

2006 **ROLEC**

Worldwide Specialists in Marina Services



Solutions to meet every budget

// Contents

Roline Range / Deck Level Remote Units / 250mm Service Bollards	03
500mm Service Bollards	04-06
750mm / 850mm Service Bollards	07-10
1000mm / Quayside Service Bollards	11-12
Midi Range of Service Bollards	13
Maxi Range of Service Bollards	14
Large Supplies / Megamaster range	15-16
Electric Metering	17
Water Services / Metering	18
Card, coin or token operated Energymaster / Timemaster Service Bollards	19
Computer or Smartcard operated Berthmaster / Smartmaster Service Bollards	20
Computer operated sytems - Mainstalk / Mainstar	21
Marina Illumination	22
Emergency Services / Fire Caddy	23-24
Distribution Units and Control Panels	25
Sanitation Pump-out	26
Accessories	27
Marina Projects Worldwide	28-30

// Company

Rolec Services is firmly established as the world's leading company specialising in the design, manufacture and installation of services on marinas and waterside locations.

We offer the largest range of marina service bollards and associated marina equipment, with each bollard manufactured to your individual specification and conforming to your local regulations.

// The Product

We manufacture thousands of service bollard variations in every colour, shape and size to ensure your requirements are met every time.

Bollard Construction Options: UV stabilised Foamex, Powder coated aluminium, aluminium chequerplate, powder coated galvanised steel and powder coated brushed stainless steel or polished stainless steel.

Bollard Colours: All colours available in both matt and metallic finishes.

Bollard Types:

Roline Range / Deck Level Remote Units	Various Sizes
Standard	250mm/500mm/750mm/850mm/1000mm
Midi Range	500mm/750mm/850mm/1000mm
Maxi Range	500mm/750mm/850mm/1000mm
Megamaster Range	Medium/Large/ Extra Large

// The Flexibility

One of Rolec's strengths is our flexibility, which enables us to design and manufacture marina service bollards to each and every customers individual requirements.

// The Accreditation (IP66)

Out of the many accreditations and approvals Rolec and its products have received, the IP66 rating for the marina service bollards has to be our most important.

The bollards have been tested and certificated by one of Europe's leading registered test laboratories to the internationally recognised IP66 rating.

This rating of high jet pressure waterproof will provide you with the confidence to install the bollard in even the most exposed conditions.

We have also achieved **CE** conformity, **ISO** quality assurance, **WRAS** water approval and **NIC EIC** electrical approval.

// The Consultant

Rolec offers an electrical and water system design service that is recognised throughout the world as the best available. We can also provide assistance in preparing tender specifications accompanied with Auto-cad drawings as well as technical / practical assistance to marina consultants, architects, contractors and operators at any stage of the marina build/refurbishment.

// The Service

Rolec provides a unique range of services from simple supply-only of service bollards to full turn-key design and installation. With an extensive network of agents worldwide we are able to provide close proximity support at all times.





➤ Deck level remote unit.

For the Marina Operator who prefers very low-level equipment on the pontoons, the NEW Roline Range in conjunction with deck level remotes is ideal.

The Roline Range is manufactured in heavy-duty aluminium and powder coated to a colour or colours of your choice with stainless steel upgrade versions available upon request.

The Roline unit can be equipped with single or three phase electrical sockets complete with overload and fault current protection, as well as low-level pontoon-facing illumination.

The deck level remote unit provides a single or three phase electrical socket in a very small compact housing suitable for mounting very close to the boat.

The housing can be manufactured in powder coated aluminium to a colour of your choice or in UV stabilised poly-propylene.

The 250mm service bollards are ideal for use on all types of pontoon system and are able to offer electrical supplies, water services and illumination.



➤ 250mm Foamex lighting bollards.

The highly popular 500mm service bollard range is a favourite with many marina operators wishing to provide electrical, water and illumination on a single service bollard.

The bollard has three segregated internal compartments to allow the services it provides to be separated.

- Like all our bollards, the 500mm range is available in unlimited colours and can be manufactured in Foamex, Aluminium, Galvanised Steel or Stainless Steel.

- Bollard illumination can be controlled by either its own independent photo-electric sensor or by a separate marina lighting circuit.



➤ 500mm Foamex bollard with two 16 amp sockets and two direct connection water outlets.



2WAY CONTROL BOLLARD WITH DECK LEVEL REMOTES



250MM BOLLARD

LENS PROTECTION

ROLINE UNIT WITH 4X SOCKETS AND ILLUMINATION



500MM STAINLESS STEEL BOLLARD



500MM BOLLARD INSTALLATION

The Rolec service bollard has been awarded the internationally recognised and highly coveted IP66 ingress protection rating.

- Every service bollard is constructed around a heavy duty hot dipped galvanised steel internal chassis to BS-EN-ISO-1461 making the Rolec service bollard one of the strongest bollards available. Optional aluminium internal chassis available upon request.

- With products in over 40 countries we are always in your area.

- Ask about our 'we design - you install' service.

As well as the standard illuminated head, the 500mm range can be equipped with any of our optional lighting heads.

A variety of optional equipment, such as lockable sockets, lockable taps and Key-switches, can also be fitted to the 500mm service bollards. [See page 27 for more accessories]

- Both electric meters and water meters can be incorporated into the 500mm service bollards.

- The Rolec service bollards have been designed for easy installation and low cost maintenance.

- All Rolec service bollard water systems come as standard with an anti-contamination valve.

- Optional anti-frost heat trace tape systems are available on every service bollard containing a water supply.



➤ 500mm bollard with watertight sockets.



STANDARD 500MM FOAMEX SERVICE BOLLARDS



STAINLESS STEEL PATTERNED EXTERIOR



ALUMINIUM CHEQUERPLATE EXTERIOR



POWDER COATED ALUMINIUM EXTERIOR



➤ Optional hook and hose.

The 750mm and 850mm service bollards are without doubt the most popular bollard ranges in our portfolio. Able to offer a huge diversity of services they are widely accepted as the work horse of service bollards.

Like all our service bollards, the 750mm and 850mm versions have three internal compartments to allow the services to be totally segregated.

- The 750mm and 850mm range are available in unlimited colours and can be manufactured in Foamex, Aluminium, Galvanised Steel or Stainless Steel.

- Hose reel options available.

Create your own unique 750mm or 850mm service bollard by choosing:

- a) the services it provides
- b) the colour it comes in
- c) the material it is manufactured in.

- The Rolec service bollard has been awarded the internationally recognised and highly coveted IP66 ingress protection rating.

- All Rolec service bollards have been designed for ease of installation and low cost maintenance.

- Rolec offer a full marina design and consultancy service.

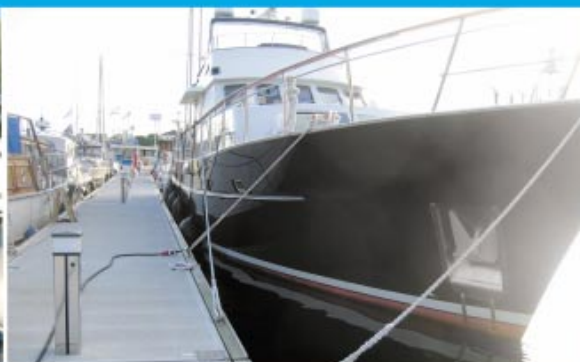
- All Rolec service bollards are fully tested, issued with a serial number and registered before despatch. In the event of requiring spare or replacement parts simply quote the serial number and we will do the rest.



➤ 750mm Credit metered bollard with key-switch control.



WATERPROOF SPEAKERS



ORNATE STAINLESS STEEL



ELECTRIC METERS



ALTERNATIVE LIGHTING



➤ S/S socket locking brackets.

Electric sockets, water taps, illumination, TV points, telephone points, PA speakers, data sockets, compressed air outlets are all available on the 750mm and 850mm service bollards.

Almost any optional extra can be accommodated on the 750mm or 850mm service bollard.

- All our bollards can be equipped with both single phase or three phase cable terminals to suit the marinas electrical system. A gland plate or cable clamps are included to suit your electric cable system.
- Bollard illumination can be controlled by either its own independent photo-electric sensor or by a separate marina lighting circuit.
- Interlock electrical sockets are available upon request.



➤ Personalised colour options.

• As a truly global supplier of marina service bollards, no one understands marina services like we do.

• Waterproof speakers can be installed in any of our service bollards to allow communication from the marina office to the berths

• Polymer coated aluminium hose reels or stainless steel hose hooks with food quality hose pipe can be added to any bollard or water stand.

• Cards, coins or tokens can be used to pay for electricity and water services by choosing either **Energymaster**, **Timemaster** or **Smartmaster**.

• Our **Berthmaster** system gives you computer control of electricity and water services.



750MM WITH NAPOLEON HEAD



750MM WITH ANGLED HEAD



4 X SOCKETS AND 4 X TAPS



The elegant 1000mm service bollard has been designed to provide that little extra capacity and flexibility whilst still remaining slim-line and unobtrusive.

This highly adaptable service bollard is able to achieve everything a 750mm version can whilst offering 25% more usable space allowing you to increase the services provided to each berth.

As well as being an ideal service bollard for marina moorings, the 1000mm service bollard has proved to be the perfect size and style for offering services on boatyards, hard standing areas, quaysides and canals.

- Like all our service bollards, the 1000mm version has three internal compartments to allow the services to be totally segregated.

- All Rolec service bollards can be provided with individual hand painted designs, which can incorporate unique patterns, a company logo and name.

- Electric sockets, water taps, illumination, TV points, telephone points, PA speakers, data sockets, compressed air outlets are all available on the 1000mm service bollards.

- Like all our bollards, the 1000mm range is available in unlimited colours and can be manufactured in Foamex, Aluminium, Galvanised Steel or Stainless steel.

- All our bollards can be equipped with both single phase or three phase cable terminals to suit the marinas electrical system. A cable gland plate or cable clamps are included to suit your electric cable system.

- Card, coin, token or computer controlled bollards available.

Create your own unique 1000mm service bollard by choosing:

- a) the services it provides
- b) the colour it comes in
- c) the material it is built in.

Represented throughout the world, Rolec can offer you international expertise at local prices.

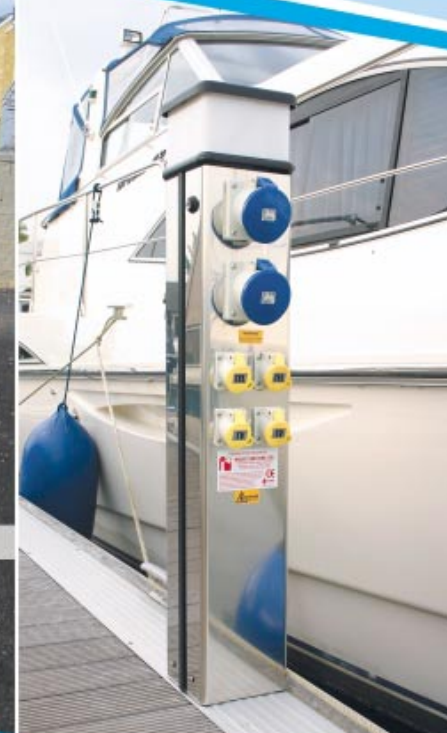
Boatyard bollards.



HAND PAINTED BOLLARDS



WATERFRONT DEVELOPMENT



1000MM COIN OPERATED BOLLARD

As part of our continuing development programme, we have now introduced a new range of service bollards called Midi.

This range is identical in appearance to the standard service bollard range whilst offering a wider and deeper body area to accommodate greater numbers and sizes of services. The increased body size also offers a higher degree of stability to the service bollard making the bollard extremely robust and hard wearing.



➤ S/S Maxi bollard with pump-out.

- Like all our bollards, the Midi range is available in unlimited colours and can be manufactured in Foamex, Aluminium, Galvanised Steel or Stainless steel.

- A variety of optional equipment, such as lockable sockets, lockable taps and Key-switches can also be fitted to the Midi service bollards.

- Both electric meters and water meters can be incorporated into the Midi service bollards.

- Cards, coins or tokens can be used to pay for electricity and water services by choosing either **Energymaster, Timemaster or Smartmaster.**

- Computer control of electricity and water services is available on all Rolec service bollards.

- 1/2", 3/4" and 1" water supplies can be provided on all Rolec service bollards with optional hose pipe facilities.

- An internal anti-contamination valve protects all service bollard water supplies.



➤ Computer controlled MAXI bollards

The new Maxi bollard is the largest bollard in our portfolio. It is able to offer unlimited variations in sizes and types of electrical and water services as well as variety of metering options.

The Maxi bollard is the perfect answer for providing services to a boat that demands everything. From 16amp single phase to 250amp three phase electrical supplies and 1/2" to 2" water supplies, the Maxi can cope with every demand. Add TV, telephone and illumination and the Maxi offers your berths a complete service.

Sanitation Pump out

A major attribute of the Maxi bollard is its ability to incorporate a pump-out sanitation facility. With the Maxi providing a sanitation pump-out point at the boat's very location, no longer does the boat have to relocate to a communal pump-out station to discharge.



➤ 63amp 3phase interlock sockets.



4 WAY MIDI BOLLARD



ENERGYMASTER MIDI BOLLARD



MAXI BOLLARD INSTALLATION



MAXI BOLLARD

The Megamaster has been developed solely for the purpose of providing large multi-outlet electrical and water services to very large boats. Manufactured in heavy-duty aluminium with a hard-wearing protective polymer coating or in stainless steel, the Megamaster provides the ideal solution for megayacht / superyacht supplies.

Available in three sizes and multiple colour combinations, the Megamaster can also provide TV, telephone and illumination. Strong enough for two people to sit on, the Megamaster can be used on marinas, quaysides or hard standing areas. When a combination of strength and a variety of services is required the Megamaster is the answer.



➤ Single and three phase sockets.

Many of Rolec's products can be equipped with large electrical and water supplies. With the Megamaster units and the introduction of the Midi and Maxi range, we now have a product range that can satisfy every marina's services requirements.

With standard bollards servicing the smaller berths, the Megamaster/Midi/Maxi bollards will provide the larger berths with their heavier duty services.

With a standard bollard for the smaller berths up to the maxi bollard for the larger berths, we are able to maintain a familiar bollard appearance throughout the whole marina.

- Up to 3" water supplies can be delivered using the Megamaster unit.

- 16amp, 32amp, 63amp and 125amp three phase supplies can be provided on most of our service bollard ranges.

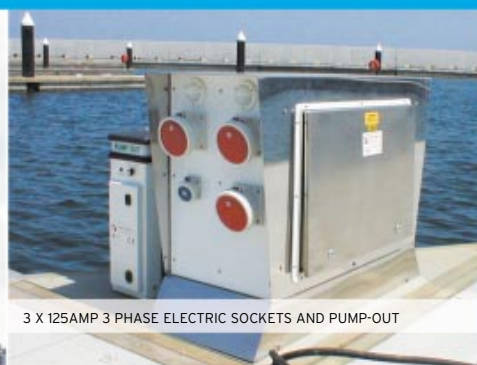
- Up to 600amp three phase electrical supplies can be provided by the Megamaster unit.



➤ Specialist electrical sockets.



MEGAMASTERS FOR SUPERYACHTS



3 X 125AMP 3 PHASE ELECTRIC SOCKETS AND PUMP-OUT



250AMP 3 PHASE ELECTRIC SOCKET AND PUMP-OUT





➤ Pre-payment card metering.

Rolec offers an extensive range of electric and water meters. From standard digital meters read on a customer to customer basis through to the ultimate in pre-payment metering being the Rolec **Smartmaster** or **Berthmaster** system.

Standard visual digital kWh meters can be supplied in both mechanical or electronic versions. Pre-payment magnetic card operated kWh meters are an easy labour saving way of managing your electrical services.

Miniature kWh meters can be supplied in all Rolec service bollards allowing the bollard size to be kept to a minimum or supplied for easy installation in to existing bollards.

The new Leadmaster ship to shore kWh meter connection lead provides a marina without metering with a quick and easy solution, both 16amp and 32amp versions available.

- Coin, token and computer controlled metering is also available.



➤ Economy water stand.

Rolec has a huge range of water services, which can be supplied on the service bollards or on dedicated water stands.

From a 1/2" water tap up to a 3" water outlet every water option is available.

With a variety of water taps and direct hose connections, we are confident we have every type of water service product you will ever need.

Visual digital water meters and pre-payment card, coin or token systems are now part of every day marina life.

- Polymer coated aluminium hose reels or stainless steel hose hooks with food quality hose pipe can be added to any bollard or stand.

- All Rolec service bollard water systems come as standard with an anti-contamination valve.

- Optional anti-frost heat trace tape systems are available on every service bollard with a water supply.

Rolec has been awarded full W.R.A.S. approval on a range of service bollards delivering water.

Seasonal or annual use W.R.A.S. approved water system are now available from Rolec.



IN-LINE METERING (16AMP OR 32AMP)

DIRECT WATER CONNECTIONS

SINGLE PHASE AND THREE PHASE MINIATURE KWH METERING

CREDIT METERING INSTALLATION

DIGITAL WATER METERS

HOSE REELS

LOCKABLE TAP

// ENERGMASER / TIMEMASTER PRE-PAYMENT SYSTEMS

In association with the **OMRON** Corporation of Japan, Rolec have developed what we consider to be the most comprehensive range of coin, token and card operated electricity and water service bollards on the market today.

This second generation **Energymaster** and **Timemaster** bollard range includes easy to maintain clip-on modular control units complete with stainless steel coin, token and card readers with protective weather windows.

New features include anti-condensation heaters, water filters, low-wind solenoids and credit available neon indicators.

The **Energymaster** and **Timemaster** systems are easily installed and do not require any computer software or additional cabling.

• **Energymaster** service bollards provide exact amounts of electricity and water per payment, with **Timemaster** providing electricity and water in time periods.

OMRON

• Both the **Energymaster** and **Timemaster** range of bollards have the full technical and component support of both **Rolec Services** and the **OMRON** corporation.



➔ Coin, token or card operated.



BERTHMASTER - COMPUTER CONTROL //

As part of the co-operation between Rolec and the **OMRON** Corporation, we have developed the second generation **Smartcard** and computer controlled electricity and water service bollards.

The **Berthmaster** system is a fully integrated computer controlled system which allows the marina operator the ability to individually switch on/off every electrical socket and water supply on the marina.

The **Berthmaster** system also monitors all electrical and water consumption and can prepare invoices on request.

Berthmaster will provide each berth with a services consumption account or alternatively a pre-payment account, ensuring that electricity and water is paid for in advance.

• **Berthmaster** can also be extended to operate in other areas of the marina including sanitation pump-out, gate access, etc.

OPERATION, TECHNICAL AND MAINTENANCE MANUALS PROVIDED WITH EVERY SYSTEM

SMARTMASTER - SMARTCARD CONTROL //

The **Smartmaster** system, developed in association with the **OMRON** Corporation, is the ultimate in marina services control.

The **Smartmaster** system allows each boat owner to have their own programmable (contact-less) smartcard, which can be loaded with as much or as little credit as required.

Once programmed, the Smartcard can download credit to the **Smartmaster** bollard allowing the berth holder to use the electrical and water services whilst a local digital display screen allows access to their accounts.

The bollards credit can be added too at any time using the Smartcard or alternatively unused credit can be retrieved from the bollard back onto the Smartcard.

The **Smartmaster** system offers a huge range of functions including opportunities to use the same card for access gates, pump-out, car park barriers, toilets, showers and much more.

• The **Smartmaster** system can also be fully integrated into the marina office computer allowing the operator the ability to switch on/off electrical and water services as well as provide pre-payment services to visitors.

OPERATION, TECHNICAL AND MAINTENANCE MANUALS PROVIDED WITH EVERY SYSTEM.



Mainstalk - Computer Control for Electricity

Probably the most efficient, reliable and cost effective computer controlled services solution available on the market today is **Mainstalk**.

Mainstalk is widely used by electricity supply authorities world-wide for the domestic housing industry.

Simply install **Mainstalk** meters into Rolec Services bollards and connect them onto the electricity cable system as usual, provide a local controller, switch on the computer/software and your working.

Each 60amp single phase meter can provide either a customer account or a pre-paid account and also includes its own built-in relay for switching on/off the electrical supply.

An auxiliary contactor allows you to independently switch water if required.

- This system is simple, cost effective and reliable.

Mainstar Utility Monitoring and Control

MAINSTAR is a unique system designed entirely with the management of marina utility services in mind.

The system has been designed to provide full computer monitoring and control of the berth's electrical and water services, as well as localised keypad control for the boat owners.

MAINSTAR is able to communicate via a twisted pair data cable or using the standard electrical cable system, making it one of the most adaptable systems available.

The **MAINSTAR** system is packed with useful functions including:

- Keypad control at berth
- Localised account display
- Dual metering for each berth (visitor and tenant account)
- Electrical overload protection feature
- Anti-theft auto dis-connection
- Electrical and water monitoring and control
- Electrical and water invoicing
- Control of access gates, lighting, etc.
- Can be installed in phases as budgets allow (Ph1- reading meters only/Ph2 localised keypad control/Ph3 fully integrated computer control).

DEDICATED MAINSTAR BROCHURE AVAILABLE



• Rolec are able to provide a huge range of lighting possibilities for the entire marina environment.

• There are four options of illumination that can be installed on our range of marina service bollards as well as vandal resistant lighting (VRL) and solar powered 'hazard' marker lights.

From the standard 360degree low glare option to the modern looking quad head, we are confident we have a light for every occasion.

Our **solar powered marker lights** are ideal for marking out hazardous edges and areas along quaysides, access bridges, pontoons, mooring fingers, footpaths, road ramps, etc. (Note: Time length of nighttime illumination is subject to various factors such as location, seasons, daytime weather conditions, etc).

Our range of heavy duty vandal resistant lighting (VRL) columns in 750mm, 1000mm and 2000mm sizes are ideal for quaysides, boatyards, footpaths and any other area requiring a general hard wearing light.

Illuminated pier identification bollards and access bridge lights are included in our extensive range of lighting products.



➤ Napoleon head.



➤ Quad head.



➤ Lense guard.



➤ Angle head.



MAINSTALK COMPUTER BOLLARDS



MAINSTAR 750MM SERVICE BOLLARD



500MM WALKWAY LIGHTS



SOLAR POWERED MARKER LIGHTS



VANDAL RESISTANT LIGHTING



ACCESS BRIDGE LIGHTS



PIER IDENTIFICATION BOLLARDS



Navigation lights.

More important than the provision of electrical and water services is the requirement to provide your customers with a safe environment in which to enjoy themselves. Rolec has developed an extensive range of emergency service equipment that will provide you and your customers complete peace of mind.

Our range is one of the largest in the world, from the low cost economy life-buoy stand right up to the mobile fire fighting caddy, our range can provide protection for almost every emergency situation.

- Lifebuoy stands
- Fire extinguishers
- SOS bollards
- Fire hydrants
- Mobile Fire Caddy
- Navigation lights
- Alarms and call points

Fire Caddy

The unique mobile Fire Caddy is able to take sea or river water, mix it with a solution and project a fire fighting bio-degradable foam spray straight onto the fire.

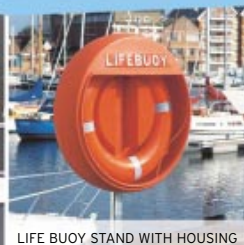
The Fire Caddy can also be used solely to pump out water from flooded boats or for washing down boats, quaysides yards etc.

A safety breaking system is fitted to the Fire Caddy as standard.

(You will receive a full operation and maintenance manual with every Fire Caddy)



ECONOMY LIFEBOUY STAND



LIFE BOUY STAND WITH HOUSING



EMERGENCY CABINET



FIRE HYDRANT STATION



1000MM SOS BOLLARD



HYDRANT WITH REEL



PORTABLE FIRE CADDY



➔ Stainless steel 1200amp electrical panel.

Individually manufactured electrical distribution panels can be ordered from Rolec. Each panel will be equipped with the necessary protective switchgear, have correctly sized cable connection terminals and holes punched to suit the incoming electric cables.

All panels will be U. V. resistant and fire retardant and can be either mounted on a wall or on a purpose manufactured pillar for installation on the marina or quayside.

Large panels with high volume electrical sockets can also be manufactured (ideal for boat yard, regattas, etc).

Electrical meters able to monitor the marina's entire electrical supply can be built into any of our individually manufactured panels.

The sanitation pump-out system is now an almost mandatory requirement for every marina.

In the very near future, every marina old or new will have to provide a sanitation pump-out facility as part of their operating conditions.

Rolec services have developed an extensive range of pump-out units to suit all specifications and budgets.

From the new economy self-contained pump-out unit through to our multi-point pump-out system, (sanitation pump-out at every berth) we have a solution for all pump-out requirements.

Our pump-out systems can be operated using a variety of different methods including:

- Keyswitch control
- Coin payment (single or multiple)
- Card payment
- Token payment
- Office computer

Further pump-out systems include:

- Dual sanitation and bilge pump-out stations
- Multi service bollards offering; electric/water/illumination/sanitation pump-out

- Rolec's expertise can be used at any point from planning a marina to its full completion.



BOAT YARD SUPPLY PANELS



INDIVIDUALLY MANUFACTURED DISTRIBUTION PANELS



SHORE ISOLATION PANEL



SELF CONTAINED COIN/CARD OPERATED SANITATION PUMP-OUT BOLLARD



PUMP-OUT AT EACH BERTH

POLISHED STAINLESS STEEL



MAXI PUMP-OUT BOLLARD WITH COIN PAYMENT

We hold huge stocks of spare / replacement components to make sure your service bollards are always functional.

We have a worldwide network of experienced Rolec representatives able to provide technical support, advice and quotations.

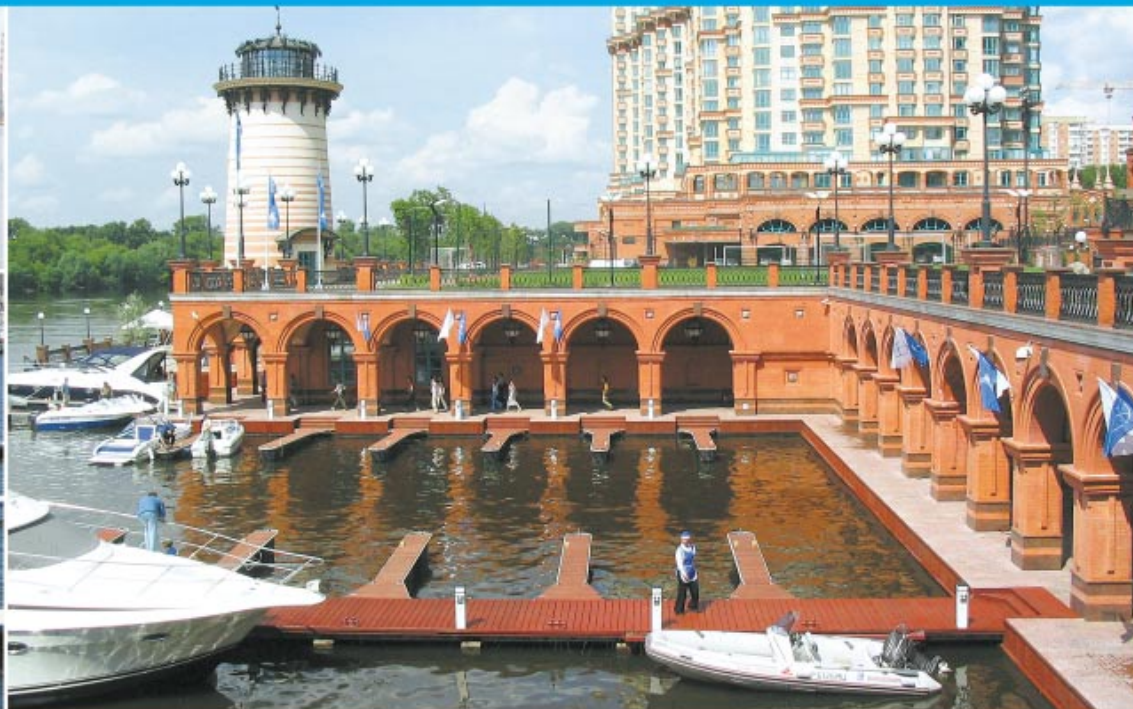
Rolec are able to provide a full electrical and water design service, allowing you to use your local labour to carry out the installation work.



➤ Maxi bollards with 250amp three phase supplies.

Rolec offers:

- A worldwide knowledge of marina services.
- The largest range of marina service products available.
- A network of worldwide representatives.
- An unequalled design service.
- A huge stock of spare and replacement parts, making sure your services are always operational.
- From supply of service bollards to a full turn-key design and build service.



// Rolec - Truly Global



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Rolec reserve the right to carry out alterations to its product range in the interest of quality and development.