



IRON FIST

Marine Cranes

PAGO VEIANO (BN) - ITALY



**MECHANICAL
TECHNOLOGY
SIGNED
IRON FIST**



Made in Italy

IRON FIST

Marine Cranes

PAGO VEIANO (BN) - ITALY

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WE RAISE YOUR BUSINESS



IRON FIST has produced hydraulic cranes for over 20 years. During this time, we have specialised in the construction of marine cranes for both shipboard and offshore applications.

The combination of excellent design standards with high quality materials ensures that IRON FIST cranes are safe, strong and extremely reliable.

Our main objective is to strive to produce equipment in pace with new state of the art technology whilst respecting the environmental requirements of our customers. Iron Fist seeks excellence in quality, service and putting the customer first.

IRON FIST can offer our customers a wide range of products according to EN13852, API2C, EN12999, and also in accordance with the main marine Classification Societies. Eg RINA, ABS, BV, CCS, DNV, GL, LR, RMSR.

who we are

01

OUR PRODUCTION

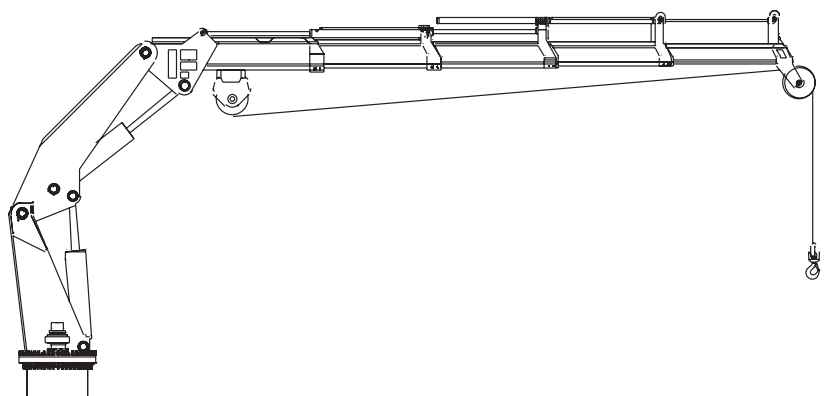


TELESCOPIC KNUCKLE BOOM CRANES



Telescopic Knuckle boom cranes are especially well suited where space is limited. It's design makes it easier to carryout maneuvers in thight spaces, and with maximum precision.

Like all cranes produced by **IRON FIST**, our telescopic knuckle boom cranes, are designed to comply with the main certification bodies. They can be customized, both in terms of design and accessories, to better meet the needs of the customer.



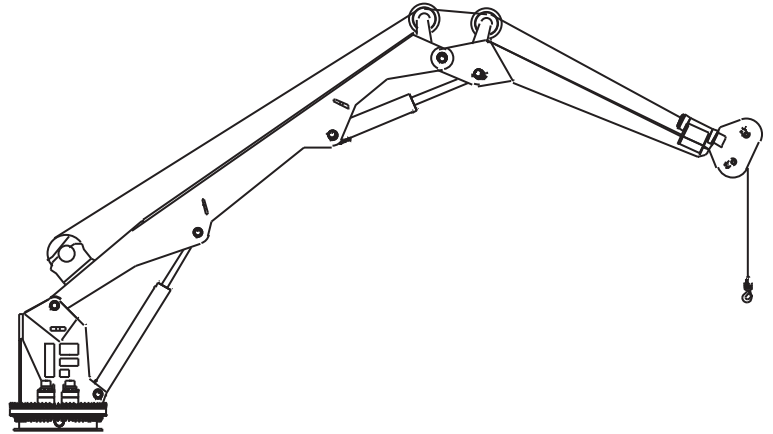


KNUCKLE BOOM CRANES

The **knuckle boom cranes** are a good choice where operating speed of the crane is of primary importance.

The design allows a very flexible and powerful outreach.

The knuckle boom cranes, like all cranes produced **by IRON FIST**, are designed to comply with the main certification bodies. They can be customized, both in terms of design and accessories, to better meet the needs of the customer.





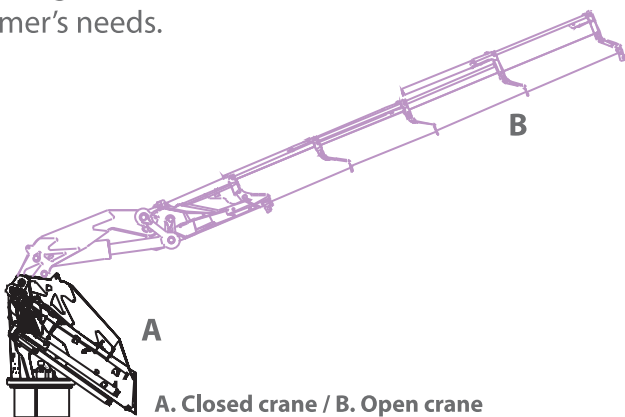
FULLY FOLDABLE TELESCOPIC KNUCKLE BOOM CRANES



Fully foldable telescopic boom cranes may be an excellent solution where installation space is very limited.

The design of these particular cranes allow the operator to fold the crane into a triangle when parked, in order to significantly reduce the overall dimensions.

Like all other cranes produced by IRON FIST, our fully foldable boom cranes are designed to comply with the main certification bodies. We also offer a significant amount of customization of both design and accessories, to meet customer's needs.



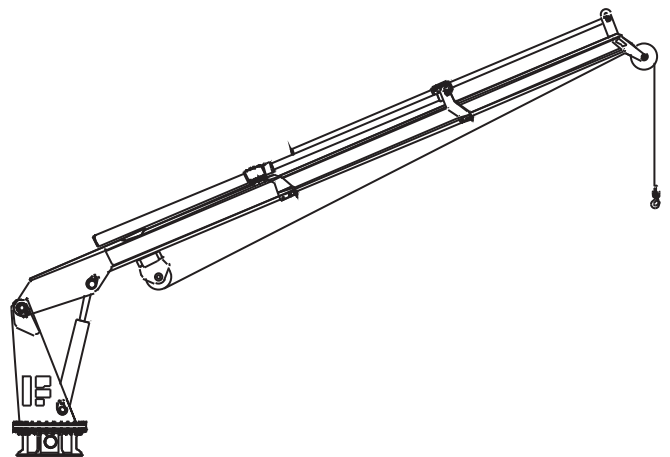


TELESCOPIC BOOM CRANES



Telescopic boom cranes allow you to position the load quickly and efficiently. The simplicity of the design also allows easy and economical maintenance.

Telescopic boom cranes, like all cranes produced **by IRON FIST**, are designed to comply with the main certification bodies. They can be customized, both in terms of design and accessories, to better meet the needs of the customer.



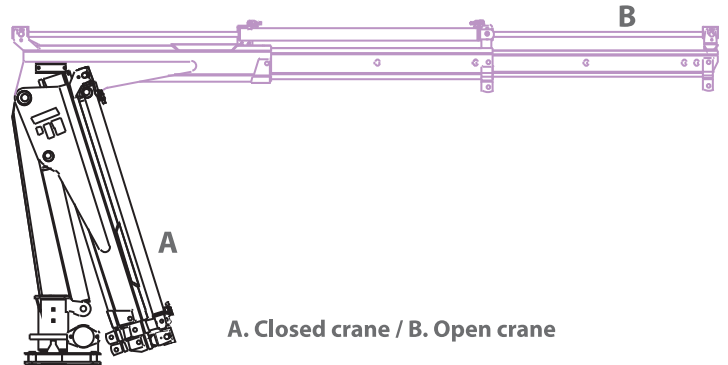


MINI TELESCOPIC BOOM CRANES

The mini telescopic boom cranes, due to their size and weight, can be a good choice where the weight of the crane itself is of importance.

This design gives you a lot of lifting capacity in a package of very small dimensions.

Like all other cranes **produced by IRON FIST**, our mini boom telescopic boom cranes are designed to comply with the main certification bodies. We also offer a significant amount of customization of both design and accessories, to meet customer's needs.



A. Closed crane / B. Open crane

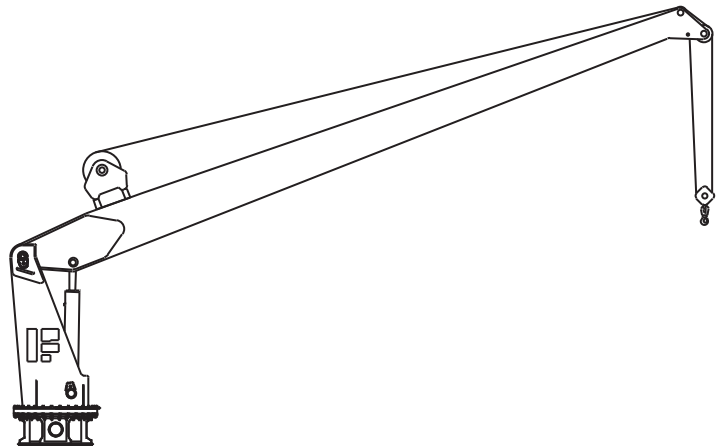




STIFF BOOM CRANES

Stiff boom cranes, due to the simplicity of their design, can be a cheaper alternative choice than those with articulated arm. The fixed arm, without hydraulic extension and secondary hinges, makes this an economic model, both in the investment phase and in terms of maintenance.

Stiff boom cranes, like all cranes produced by **IRON FIST**, are designed to comply with the main certification bodies. They can be customized, both in terms of design and accessories, to better meet the needs of the customer.





RESCUE BOAT CRANES



IRON FIST designs and manufactures rescue boat cranes with various load capacities according to the customer's operational needs. Also the design of the arm can be realized taking into account the operational needs. It can be either fixed, telescopic or folding telescopic.

A variety of crane designs from fixed to telescopic or even folding telescopic arms can be offered for rescue cranes. ***The rescue boat cranes produced by IRON FIST are certified and compatible with the latest SOLAS, IMO and LSA regulations.***





SPECIAL CRANES



The special cranes are custom designed according to customer needs. The special cranes thus become a true work partner, suitable for carrying out the handling of loads in extreme conditions and in the absence of risks.

The special cranes, like all cranes produced **by IRON FIST**, are designed to comply with the main certification bodies. They can be customized, both in terms of design and accessories, to better meet the needs of the customer.





ACCESSORIES

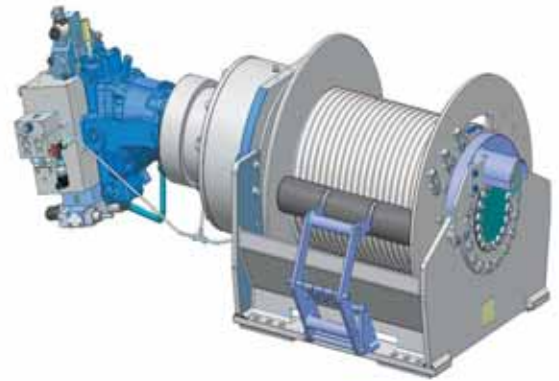
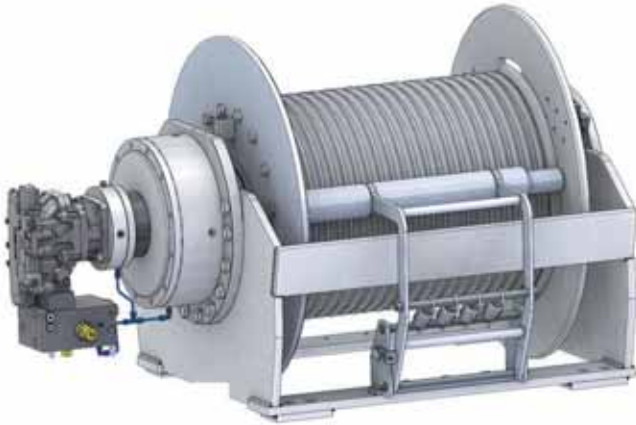
The Iron Fist Marine Cranes can be equipped with the following accessories:

- Hydraulic Power Units;
 - Radio Remote Control;
 - Operator's Cabin ;
 - Hydraulic Buckets;
 - Hydraulic Grabs ;
- **Control System:**
 - Sea Conditions;
 - Speed reduction;
 - Crane monitoring with Display;
 - **Inclination Sensor**
 - **Hydraulic Winch – Available with:**
 - Personnel Lifting
 - CT (Constant Tension)
 - AHC (Active Heave Compensation)
 - AOPS (Automatic Overload Protection System)
 - MOPS (Manual Overload Protection System)
- Explosion proof equipment;
 - Equipment for arctic climates





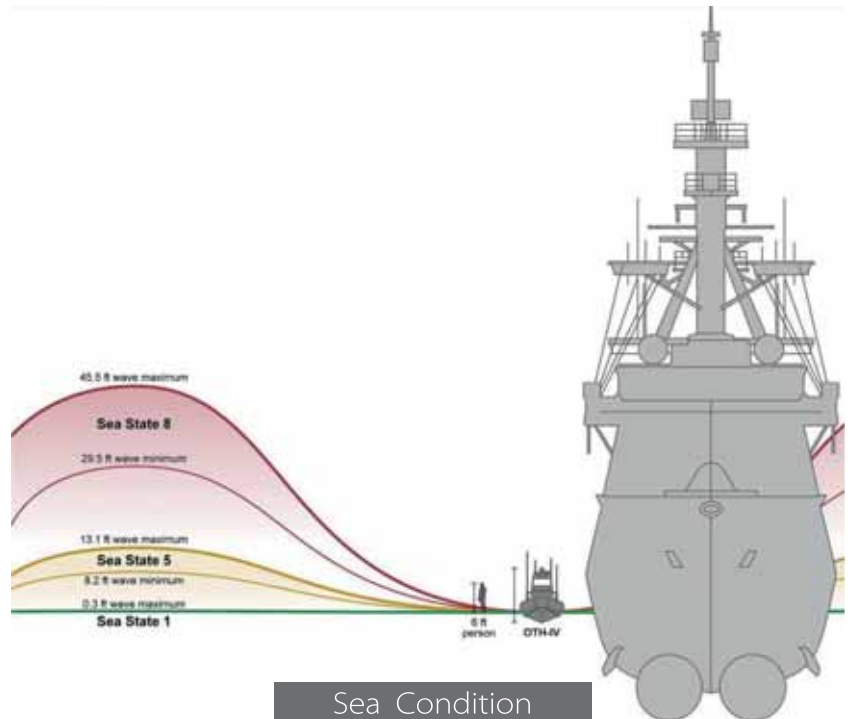
ACCESSORIES



Hydraulic Winch



Cabin



Sea Condition



Hydraulic Grabs



Radio Remote Control

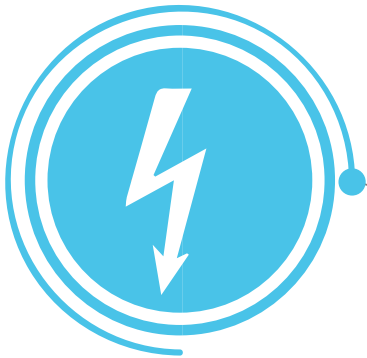
02

QUALITY



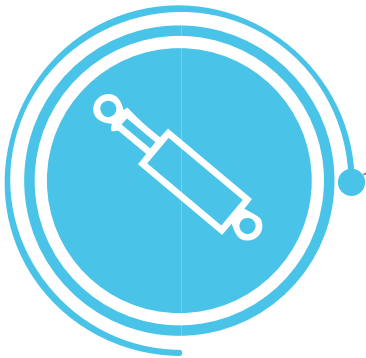
CONTROL

All cranes are equipped with PROPORTIONAL CONTROL VALVES for have all movements perfectly controlled, proportional and smooth.



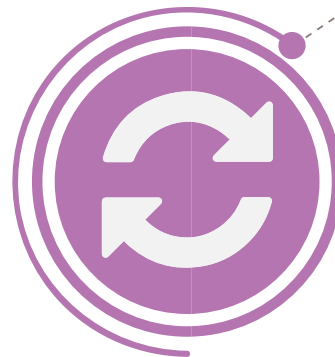
ELECTRIC SYSTEM

All the components of the electric system have an protection degree of IP67/IP68.



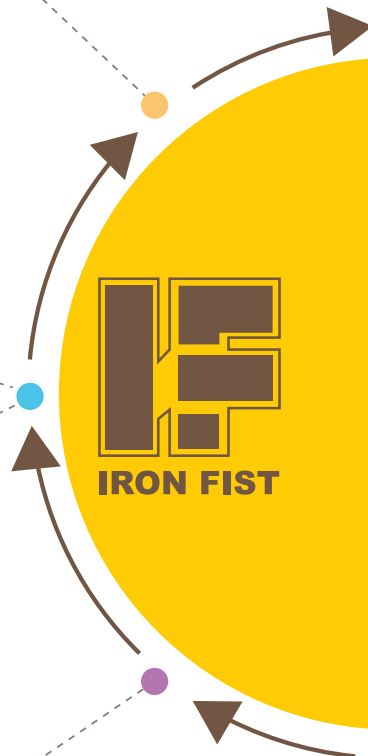
HYDRAULIC SYSTEM

The hydraulic systems of the IRON FIST cranes are characterized by two important factors: Low working pressure; Larger pipes diameter.



ROTATION

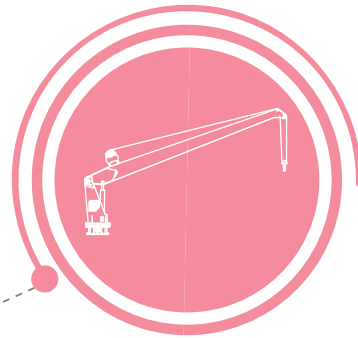
The rotation system can be also supplied with special valves for motion control for special applications.





DESIGN

The design is the key start point in the development of the system.



STEEL

IRON FIST uses only high strength steels in the construction of our cranes.



TREATMENTS

The surface of all cranes are made of a special marine treatment using blasting, high pressure washing and cold galvanizing. An intermediate coat and two layers of polyurethane paint are applied, with a minimum thickness of 340 micron of protection.



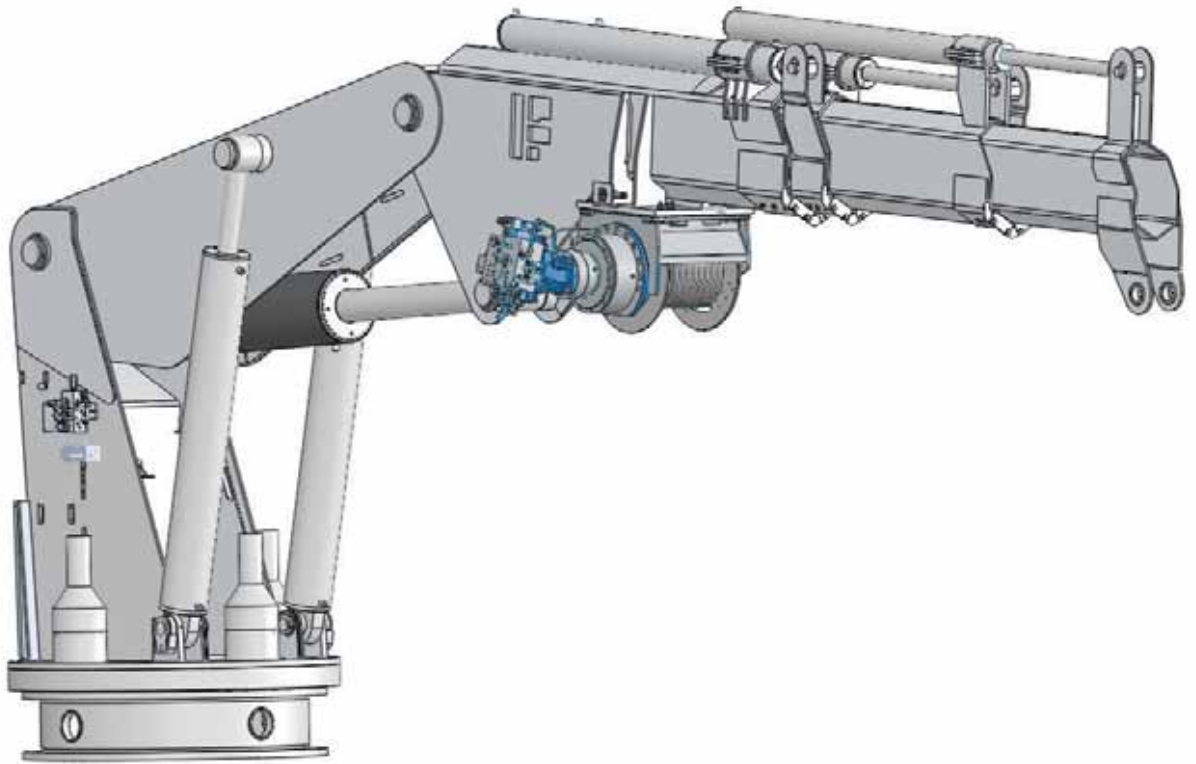
SECURITY

The crane's safety system, are made exclusively with hydraulically actuated components without the use of electrical components, which are less suitable for use in the marine environment.



SPARE PARTS

IRON FIST spare parts are the same as used of the cranes construction. They guarantee quality and reliability,

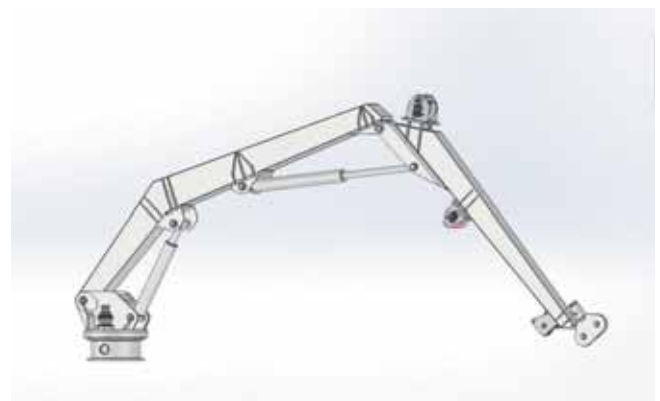


The design is the key start point in the development of the system. It determines the form, structure and function of all **IRON FIST** products.

The company uses sophisticated software that allows the simulation of the working condition, which enables the design team to de-risk the structure digitally.

All our cranes are fully designed for marine applications and for marine environment. All structural parts are developed to guarantee full operational capability in all marine environments and applications.

IRON FIST Marine Cranes are manufactured to ensure they provide the customer will complete reliability, strength and confidence that the task can be completed.





IRON FIST uses only high strength steels in the construction of our cranes. This type of steel ensures the strength of the structure and allows more constructive solutions. All steels, as well as being certified by suppliers, are also certified and tested in our laboratory.

All components are welded by our internal welders, who are dully certified from the major class certification societies.

All components that are not structurally related (eg, support ladders) are fully produced in stainless steel AISI316.





The surface of all cranes are made of a special marine treatment using blasting, high pressure washing and cold galvanizing. An intermediate coat and two layers of polyurethane paint are applied, with a minimum thickness of 340 micron of protection. On all cranes we can supply a customized procedure, based on the customer's requirements.

Extreme attention is paid to the cylinders rods. On all our cranes the main and articulation cylinder rods are made from NIKROM 500. All Extension boom cylinders are treated with a double crossed chrome, with a minimum thickness of 100 Micron. The chrome-plating is carried out after all the mechanical operations in order to guarantee the integrity of the treated surfaces.



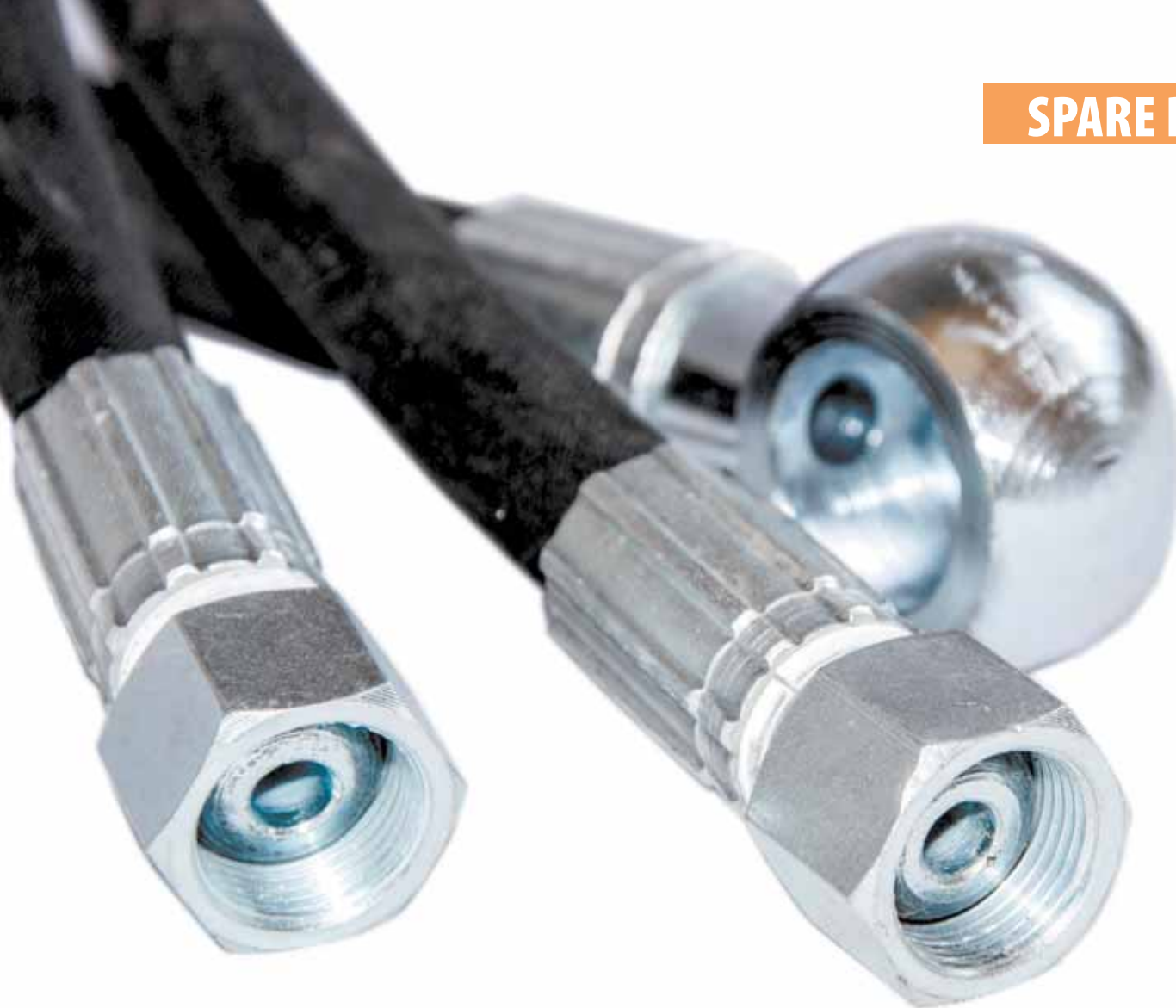
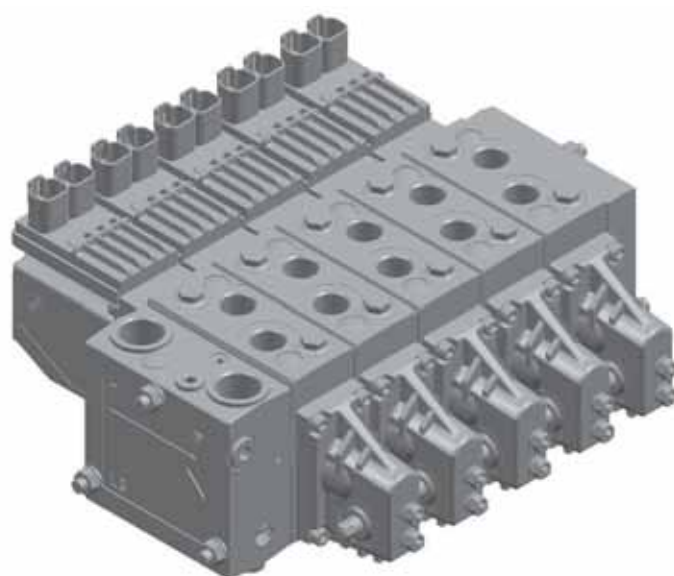


photo by SHUTTERSTOCK

IRON FIST spare parts are the same as used of the cranes construction. They guarantee quality and reliability, helping to keep it in time, the features that have convinced the customers to choose IRON FIST cranes. To ensure a fast delivery, IRON FIST has a large amount of spare parts both at home and in business partners.





The crane's safety system, overload limiting device, limitation switches, hydro piloted block-valve on the cylinders and on the rotation geared motor and emergency stop, are made exclusively with hydraulically actuated components without the use of electrical components, which are less suitable for use in the marine environment.

Also the Winch safety device (switch limit rope down, switch limit rope up and overload protections system) are fully hydraulic.





A powerful rotation system with a slewing bearing and gearboxes enables precise work and a better distribution of loads on the base. This slew solution provides the best rotation method for the operator. All gearboxes are supplied with a negative brake that restricts crane movements during operations and boat movements.

The rotation system can be also supplied with special valves for motion control for special applications.



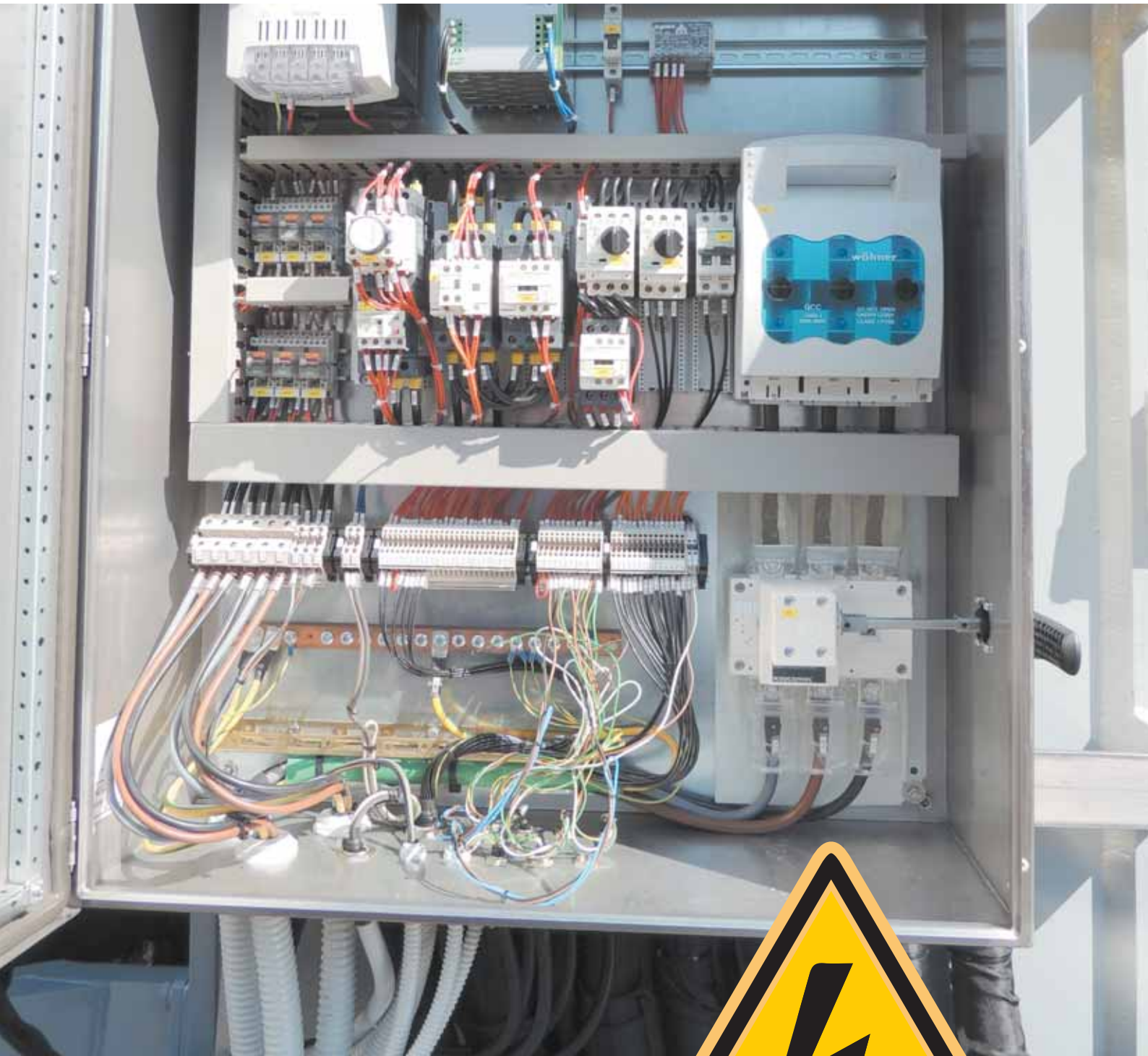


The hydraulic systems of the IRON FIST cranes are characterized by two important factors: Low working pressure; Larger pipes diameter. Both allow for increased life and lower maintenance of the hydraulic system. Low pressure avoids heavy strain on the sealing system, the increased diameter of the pipes allows to keep the oil temperature low and to have a high operating speed since the first maneuvers.

All cranes are equipped with stainless steel pipes and stainless steel fittings. The flexible hoses are used only in the articulation point for reduce at minimum the maintenance, reducing also the maintenance costs.

All cranes are equipped with pressure filter for avoid the contamination of the crane hydraulic system.





When required the cranes can be equipped with electrical system, generally used for the application of Radio Remote Controls, Work light, signal light or special equipment. In this case the electrical component are designed and built for use in marine environments. All the components of the system have an protection degree of IP67/IP68.

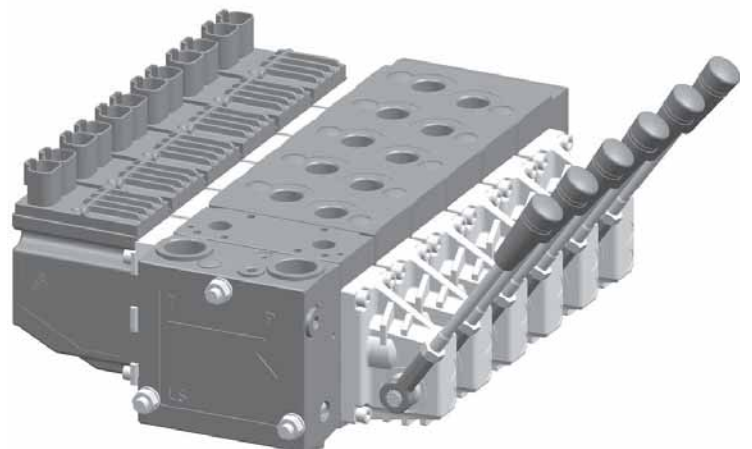




All cranes are equipped with PROPORTIONAL CONTROL VALVES for have all movements perfectly controlled, proportional and smooth. The cranes cylinder are equipped with overcenter valve projected from the best manufacturer on IRON FIST specifications.

The cranes can be equipped with Remote controls, that can be with linear levers or with customized joystick.

The cranes can be equipped with special control system like AOPS-MOPS-CT-AHC and all other system arranged on customer request.



03

SERVICE AND
AFTER
SALES SERVICE



SERVICES AND AFTER-SALESSERVICE



IRON FIST only high strength steels in the construction of our cranes, eg WELDOX. This type of steel ensures the strength of the structure and allows more constructive solutions. All steels, as well as being certified by suppliers, are also certified and tested in our laboratory.

All components are welded by our internal welders, who are dully certified from the major class certification societies.

All components that are not structurally related (eg, support ladders) are fully produced in stainless steel AISI316.





QUALITY **AND** DESIGN



04

APPLICATIONS



APPLICATIONS

The Iron Fist Marine Cranes applications

01 Arbour Station and Fixed Locations
02 Research Vessels
03 Offshore - Oil & Gas Industry -
Fixed Platforms - Drillships - Fspo
04 Passengers Ships
05 Wind Turbines

06 Fishing Vessels
07 Tug and Supply vessel
08 Provision Crane
09 Rescue Boat Crane
10 Subsea Works Crane
11 Dredging Crane
12 Basket Crane SYstem
13 Special Applications
14 Military Navy



APPLICATIONS

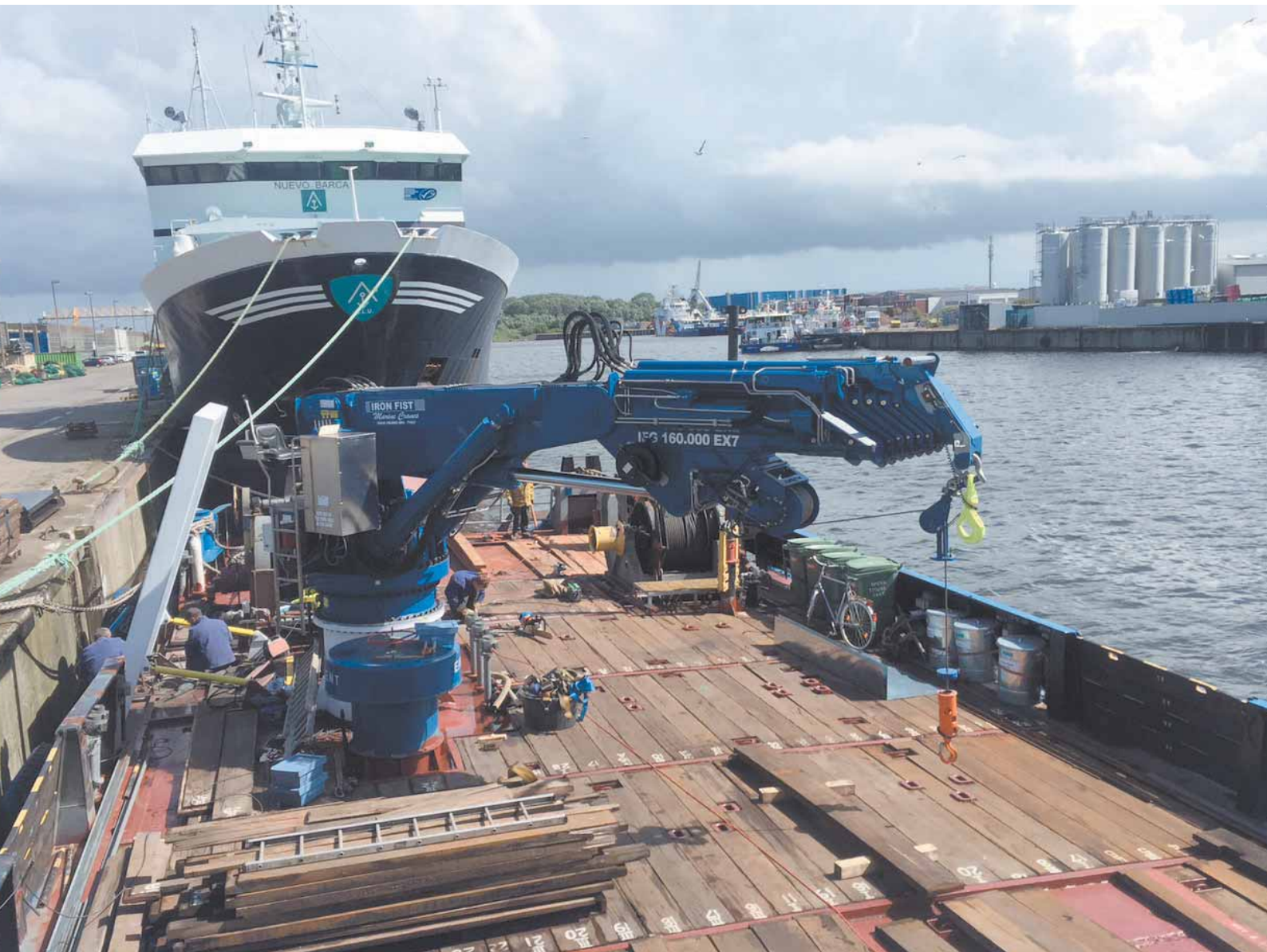




APPLICATIONS



APPLICATIONS





For 20 years we have been designing and manufacturing hydraulic cranes with care and passion, to satisfy our customers.





MECHANICAL TECHNOLOGY SIGNED **IRON FIST**





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