of 35,000 people).

The floating jetties are the King Size type, 12x3 m, with rigid joints, galvanised steel structures, floating units in reinforced concrete and polistyrene and exotic hardwood walkways. The flexibility of the floating elements meant that the jetties installed for the previous Show could be utilised in the new port layout.

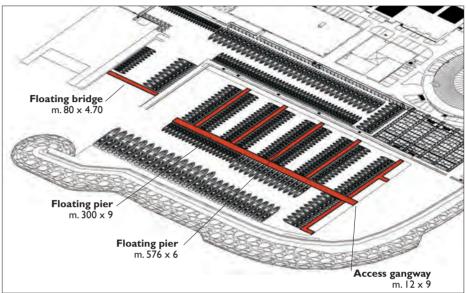
All the modules are prepared so as to be combined in different ways, thus satisfying the needs of a modern tourist port for mega yachts as well as for diverse exhibition layouts.

Along the 200 m of approaches are moorings for more than 200 boats, the most beautiful at the Show, for lengths of up to 35 m.

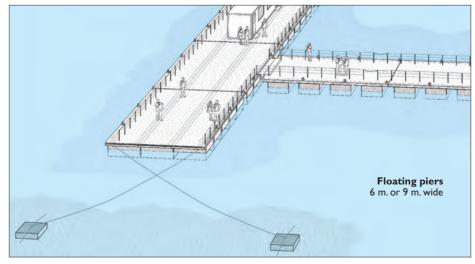
In order to ensure maximum security and accessibility for visitors, all the jetties are supplied with parapets, with stanchions and ropes, and the access walkways are of the same width as the pontoons with very slight inclines so as to ensure easy disabled access. Ingemar's presence at the Show was further enhanced by the supply, as technical sponsor, of a new floating bridge over the canal which provides access to the inner basins, so as to ensure a link between the new marina and the exhibition areas of the Ponente della Fiera. The bridge, 80 m long and 4.70 m wide, is supplied with access gangways, lined with handrails, and both the structural and aesthetic characteristics are in keeping with the other floating port structures. All the floating structures are anchored to the seabed by a system of chains and deadweights which ensure stability of the pontoon system even under the weight of moored yachts.

Overall there are 28,000 kg of chains for anchorage lines and 1,100 tonnes of reinforced concrete for the deadweights.









#### **MARSALA (TP)**

### A floating port in the commercial basin

Large ports offer an ideal location for receiving smaller craft. Often, however, apart from the interference in commercial and fishing activities, the protection for small craft is completely inadequate. In these cases the use of floating breakwaters is often the best solution: quick and inexpensive they delineate a protected space safe from the waves generated in large ports.

The new tourist port at Marsala is an example of this kind of project: minimal impact on the territory and often useful for reconverting abandoned port space. Through a series of projects the south basin of the port has been equipped with 500 m of Ingemar pontoons protected by a floating barrier of 120 m using the F/CA type breakwaters of 20x4 m.

Overall there are more than 300 berths fitted with all essential services, close to the town centre, the main tourist attractions and important archaeological sites.

The new port will be a popular destination for pleasure craft as it is only a few miles from the favourite Sicilian tourist attractions and the Egadi islands.





#### **CASAMICCIOLA (ISCHIA)**

#### More berths in Cala degli Aragonesi

By means of about 200 m of floating pontoons, Cala degli Aragonesi raised its accommodation capacity up to 160 berths. A further resource for the expanding nautical tourism in Isole Flegree always inhibited by the lack of landing structures.



#### **VIGONOVO (VE)**

## A floating highway to reunite the municipality

A new bridge over boats, using building techniques of today but following the layout and aspect of traditional Polesana structures, has reunited the town of Vigonovo which was literally cut in half by the Padova to Venice waterway. This is an economical solution, quickly executed and with minimum impact on the environment; it has restored the original route to the satisfaction of both pedestrians and cyclists who were obliged to go a long way round along a dangerous and busy road. The bridge is 58 m long and 2.4 m. wide, "resting" on 5 boats, 2 of which have pontoons for canoes and small boats. There is a rigid central walkway accessed by two footbridges with slight inclines: the structure has a maximum load of 400 kg/m<sup>2</sup> and allows for maximum displacement in the event of high tides or flood waters.



#### **ROSIGNANO SOLVAY (LI)**

#### A new fixed wharf at Cala Dé Medici

The port at Cala Dé Medici is nearing completion and the work on land is also in its final phase.

In 2003, following supply of the pontoons, the Marina again turned to Ingemar for an even more complex project: the widening of the shoreside piers so as to enlarge the footpaths whilst avoiding the danger of collision with the rocky quay.

The functional requirements are demanding: a projecting structure, 3.20 m. wide with an overload of 400 kg per m.², to be joined to a narrow underground passage in concrete, and inserted between the pontoons connecting to land.

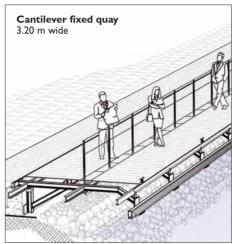
Overall there are approximately 300 m. of new piers furnished with sturdy protective systems, moorings and handrails to separate the pedestrian areas from those destined for the boat users.

Naturally, all had to be finished quickly, with low costs and without disrupting the marina's activity!

The metal structure, supported by spatial shelving joined to the curb by cast ironwork, constitutes a natural widening of the existing pier adding a new aesthetic touch thanks to its weightlessness and the exotic hardwood finishings.

This is an interesting solution, maintaining the rocky quays in a port with their positive effects on the undertow, whilst optimising water space and improving the aesthetics of port structures.







#### **MITILENE - GRECIA**

#### A safe marina between Europe and Asia

Following a reflective pause after the Olympics, Greece is enthusiastically continuing its programme of growth and development of ports and harbours which, thanks to natural, climatic and cultural resources, are a growing tourist attraction in the sailing world. The facilities at Lefkas, Gouvia, Fiscardo and Athens and the structures for the sailing events at the Athens Olympics, were particularly prestigious commissions for Ingemar and its Greek partner I.T.I., who will participate in the new enterprises at Samos, Santorini and Mitilini. At Mitilini, on the island of Lesbos just off the Turkish coast, Ingemar has been awarded the contract to supply floating pontoons (approx. 300 m) and fingers for the new marina to be built within the commercial port and surrounded by new protective structures. These will be of extruded sections in aluminium alloy and floating units in reinforced concrete for the pontoons and rotational polyethylene for the fingers and the mooring bollards: the walkways will be of tropical hardwoods, as with all Ingemars' standard discontinuous floating pontoons.





#### **EVENTI SULL'ACQUA**

#### 2006 a year of great visibility and participation

2006 has been an exceptional year for the companys' visibility at boat shows and water sports events where Ingemar has reinforced its position as a leader in the sector by participating as the supplier of the floating structures and technical sponsor, as at the International Boat Show of Genoa.

The Venice Boat Show is in its fifth year and has become a prestigious event for the pleasure craft industry on the Adriatic: Ingemar furnished the Show with the floating mooring pontoons within the basin at the Stazione Marittima consisting of a large walkway over the water with floating platforms for the exhibition stands; the route followed the form of a Z for 440 m. winding between the boats on show. Cooperation between the Croatian Boat Show at Split and Ingemar began with this the 8th Show which provoked great public interest as well as that of international operators.

Profectus, the company which "invented" and organises the show, commissioned Ingemar to supply the breakwaters, F/CA type, 20x4 m in reinforced concrete, which were used to create two floating barriers, each 60 m long and weighing 200 tonnes, to protect the exhibition space. Ingemar, as technical sponsor for the traditional annual Historic Sailing Ships Trophy at Imperia, this year participated in the race at Porto Santo Stefano, Argentaria, for AIVE (the Italian Association of Historic Sailing Ships): Ingemar's pontoons meant more berths for the numerous race enthusiasts.

Ingemar also supplied pontoons and floating slides for the regattas of the Academy Trophy at Livorno, the Trieste Challenge-La Sfida, the Winter Regatta at Imperia as well as for water events at Milan's Festa of the Navigli Canals.



**ARGENTARIO** Sailing Week 2006 Trofeo Panerai S.Stefano



TRIATHLON SPRINT Città di Muggia, Porto S.Rocco



**VENICE Boat Show** 



**IMPERIA** Vele d'epoca di Imperia, Trofeo Panerai



**TRIESTE** Trieste Challenge - La sfida



**SPLIT** Croatia Boat Show



Floating breakwater F/CA(20x4)





