

# Marinas, Harbours and Fishing Docks

Floating Equipment Catalogue





### About Us

LINDLEY MARINAS	5
LINDLEY GROUP	7
Floating Equipment	9

• Innovation, Quality and Engineering

Equipment and Solutions	
Wave Attenuators	11
Concrete Pontoons	21
Steel Pontoons	27
Aluminium Pontoons	33
Timber Pontoons	39
Floating Platforms	43
Ramps and Gates	47
Services and Accessories	55
Mooring Systems	63
Pile Driving	69
Boatyard Equipment	75
Special Projects	79
Equipment Rental	83





**LINDLEY MARINAS**, a member of the LINDLEY GROUP of companies, is a specialist in the design, manufacture, supply, installation and maintenance of floating equipment for marinas, harbours and fishing docks.

The experience gained over more than 35 years of activity in the sector, our specialized technical staff, and our close collaboration with customers and suppliers, make LINDLEY MARINAS a company with unique expertise, offering a flexible and comprehensive range of solutions, products and services, highlighting:

- Floating Equipment and Solutions
- Mooring Systems
- Accessories and Services
- Equipment Rental
- Installation, Assembly, Maintenance and Technical Assistance



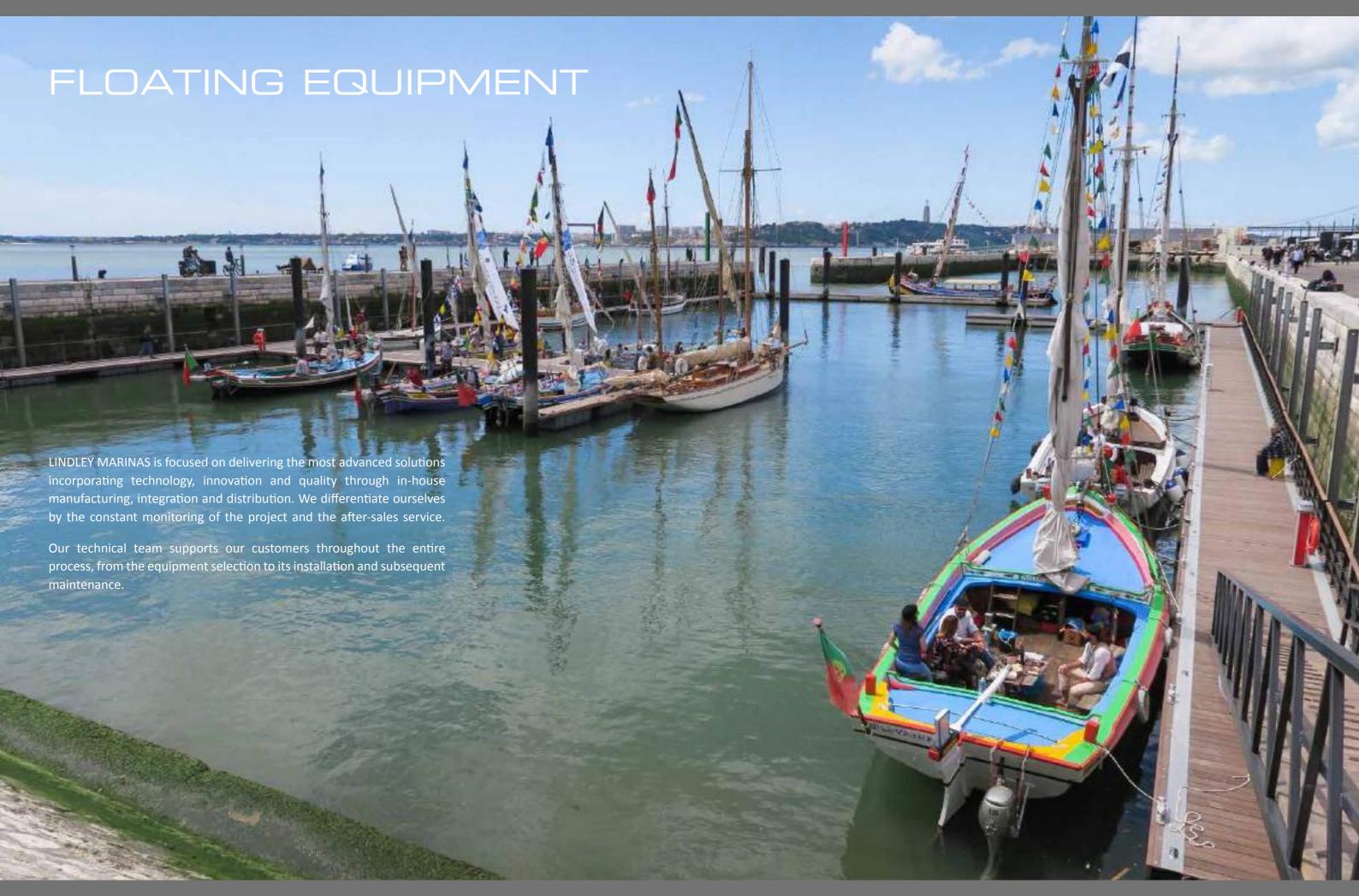


The **GRUPO LINDLEY** of companies was founded in 1930 as Ahlers Lindley, Lda., which today operates under the LINDLEY MARINAS brand. The group is composed of three independent companies: LINDLEY MARINAS, a specialist in the design and supply of equipment for marinas, harbours and fishing docks; ALMARIN, in the design and manufacture of marine aids to navigation; and ALMOVI, in the distribution and maintenance of lifting and handling equipment for ports and industry.

The services offered by the GRUPO LINDLEY cover the entire life cycle from design and supply to maintenance and sale of used equipment in the various areas of activity.

Each company employs a highly-skilled team of staff, capable of delivering solutions and services tailored to its customers, and prides itself in the more than 90 year history of standing by its customers with innovative solutions and continuous support.







### WAVE ATTENUATORS

### REINFORCED CONCRETE QMF

#### **GENERAL FEATURES** Marine concrete with 45N/mm<sup>2</sup> density, watertight, reinforced Structure with galvanized steel mesh Expanded polystyrene with 15kg/m³ density Core **Fenders** Nordic pine impregnated **Fasteners** Semi-flexible; bolts, washers and nuts in galvanized steel; block in and fittings marine elastomer **Flexibility** Modular construction with variable sizes Mooring Chains, elastic moorings, piles, metal profiles or radius arms systems **Services** HDPE conduits on both sides Live load Greater than 5kN/m<sup>2</sup> Non-linear geometries (30°, 45°, and 60°) are possible; Decks in Nordic pine, exotic wood or composite; Accessories Aluminum or cast iron cleats and bollards; and options Marine elastomer fenders; Concrete pigmentation; Additional connection and hatch boxes.

#### **APPLICATIONS**

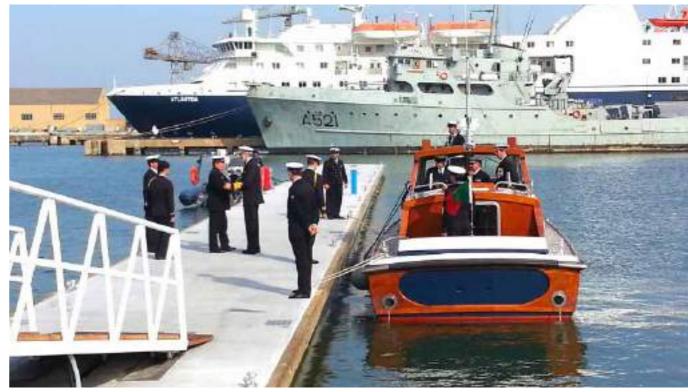
- Wave attenuation in coastal sheltered and estuarine areas for watershed and dock protection
- Bridge piers in areas with adverse conditions



The QMF (Floating Wave Attenuator) range consists of robust, resistant and safe pontoons made of reinforced concrete with an expanded polystyrene core. Its geometry, layout, construction method and type of connections make its primary use as a wave attenuator in the protection of bays and ports.

The units are monolithic and modular, built in sections of 15 or 20m. These dimensions reduce the number of moorings and connections required, and have advantages in terms of the overall performance of the system, reducing maintenance costs. The width can range from 3, 4 or 5 to 6m with a height range between 1.4m and 1.8m.

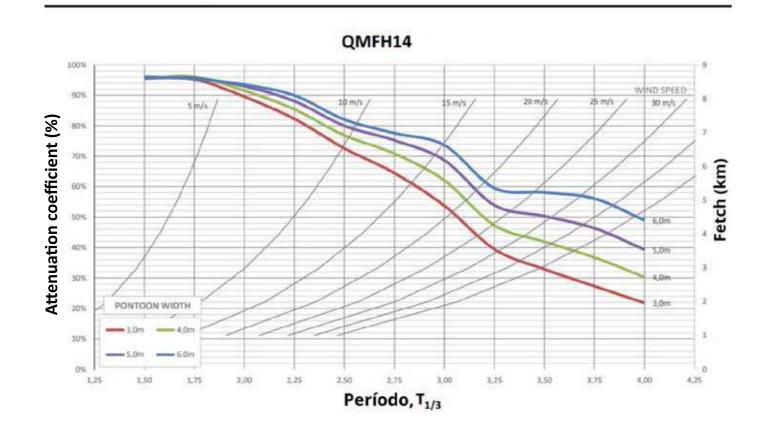




### REINFORCED CONCRETE QMF H14

H14	3015	3020	4015	4020	5015	5020	6015	6020
Length (m)	15,0	20,0	15,0	20,0	15,0	20,0	15,0	20,0
Net width (m)	3,0	3,0	4,0	4,0	5,0	5,0	6,0	5,0
Height (m)	1,4	1,4	1,4	1,4	1,4	1,4	1,4	1,4
Weight (Ton)	30,0	37,0	35,0	44,0	44,0	55,0	50,0	62,0
Overload (kN/m²)	5,0	5,0	5,0	5,0	5,0	5,0	5,0	5,0
Minimum freeboard (mm)	400	400	400	400	400	400	400	400
Medium freeboard (mm)	600	600	600	600	600	500	600	500
Maximum freeboard (mm)	800	800	800	800	800	800	800	800
Resistance connections	4x672	4x672	4x672	4x672	4x672	40/672	4x672	4x572

### **Attenuation Curve**



### REINFORCED CONCRETE QMF H14

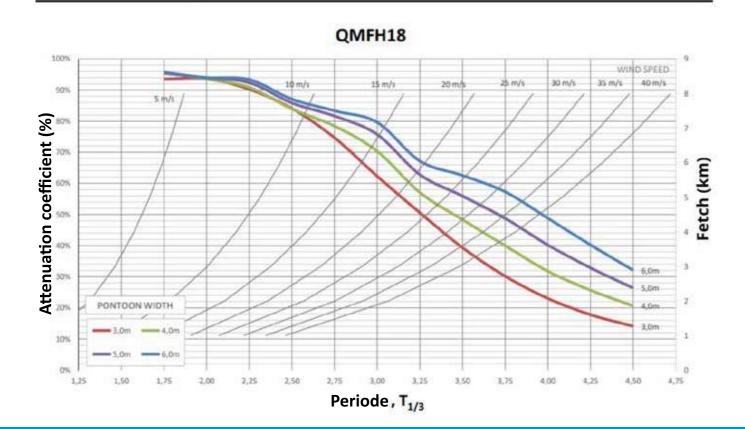




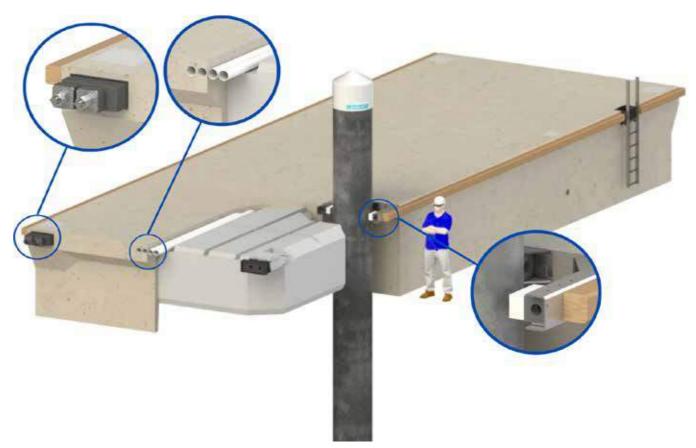
### REINFORCED CONCRETE QMF H18

H18	3015	3020	4015	4020	5015	5020	6015	6020
Length (m)	15,0	20,0	15,0	20,0	15,0	20,0	15,0	20,0
Net width (m)	3,0	3,0	4,0	4,0	5,0	5,0	6,0	6,0
Height (m)	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8
Weight (Ton)	35,0	59,0	41,0	51,0	51,0	64,0	57,0	71,0
Live load (kN/m²)	5,0	5,0	5,0	5,0	5,0	5,0	5,0	5,0
Minimum freeboard (mm)	400	400	400	400	400	400	400	400
Medium freeboard (mm)	600	600	600	600	500	600	600	600
Maximum freeboard (mm)	1100	1100	1100	1100	1100	1100	1100	1200
Resistance connections (kN)	4x1218	4×1218	4x1218	4x1218	4x1218	4x1218	4x1218	4x1218

### **Attenuation Curve**



### REINFORCED CONCRETE QMF H18



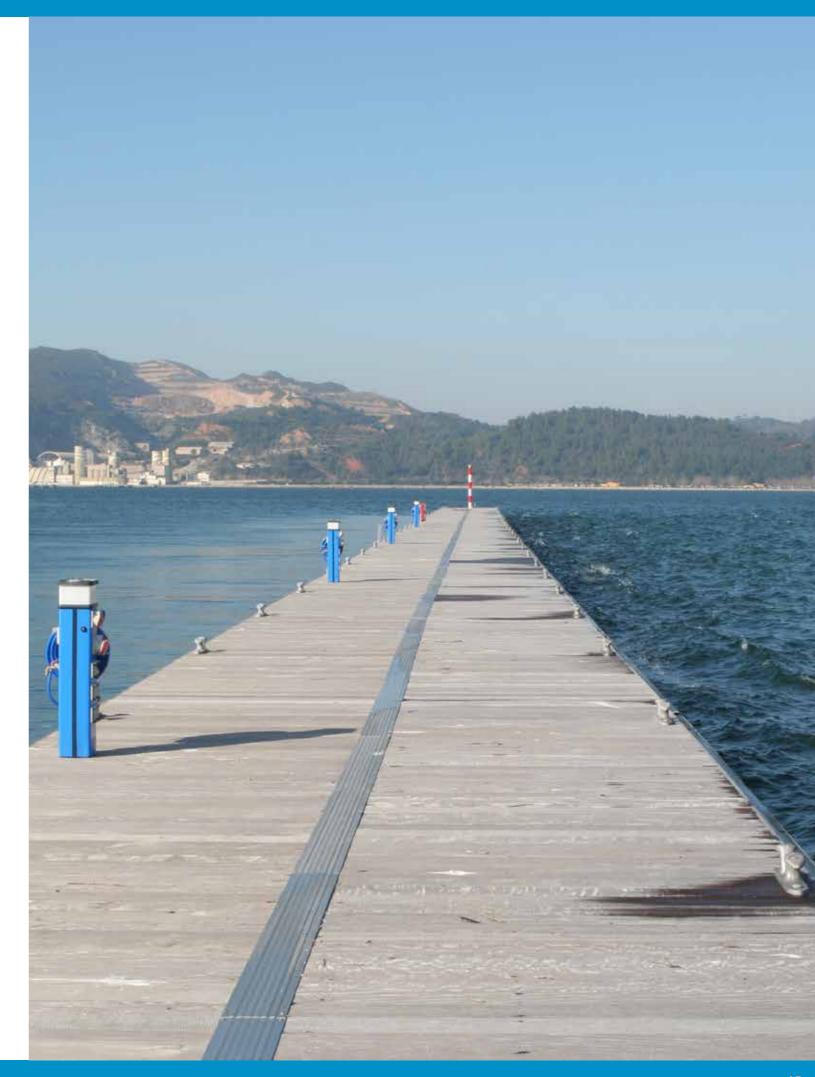


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### REINFORCED CONCRETE QMF









## CONCRETE PONTOONS

### REINFORCED CONCRETE

### **PFC**

#### **GENERAL FEATURES** Marine concrete with 45N/mm<sup>2</sup> density, watertight, reinforced with Structure galvanized steel mesh Core Expanded polystyrene with a density of 15kg/m³ coated **Fenders** Nordic pine impregnated Semi-flexible; bolts, washers and nuts in galvanized steel; blocks in **Fasteners** and fittings marine elastomer Flexibility Modular construction with variable sizes Mooring Chains, elastic moorings, piles, metal perfis or radius arms systems HDPE conduits on both sides Services Greater than 4kN/m<sup>2</sup> Live load Decks in Nordic pine, exotic wood or composite; Accessories Aluminum or cast iron cleats and bollard; and options Marine elastomer fenders; Concrete pigmentation.

### **APPLICATIONS**

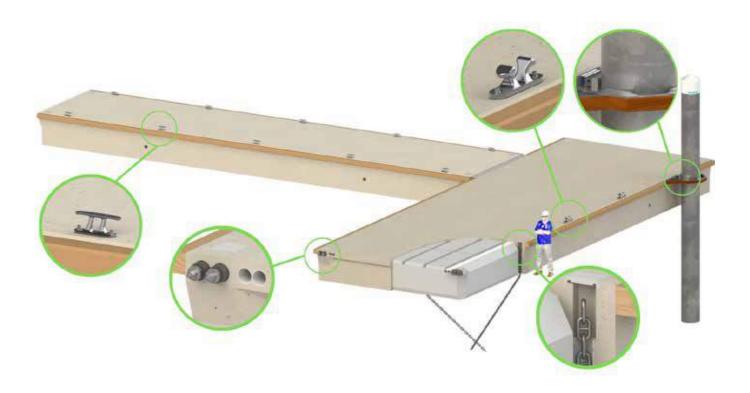
- Berthing and mooring of large vessels
- Landings for fishing vessels and heavy boats
- Maritime-tourist docks
- Bridge piers in semisheltered areas

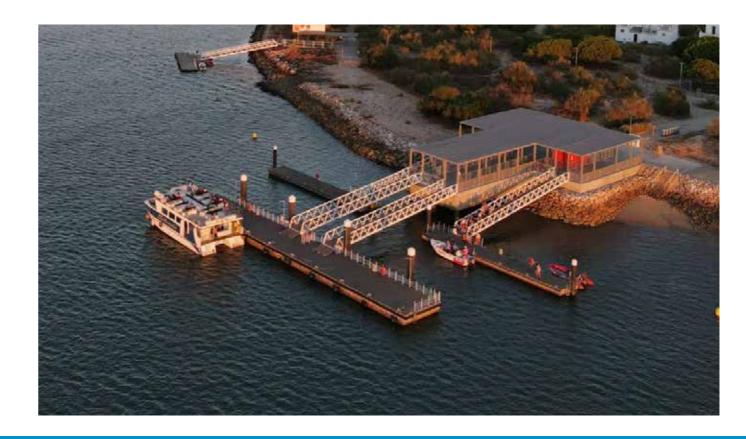


Lindley manufactures a comprehensive range of continuous floating pontoons in steel-reinforced marine concrete.

These elements represent the latest technology in concrete pontoon construction, and are designed for mooring heavy and large vessels; they are very robust and stable, with a high overload capacity, requiring little maintenance.

The standard design is manufactured with inside conduits for the passage of electrical cables and pipes for electricity and water services.

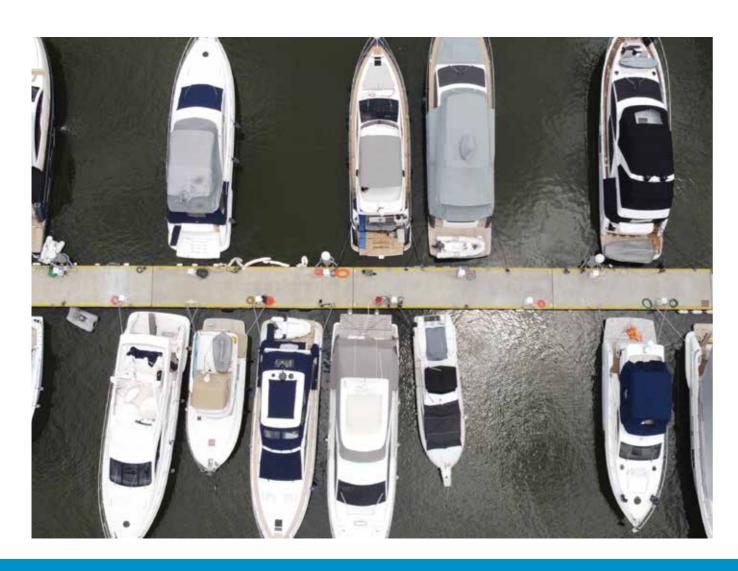




### REINFORCED CONCRETE

### **PFC**

H10	2412	2415	3012	3015	3020	4012	4015	4020	5012	5015	5020
Length (m)	12,0	15,0	12,0	15,0	20,0	12,0	15,0	20,0	12,0	15,0	20,0
Net width (m)	2,4	2,4	3,0	3,0	3,0	4,0	4,0	4,0	5,0	5,0	5,0
Height (m)	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0
Weight (Ton)	11,6	14,6	15,5	18,7	25,4	19,3	24,3	30,2	21,2	26,7	36,0
Live load (kN/m²)	4,5	4,6	5,0	5,0	5,0	5,0	5,0	5,0	5,0	5,0	5,0
Minimum freeboard (mm)	400	400	400	400	400	400	400	400	400	400	400
Medium freeboard (mm)	600	600	600	600	600	600	600	600	600	600	600
Resistance connections (kN)	4x672										















### **GALVANIZED STEEL** SAGRES, SAGRES+

GENE	RAL FEATURES
Structure and deck	Structure in hot-dip galvanized steel
Fenders	Exotic rot-resistant or composite wood
Flexibility	Adjustment along the pontoon dock that allows the fixing of othe walkways, fingers, and accessories
Mooring systems	Piles, metal profiles, radius arms, chains, or elastic moorings
Services	Easy assembly and maintenance of the electricity and water piping system
Live load	1.5kN/m², on the surface between evenly distributed lines
Accessories and options	Epoxy paint over galvanization; Ducts equipped with PVC fender profiles or guttering; Marine elastomer fenders; Overloads exceeding 2.5kN/m² or 4kN/m² with additional flotation.

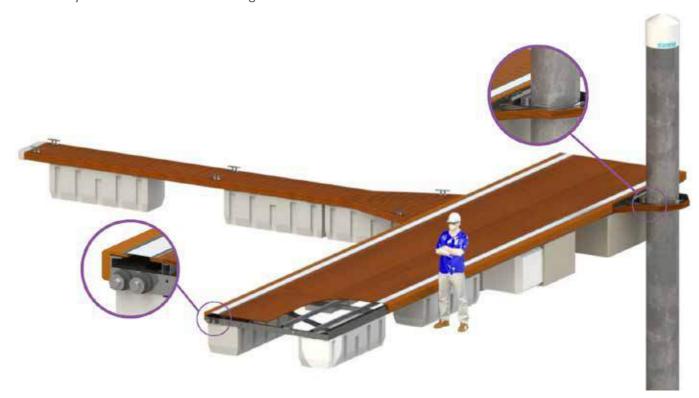
### APPLICATIONS

- Semi-sheltered areas in protected bays
- Mooring pontoons in marinas, harbors and fishing
- Private and public piers
- Anchorages



The Sagres and Sagres+ systems consist of floating pontoons with hot dip galvanized steel structure, composed of modular units and suitable for adverse weather conditions; optionally, and depending on the specific features of each application, the structures can be painted after galvanization. The walkways are supplied with ducts on both sides, covered by anodized aluminum coverings.

These systems are recommended for semi-sheltered areas in protected bays and were developed from experience acquired over more than 35 years in the sector. They have proven to be stable, resistant and



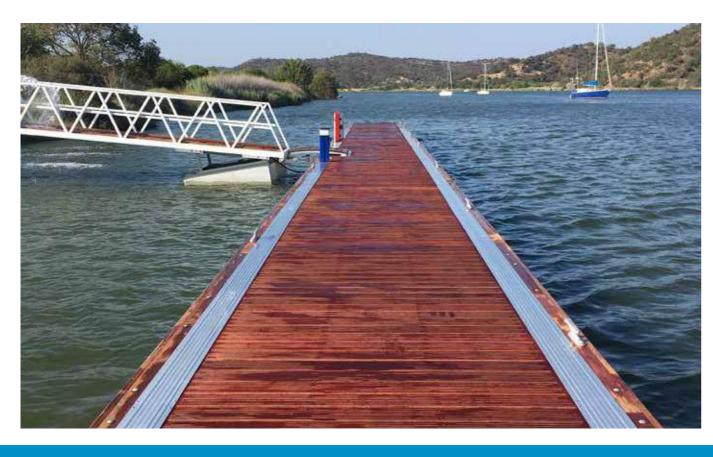
Structure	Welded mild steel, hot-dip galvanized (BS.EN.150.1461:1999)
and deck	Exotic rot-resistant wood, striated slats 145x21mm, with stainless steel screws; optional composite and pultruded grating
Live load	Pontoons: Standard 1.5kN/m² with 2.5kN/m² option;
Live load	Fingers: standard overload of 1.0kN/m².
Freeboard	500 mm without load
Draft	400 mm without load
	Waves with a maximum significant height of 400mm (Sagres) and 500mm (Sagres+).
Project	Wind with peak speed of 47m/s and average speed of 25m/s.
parameters	Maximum lateral load of 1.25kN/m (Sagres) and 1.50kN/m (Sagres+).
	Maximum distance between piles: 25m (Sagres) and 30m (Sagres+)
Hulls	Expanded polystyrene coated with stainless steel reinforced concrete or rotomolded polyethylene filled with
	expanded polystyrene
Fasteners	Flexible with elastomer blocks crossed by M24 hexagonal bolts, nuts, and section brakes; with two or fou
and fittings	bolts per connection between walkways; galvanized or stainless steel

### **GALVANIZED REINFORCED STEEL SAGRES HD**

GENER	AL FEATURES			
Structure	Reinforced structure in hot-dip galvanized steel			
Decks and fenders	Exotic rot-resistant or composite wood			
Flexibility	Universal adjustment along the pontoon dock that allows the fixing of other walkways, fingers, and accessories			
Mooring systems Piles, metal profiles, radius arms, chains, or elastic moorings				
Services	Easy assembly and maintenance of the electricity and water piping systems			
Live load	2.5kN/m², evenly distributed on the surface between ducts			
Accessories and options	Epoxy paint over galvanization; Ducts equipped with PVC fender profiles or guttering; Prepared for the installation of mooring bollards with a load capacity of up to 10 tons; Marine elastomer fenders; Higher overloads by additional flotation.			

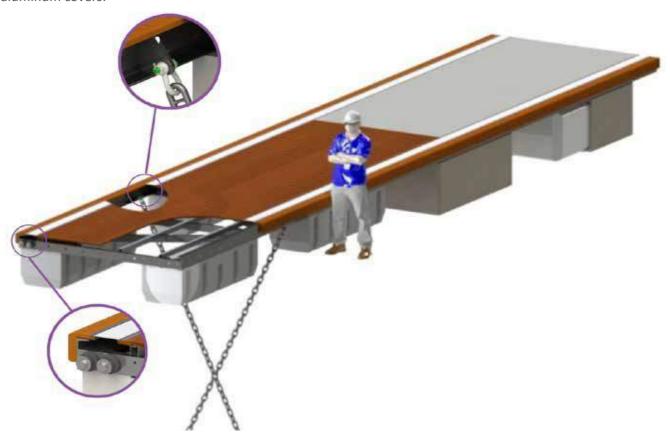
### APPLICATIONS

- Semi-exposed areas in bays and estuaries
- · Quays for tourist and fishing boats
- Fueling docks
- Anchorages for heavy vessels
- Bridge piers



The Sagres HD system consists of floating pontoons with a reinforced structure with high resistance and overload capacity, available in various sizes and freeboards, with finishings in line with the PFC, Sagres and Faro ranges. The pontoons are supplied with piping on both sides, covered by anodized aluminum covers.

Sagres HD is a robust and stable modular system with a reinforced structure, with excellent behavior to alternating loads, which makes it ideal and resistant for places where loads are a critical factor due to wind and wave effect.



### **TECHNICAL SPECIFICATIONS**

Structure	Mild steel frame galvanized by immersion
Deck	Maintenance-free, rot-resistant exotic wood planks, with minimum density of 1,100kg/m², standard dimensions 145x21mm, planed and grooved, fixed with stainless steel screws; optional dimensions 110x21mm and 145x28mm; optional composite material and railings
Live load	Pontoons: standard 2.5kN/m², optional 4.0kN/m²
Freeboard	550 mm without load
Draft	400 mm without load
Project parameters	Waves with a maximum significant height of 600mm Wind with peak speed of 47m/s and average speed of 25m/s Maximum side load of 2.5kN/m, Maximum distance between piles: 35m
Hulls	Expanded polystyrene coated with stainless steel reinforced concrete or rotomolded polyethylene filled with expanded polystyrene
Fasteners and fittings	Flexible with elastomer blocks crossed by M24 hexagonal bolts, nuts, and section brakes; with two or four bolts per connection between walkways; galvanized or stainless steel



### MARINE ALUMINIUM

### FARO, FARO+

GENE	RAL FEATURES	AF
Structure	Structure in marine aluminum alloy. High corrosion resistance and attractive finish	• She
Deck and fenders	Exotic rot-resistant wood	• Lan
Flexibility	Universal adjustment along the pontoon dock that allows the fixing of other walkways, fingers and accessories	• Priv
Mooring systems	Piles, metal profiles, radius arms, chains, or elastic cords	env
Services	Easy assembly and maintenance of the electricity and water services network	
Live load	Evenly distributed 1.5kN/m² on the surface between piping	
Accessories and options	Marine elastomer fenders. In-built railings. Higher overloads by additional flotation.	-

### APPLICATIONS

- Sheltered sites in bays and estuaries
- Landings for pleasure crafts and yachts
- Private docks
- Areas with aggressive environmental conditions

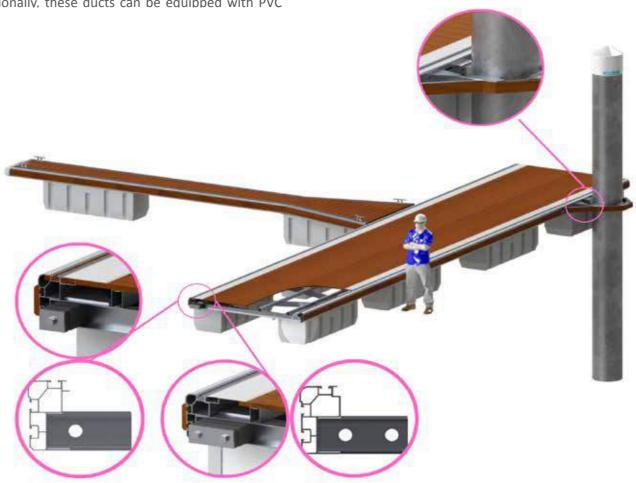


The Faro and Faro+ systems consist of floating pontoons with a special aluminum alloy profile structure composed of modular units.

The walkways are supplied with ducts on both sides, covered by anodized aluminum covers; optionally, these ducts can be equipped with PVC

fender profiles or guttering.

These systems are recommended for installations in sheltered places in bays and estuaries that are subject to lower stress. It is an easy-to-install, stable, flexible, and corrosion-resistant system.



### TECHNICAL SPECIFICATIONS

Structures	Welded and bracketed in A6082-T6 and A6005-T5 aluminum alloy. The Faro+ range has a reinforced structure and a more robust profile. Structure weight with 2,5m width: 34,4kg/m (Faro) and 45,6 kg/m (Faro+)
Deck	Maintenance-free, rot-resistant, exotic wood planks with minimum density of 1,100kg/m², non-slip, standard dimensions 145x21mm, planed and grooved, fixed with stainless steel screws; optional dimensions 110x21mm and 145x28mm; optional composite material and railings
Live load	Pontoons: standard overload of 1.5kN/m², between ducts. Fingers: standard overload of 1.0kN/m².
Freeboard	500 mm without load
Draft	400 mm without load
Project <sub>.</sub>	Ripple with maximum significant height of 250mm (Faro) and 350mm (Faro+).
	Wind with peak speed of 40m/s and average speed of 20m/s, maximum lateral load of 0.25kN/m (Faro) and 0.50kN/m (Faro+).
parameters	Maximum load on wedges of 25kN (Faro) and 50kN (Faro+).
	Maximum distance between piles: 20m (Faro) and 24m (Faro+)
Hulls	Pontoons: rotomolded polyethylene filled with expanded polystyrene; maintenance-free. Fingers: rotomolded polyethylene filled with expanded polystyrene

Fasteners and fittings

Flexible and silent with elastomer blocks crossed by M24 stainless steel hex bolts, with nuts and brakes.

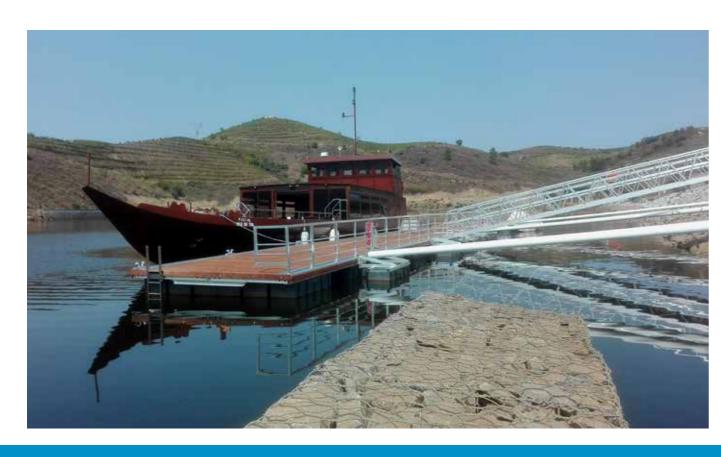
### **HEAVY-DUTY MARINE ALUMINIUM**

### **FARO HD**

GENER	AL FEATURES
Structure	Frame with reinforced extension in marine aluminum alloy High corrosion resistance and attractive finish
Fenders	Rot-resistant exotic wood in composite
Flexibility	Universal adjustment along the pontoon dock that allows the fixing of other walkways, fingers, and accessories
Mooring systems	Piles, metal profiles, radius arms, chains, or elastic moorings
Services	Easy assembly and maintenance of the electricity and water piping system
Live load	Evenly distributed 2.0kN/m² on the surface between ducts
Accesories and options	In-built railing; Marine elastomer fenders; Higher overloads by additional flotation.

### APPLICATIONS

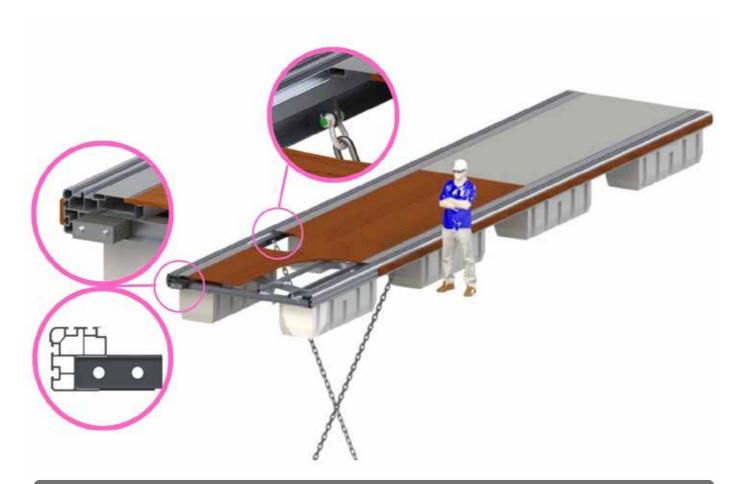
- Berthing of medium-sized vessels in sheltered areas
- Maritime-tourist quays
- Fixed structures and bridge piers



The Faro HD system consists of floating equipment with a reinforced structure in marine aluminum alloy, and is used in berthing and mooring installations of vessels in semi-enclosed bays in places with adverse environmental conditions where corrosion is a critical factor.

The walkway is supplied with ducts on both sides, covered by anodized aluminum covers; optionally, these ducts can be equipped with PVC fender profiles or guttering.

It is characterized by its durability, corrosion resistance, and robustness.



TECHN	NICAL SPECIFICATIONS
Deck	Maintenance-free, rot-resistant exotic wood planks with minimum density of 1,100kg/m², non-slip, standard dimensions 145x21mm, planed and grooved, fixed with stainless steel screws; optional dimensions 110x21mm and 145x28mm; optional composite material and railings
Structure	Welded and bracketed in aluminum alloy type A6082-T6 and A6005-T5.
Structure	Structure weight with 2.5m width: 65.3kg/m
Live load	Pontoons: standard overload of 2.0kN/m², optional 2.5kN/m², between ducts. Fingers: standard overload of 1.0kN/m².
Freeboard	500mm without load
Draft	400mm without load
Project parameters	Waves with a maximum significant height of 450mm
	Wind with peak speed 42m/s and average speed 22m/s
	Maximum side load of 0.75kN/m
	Maximum load on 75kN wedges
	Maximum distance between piles: 28m
Hulls	Pontoons: rotomolded polyethylene filled with expanded polystyrene; maintenance-free Fingers: rotomolded polyethylene filled with expanded polystyrene
Fasteners and fittings	Flexible and silent with elastomer blocks crossed by M24 stainless steel hex bolts, with nuts and section brakes



### TIMBER PONTOONS

### **REINFORCED NORDIC PINE**

### **DOC-KIT**

#### **GENERAL FEATURES** Structure in impregnated Nordic pine, with galvanized or Structure stainless steel reinforcements Hulls Rotomolded polyethylene filled with expanded polystyrene **Fenders** Nordic pine Flexibility Easy transport, assembly and installation Mooring Attachment by sinkers and chains, or elastic moorings systems Live load Evenly distributed over the deck 1kN/m<sup>2</sup> Stainless steel reinforcements; 4 x 2.2m pontoon; Accessories Pile or wall-guide mooring systems; and options Lightweight fingers, used in conjunction with floating walkways for individual moorings; Marine elastomer fenders; Low step for rowing and canoeing; Lowered floats for reduced freeboard.

#### APPLICATIONS

- Lightweight private docks
- For rowing and canoeing
- Pier for lightweight sailboats
- Berthing piers on river beaches, rivers, lakes and dams



The Doc-Kit system consists of floating walkways with a Nordic pine wood structure entirely designed and manufactured by Lindley.

The standard equipment is supplied in a kit that can be easily transported and installed and is intended for sheltered places with weak currents and no wind-generated swell.

Being entirely made of treated wood, it is an ecological, economical, lightweight system that integrates perfectly with the surrounding environment.



### **TECHNICAL SPECIFICATIONS**

Structure	Nordic pine impregnated with galvanized steel reinforcements	
Deck	Nordic pine wood planks 25mm thick, planed and grooved, fixed with stainless steel screws	
Live load	100kg/m² for a load evenly distributed over the deck, with 25% float reserve	
Freeboard	450 mm without load	
Draft	150mm without load	
Project parameters	Sheltered locations with swell less than 150mm and currents less than 1 knot	
Hulls	Rotomolded polyethylene filled with expanded polystyrene	
Fasteners and fittings	Flexible with elastomer blocks and bolts in galvanized steel or stainless steel	

#### LAYOUT OPTIONS

Α	T-shaped jetty with access walkaway
В	I-shaped jetty with access walkaway
С	Combination of walkways; with fingers for various moorings
D	Isolated system



### FLOATING PLATFORMS

### ROTOMOLDED POLYETHYLENE HYDROFLOAT

# Structure Base in rotomolded polyethylene with non-slipping floor Length: 3,5 m Width: 1,5 m Height: 38 cm Flexibility Easy transport and assembly Maintenance Reduced Load capacity Up to 700 kg Weight 105 kg

Available in blue and brown

### APPLICATIONS

- Parking of jet skis and water scooters
- Parking of lightweight semirigid watercraft

The Hydrofloat system consists of floating equipment with a high-density polyethylene structure and a non-slip floor, designed to allow for the safe parking of jet-skis and water scooters in marinas, docks, and reservoirs.

Color

This equipment has low maintenance and flexible mooring perpendicular or parallel to the dock with

no parts fixed to its structure. With the use of this platform, you benefit from quick and convenient access to the water; the platform is equipped with an impact absorption system providing a soft support for the keel and facilitating the approach to parking. It is an easy to install, lightweight, durable and versatile system.



### FLEXIFLOAT

GENERAL FEATURES	
Structure	Base in injected polyethylene with non-slipping floor
Dimensions	Mini elements: 50x50x25cm Single elements: 50x50x40cm Double elements: 100x50x40cm
Flexibility	Easy transport and assembly
Maintenance	Reduced
Load capacity	Up to 75 kg/m²
Weight	Mini elements: 5,2kg Single elements: 6,0kg Double elements: 11,5kg
Color	Available in blue, light gray and black

### **APPLICATIONS**

- Natural pools, water parks
- Parking of lightweight semirigid boats
- Temporary installations
- Aquaculture

The Flexifloat system consists of floating modular equipment with a high-density injected polyethylene structure, and is used in temporary applications and in areas with restricted access; despite being lightweight, it was designed to withstand adverse weather conditions.

This equipment is characterized by low maintenance

requirements and a long service life. The mini elements have a low freeboard and are suitable for rowing and canoeing applications.

This equipment is ISO9001 certified and approved by environmental protection agencies.





### STEEL, ALUMINIUM AND NORDIC PINE **ACCESS RAMPS**

#### **GENERAL FEATURES** Truss structure with options in steel, aluminum or Nordic Structure pine, according to customer needs and application Exotic wood provided with non-slip slats; optionally in Deck composite materials **Flexibility** Adaptable compatibility for each application Live load, side Evenly distributed over deck of 2.5kN/m2; horizontal load of loading 1kN/m applied on the side deck Accessories Depending on the type of use, access ramps can be designed for special overloads, namely 4kN/m² for unrestricted access and options and 5kN/m<sup>2</sup> for unrestricted public use. Design and manufacturing capability to meet special requirements.

#### **APPLICATIONS**

- · Access to floating docks in marinas, harbors and fishing
- Pedestrian access

Access ramps are one of the key pieces of a nautical infrastructure, and can be used for pedestrian access or for access to the floating facility.

Access ramps can have a steel, aluminum, or Nordic pine structure, in line with the specifications of our Sagres, Faro, and Dockit floating equipment range, respectively.

Lindley has developed optimized and proven calculation methods and manufacturing processes in ramps produced over the past years. Structural performance is optimized in terms of strength and deformation for the load conditions defined for each project. Our team of engineers studies the behavior of the structures according to the defined specifications.



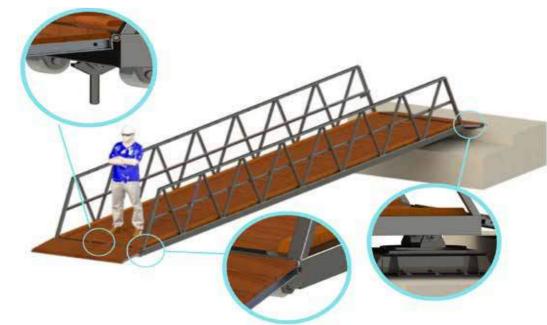
### METALLIZED OR GALVANIZED STEEL **ALPS RAMPS**

#### **TECHNICAL SPECIFICATIONS**

Structure	Truss structure with pickled and metallized or hot-dip galvanized painted steel profiles
Dimensions	Preferably manufactured with standard dimensions in lengths from 8 to 20m, and working widths of 1.0, 1.5, 2.0 and 2.5m
Live load	Overload of 2,5 kN/m², 4 kN/m² or 5 kN/m²
Design and manufacturing	Design and manufacturing capacity to attend to special requirements, both in terms of dimensions and overloads of use

#### OPTIONS

Fasteners and fittings	Both the upper and lower ends of the dock ramp can be provided with uniaxial, biaxial, and roller pivots, which allow for angular movements in the vertical and horizontal planes
Hull support bridge	May have their own flotation at the lower end
Lighting	Can be supplied with its own lighting





### MARINE ALUMINIUM ALPF RAMPS

### TECHNICAL SPECIFICATIONS

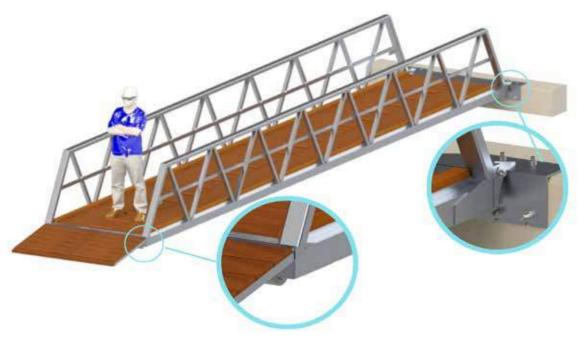
Structure	Truss structure with marine aluminum profiles
Dimensions	Preferably manufactured with standard dimensions in lengths from 8 to 20m, and working widths of 1.0, 1.5, 2.0 and 2.5m
Live load	Overload of 2,5 kN/m², 4 kN/m² or 5 kN/m²

### OPTIONS

Illumination

Hull support bridge	May have their own flotation at the lower end
Fasteners and fittings	ramp can be provided with uniaxial, biaxial, and roller pivots, which allow for angular movements in the vertical and horizontal planes

Can be supplied with its own lighting





### NORDIC PINE ALPD RAMPS

### TECHNICAL SPECIFICATIONS

Structure	Steel-reinforced Nordic pine wood
Dimensions	Preferably manufactured with standard dimensions in lengths from 4 to 6m, and working widths of 1.1m
Live load	Standardized overload evenly distributed over the deck of 1kN/m <sup>2</sup>

### OPTIONS

Lighting

ramp can be provided with uniaxial, biax and roller pivots, which allow for angu movements in the vertical and horizor planes
May have their own flotation at the lower end

Can be supplied with its own lighting







### **ENTRANCE GATE**

### **ALAC**

### GENERAL FEATURES

Structure	Reinforced with anti-corrosion treatment and finish to match the ramps
Composition	Gate and side rails with polycarbonate panels
Flexibility	Lindley advises its customers and recommends the appropriate solution for each application

### APPLICATIONS

Access control to marinas, fishing docks and private docks

### OPTIONS

Automation	It can be automated, through an electric lever and latch; in this case, access control is done through a magnetic card reader, keyboard or spring lock
Finishing	With galvanized steel mesh panels, tempered glass or perforated sheet metal as required by the customer
Accessories	Own lighting, CCTV system, single or double sliding doors





### ACCESSORIES AND SERVICES SERVICE PEDESTALS

GENERAL	FEATURES	
Dimensions	Base, height and width variable depending on the application; heights between 1000mm and 1500mm	
Finishing	External finish in anti-corrosive material (pressed plastic, painted aluminum or stainless steel)	
Services	Electricity: combinations of single-phase and/or three-phase electrical outlets from 16A to 250A Water: 1/2" to 1" water tap combinations, including hose in appropriate holder	
Protection	Equipped with differential switch and circuit breaker per socket for overload prevention	
Color	Diversified range and patterns	
Manufacturing	CE certified supplier	
Accessories and options	Consumption control through analog or digital meters and readers, associated with credit card systems or operation tokens Integration into global infrastructure management systems	

### APPLICATIONS

- Fixed structures on land
- Floating pontoons
- Fuel and service docks
- Campgrounds
- Leisure and recreational spaces







### **ACCESSORIES AND SERVICES**

### **MEGA YACHT PEDESTALS**

### TECHNICAL SPECIFICATIONS

Structure	Internal chassis in marine aluminum and painted marine aluminum or stainless steel casing	
Material	Painted marine aluminum or stainless steel	
Power	CEI309 or Marechal sockets between 16A and 600A, single-phase and/or three-phase	
Watertightness IP65		



### **EV PEDESTALS**

### TECHNICAL SPECIFICATIONS

Painted galvanized steel

Structure Surge protection
LED lighting

Manufacturing ISO9001, CE certified supplier

It is also available as a high-speed unit with one or two IEC **Optional** 62196 outputs, providing a single or three-phase load between

3.6kW and 22kW



### **WALLPOD**

### TECHNICAL SPECIFICATIONS

Finishing	Available in a variety of colors	
Structure	Non-corrosive material (fiber, stainless steel or aluminum)	
Capacity	16amp (3.6kW) or 32amp (7.2 kW) This unit also provides a 13-amp IP65 socket	





### ACCESSORIES AND SERVICES EMERGENCY PEDESTALS

### TECHNICAL SPECIFICATIONS

Structure

Classic: Galvanized steel internal chasis and aluminum

external chasis

Quantum: Anodized extruded aluminium body

Manufacturing ISO9001, CE certified supplier

Optional

Life buoy ring, chemical powder fire extinguisher and first

aid box, emergency lantern and siren



### **EMERGENCY LADDERS**

### TECHNICAL SPECIFICATIONS

**Dimensions** Available in various sizes and designs

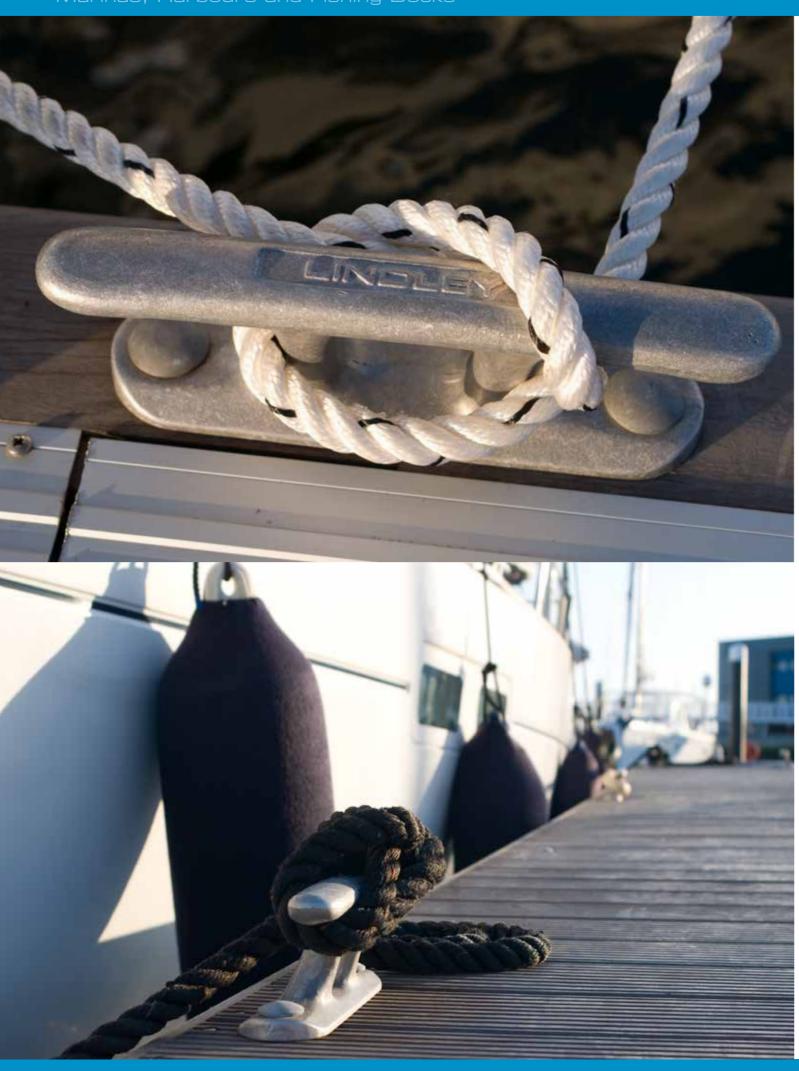
**Structure** Non-corrosive material (fiber, stainless steel or aluminum)

Installation Various types of jetty ladder attachments, all with stainless steel screws









### **ACCESSORIES AND SERVICES**

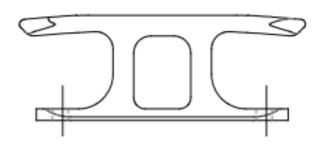
### **CLEATS AND BOLLARDS**

### TECHNICAL SPECIFICATIONS

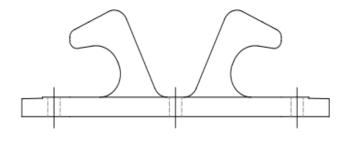
Structure Cast aluminium

Installation Fixing by means of stainless steel screwing

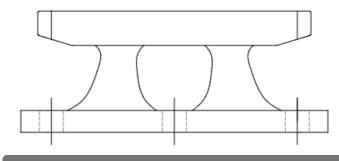
### 3T CLEAT



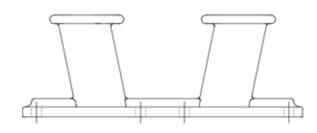
### 5T BOLLARD



### **8T CLEAT**



### 10T BOLLARD













# MOORING SYSTEMS



### **MOORING SYSTEMS** PILE GUIDES

The pile guide system consists of a ring that surrounds the pile and is attached to the walkway, adjusting and guiding it according to tidal variation.

### TECHNICAL SPECIFICATIONS

**Dimensions** Available in various sizes

Steel piles of X50 rating or higher, diameters from 340 to 610mm, longitudinal seam and minimum thickness of 10mm Structure





### **WALL GUIDES**

Mooring systems by means of wall guides on HEB galvanized steel beams can be fixed to the jetty by means of chemical fixings (bonded anchors).

The pile guiding clamps are equipped with low friction material and impact absorption systems, as well as an adjustment device to minimize possible gaps.

#### TECHNICAL SPECIFICATIONS

Dimensions Available in various sizes

HEB beams (160-220) in steel Structure







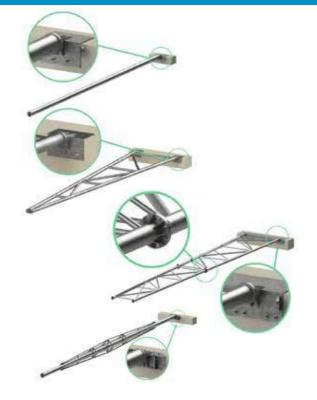
### **MOORING SYSTEMS RADIUS ARMS**

The radius arms can be tubular, 'A' shaped, or trussed, and work under compression and/or tension to keep the walkway positioned relative to the shore. A set of cross-bracing cables ensures the rigidity of the assembly and keeps it parallel to the shore; mooring systems of this type are usually calculated to safely withstand currents with a maximum speed of up to 3m/s (approx. 6 knots).

#### TECHNICAL SPECIFICATIONS

**Dimensions** Available in various sizes

Metallic components in heat-treated steel followed Structure by painting or marine aluminum, with flotation aids



### **CHAINS AND ELASTIC MOORING SYSTEMS**

The mooring system by means of chains or elastic moorings consists of introducing damping into the movement of the pontoon docks.

### TECHNICAL SPECIFICATIONS

**Dimensions** Available in various sizes

Open or closed link metal chains, hot-dip galvanized

or painted with epoxy coal tar

Part with material specifically designed to absorb Structure regular stretching without permanent deformation





### SINKERS AND ANCHORS

The chains or elastic moorings are connected to reinforced concrete sinkers or anchors fixed to the seabed and/or riverbed.

### TECHNICAL SPECIFICATIONS

**Dimensions** Available in various sizes and weights

Reinforced concrete sinkers with reinforcement

eyebolts

Cast iron or steel anchors in various shapes and Structure

designs







### **PILE DRIVING**

LINDLEY currently has its own certified means to execute steel piling work in sandy and muddy soils as well as in more demanding terrain such as clay and rock.

By using modular equipment transportable by land, with low mobilization costs, it is possible to carry out this type of work using systems certified by competent authorities.

The operation involves three steps:

- Assembling the floating pontoon dock
- Preparation of the metal piles
- Pile driving

### GENERAL FEATURES

#### METALLIC PILLING RIG

Floating pontoon	12x7,5m
Winch	8.000 Kg
Hydraulic system	
Maneuvering winch	2.000kg
Maximum lift capacity	4.500kg
Speed at maximum lift capacity	20m por min.
lammer for driving piles into sand and mud	2.000kg/3.200kg/4.500kg
Bore pile drilling equipment	1.500kg
Pile driving limit	Pre-defined depth
Maximum pile driving bore	70 diameters

### APPLICATIONS

- Mooring walkways and pontoons on sandy, muddy, clay, and rocky soils
- Support of fixed structures on the water surface





#### OPERATION

#### **Floating Platform Installation**

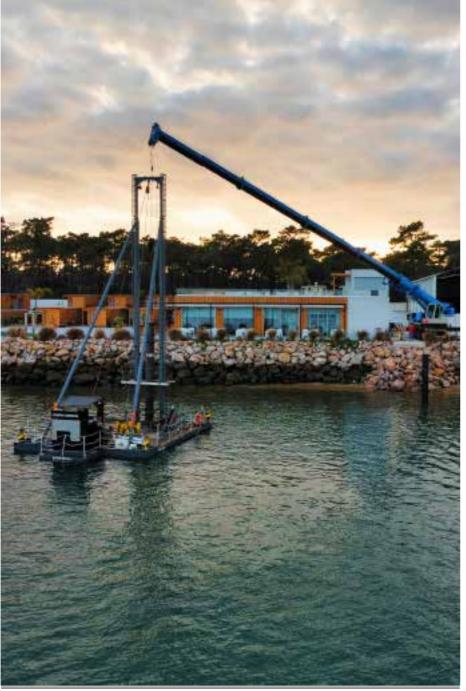
The pile-driving platform consists of modules that are transported to the site by truck. Once on site, the modules are pre-assembled, placed in the water using a telescopic crane; once the pontoon dock is afloat, connectors are fitted, and the pile-driving tower and hydraulic equipment are assembled.

#### **Metal Pipes Preparation**

The metal pipes for the piles are unloaded onto the embankment next to the water, so that they can be gradually transferred to the floating platform as the pile driving work is carried out.

#### **Pile Driving**

Pile driving is done according to a work plan defined with the customer, proceeding to preliminary positioning with the help of topographic studies and tower guidance to ensure position and verticality. Pile driving in sandy, muddy, and fine-clay soils is done with a free-fall hammer; in cases where it is necessary to add pipes, the sections will be welded top to top; at the end of the pile driving process, the top of the pile is cut at the crown and capping level, minimizing gas exchange and internal corrosion. In situations where the type of soil requires more robust methods, it may be necessary to perform borehole drilling.







# **BOATYARD EQUIPMENT**

Lindley offers a complete range of equipment for beaching and parking boats, and structures for dry docking. Through the experience amassed over the years and from our partners, our technical team offers to our customers a comprehensive service, which includes advice in the selection of the most adequate equipment for the needs of each project, assembly and turn-key installation, staff training and high quality after-sales service. We work exclusively with top quality equipment, thus ensuring a long-lasting relationship with our customers by maximizing the return on their investment.

### **TRAVELIFTS**





## **FORKLIFTS**





## **HYDRAULIC BOAT TRAILERS**





## **BOAT STANDS**





## **DRYSTACK-BOAT STORAGE**







# SPECIAL PROJECTS

# **SPECIAL PROJECTS**

One of the differentiating factors of LINDLEY MARINAS, stemming from its many years of experience in the design, manufacture and installation of floating equipment, is the flexibility in developing solutions tailored to the specific requirements of each application.

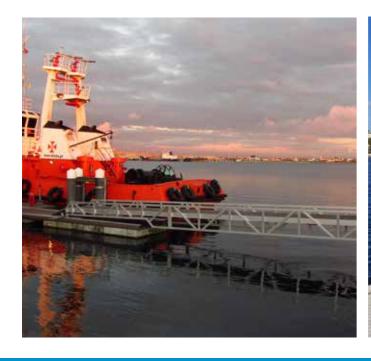
This has meant that we have regularly developed special projects that allow us to present a wide range of solutions.

#### **WALKWAYS AND BRIDGES**



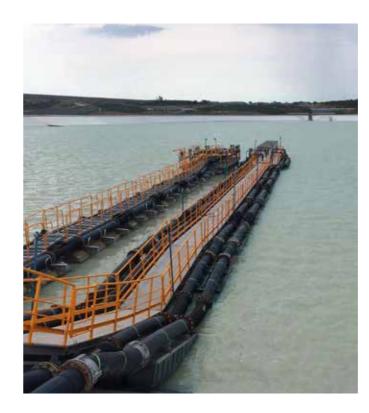


#### **INDUSTRIAL PONTOONS**





#### **PUMP PLATFORMS**





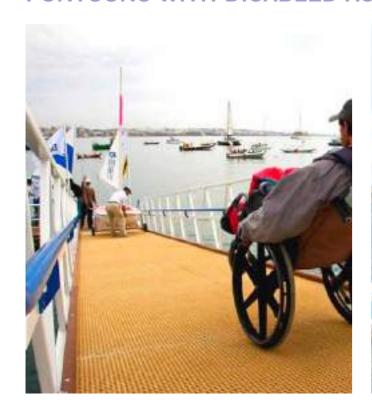
#### **FERRY AND TOURIST BOAT JETTIES**





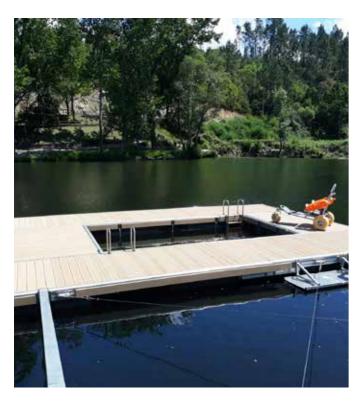
# **SPECIAL PROJECTS**

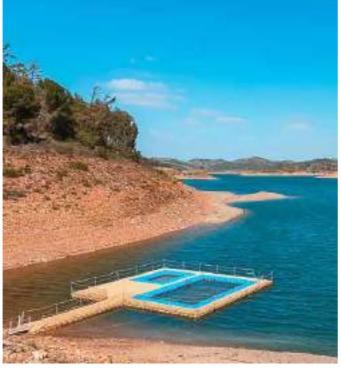
#### PONTOONS WITH DISABLED ACCESS



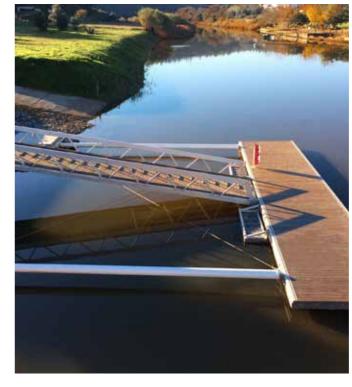


**FLOATING SWIMMING POOLS** 





#### **ROWING AND CANOEING PIERS**





**SAILING RAMPS** 







# EQUIPMENT RENTAL



# **EQUIPMENT RENTAL**

LINDLEY has solutions and equipment for temporary rental to use in events and sporting events.

By using material from our standard range, it is possible to create floating solutions to safely receive boats and people, meeting the needs of each location and application.

For more information, please contact us:

T: +351 21 469 2024 | +351 91 879 81 23

E: geral@lindley.pt















# **INNOVATION AND QUALITY**

Quality control of manufactured equipment is a priority for Lindley. Our company maintains strict supervision on the quality of workmanship, raw materials, and the traceability of its products to prove their evolution throughout their useful life.

In its commitment to quality, Lindley is ISO9001:2015 certified by SGS. Compliance with standard procedures allows for rigor in its activities and promotes constant progress in the different activities of the company.

Lindley has a construction license from IMPIC of Portugal, in Category 3 - Hydraulic Works, which enables the company to carry out works in rivers and hydraulic operations, ports, dredging and repairs and surface treatments on metal structures.

The sub-categories of the license fall under class 5 of the INCI, enabling the company to carry out contracts with a total value of up to 2.65m/EUR.

Lindley is a member of PIANC - The World Association for Waterborne Transport Infrastructure, an organization that provides guidance for infrastructure in ports and waterways, regularly participating in technical meetings, seminars and conferences.





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## **ENGINEERING**

Lindley counts on the expertise and experience of the Lindley Group, a holding company with over 90 years of activity in the manufacturing of solutions for the maritime-port sector. This advantage is reflected in the design and control of solutions for its customers. Our mass-produced products are subject to periodic reviews to update designs and procedures.

At Lindley, equipment is continuously developed using the most efficient materials for each application. Before adopting new designs or materials, solutions are tested by various methods, such as physical testing in our facilities or in the marine environment, and testing of material properties in the laboratory.

All new projects are developed from three-dimensional design tools with subsequent structural analysis. The use of the latest technologies, innovative materials, and the dedication of highly skilled personnel ensure the supply of high-quality products to the market.







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