

2003 was another good year for Ingemar which found a growing consensus and interest within both Public Administrations as well as the private sector. The company's design capacity combined with its flexible production methods, both of which are essential for solving specific site and operational requirements, have proved the determining factors yet again in the acquisition of important orders. The execution of made to measure facilities for the Kuwaiti Coast Guard and the landing-place at Piombino,

necessitated the application of new technical and structural solutions for floating pontoons, access systems and pre-fabricated wharfs/docks. The company's huge range of mass products proved the winning feature in acquiring an order for the new tourist ports at Hammamet, Lefkas and Locarno. Their floating breakwaters found new applications at Taranto, Lake Garda, Venice and Portoferraio as well as at Lefkas and Fries in Greece. The company's prominence in the field of nautical sports was crowned by

the acquisition of orders for sailing and rowing facilities for the 2004 Olympics to be held in Athens. The 'specialist operations sector' has also grown rapidly thanks to the implementation of important and diverse orders such as the floating pontoon at Venice, the Tall Ships terminal at La Spezia, floating platforms complete with superstructures on the River Tiber and at Ravenna, and finally the floating berths for shipping on the Rivers Po, Adige and Tiber.



^ The Port of Locarno

LOCARNO (SVIZZERA)

Huge success for the floating docks on Lake Maggiore.

The Port of Locarno is probably the most important pleasure-craft port on the Swiss lakes: the 400 finger berths, complete with all service facilities, launching ramps and sewage treatment systems, are well integrated along the waterfront and easily accessible by the public. The considerable variations in water levels and the lakes' depth, necessitated innovative and complex solutions to anchor the floating structures, as well as to build the access systems from the lakeside: these structures overcame the most extreme tests, during violent storms, when the lake reached its all-time historic depth.



PORTOVENERE

Two new landings on the Gulf of La Spezia.

The Gulf of La Spezia is a paradise for sailing enthusiasts who bring fame and new resources to the area. Ingemar has reinforced its presence this year with two new undertakings, in addition to the floating port for Assonautica of La Spezia at the Marina del Fezzano. The Public Administration of Porto Venere, with innovative procedures, took charge of the construction of the new landings in the Bays of Le Grazie and Fezzano: 370 moorings on floating pontoons were constructed complete with all facilities to efficiently manage the waterspace with the greatest comfort of the users, who up to then had to use mooring buoys. The Fezzano Municipality cooperated with the Unione Sportiva Fezzanese (the local Sports Authority) in the building of another 90 moorings, again on floating pontoons. This is an excellent example, which should be emulated, of cooperation and joint efforts between local authorities and sports associations to the benefit of nautical development. Ingemar's contribution was to complete the work in record time: 700 mts of pontoons were installed in only 3 months.



^ Baia di Fezzano



^ Baia di Le Grazie

ACITREZZA

More boats and more services with the ports' restructuring.

The recent development of the tourist port at Acì Trezza, near Catania, is the achievement of a group of capable and obstinate people who have reorganised the waterspace, increasing receptive capacity and improving services. It has been most gratifying for Ingemar to have merited the approval of these specialists and highly satisfying to be commissioned to supply the floating pontoons which will ensure structural uniformity, as well as aesthetics, to the whole operation.



LEFKAS (GRECIA)

A floating port for the Island of Lefkada.

The new marina on Lefkada, one of the Ionian islands situated between Corfu and Cephalonia, was another contract for the creation and management of a marina/lido: these are highly successful formulae for new Greek tourist ports. As with the expansion of the marina at Gouvia on Corfu, the use of floating breakwaters was the determining factor for the viability of the project and have created a true floating port with 650 moorings. The operation included the supply of 300 mts. of breakwaters, in segments of 12x3 mts., and nearly 1,400 mts. of "King Size" pontoons - 2.70 mts. in width. This prestigious acquisition has reinforced Ingemar's presence on the Greek market and earned the appreciation of investors for the high quality of technical solutions as well as the resourcefulness shown by the company's operation in Greece.



PIOMBINO

More than 1,000 new moorings on the coast opposite Elba.

The new tourist complex "Terre Rosse", near the port of Piombino, is an interesting example of industrial conversion. The new landing-place, on the Cagliana canal, is the brainchild of an ambitious plan by the Circolo Nautico Pontedoro and the privately owned company C.P.C., to reclaim and restore a degraded ex-industrial area and provide two sheltered water basins with well equipped service areas on shore. The overall receptive capacity is approximately 1,100 berths for boats of up to 10 mts. in length. Ingemar was commissioned by the two companies to install all the moorings: an important undertaking due to the complexity and size of the operation. The more than 1,300 mts. of fixed piers, supported by pilings, meant demanding designs in order to adapt the prefabricated modules to the shores' curves. The pontoons, with an overall extension of 1,350 mts., are of differing types, depending on the various requirements, and are all accessed by floating walkways. The C.P.C. moorings are on fingers and mini-fingers; marina pedestals and fire stations ensure all essential services to boats. This was a complex operation using uniform structures with discreet finishings which blend harmoniously into the surrounding landscape.



^ Detail of the C.P.C. landing-place



^ General view

CROAZIA

Croatia: an expanding market.

The Croatian coastlines are Ingemar's latest objectives. There have been several important initiatives recently: the Marina at Giricic with aluminium pontoons and the Marina at Kastela with steel pontoons; both are close to Split. In the Bay of Volme on the Istrian coast, a new floating installation is underway on behalf of a local developer and in Dalmatia, on the Incoronate islands, the restructuring of several marinas has begun with the installation of new floating pontoons.



PORTOFERRAIO

A new floating marina for the island of Elba.

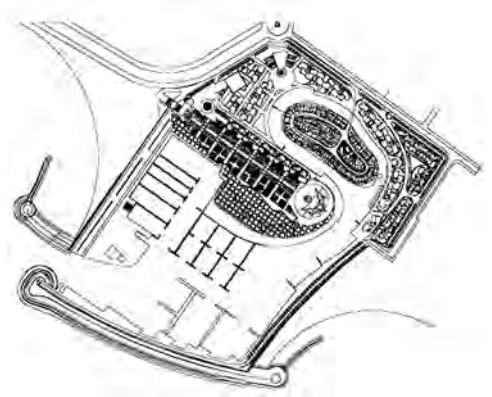
The building sites of Esaom-Cesa, are part of an important company restructuring and have gone some way towards answering the complaints of pleasure-craft owners visiting Elba: a new floating marina on the beautiful Bay of Portoferraio near the town centre has been built. Ingemar is proud of its contribution to this project made possible using floating breakwaters combined with robust pontoons, wide enough for both comfort and safety.



HAMMAMET (TUNISIA)

Aluminium pontoons for the Jasmine Marina.

This is possibly the biggest marina on the North African coast (720 moorings) and part of a huge investment development to the south of Hammamet. Ingemar supplied aluminium pontoons with concrete floaters for the two inner basins, outbidding their French competitors and this in a country which is still closely linked, technically, to the use of traditional French floating pontoons in aluminium alloy.



GIOCHI OLIMPICI 2004

Athens: Ingemar for sailing and rowing.

Less than a year away from the opening of the 2004 Olympic Games in Athens, a series of test events last August inaugurated the new sailing and rowing infrastructures. Ingemars' specific experience in the sector of sports complexes was the determining factor in winning the contract to supply all the floating equipment for the two competition courses. Both Ingemar's organisation and resources in Greece were of particular importance to the Games' organisers not only for the installation but also the maintenance of the structures right up to the Olympic Games as well as the possibility of reusing them at the end of the events. Close to 900 mts. of pontoons and more than 3,800 sq.mts. of floating slipways constitute Ingemars' important contribution to ensure the maximum efficiency of the new port at Agios Kosmas, Athens, destined to be the base for the sailing events during the next Olympics. For the new artificial basin, where the rowing and canoe events will take place, Ingemar has built a series of floating structures with an overall surface area of nearly 3,600 sq.mts. for boat launching, departure floating devices, the award ceremony platform as well as all the necessary service and safety platforms.



^ General view of the port of Agios Kosmas



^ Agios Kosmas: dinghy launching



^ Schinias: landing pontoons



^ General view of Schinias: the rowing basin

CAMPIONATI DEL MONDO 2003

Idroscalo at Milan: Ingemar completes the race structures.

The 2003 World Rowing Championships were held at the Idroscalo, Milan, last August. Sports activities on this artificial lake have grown at the same pace as Ingemar, who over the years have furnished the floating structures for races, services and recreation facilities. This cooperation has continued through the years with the successive supply of more modern structures amongst which, in the spring of 2003, were added the new sliding departure pontoons, thus completing the race installations for rowing, first installed for the world championships of 1987.



AL FINTAS (KUWAIT)

Patrolling the Kuwaiti coastline.

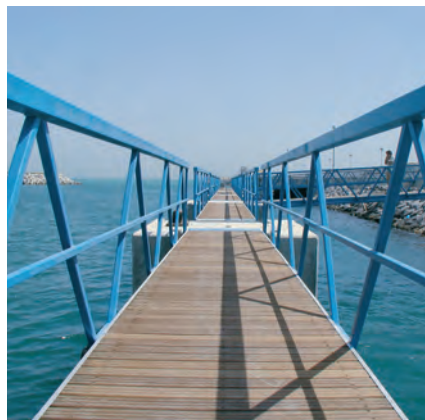
In the summer of 2002 Ingemar delivered the first part of the floating structures for the port of the Marine Guard at Al-Fintas in Kuwait, thus concluding three years of work, from design to on-site installation, technical controls with the clients' consultants and the on-site construction of various elements. The port complex, due to become the largest coastguard base in the Middle East, contains buildings housing various institutional activities, workshops for boat repairs and maintenance, housing for personnel, sports equipment, a ship lift and launching ramps. The hub of the project is the marina which, protected by breakwaters, covers a large area divided into different basins for different uses by fixed concrete jetties. Each of the basins has its own pontoons, finger piers and floating docks for mooring speed boats, patrol vessels and landing craft. Service pontoons ensure fuel supply and simple maintenance. A series of fixed piers behind the floating breakwaters (for mooring impounded boats) completes the installation. All the structures, both fixed and floating, necessitated a specific design approach related to both the high level of loading as well as the large size of the boats to be moored (up to 45 mts. in length and 540 tonnes of displacement). Ingemar supplied a "turn key" operation: all the structures were made in the Persian Gulf and anchored by steel pilings to the sea floor. To satisfy the technical specifications, a new floating element in rotomoulded polyethylene was designed and produced, and which has since been used in other specialist operations.



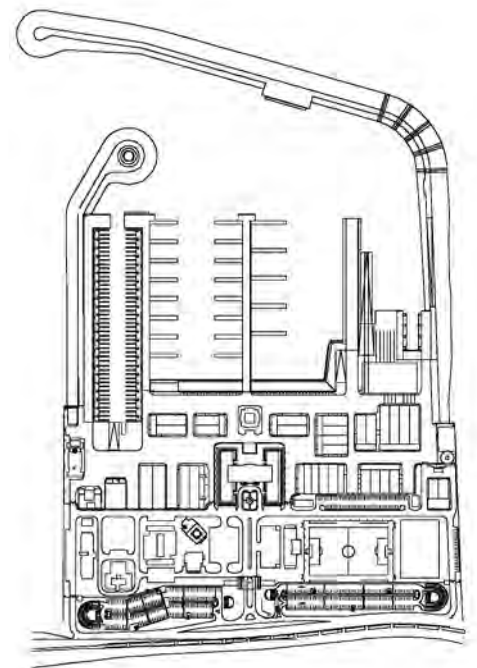
^ Pontoons for speedboats



^ Pontoons for patrol vessels



^ Fixed piers



LA SPEZIA

Floating terminal for cruise ships.

The solution adopted by the Port Authority of La Spezia for welcoming ever more tourists from cruise ships moored in the bay, is certainly an innovative one. Ingemar has built to measure a huge platform, complete with offices and reception rooms, which is anchored offshore opposite the Morin promenade in the city centre: passengers continue their cruise round the Gulf on the ship's tenders ensuring continuous connections between the ships and the terminal. This is an important example of how it is possible to achieve new and alternative solutions to traditional problems through the use of floating structures, meaning rapid and economic intervention through modular and removable pre-fabricated structures.



VENEZIA

Floating bridges for the feast days of the "Redentore" and "Salute".

In 2003 the floating bridge built the previous year by Ingemar on behalf of Insula, the town's urban maintenance contractor, was used again by both the Venetians and tourists as part of the ritual of respecting the vow made in 1576 to end the pestilence inflicted on the city. The bridge, installed for the occasion of the feast of the "Redentore", is 334 mts. long by 4 mts. wide and is made of hinged elements, each 20 mts. long, plus the access structures. The floating structure, anchored to the sea floor by pilings and sliding devices, connects the two banks of the Giudecca Canal thus allowing for access to the Church of the S.S. Redentore in front of the "Zattere". This floating bridge fully respects the traditional bridge built on boats (each unit's shape recalls that of a boat and is positioned crossways) whilst being more comfortable and certainly more secure. The bridge is elevated in the centre to allow the 'vaporetti' to pass underneath. The modular elements of the bridge (only the access ramps need to be modified) has meant that it can also be used for the feast of the "Madonna della Salute" - another important feast day in the Venetian calendar. For this occasion the central elements were installed on the Canal Grande near the church of the "Madonna della Salute" and opposite the Piazza di San Marco.



^ Detail of the Ponte della Salute



^ Floating bridge - Ponte della Salute



^ Floating bridge - Ponte del Redentore



^ Ponte del Redentore

ROMA

Floating platform for a sports centre on the River Tiber.

This was a prestige commission for Ingemar. The client, one of the most exclusive sporting clubs in Rome, is the Reale Circolo Conottieri Tevere Remo. The brief was a difficult one: to provide solid foundations for a building on the River Tiber. The building complex, with an overall surface area of nearly 400 sq.mts., comprises a ground floor, with a gym and storage for the canoes, and an upper floor for the offices, services and a 'Solarium'. Downstream the building is connected to a second floating platform for the launching the boats.



GRANDI FIUMI

Mooring platforms for river cruise ships and pleasure craft.

Tourism on inland waterways is becoming more popular in Italy: the country's rivers are a natural resource and their shores are dense with history and architecture. Reserves and parks are being created with moorings for pleasure boats and river navigation craft. Ingemar's experience in designing and building special structures and studying the anchorage systems, proved the winning hand in confronting the problems of tourist boat dimensions, the rise and fall of water levels on the tidal rivers and the tidal currents. To date 23 berths have been built on the Rivers Po and Adige and 5 at the Tiber-Farfa Reserve north of Rome. Four more berths have been installed at Chioggia for the connecting services with Venice. In many cases these are installations for the mooring requirements of ferries, craft of all sizes and rowing boats, as well as for welcoming tourists.



^ Chioggia (Venice)



^ Loreo (Rovigo)



^ Scardovari (Rovigo)



^ River Tiber (Rome)

VENEZIA

Floating pontoons for ferries in maintenance.

The re-modernisation of the maintenance centre for the Transport Company of Venice has begun on the mooring structures: new floating pontoons by Ingemar have replaced the old fixed bridges to the satisfaction of the operators who now have easy access in all tidal conditions. The structures are characterised by height displacement and continuous floatation in order to ensure maximum trim stability and comfort.

