IBERCISA.

# DECK CUSTOM BUILT NACHNERY

A deep knowledge of the market makes a big difference

#### IBERCISA.

# QUALITY OUR COMMITMENT

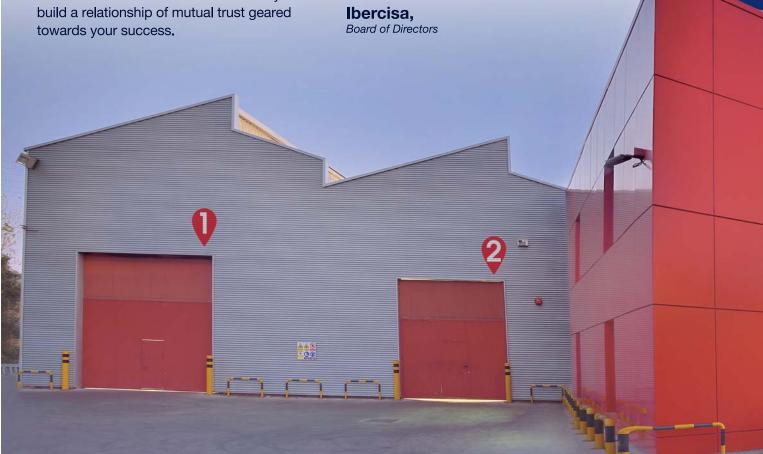
#### On a successful course since 1969

Ibercisa is a vertically integrated company, market leader in solutions for marine systems and deck machinery.

Our philosophy is to create long-standing relationships with our customers based on trust and understanding. We spend a significant amount of time studying your requests for future projects because your needs are crucial to us and we aim to work hand in hand with you to build a relationship of mutual trust geared towards your success.

Founded in Vigo (1969) on the north western Galician coast of Spain, Ibercisa has become a world player in the field of marine equipment. Today the company sells its products throughout the five continents.

We hope that this overview of our company services will show you how we can work together to achieve your goals.



#### Our business

Today, the marine services market offers a vast array of different and often confusing, choices. Over the past 46 years however, Ibercisa has become "winch specialist" par excellence. We concentrate on what we do best which in turn, enables us to help you identify the best equipment for your project.

We are professionally qualified to deliver well-researched, proven solutions and products using our many years of maritime experience to help you make the best choice. By working together from the earliest stages of preliminary design and tailoring equipment to your needs, we are able to guarantee both high quality and cost effectiveness.

lbercisa has an international profile. The Company is present in over 50 countries, thanks to a global network of agents and highly professional staff.

Our employees are committed to offering an impeccable aftersales service. We aim to give every client our close, personal attention, which is also both knowledgeable and informed about the very latest operating methods and equipment in all the naval sectors; fishing, offshore, oceanography, AHTS, towing, etc.

For further information please contact us at: ibercisa@ibercisa.es

#### Ongoing service

# What we like our clients to feel about us

"That they are always professional and not pushy with sales"

"When dealing with Ibercisa, they feel confident and informed"

"Effective, professional and friendly; they see our staff as members of their team"



# Worldwide Players Active on Five Continents

#### **Getting Stronger**

Since the early days, Ibercisa has relied on skilled labour. Our workers are an important pillar in the structure of the company, with wide professional expertise.

Machinery is designed hand in hand with our clients, from the original draft of a project until its installation. Ibercisa offers personalised adjustments on its machines for both running conditions and capacities.

#### **Getting Greener**

Environmental awareness is an aspect which the Company has integrated into its manufacturing and administrative systems, conscious as we are of the relevance of environmental policies in today's world, and our adherence to legal requisites goes beyond what is demanded of us. Ibercisa has been awarded a Certificate from Lloyd's Register under the rule UNE-ISO 14001:2004 guaranteeing that the Company complies with international specifications in the administration of environmental quality. In this way the Company has included in its daily routine the environmental aspects required of its activity. The ISO 14001 Rule is based on the well known ISO 9001 which has widened its commitment to environmental issues.

#### Improving our efficiency

Ibercisa has assigned a sizeable budget to update its production systems. The acquisition of machinery is a significant investment for the Company which is intent upon innovation and modernization of all its facilities. The Company has CNC machinery such as milling machines with 5 shafts, or a lathe connected to the CAD-CAM system in the technical office for greater accuracy of the mechanization processes.

#### Getting better all the time

#### Why you should be interested in Ibercisa equipment

#### WORK BOATS

Towing Winches Anchor Towing Winches Escort Towing Winches Capstans

#### ENERGY & OFFSHORE VESSELS

Anchor HandlingTowing Winches Traction and Storage System Heavy Lift Winches DNV 2.7.3 HPU DNV 2.7.1 ROV Winches Spooling Operations Mooring Winches

Anchor Windlasses & Winches Auxiliary Deck Winches

#### FISHING

Trawl and Purse Seine Winches Net Drums Net Sounder Auxiliary Deck Winch Capstans Anchor Windlasses & Winches

#### RESEARCH VESSELS

Coring and Deep Sea Winches CTD and Hydrographic Winches Traction Winches Streamer Piston Corer Bed

#### CIVIL

Anchor and Mooring Winches Drydocking Winches

#### NAVY

Anchor and Mooring Winches Stoppers Capstans



#### **DREDGING**

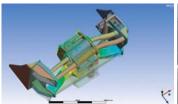
Auxiliary Anchor Winches Fall Pipe Winches Cargo Winches Anchor & Mooring Winches Mooring Winches

#### MERCHANT & TRANSPORT

Anchor and Mooring Winches Capstans Cargo Winches

# Our technology

The process begins in our Technical Department, always in close contact with the production processes and with strict adherence to the specific requirements of our customers.





We have made significant investments in technology as well as infrastructural upgrades at Ibercisa. The use of cutting edge technology along the entire value chain is key to our business. From conceptual design of the machinery using 3D modelling to calculation and validation through Finite Element Analysis programs, to the Physical Tests, up to delivery of the final product. This whole production process is carried out at our 9,000 m² facility. Cutting, moulding, welding, heat stress relief, CNC mechanics, surface treatment and machinery assembly; we have control over the entire value chain, including physical stress tests in our testing area, with a tow capacity of up to 400 Tons.



#### **Remote Monitoring**

# Access to your data anywhere, anytime

All deck machinery is constantly monitored to precisely and reliably control the operations; a multitude of sensors acquire real time data that is stored and processed on board. By using Ibercisa's on-board application, operational data can be accessed in real time from on board.

To get the most out of the data, it is all securely transmitted to a protected server, in which it is further processed in order to extract all the information that it contains.

Thanks to Ibercisa's remote application, all your deck machinery information can be accessed anywhere, anytime. Furthermore, with all the collected data any imaginable solution can be developed, such as maintenance management, load tracking, overload management, alarms and many more.









More than 400 tugboats working worldwide

# POWER PACK

To drive hydraulic winches and other on-board consumers such as cranes, towing pins, shark jacks, frames, etc., both by means of electro hydraulic group or pumps connected to PTO.

We design and issue detailed hydraulic circuits, closed or open circuit, with piping sizes, installation procedures, fluxing requirements, etc.





#### Ibercisa manufactures winches for Harbour and Escort tugboats with capacity of up to 350 tons direct pull.



14 Units Hydraulic towing winch Vessel: Cerro Itamut Owner: Panama Canal Authority Country: Panamá



#### TUG & WORK BOATS

Towing Winches Anchor Towing Winches Escort Towing Winches Capstans



#### 2018

#### LATEST ORDERS AND DELIVERIES

Owner/Operator: Starnav (Brasil) Shipyard: Detroit (Brasil)8 units	Owner/Operator: Svitzer (TM2 project) Shipyard: Sanmar (Turkey)
Owner/Operator: Serport Services Portuaires (Algeria) Shipyard: Armón (Spain)	Owner/Operator: Port of Lulea (Sweden) Shipyard: Gondan (Spain)
Owner/Operator: Port Qasim Port Authority (Pakistan) Shipyard: Uzmar (Turkey)2 units	Owner/Operator: Port of Tan Tan (Morocco) Shipyard: Armón (Spain)
Owner/Operator: Fortescue Metals Group (Australia) Shipyard: Damen (Vietnam)	Owner/Operator: Lyttelton Port Company (New Zealand) Shipyard: ASL (Singapore)
Owner/Operator: Kotug (The Netherlands)	

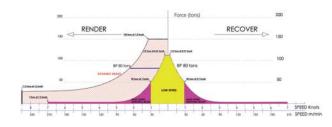


#### RENDER RECOVERY WINCHES

Shipyard: Cheoy Lee (Hong Kong)...... 2 units

Ibercisa's **render-recovery** winches offer a dynamic, reliable and adjustable line tension control, which automatically optimizes both **direct and indirect** towing.

- · Safety first, preventing slack wire.
- · Wave compensation.
- $\cdot$  2-speed gearbox allows average speed of 210 m/min and line tension up to 150 tons.
- · Integrated dynamic brake to work in even harder conditions of speed and force, protecting gearbox and motor.
- · Direct and instant information of pull and brake forces.





#### Wheatstone Project

The Danish owner Svitzer has recently ordered a set of 4 render recovery winches and 2 towing winches from Ibercisa for their 4 new tugboats which will be operating at Wheatstone LNG's terminal in Australia.

Cheoy Lee Shipyard (Hong Kong) has recently ordered 4 new electric escort tugs, prepared for indirect towing up to 8 knots.



#### In search of Marine Energy



Machines are electrically driven, safe, environmentally friendly and capable of great control during turbine mooring manoeuvres. The machinery is designed with high precision electronic stowage to limit cable spoilage: high security instant "Pawl brake", software controlled dynamic pull control and non-slip traction control. The system is also furnished with three point level control with maximum error range of 50 mm depth among them, technology which allows precise control and total safety.



Anchor Winch Vessel: DLV2000 / Owner: McDermott Shipyard: Keppel / Country: USA



Anchor Handling Towing Winch 350 Tons Electrically Driven Vessel: Bylgia / Owner: Heerema Marine Contractors / Shipyard: Armón



**ROV Handling Winch** *Owner:* McDermott

#### Ibercisa specializes in the manufacture of large but compact equipment, as seen on the offshore fleet and AHTs (Anchor Handling Towing).

#### **Electrical Drive**

Ibercisa invests in the continued development and improvement of drive systems.



By using AFE (Active Front End) technology, we make the most of the energy generated in shooting, returning clean energy to the boat. Our experience spans from the pioneering use of permanent magnet motors on AHTs to the development of our own AHC (Active Heave Compensation) system.



Anchor Handling Towing Winches Traction and Storage System Heavy Lift Winches DNV 2.7.3 HPU DNV 2.7.1 ROV Winches Spooling Operations



#### Winches for rental fleet

Comply with:

- 2.7.3. portable offshore units. Class R60.
- 222 lifting appliances.
- ATEX regulations.

## Portable Winches

Are designed to be easily transported and installed. In compliance with the most demanding certifications DNV 2.7.3 DNV 2.7.1 DNV 2.22 mark etc.









**Electric Fishing Winches** Vessel: Argos Cíes / Owner: Armadora Pereira Shipyard: Nodosa Country: Spain



**Electric Fishing Winches** Vessel: Østervold / Owner: Knut Inge & Henrik Østervold / Shipyard: Western Marine Design Office: Sawicon



Twinrig Trawler & Flyshooting Vessels: Henk Senior CN283 & Jannetje-Cornelis Owner: Osprey Group BV "De Boer Family" / Shipvard: Nodosa

Ibercisa originated in the fishing sector. In 1969 it began its activities manufacturing power blocks for purse seining, and thanks to the quality of its products and the improvement in fishing operations, it began to increase its market share in the sector of big trawlers and pelagic vessels.



Trawl and Purse Seine Winches **Net Drums Net Sounder** 

#### **LATEST ORDERS** FISHING TRAWLERS



Ocean Choice International (Canada) 74 m Freezer Trawler · Electric Shipyard: Tersan · Shipdesign: Skipsteknisk



Pesca Baqueiro (Spain) 50 m Freezer Trawler (NAFO) · Electric Shipyard and Design: Nodosa



Osprey Group, B.V. (Holland) 2 units. 29 m Fly Shooting · Hydraulic Shipyard and Design: Nodosa



Kutterfisch (Germany)



Tunacor Group Limited (Spain) 53 m Fishing Trawler · Electric Shipyard and Design: Armón



Arkhangelsk Trawl Fleet (Russia) 86 m Fishing Trawler · Electric Shipyard: Vyborg · Shipdesign: Skipsteknisk



M.V. Osprey Ltd. (Canada) 80 m Factory Trawler · Electric Shipyard: Tersan · Shipdesign: Skipsteknisk



Fishermen's Finest (USA) 80 m Factory Trawler · Electric Shipyard: Dakota Creek · Shipdesign: Skipsteknisk



Pereira (Falkland Islands) 74x14m Factory Trawler · Electric Shipyard and Design: Nodosa

#### PELAGIC VESSELS WITH IBERCISA COMPLETE WINCH PACKAGE



Vessel H, ØSTERVOLD

Shipowners: Knut Inge & Henrik Østervold Shipyard/Design Office: Western Marine/Sawicon



RUTH

Shipowner: Rederiet Ruth A/S Shipyard/Design Office: Karstensens



Vessel

BEINUR

Shipowner: Fridalvur Tindskard Shipyard/Design Office: Karstensens

#### MAIN ADVANTAGES

Lower installation costs.

Lower energy consumption, maintenance and noise levels. Higher efficiency.

Better control than hydraulic systems.

Environmentally Friendly.

The efficiency of electrically driven machinery is around 85-90%, as opposed to the hydraulic system which is 60%. This gives better control than hydraulic drive, with a variable speed of 0-100% maximum rpm and the whole torque at any speed.









#### LATEST ORDERS

Vessel: Taqnia Owner: Saudi Development and Investment Company Shipyard: Freire Vessel: Svea Owner: Sveriges Iantbruksuniversitet, SLU Shipyard: Armón Owner: Kuwait Institute for Scientific Research Shipyard: Freire

Other relevant research vessels Supplied: Arni Fridiksson-Iceland, Cefas Endeavour-U.K., Miguel Oliver and Sarmiento de Gamboa-Spain, Noruega-Portugal, Cabo de Hornos-Chile, Bipo Inapesca México.



Oceanographic winches are provided with a spooling device driven either mechanically from the drum or electronically by an independent electrical moto-reducer. Special attention is paid to the care of electro-mechanical cables.

Ibercisa supplies complete systems including the integration of winches with frame operations. Ibercisa offers the possibility of installing these machines over a rotating base.



#### **Precise Machinery**

The independent units which are installed on board oceanographics can be used on other types of vessels. Adapted for the requirements of scientific teams, the winches have a large cable storage capacity as well as pull to enable them to be used for deep research operations.

Other important features:

- Grooved drums
- Remote control (radio and cable control, control from laboratory and bridge, etc)
- Easy modification of winch parameters: torque, speed, type of cable, automatic payout, etc.
- Wireless access to parameters from land or remote stations: easy to check and correct parameters whilst at sea.



**RESEARCH VESSELS** 

Coring and Deep Sea Winches CTD and Hydrographic Winches **Traction Winches** Streamer **Piston Corer Bed** 



# "Antartica-1" Project

A state-of-the-art icebreaker for the Chilean Navy.

Complete deck machinery package which apart from oceanographic will also include:

#### LARS SYSTEM:

- **STERN A-FRAME**
- ·LATERAL TELESCOPIC BOOM
- ·LARS SYSTEM FOR CTD

Owner: Chilean Navy / Shipyard: ASMAR



Ibercisa Deck Machinery's technical office addresses the requirements of civil works.

26 HPU and winch sets. Up to 100 Ton pull for Valemax class carriers mooring.



Coastal countries' economic strategies are focusing on blue growth, stimulating sea related activity. In recent years we have supplied equipment designed for docks, dykes, exterior piers etc.



CIVII

Anchor and Mooring Winches Dry dock Winches

#### Dry Docks · Slipways

Ibercisa supplies a variety of machinery for dry docks with a docking capacity of vessels up to 5500 Tons and 120m length.



Dry docks
Owner: Astican / Country: Spain



**Dry docks** *Owner:* Repnaval / *Country:* Spain









### Nature always represents a challenge for civil works

The construction of a 3,5 km bridge over the Rio Negro in Brazil was a huge challenge in terms of maintaining navigation during the rainy season. In order to solve the problem 12 barges were built for installation on the bridges, for which Ibercisa built 24 anchor winches for 64mm diameter chain.

Hydraulic Anchor Winches Owner: Erin Shipyard Country: Brazil



Ins Shakti (AOR Vessel) Ins Deepak (AOR Vessel) Indian Navy Anchor Windlasses & Mooring Winches

4 Patrol Ships Iraqi Navy Anchor Windlass & Capstans Juan Carlos I (BPE) Spanish Navy Anchor Windlasses, Mooring Winches & Capstans

Cantabria (BAC) Spanish Navy Anchor Windlasses & Capstans



Navy vessels require versatile, reliable machinery which is also easy to operate and maintain. Machinery approved by the Classification Societies in accordance with the extremely demanding working conditions of Navies.



#### **Hydraulic Windlass**

Vessel: AOR Project (Two vessels) Owner: Australian Navy Shipyard: Navantia









**Anchor and Mooring Winches Stoppers** Capstans

**Galicia (LPD)** Spanish Navy Anchor Windlasses Mooring Winches & Capstans Canberra and Adelaide (ALHD) Australian Navy Anchor Windlasses, Mooring Winches & Capstans

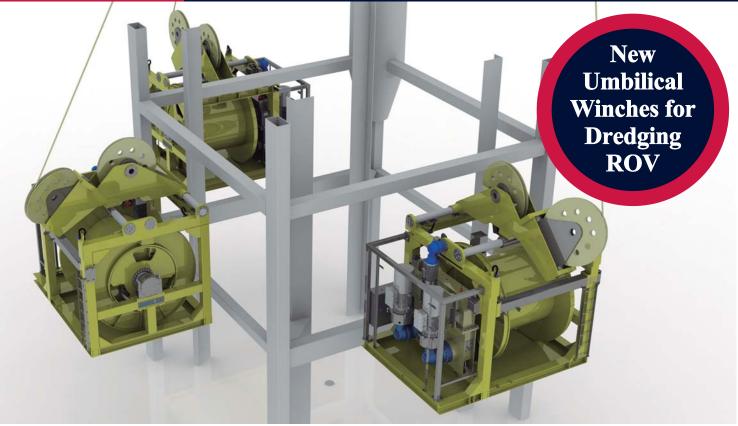
**New AORs** Australian Navy Anchor Windlasses, Mooring Winches & Capstans

FTI Programme Frigates
French Navy
Anchor Windlasses, Mooring Winches & Capstans

Hobart, Brisbane & Sydney (Hobart class "AWD") Australian Navy Electric Capstans









**Auxiliary Winch** *Vessel:* Willem de Vlamingh / *Owner:* Jan de Nul *Country:* Belgium



**Auxiliary Anchor Winch** *Vessel:* Charles Darwin / *Owner:* Jan de Nul *Country:* Belgium



Anchor Windlasses and Mooring Winches Vessel: Omvac Diez/Country: Spain

Companies specializing in dredging have entrusted lbercisa with supplying their equipment. These are highly resistant machines, easy to maintain, and designed to work in the hardest of conditions.



Auxiliary Anchor Winches
Fall Pipe Winches
Cargo Winches
Anchor & Mooring Winches
Mooring Winches



Anchor and Mooring Winches
Capstans
Cargo Winches



Vessel: Magellan Explorer / Owner: Antarctica fly cruises Shipyard: Asenav (Chile)

# MERCHANT & TRANSPORT

Ibercisa offers electric and hydraulic anchor winches for chain diameters of 20 to 120 mm, combined with mooring drums with constant tension, manual or hydraulic clutches, and ATEX Explosion Proof notation.



Hydraulic combined anchor and mooring windlass  $\emptyset$ 44 mm Hydraulic combined anchor and mooring windlass  $\emptyset$ 46 mm Owner: CHOUEST

