# RECOGNITION OF THE SHIPYARD BY CLASSIFICATION SOCIETIES





- Certificate of Compliance of the enterprise (CERTIFICATE OF FIRM CONFORMITY) with the requirements of the **Q-CERT (ISO 9001:2015).**
- Certificate issued by **BUREAU VERITAS** for execution of thickness measurements of hull structure of the vessels.



### **CONTACT INFORMATION**

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ASTILLEROS DE GUINEA ECUATORIAL S.A. Puerto de MALABO – Guinea Ecuatorial

SHIP-REPAIR SERVICES (summary)





# **SHIP REPAIR**

Working since 2010 we have gained an experience allowing us to introduce modern technologies into the process of repair work and to achieve the best results within the shortest possible time.

Our technical staff arrange full support to Customer's Representatives in solving of difficult technical matters, negotiations with Classification Societies.

Our competent technical staff is fully responsible for the quality and terms of repair, we guarantee rapid and efficient performance and on-time re-delivery of the vessel.





# THE MAIN PRODUCTION CAPACITIES OF THE SHIPYARD



#### **FLOATING DOCK (big size):**

Length (working deck with a crinoline) – 210,0 m Breadth (between the inner walls of tower) – 36,0 m Draught (maximum) – 13,5 m Dock cranes (2 pc) – 20 tn / 15 m; 5 tn / 30 m; 3 tn / 40 m

Maximum parameters of vessels for docking:

- length ~ 210,0 m
- draught ~ 7,0 m
- weight of the vessel  $\sim$  14 000 tn



#### **FLOATING DOCK (small size):**

Length (working deck with a crinoline) – 104,8 m Breadth (between the inner walls of tower) – 23,0 m Draught (maximum) – 12,2 m Dock cranes (2 pc) –5 tn / 29 m

Maximum parameters of vessels for docking:

- length ~ 100,0 m
- draught ~ 6,5 m
- weight of the vessel ~ 4500 tn



#### OCEAN TUG (big size):

Gross tonnage – 186,0 tn L x B x H – 25,5 x 7,8 x 2,9 m Engine power – 2 x 691 kW

#### **OCEAN TUG (small size):**

Gross tonnage – 80,0 tn L x B x H – 18,5 x 5,9 x 2,0 m Engine power – 2 x 336 kW

#### **LOAD-LIFTING EQUIPMENT:**

Self-propelled crawler crane (Liebherr LR 1300) – h/c up to 300 tn

Truck cranes – h/c up to 50 tn

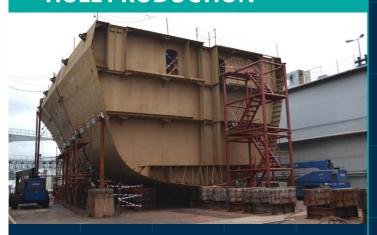




## **CLEANING, BLASTING & PAINTING**



### **HULL PRODUCTION**



Plasma and gas plants for cutting of plates, modern welding equipment "KEMPPI" and "MIGATRONIC", assembly and welding benches, equipment for bending of rolled steel plates and steel profiles is used.

Our fitters-welders are well familiarized with all methods of welding: SMAW / MIG / TIG / Gas welding, etc.





- Plants for hull cleaning under high 2500-3000 bar pressure 4 pcs
- Plants for hull sand blasting according to standard SA 2,5.
- We use modern painting equipment made by such well-known manufacturers as "WIWA" and "GRACO"
- Treatment of ballast and fuel tanks, freshwater tanks, etc. is carried out by our painters and cleaners.



### **PIPELINE PRODUCTION**



Available equipment ensures the manufacturing and installation of steel, non-ferrous and plastic pipes of various sizes and pipe bending of up to 150 mm in diameter.





# **OVERHAULING OF TURBOCHARGERS**

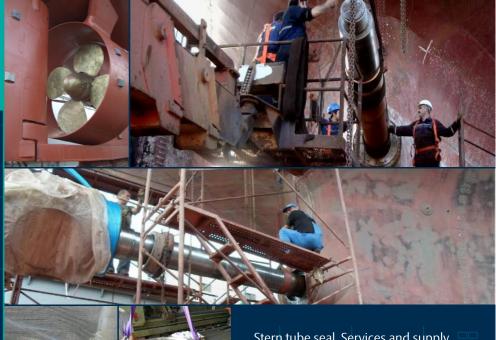


Repair and periodic servicing of turbochargers and turbogenerators can be carried out.

Balancing of rotating parts can be made weighting up to 5 tons.

# MECHANICAL AND ASSEMBLY PRODUCTION

Available equipment ensures the fulfillment of mechanical and assembly works of the required range, machining of parts up to 1000 mm in diameter, machining of shafting up to 600 mm in diameter and length of up to 8 m.





Stern tube seal. Services and supply. In-house certified engineers for bonding or supervising during tails shaft withdrawal. All types of LIP type stern tube seals.

# **DIESEL DIVISION PRODUCTION**



Years of experience and modern equipment ensures diagnostics, repair and installation of diesel engines and compressors of various manufacturers and modifications.

Honing of cylinder liners, grinding of valves and seats enable our workers to carry out overhauling of engines fast and professionally. Appropriate Service Reports (including measurements data) are issued for future references, recommendation for further improvement of equipment condition and its operation.

# **DIAGNOSTIC AND REPAIR OF AUXILIARY MACHINERY**

Our specialists perform diagnostics and further repair of the following auxiliary equipment and ship's systems:

- Lifting devices (cranes, ramps, davits, etc.)
- Pumps, compressors, winches
- Steering gear
- Hydraulic and pneumatic systems
- Refrigerating plants
- Cargo holds hatches
- Coolers, condensers, boilers
- Insulation of manifolds and other





## **ELECTRICAL PRODUCTION**



Available equipment ensures performance of electrical, adjustment–alignment and repair works on the units, which are under construction and repair, allows the rewinding of stators and rotors of electrical machines of up to 0,5 MW.

### **RECONDITIONING OF SPARE PARTS**

Our workshop is equipped with professional equipment (machining, grinding, polishing, etc.) for reconditioning of spare parts. We restore piston-heads of all types, perform reconditioning of cylinder covers, exhaust valves, valve saddles, honing of cylinder liners, repair of hydraulic cylinders (including restoration of stock geometry) and many other kinds of reconditioning. Our modern equipment and the flexible technological process allows us to implement a wide range of reconditioning tasks: from unique pieces to large amounts of serial parts. We offer a wide exchange base and emergency repairs in very short time terms.





### **EXECUTION OF DOCK REPAIR**

Dock repair is accompanied by the issuance of the relevant documents required for inspection of the fulfilled works by Classification Societies. We offer steel works of any complexity – repair/renewal of steel structure (shell plating, inner stiffeners, etc.), hull reinforcement, hull geometry restoration and others.



# SHIPYARD'S LABORATORY

Our laboratory is licensed and equipped with all the appropriate equipment for a wide range of non-destructive tests and inspection.

# **OXYGEN AREA**

We produce industrial oxygen for industrial purposes, and perform the filling of diving cylinders with air.



## **SURVEYS, LOAD TESTS, ANNUAL INSPECTIONS**

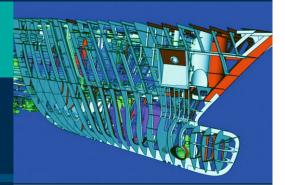
We carry out inspection and maintenance of the following equipment:

- Lifeboats and davits
- Life-rafts
- Lifting equipment (cranes, ramps, etc.)
- Radio-navigating equipment



# CONVERSION AND MODERNIZATION OF SHIPS AND SYSTEMS

- Our specialists provide following services:
- Designing / conversion of ships
- Strength calculation
- Modernization of systems (fuel, oil, water, sewage systems; electrical and automation, firefighting system according to Class requirements, etc.)
- Investigations of ship seaworthiness





#### **UNDERWATER WORKS**

We perform diving inspection of objects at a depth of 30 m with the issuance of the current visual report. We are able to offer complete Underwater Survey (full inspection of hull, sea chests, propeller and rudder).



#### **WAREHOUSING AND LOGISTICS**

Available storage areas of open and closed ensure safety and stocktaking of the delivered products and materials.

### YARD "ASABA" PROVIDES

We provide support and assistance in obtaining visas for technical staff, surveyors and crew members. We also provide customs clearance only for spare parts intended for the vessels, which are undergoing repair on the territory of "ASABA" Shiprepair and Shipbuilding Yard. Spare parts can be shipped to Malabo by sea, in containers or by the means of DHL Cargo or Lufthansa Cargo by air.