SHIPREPAIRER TO THE WORLD FLEET
COMPANY | Having excellent facilities, an optimum geographical location, fair weather conditions and a vast wealth of experienced know-how, LISNAVE welcomes all worldwide clients at its modern and upgraded Mitrena Yard near Setúbal.

FACILITIES | LISNAVE is fully equipped with all the necessary workshops, services and facilities to carry out the wide range of tasks required of a ship repairer. The Yard has ample craneage, staging, transporters for moving large sections of steel structures, dockside arms, painting and blasting equipment, air compressors, pumps and lighting units. Office facilities are available for Project Management Teams, Owner’s Superintendents, Surveyors, Inspectors and Consultants.
Drydocks 20, 21 and 22

DRYDOCKS

<table>
<thead>
<tr>
<th>Drydock</th>
<th>Dimensions</th>
<th>Draft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drydock 20</td>
<td>420 m x 75 m</td>
<td>4.6 m</td>
</tr>
<tr>
<td>Drydock 21</td>
<td>450 m x 75 m</td>
<td>7.6 m</td>
</tr>
<tr>
<td>Drydock 22</td>
<td>350 m x 55 m</td>
<td>7.6 m</td>
</tr>
<tr>
<td>Drydock 31</td>
<td>280 m x 39 m</td>
<td>5.1 m</td>
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<tr>
<td>Drydock 32</td>
<td>280 m x 39 m</td>
<td>5.1 m</td>
</tr>
<tr>
<td>Drydock 33</td>
<td>280 m x 39 m</td>
<td>5.1 m</td>
</tr>
</tbody>
</table>

Lifting Equipment: 20 Travelling Cranes (up to 100 t) over Drydocks and Berths, and 1 Gantry Crane (500t) over Docks 20 and 21
SHIPYARD LAYOUT

LISNAVE can undertake repairs to any kind and size of vessel. The Yard, that occupies an area of 1,500,000 m², is sheltered by the peninsula of Tróia providing safe anchorage for ships of any size.

BERTHS

<table>
<thead>
<tr>
<th>Berth Type</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>BERTH 1</td>
<td>160 m</td>
</tr>
<tr>
<td>BERTH 2</td>
<td>190 m</td>
</tr>
<tr>
<td>BERTH 3 (east)</td>
<td>250 m</td>
</tr>
<tr>
<td>BERTH 3 (west)</td>
<td>140 m</td>
</tr>
<tr>
<td>OFF-SHORE BERTH (east)</td>
<td>95 m</td>
</tr>
<tr>
<td>OFF-SHORE BERTH (west)</td>
<td>250 m</td>
</tr>
<tr>
<td>OFF-SHORE MINI-BERTH</td>
<td>25 m</td>
</tr>
<tr>
<td>STEEL BERTH</td>
<td>100 m</td>
</tr>
</tbody>
</table>

9 Repair Berths with the total length 1,400 m, draft 6.6 m
**LOCATION**

**LISNAVE** is ideally located for vessels trading or passing through Atlantic and Mediterranean waters. The Yard, situated in the RiverSado estuary, close to the town of Setúbal and 50 Kilometers away from Lisbon and its Airport, which has excellent connections with the world’s major cities, making air travel for personnel and manufacturer’s specialists easy, including logistics of spare parts. Setúbal region has several hotels with swimming pools, tennis courts and a number of first class golf courses, as well as being surrounded by excellent beaches.

A major advantage of the Yard’s location is the year round excellent weather that Portugal enjoys. Normally fair and mild, ideal for outside work and hull treatment. Temperatures range 23 to 28°C during March to October, and between 14 and 22°C in winter months.
The safe manoeuvring of large vessels, often not having their own power available, requires specialist handling. **LISNAVE** is served by the tug Companies Rebocalis and Rebonave which manage a fleet of seventeen powerful tugs ranging from 1200 to 1400 bhp, including one salvage tug.

**TANK CLEANING**

tank cleaning and gas freeing

Dedicated tank cleaning and gas freeing station owned by Eco-oil is located adjacent to the Yard.
- A land based tank cleaning station;
- Reception facilities for slops and contaminated water;
- Mooring facilities up to 7 m draft.

**CLEANING AND PAINTING**
surface treatment and painting

A major part of any repair Yard’s activities involves the cleaning and painting of both external hull and internal tanks and cargo holds. Fair weather year round allows grit blasting and painting operations to be carried out without major weather delays.

In addition to conventional gritblasting, ultra high pressure water blasting can be offered. The most sophisticated coatings can be specified with confidence and Owners can be assured that coating will be applied strictly in accordance with paint manufacturers specifications.

The same level of expertise is available for internal surface treatment and coating. A full range of dehumidifiers, heaters, staging and dust collection equipment is available at the Yard.
STEELWORK REPAIRS

Steelworking facilities in Mitrena allows the execution of major steel renewals, with certified high quality, including planning and pre-fabrication of block structures up to 500 tons.

PIPING REPAIRS

The vast quantity of pipes aboard ship’s of all types, and in particular the extensive piping found on tankers, gas carriers, etc., mean that repair and replacement of pipes and valves is one of the major activities of any repair Yard.

Pipe shops at LISNAVE are fully equipped with machinery to allow even the most extensive and complicated pipe repairs to be undertaken in such areas as cargo, ballast, heating coils and hydraulic systems.
MACHINERY REPAIRS

Whatever type of propulsion machinery is fitted, be it diesel engines, steam or gas turbines or a diesel-electric installation, LISNAVE can offer the same high standards of workmanship as the original supplier. LISNAVE has service agreements with several manufacturers which authorize us to repair most types of machinery. Machinery repair is not confined to main engines and repairs can be carried out on any of the other wide range of equipment including tail shafts, rudders and rudder stocks.

ELECTRICAL REPAIRS

Electrical work is carried out by in-house sub-contractor Selinat, which employs highly trained staff and has service agreements with the most important companies in these technological fields. Selinat is equipped for all types of maintenance of electrical and instrumentation – including motor rewinds – and has ISO 9002 certification.
TURBOCHARGER REPAIRS

A joint venture agreement with the worldwide Company MAN Diesel Portugal. With a dedicated workshop and specifically trained personal inside the yard, offers full repair service of normal turbocharger maintenance, onboard ultrasonic cleaning, blade repair, shaft repair including metal spray, balancing and delivery of spare parts for any type of turbochargers produced either by MAN B&W, MITSUBISH or ABB.

LNG/LPG

LISNAVE’s facilities include a dedicated climatized workshop to overhaul Cryogenic Equipment, such as Cargo Compressors, Pumps and valves. LISNAVE has signed technical agreements with the most of the specialized companies to provide all the required assistance to deal with Cargo Compartments of LNG/LPG’s vessels.

RECONDITIONING OF SPARE PARTS

Equipment available for this type of work includes:
- Laboratories for sophisticated non-destructive testing;
- Reconditioning of parts by electric welding;
- Surface coating using metal spraying process;
- Reconditioning of diesel engine pistons and exhaust valves;
- Other equipment such as deck gear, winches, ramps, watertight doors, cranes and elevators, can be handled by LISNAVE’s enginers.
**PROPELLER REPAIRS**

**LisNave** through its affiliated Company Repropel, offers more than 30 years of experience in propellers (of all types and dimensions) maintenance and repair. This affiliated Company is also certified by Wartsila Propulsion Station (JCM Seals and Cpp Propellers).

**GAS FREE CERTIFICATION**

Gas Free Certification and Atmospheric risk assessment is carried out by Gaslimpo, an independent company, with a Lloyd’s Certified Quality Management System fulfilling all legal requirements. Gaslimpo issues Gas Free Certificates on behalf of Port Authorities both in port and at sea.

**ENVIRONMENTAL MEASURES**

Incorporated within the Yard facilities, two (2) residual water treatment plants (ETARs) have been constructed – one unit being used to treat domestic effluents and the other to handle dry-dock water.
COMPANY POLICIES

**LISNAVE** works to continually improve service levels, organization, procedures, operations and equipment so we can meet the expectations of our valued Customers. Goals are achieved through the commitment of our management and staff to follow the guidelines and regulations as set out in our Company Policies and Procedures.

ETHICS

**LISNAVE**’s success depends on building productive relationships based on integrity, ethical conduct and mutual confidence. All our activities and that of our employees are governed by ethical criteria, never neglecting the impact that any action may have on our Customers, Company’s Shareholders, Suppliers, Partners, Competitors, Employees, Social Organizations, Regulatory Entities, Stakeholders and the Public in General.

QUALITY

**LISNAVE** operates under a Quality Management System certified according ISO 9001:2008. The system has defined processes, performance targets, which are analyzed and reviewed systematically, promoting improvement actions and innovations. Lisnave seeks to reach excellence through teamwork, communication and permanently improving its performance. We value customer’s satisfaction and always work to meet their expectations and ensure the completion within scheduled dates.
HEALTH AND SAFETY

LISNAVE has adopted a Health and Safety Policy to preserve, protect and continuously improve the Health and Safety of all its employees and the employees of all related parties. The policy and the implemented procedures and regulations aim to provide a safe and healthy working environment, to comply with the governing health and safety legislations and to meet the requirements of our Customers.

ENVIRONMENT

LISNAVE’s Environmental Policy aims to monitor, control and continuously improve on its activities that may have a potential negative impact on the environment. We comply with governing legislations and we ensure that measures are adequate to meet our objectives and targets regarding our environmental responsibilities.

SECURITY

LISNAVE fully complies with the security requirements under the ISPS code and has been certified since 2004. All the security measures are being performed in accordance with the Security Plan approved by the national authority for maritime security (IPTM).
LISNAVE, whose customers span more than 50 different countries, is acting as a global partner in Shipping maintenance / repair activity.