

# Marinas, Harbours and Fishing Docks

Floating Equipment Catalogue





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A SALISA SILLEY

# LINDLEY MARINAS

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:

- Mooring Systems
- Equipment Rental
- Assistance



• Floating Equipment and Solutions • Accessories and Services • Installation, Assembly, Maintenance and Technical



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.



# FLOATING EQUIPMENT

LINDLEY MARINAS is focused on delivering the most advanced solutions incorporating technology, innovation and quality through in-house manufacturing, integration and distribution. We differentiate ourselves by the constant monitoring of the project and the after-sales service.

Our technical team supports our customers throughout the entire process, from the equipment selection to its installation and subsequent maintenance.





# WAVE ATTENUATORS

Additional connection and hatch boxes.

# REINFORCED CONCRETE

GENEF	RAL FEATURES	APPLICATIONS
Structure	Marine concrete with 45N/mm <sup>2</sup> density, watertight, reinforced with galvanized steel mesh	<ul> <li>Wave attenuation in coastal sheltered and estuarine</li> </ul>
Core	Expanded polystyrene with 15kg/m <sup>3</sup> density	areas for watershed and dock protection
Fenders	Nordic pine impregnated	• Bridge piers in areas with
Fasteners and fittings	Semi-flexible; bolts, washers and nuts in galvanized steel; block in marine elastomer	adverse conditions
Flexibility	Modular construction with variable sizes	_
Mooring systems	Chains, elastic moorings, piles, metal profiles or radius arms	
Services	HDPE conduits on both sides	_
Live load	Greater than 5kN/m <sup>2</sup>	_
Accessories and options	Non-linear geometries (30º, 45º, and 60º) are possible; Decks in Nordic pine, exotic wood or composite; Aluminum or cast iron cleats and bollards; Marine elastomer fenders; Concrete pigmentation;	



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.

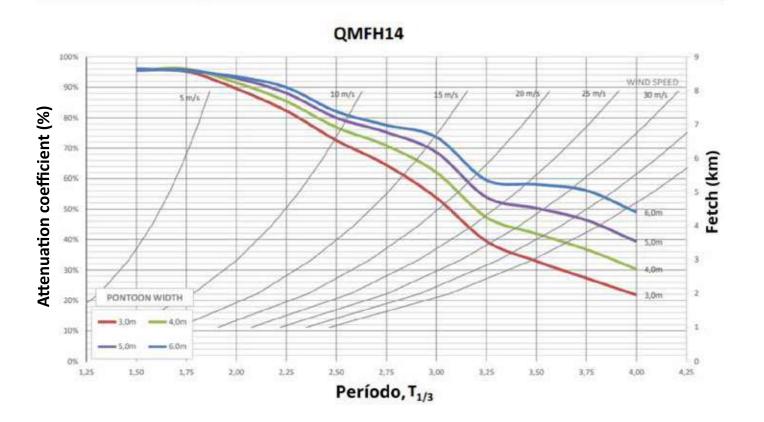
# REINFORCED CONCRETE QMF H14

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,D
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	3,0	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	000	600
Maximum freeboard (mm)	800	800	800	800	800	800	800	800
Resistance connections	4x672							

# REINFORCED CONCRETE QMF H14



## **Attenuation Curve**

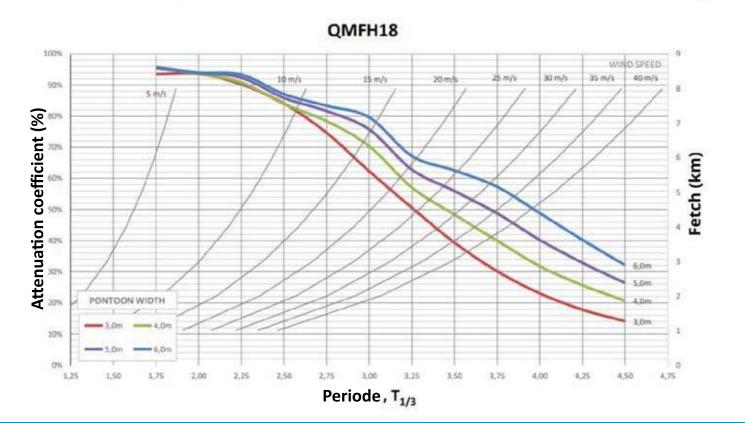




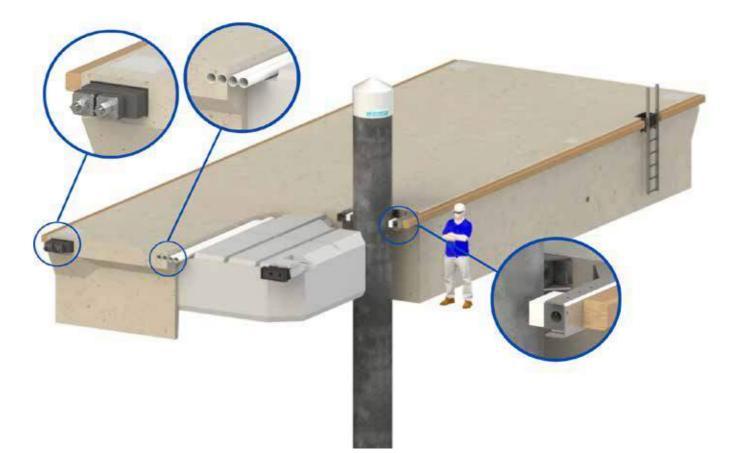
# REINFORCED CONCRETE QMF H18

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,D
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	600	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

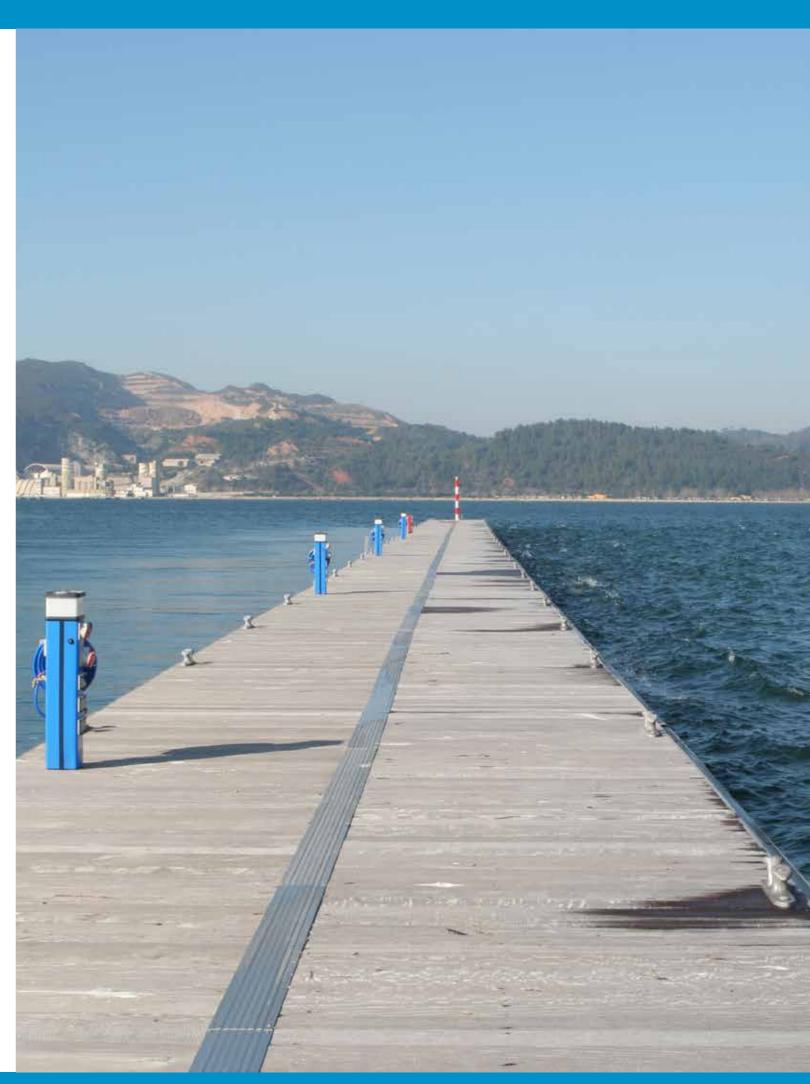




# REINFORCED CONCRETE









# CONCRETE PONTOONS

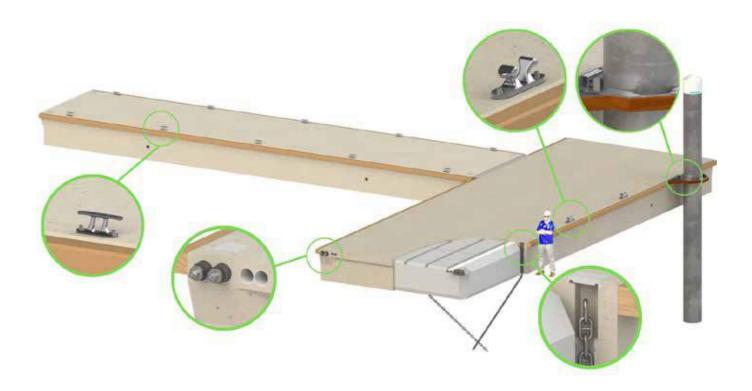
# REINFORCED CONCRETE **PFC**

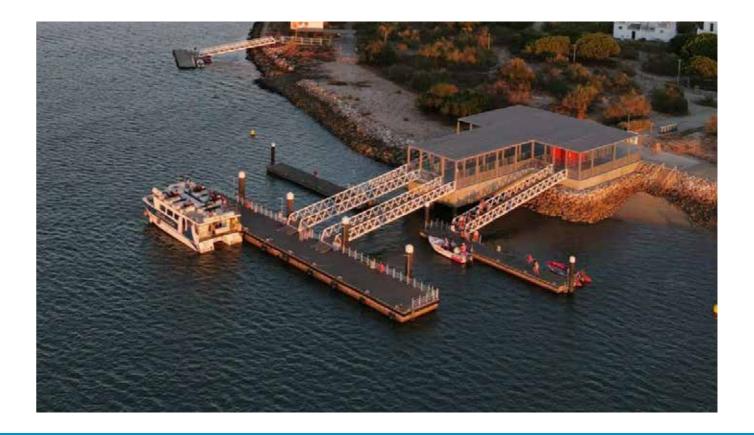
GENE	RAL FEATURES	APPLICATIONS
Structure	Marine concrete with 45N/mm <sup>2</sup> density, watertight, reinforced with galvanized steel mesh	<ul> <li>Berthing and mooring of large vessels</li> </ul>
Core	Expanded polystyrene with a density of 15kg/m <sup>3</sup> coated	<ul> <li>Landings for fishing vessels and heavy boats</li> </ul>
Fenders	Nordic pine impregnated	Maritime-tourist docks
Fasteners and fittings	Semi-flexible; bolts, washers and nuts in galvanized steel; blocks in marine elastomer	<ul> <li>Bridge piers in semi- sheltered areas</li> </ul>
Flexibility	Modular construction with variable sizes	
Mooring systems	Chains, elastic moorings, piles, metal perfis or radius arms	
Services	HDPE conduits on both sides	
Live load	Greater than 4kN/m <sup>2</sup>	
Accessories and options	Decks in Nordic pine, exotic wood or composite; Aluminum or cast iron cleats and bollard; Marine elastomer fenders;	



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.

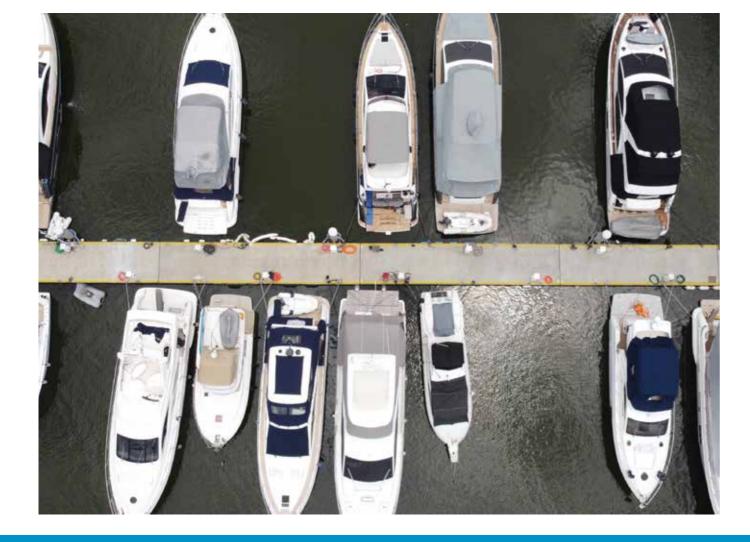
# REINFORCED CONCRETE **PFC**

H10	2412	2415	3012	3015	3020	4012	4015	<b>40</b> 20	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	4x672	4x672	4x672							











# **GALVANIZED STEEL** SAGRES, SAGRES+

## GENERAL FEATURES

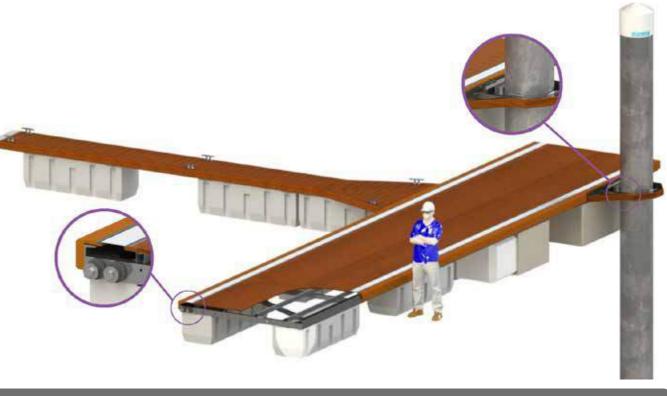
Structure and deck	Structure in hot-dip galvanized steel
Fenders	Exotic rot-resistant or composite wood
Flexibility	Adjustment along the pontoon dock that allows the fixing of other walkways, fingers, and accessories
Mooring systems	Piles, metal profiles, radius arms, chains, or elastic moorings
Services	Easy assembly and maintenance of the electricity and water piping system
Live load	1.5kN/m <sup>2</sup> , 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/m <sup>2</sup> or 4kN/m <sup>2</sup> with additional flotation.



### APPLICATIONS

- Semi-sheltered areas in otected bays
- oring pontoons in rinas, harbors and fishing cks
- vate and public piers
- chorages

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.



## TECHNICAL SPECIFICATIONS

and deck	Exotic rot-resistant wood, striated slats 145x21mm, with stainless s pultruded grating
Live load	Pontoons: Standard 1.5kN/m <sup>2</sup> with 2.5kN/m <sup>2</sup> option; Fingers: standard overload of 1.0kN/m <sup>2</sup> .
Freeboard	500 mm without load
Draft	400 mm without load
Project parameters	Waves with a maximum significant height of 400mm (Sagres) and 500m Wind with peak speed of 47m/s and average speed of 25m/s. 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 expanded polystyrene
Fasteners and fittings	Flexible with elastomer blocks crossed by M24 hexagonal bolts, nuts bolts per connection between walkways; galvanized or stainless steel

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 durable.

150.1461:1999) x21mm, with stainless steel screws; optional composite and

100mm (Sagres) and 500mm (Sagres+).

eel reinforced concrete or rotomolded polyethylene filled with

24 hexagonal bolts, nuts, and section brakes; with two or four

# GALVANIZED REINFORCED STEEL **SAGRES HD**

Marine elastomer fenders;

Higher overloads by additional flotation.

### **GENERAL FEATURES**

Structure	Reinforced structure in hot-dip galvanized steel	<ul> <li>Semi-exposed and estuari</li> </ul>
Decks and fenders	Exotic rot-resistant or composite wood	<ul> <li>Quays for to boats</li> </ul>
Flexibility	Universal adjustment along the pontoon dock that allows the fixing of other walkways, fingers, and accessories	<ul> <li>Fueling doc</li> </ul>
Mooring syste	<b>ms</b> Piles, metal profiles, radius arms, chains, or elastic moorings	Anchorages
Services	Easy assembly and maintenance of the electricity and water piping systems	<ul> <li>Bridge piers</li> </ul>
Live load	2.5kN/m <sup>2</sup> , 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;	

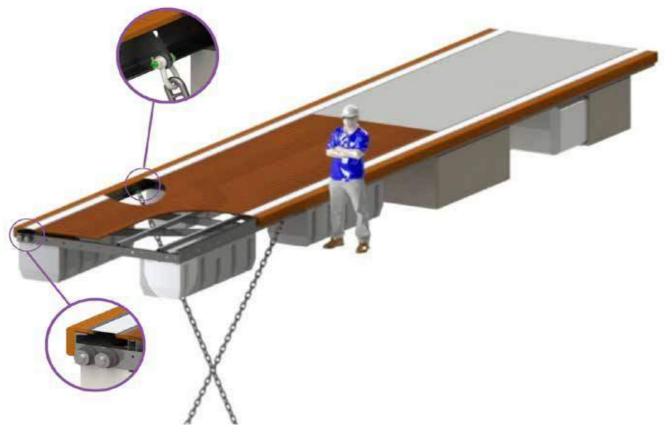


APPLICATIONS

osed areas in bays ries

- tourist and fishing
- ocks
- es for heavy vessels
- rs

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.



### **TECHNICAL SPECIFICATIONS**

Structure	Mild steel frame galvanized by immersion				
Deck	Maintenance-free, rot-resistant exotic wood dimensions 145x21mm, planed and grooved 110x21mm and 145x28mm; optional composit				
Live load	Pontoons: standard 2.5kN/m <sup>2</sup> , optional 4.0kN/				
Freeboard	550 mm without load				
Draft	400 mm without load				
Project parameters	Waves with a maximum significant height of 60 Wind with peak speed of 47m/s and average sp Maximum side load of 2.5kN/m, Maximum distance between piles: 35m				
Hulls	Expanded polystyrene coated with stainless ste with expanded polystyrene				
Fasteners and fittings	Flexible with elastomer blocks crossed by M24 bolts per connection between walkways; galva				

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.

d planks, with minimum density of 1,100kg/m<sup>2</sup>, standard ed, fixed with stainless steel screws; optional dimensions ite material and railings

/m²

600mm speed of 25m/s

eel reinforced concrete or rotomolded polyethylene filled

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



# ALUMINIUM PONTOONS

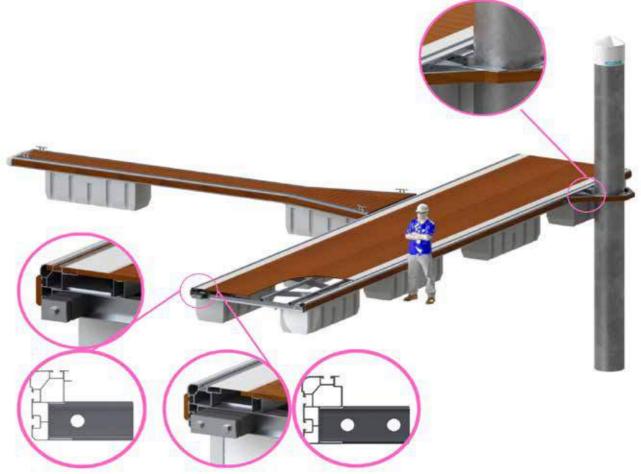
# MARINE ALUMINIUM FARO, FARO+

GENE	RAL FEATURES	APPLICATIONS
Structure	Structure in marine aluminum alloy. High corrosion resistance and attractive finish	<ul> <li>Sheltered sites in bays and estuaries</li> </ul>
Deck and fenders	Exotic rot-resistant wood	• Landings for pleasure crafts and yachts
Flexibility	Universal adjustment along the pontoon dock that allows the fixing of other walkways, fingers and accessories	<ul> <li>Private docks</li> <li>Areas with aggressive</li> </ul>
Mooring systems	Piles, metal profiles, radius arms, chains, or elastic cords	environmental conditions
Services	Easy assembly and maintenance of the electricity and water services network	-
Live load	Evenly distributed 1.5kN/m <sup>2</sup> on the surface between piping	
Accessories and options	Marine elastomer fenders. In-built railings. Higher overloads by additional flotation.	-



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



## **TECHNICAL SPECIFICATIONS**

Structures	Welded and bracketed in A6082-T6 and A6005- and a more robust profile. Structure weight wi
Deck	Maintenance-free, rot-resistant, exotic wood p dimensions 145x21mm, planed and grooved, fix and 145x28mm; optional composite material a
Live load	Pontoons: standard overload of 1.5kN/m <sup>2</sup> , bet Fingers: standard overload of 1.0kN/m <sup>2</sup> .
Freeboard	500 mm without load
Draft	400 mm without load
Project parameters	Ripple with maximum significant height of 250 Wind with peak speed of 40m/s and average sp 0.50kN/m (Faro+).
	Maximum load on wedges of 25kN (Faro) and Maximum distance between piles: 20m (Faro)
Hulls	Pontoons: rotomolded polyethylene filled with Fingers: rotomolded polyethylene filled with ex
-	

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.

5-T5 aluminum alloy. The Faro+ range has a reinforced structure vith 2,5m width: 34,4kg/m (Faro) and 45,6 kg/m (Faro+)

planks with minimum density of 1,100kg/m<sup>2</sup>, non-slip, standard ixed with stainless steel screws; optional dimensions 110x21mm and railings

tween ducts.

0mm (Faro) and 350mm (Faro+).

speed of 20m/s, maximum lateral load of 0.25kN/m (Faro) and

50kN (Faro+).

and 24m (Faro+)

th expanded polystyrene; maintenance-free. expanded polystyrene

# **HEAVY-DUTY MARINE ALUMINIUM** FARO HD

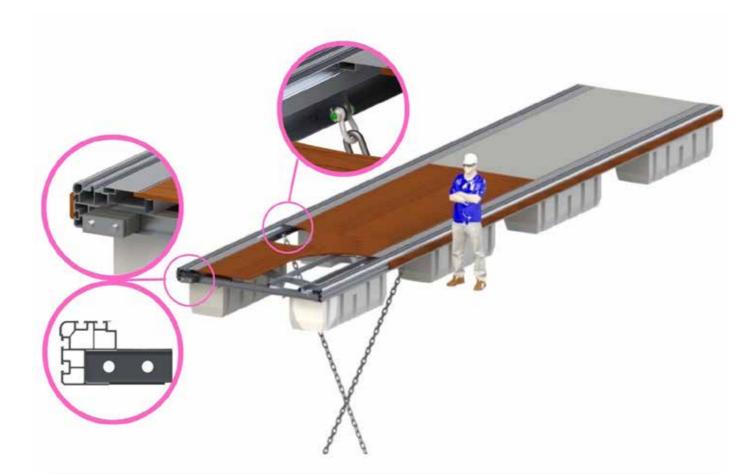
## GENERAL FEATURES

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 the fixing of other walkways, fingers, and accessorie	
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/m <sup>2</sup> 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.



## **TECHNICAL SPECIFICATIONS**

Deck	Maintenance-free, rot-resistant exotic wood pla dimensions 145x21mm, planed and grooved, fix and 145x28mm; optional composite material a	
Structure	Welded and bracketed in aluminum alloy type / Structure weight with 2.5m width: 65.3kg/m	
Live load	Pontoons: standard overload of 2.0kN/m <sup>2</sup> , optic Fingers: standard overload of 1.0kN/m <sup>2</sup> .	
Freeboard	500mm without load	
Draft	400mm without load	
Project parameters	Waves with a maximum significant height of 45 Wind with peak speed 42m/s and average spee Maximum side load of 0.75kN/m Maximum load on 75kN wedges Maximum distance between piles: 28m	
•	Wind with peak speed 42m/s and average spee Maximum side load of 0.75kN/m Maximum load on 75kN wedges	

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.

lanks with minimum density of 1,100kg/m<sup>2</sup>, non-slip, standard xed with stainless steel screws; optional dimensions 110x21mm and railings

A6082-T6 and A6005-T5.

tional 2.5kN/m<sup>2</sup>, between ducts.

50mm ed 22m/s

h expanded polystyrene; maintenance-free expanded polystyrene

ssed by M24 stainless steel hex bolts, with nuts and section



# TIMBER PONTOONS



Structure in impregnated Nordic pine, with galvanized or

Lightweight fingers, used in conjunction with floating walkways

Rotomolded polyethylene filled with expanded polystyrene

# **REINFORCED NORDIC PINE DOC-KIT**

## GENERAL FEATURES

Nordic pine

stainless steel reinforcements

Easy transport, assembly and installation

Evenly distributed over the deck 1kN/m<sup>2</sup>

Stainless steel reinforcements;

Pile or wall-guide mooring systems;

Low step for rowing and canoeing; Lowered floats for reduced freeboard.

4 x 2.2m pontoon;

for individual moorings; Marine elastomer fenders;

Attachment by sinkers and chains, or elastic moorings

Structure

Hulls

Fenders

Flexibility

Mooring

systems

Live load

Accessories

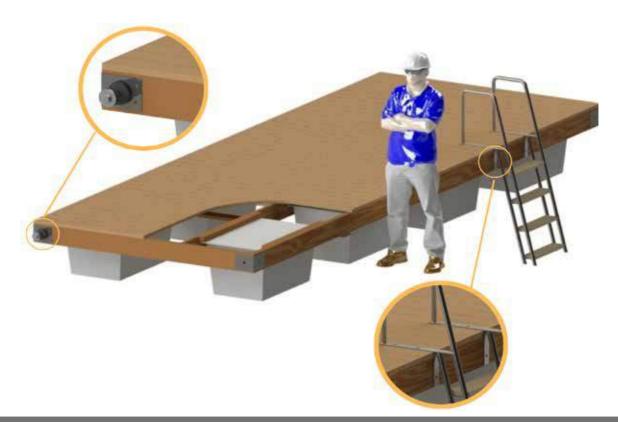
and options

APPLICATIONS
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- 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



## **TECHNICAL SPECIFICATIONS**

Structure	Nordic pine impregnated with galvanized steel r
Deck	Nordic pine wood planks 25mm thick, planed an
Live load	100kg/m <sup>2</sup> for a load evenly distributed over the
Freeboard	450 mm without load
Draft	150mm without load
Project parameters	Sheltered locations with swell less than 150mm
Hulls	Rotomolded polyethylene filled with expanded
Fasteners and fittings	Flexible with elastomer blocks and bolts in galva

LAY	<b>(OU</b> )	ΓΟΓ	ΡΤΙΟ	NS

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



### wind-generated swell.

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

reinforcements

and grooved, fixed with stainless steel screws

e deck, with 25% float reserve

m and currents less than 1 knot

polystyrene

vanized steel or stainless steel

is moorings



# FLOATING PLATFORMS

# ROTOMOLDED POLYETHYLENE HYDROFLOAT

### **GENERAL FEATURES**

Length: 3,5 m

Width: 1,5 m

Height: 38 cm

Structure

Dimensions

Flexibility

APPLICATIONS

Base in rotomolded polyethylene with non-slipping floor - Parking of jet skis and water scooters - Parking of jet skis and water

• Parking of lightweight semirigid watercraft

# INJECTED POLYETHYLENE FLEXIFLOAT

## **GENERAL FEATURES**

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

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



Maintenance	Reduced
Load capacity	Up to 700 kg
Weight	105 kg
Color	Available in blue and brown

Easy transport and assembly

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.

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.



## APPLICATIONS

lipping floor

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

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.



# AND GATES



GENERAL FEATURES

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

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

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.

APPLICATIONS



# METALLIZED OR GALVANIZED STEEL **ALPS RAMPS**

TECH	NICAL SPECIFICATIONS	OPTIONS		
Structure Truss structure with pickled and metallized or hot-dip galvanized painted steel profiles		Fasteners	Both the upper and lower ends of the dock ramp can be provided with uniaxial, biaxial, and roller pivots,	
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	and fittings	which allow for angular movements in the vertical and horizontal planes	
Live load	Overload of 2,5 kN/m <sup>2</sup> , 4 kN/m <sup>2</sup> or 5 kN/m <sup>2</sup>	Hull support bridge	May have their own flotation at the lower end	
Design and manufacturin	Design and manufacturing capacity to attend to special requirements, both in terms of dimensions and overloads of use	Lighting	Can be supplied with its own	

be overloads of use



# MARINE ALUMINIUM ALPF RAMPS

TECHN	ICAL SPECIFICATIONS	OPT
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	Fasteners fittings
Live load	Overload of 2,5 kN/m <sup>2</sup> , 4 kN/m <sup>2</sup> or 5 kN/m <sup>2</sup>	Hull support

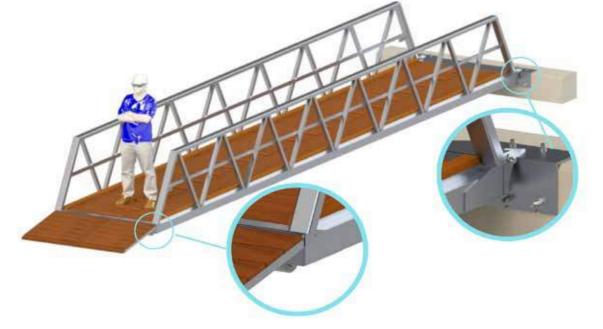
## OPTIONS

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	May have their own flotation at the lower end

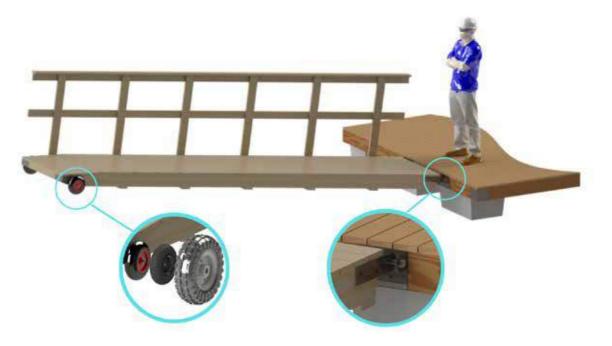
Illumination Can be supplied with its own lighting

# 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

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



# ENTRANCE GATE

## GENERAL FEATURES

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

# OPTIONS

Automation	It can be automated, through an electr in this case, access control is done the card reader, keyboard or spring lock	
Finishing	With galvanized steel mesh panels, te perforated sheet metal as required by t	
Accessories	Own lighting, CCTV system, single or dou	



## APPLICATIONS

• Access control to marinas, fishing docks and private

docks

ent and finish to

### anels

recommends the n

ric lever and latch; rrough a magnetic

tempered glass or the customer

ouble sliding doors



# ACCESSORIES AND SERVICES

1.1.1

# **ACCESSORIES AND SERVICES SERVICE PEDESTALS**

painted aluminum or stainless steel)

electrical outlets from 16A to 250A

socket for overload prevention

Diversified range and patterns

appropriate holder

CE certified supplier

tokens

Base, height and width variable depending on the

application; heights between 1000mm and 1500mm

External finish in anti-corrosive material (pressed plastic,

Electricity: combinations of single-phase and/or three-phase

Water: 1/2" to 1" water tap combinations, including hose in

Equipped with differential switch and circuit breaker per

Consumption control through analog or digital meters and readers, associated with credit card systems or operation

Integration into global infrastructure management systems

## **GENERAL FEATURES**

Dimensions

Finishing

Services

Protection

Manufacturing

Accessories and options

Color

APPLICATION	<b>NS</b>
-------------	-----------

- 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 pa aluminum or stainless steel casing
Material	Painted marine aluminum or stainless steel
Power	CEI309 or Marechal sockets between 16A a phase and/or three-phase

Watertightness IP65

# **EV PEDESTALS**

## **TECHNICAL SPECIFICATIONS**

Structure	Painted galvanized steel Surge protection LED lighting		
Manufacturing ISO9001, CE certified supplier			
Optional	It is also available as a high-speed unit with one or two IEC 62196 outputs, providing a single or three-phase load between		

3.6kW and 22kW



## **TECHNICAL SPECIFICATIONS**

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



ainted marine

and 600A, single-











r aluminum)





# ACCESSORIES AND SERVICES **EMERGENCY PEDESTALS**

## TECHNICAL SPECIFICATIONS

Structure	Classic: Galvanized steel internal chasis an external chasis Quantum: Anodized extruded aluminium bod		
Manufacturing ISO9001, CE certified supplier			
Optional	Life buoy ring, chemical powder fire extinguis aid box, emergency lantern and siren		

# **EMERGENCY LADDERS**

## TECHNICAL SPECIFICATIONS

	Dimensions	Available in various sizes and designs
	Structure	Non-corrosive material (fiber, stainless steel of
Installation		Various types of jetty ladder attachments, all w steel screws





nd aluminum

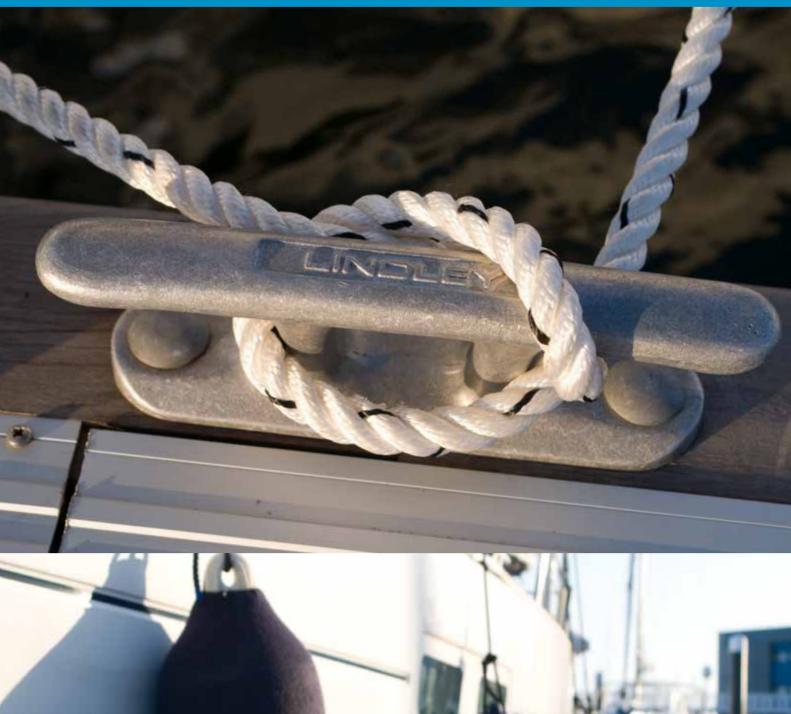
dy

isher and first



or aluminum) with stainless





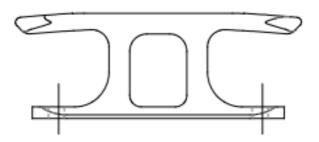


# ACCESSORIES AND SERVICES **CLEATS AND BOLLARDS**

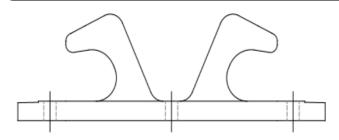
TECHNICAL SPECIFICATIONS			
TECHNICAL SPECIFICATIONS			FIGNIE

Structure	Cast aluminium
Installation	Fixing by means of stainless steel screwing

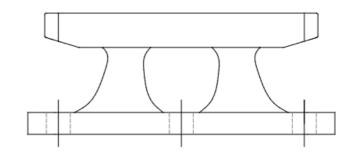
# **3T CLEAT**



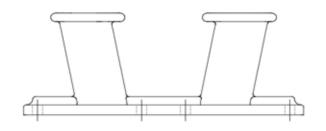
## 5T BOLLARD



## **8T CLEAT**



## 10T BOLLARD









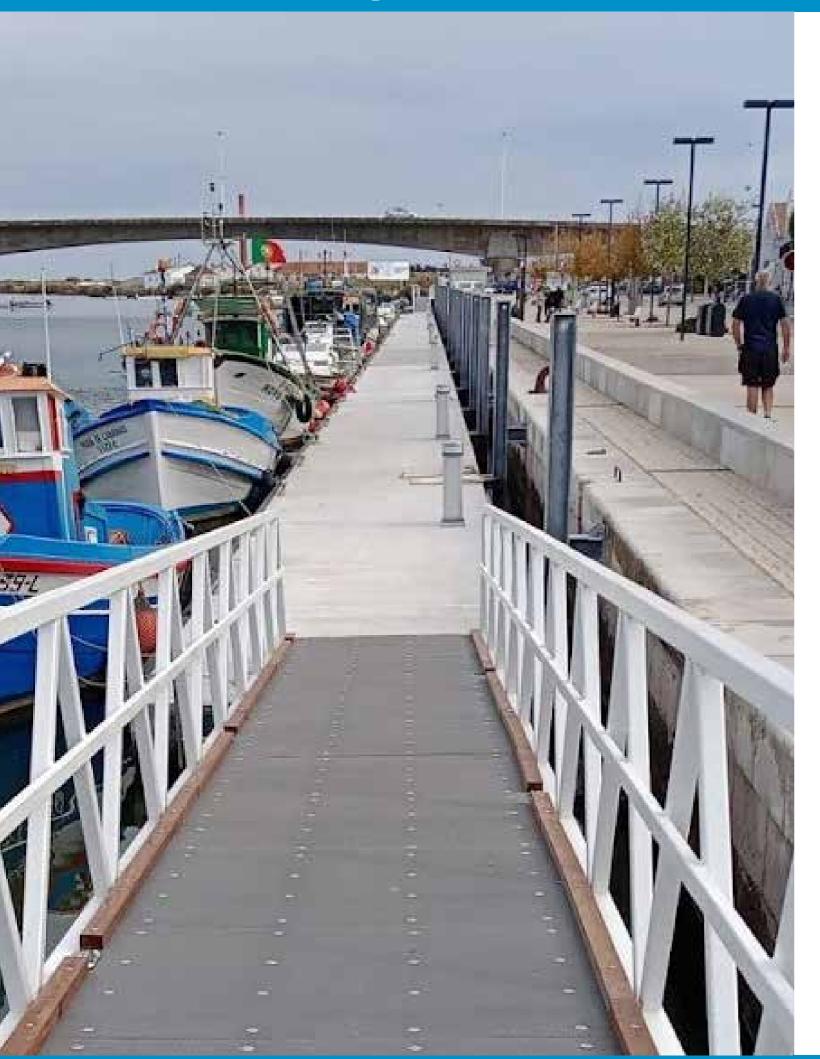






# MOORING SYSTEMS





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

# 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).

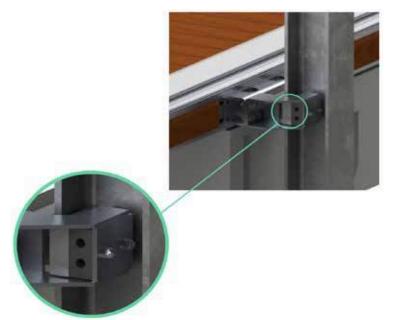
The pile guiding clamps are equipped with low friction material and impact absorption systems, as well as an adjustment device to minimize possible gaps.

## TECHNICAL SPECIFICATIONS

Dimensions	Available in various sizes
Structure	HEB beams (160-220) in steel









# **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

Structure

Metallic components in heat-treated steel followed 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
Bunchalona	

	Open or closed link metal chains, hot-dip ga
	or painted with epoxy coal tar
Structure	Part with material specifically designed to
	regular stretching without permanent deforn



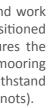
# SINKERS AND ANCHORS

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

eyeb	olts						
	-	or	steel	anchors	in	various	sh
	, Cast	eyebolts Cast iron designs	, Cast iron or	Cast iron or steel	Cast iron or steel anchors	Cast iron or steel anchors in	Cast iron or steel anchors in various









galvanized

to absorb mation



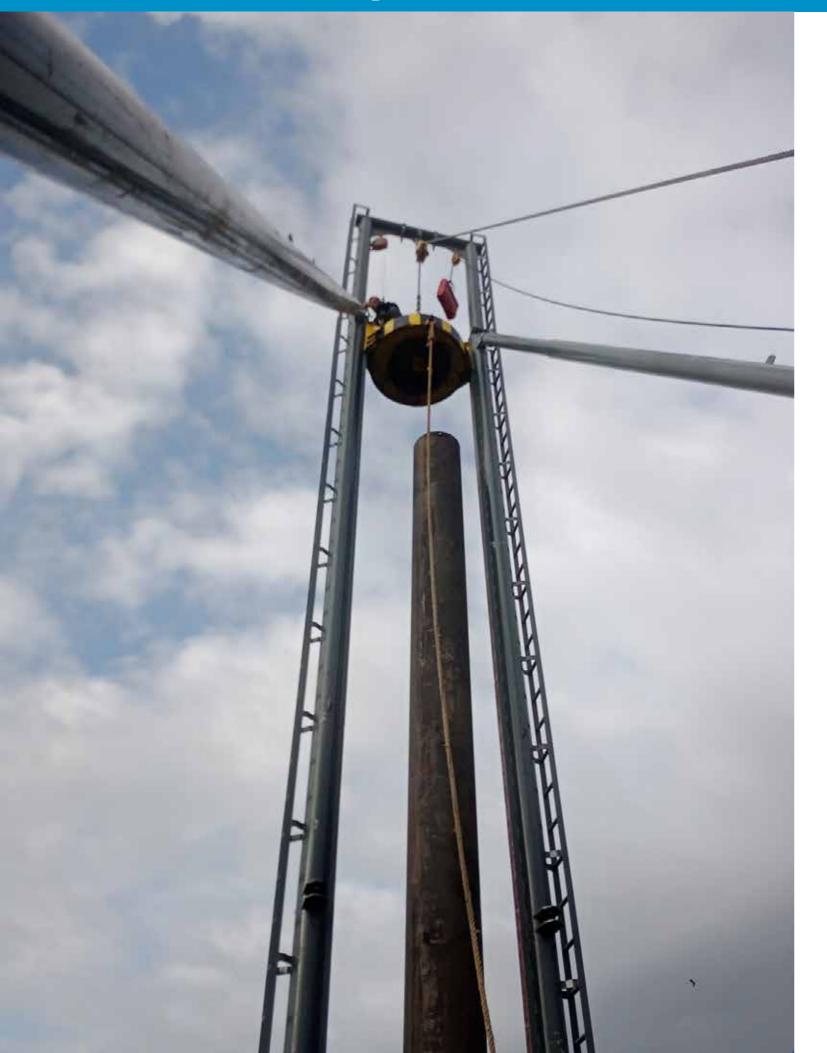












# **PILE DRIVING**

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.

## GENERAL FEATURES

### METALLIC PILLING RIG

12x7,5m			
8.000 Kg			
2.000kg			
4.500kg			
20m por min.			
2.000kg/3.200kg/4.500kg			
1.500kg Pre-defined depth			
			70 diameters



The operation involves three steps:

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

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## APPLICATIONS

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



#### OPERATION

#### **Floating Platform Installation**

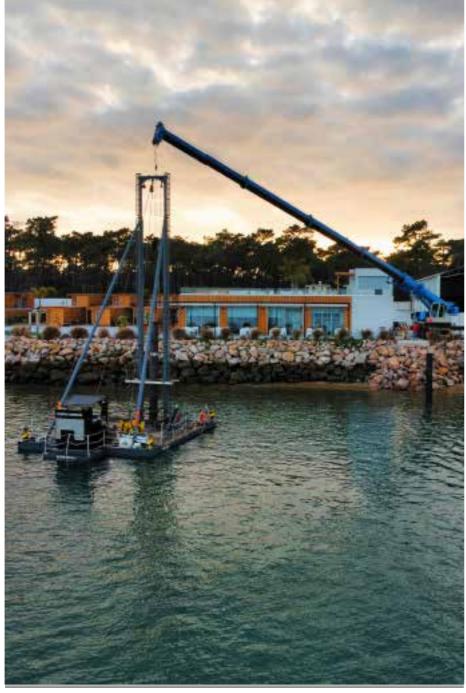
The pile-driving platform consists of modules that are transported to the site by truck. Once on site, the modules are pre-assembled, placed in the water using a telescopic crane; once the pontoon dock is afloat, connectors are fitted, and the pile-driving tower and hydraulic equipment are assembled.

#### **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

# **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

79

# **SPECIAL PROJECTS**

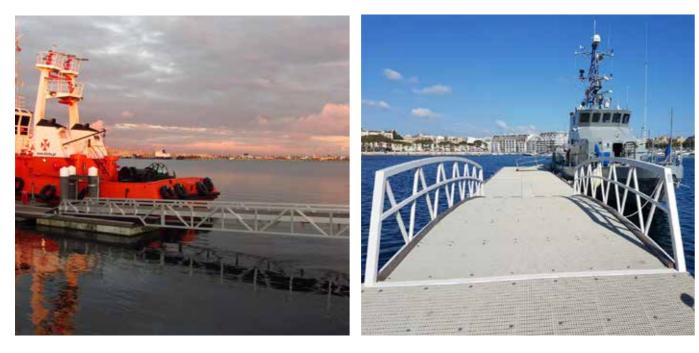
One of the differentiating factors of LINDLEY MARINAS, stemming from its many years of experience in the design, manufacture and installation of floating equipment, is the flexibility in developing solutions tailored to the specific requirements of each application.

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**

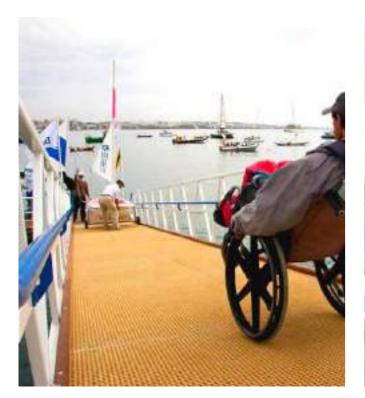


## FERRY AND TOURIST BOAT JETTIES



# **SPECIAL PROJECTS**

## PONTOONS WITH DISABLED ACCESS





## **FLOATING SWIMMING POOLS**



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



## SAILING RAMPS





# **EQUIPMENT RENTAL**

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, QUALITY AND ENGINEERING



# **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.



IMPIC

#### Empresas titulares de alvará de empreiteiro de obras públicas

Alvará 62351-PUB	
Deta de Inscrição 05/06/2009	
Classe Mixima 3	
NIF/NIPC 500012261	
Benomineção AHLERI LINDLEY, LDA	
Horade ESTRADA MANGUE EDF MICAL ALCOITAD 3649-502 ALCABIDECHE	
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HARLITAÇÕES	
Descrição	Classe
If Categoria - Otime bidefulcae If - Otime Reveix e aprovedamentor tumánicos	
17 - Obrae Huwan e aprovedamentor tubblutcae	
2.4 - Obvie contrainer	1
51 - Oragagiete	36
1º Catagoria - Outros Instalhos	
6*- Reparables e tratamentos superficiais en estruturos metalicas	8

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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.

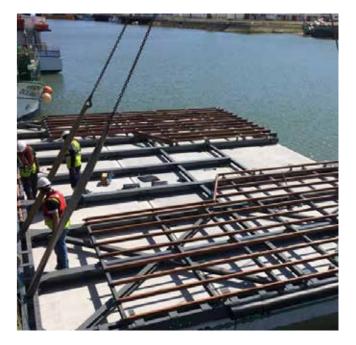
At Lindley, equipment is continuously developed using the most efficient materials for each application. Before adopting new designs or materials, solutions are tested by various methods, such as physical testing

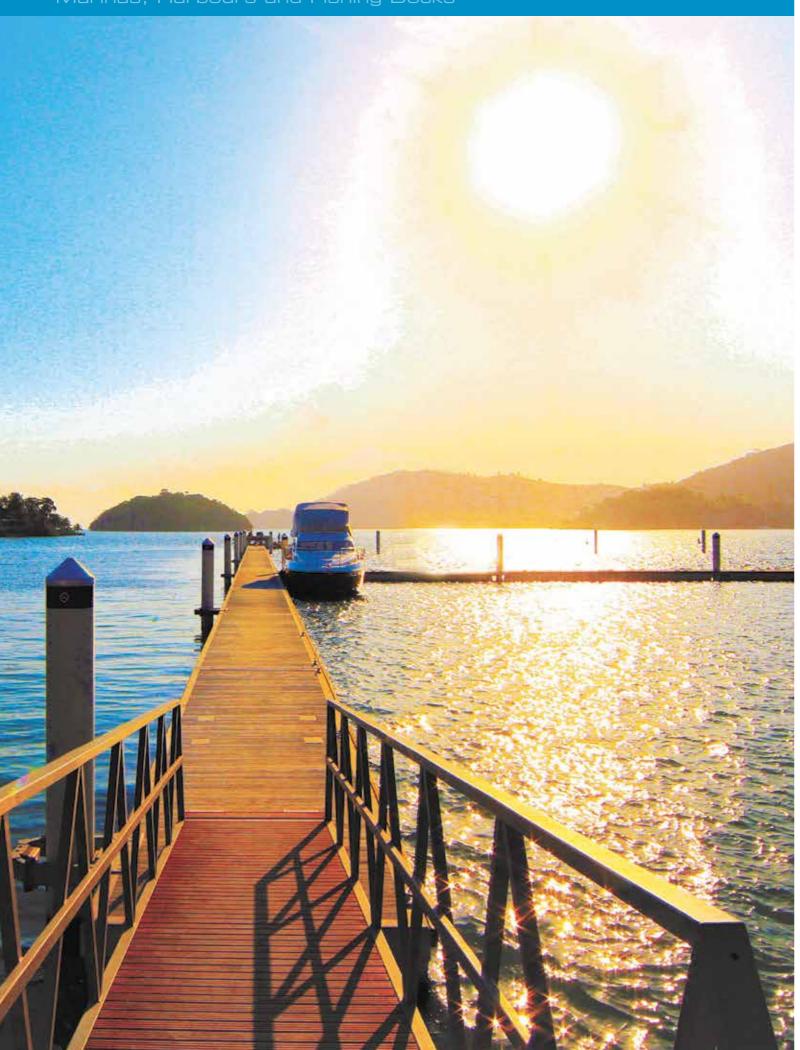




in our facilities or in the marine environment, and testing of material properties in the laboratory.

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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#### Marinas, Harbors and Fishing Docks Tel.: (+351) 214 692 024 · www.lindley.pt







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