

# THE NON-STICK VALVES

## 7 PATENTED MODELS ARE OUR RESPONSE TO THE NEEDS EXPRESSED BY THE MARKET.

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# THE NON-STICK VALVES



# The indications we receive from the market are essential for innovation and research to identify new products that are often crucial for on-board systems.

Guidi non-stick valves have been designed for the nautical sector, in response to the need to improve the functional characteristics of an existing product that was unable to guarantee the performance required.

These valves are crucial for motors, generators, refrigerating units, bathrooms, desalinators and for on-board systems in general.

#### Compact size, optimised components, ease of use, resistance and duration are just some of the innovative elements of these products, studied both for leisure and working boats.

Traditional valves should not be used in contact with seawater; non-stick valves should be used instead.

When they are not being constantly opened and closed, traditional valves become blocked, with unpleasant consequences such as the breaking of the handles. When it comes into contact with the inside of the valves, seawater creates cakedon deposits and corrodes the components of the valves (internal shaft, ball...)

#### To avoid these unpleasant problems on board, we have created a line of non-stick valves: a range of products designed for performance, durability and reliability, made in bronze, patented and validated by RINA (the Italian Naval Register).

To sum up the concept:

• **ball valves and traditional valves** = suitable for hydraulic, civil and industrial use; not suitable for contact with seawater, because they corrode, get blocked and stop working

• **non-stick valves** = studied and created for use in the nautical sector; suitable for contact with seawater, because they do not corrode or get blocked and stop working.

## 2004

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The 2200-2220 models with flanges and the 2210-2230 threaded models were the first to be patented and added to the catalogue.

All the models were studied and designed to guarantee optimal performance and functioning during all operating conditions, even after prolonged periods of inactivity.

Unlike traditional valves, the internal mechanisms are fitted with a protective neoprene coating.

Neoprene is the commercial name (DuPont) of the chloroprene polymer polychloroprene. This is a type of synthetic rubber that degrades less than natural rubber or other synthetic rubbers, making it suitable as an anti-corrosion coating. It is resistant to the action of salt water, air, the sun's rays, cutting and crushing. The chlorine component gives the elastomer flame-resistant and self-extinguishing properties.

# The handwheel, complete with a lever and blocking pivot, makes it possible for the operator to manoeuvre the valve easily.

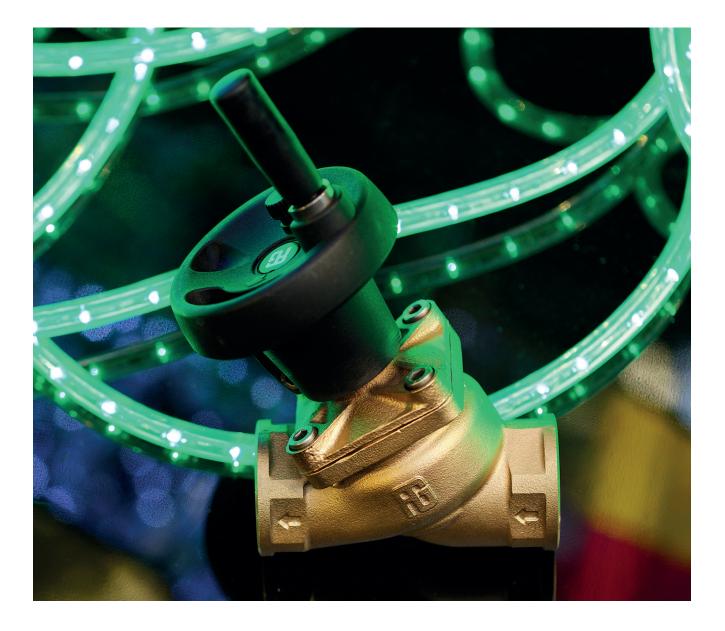
Created in Polyamide 6 (Nylon) reinforced with glass fibre, it has excellent mechanical resistance, as well as resistance to wear, chemical agents and impact. It has good electrical insulation properties and is self-extinguishing.



# The 2220 model has the same functions as the 2200 model, and the 2230 model has the same functions as the 2210 model, except for the handwheel:

• the handwheels on the 2200 and 2210 models are fitted with a position indicator, and are compliant with the <u>UNI EN ISO 9093-1 : 2018 standard</u>. The standard specifies the requisites for the thru-hull outlets, hull valves and fittings for flexible metal tubes that specifically form part of the water intake and outlet lines, and for the waste water outlets used in small boats with a hull of up to 24 m long.

• the handwheels on the 2220 and 2230 models are not fitted with a position indicator: an arrow indicates the open/closed direction, but not the position. These models are significantly more economical than the 2200 and the 2210.



## 2007

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With two new patents, we added the double intake non-stick valves to the catalogue: models 2240 (with flanges) and 2250 (threaded).

#### The double intake non-stick valve has a three-way valve function.

A number of shipyards install a separate emergency circuit aboard to discharge the bilge water in the event of breakdowns, holes or collisions that could cause a leak.

In this case, the circuit with the seawater is closed and the emergency circuit opened in its place. The bilge water is thus used to cool the motor, at the same helping to drain it off.

With our double intake non-stick valve, when the seawater circuit is closed, a passage is automatically opened to allow access to the bilge water.

With this type of valve, the same result can be obtained without the need to install a double circuit, thus saving a considerable amount of money.



2240 Model



2250 Model



# **Guidi non-stick valves**

- are all validated by RINA
- are all patented
- are made in bronze
- have a handwheel in self-extinguishing material
- are resistant to caked-on deposits and corrosion (the coating provides insulation from the galvanic current), thanks to the neoprene membrane
- guarantee maximum flow without leakage, thanks to the internal passage, despite the slanted body
- have a position indicator to allow the operator to check the position of the valve at any time
- make it possible to fix the position with a pivot fixed with safety screws
- have a maintenance-free internal mechanism
- can be easily and simply inspected by unscrewing the four bolts, without the need to disassemble them



In 2013, we patented the 2260 model: the threaded non-stick valve Alex full flow.

The Alex valve was designed as a more advanced version of our non-stick valves, in order to respond to the market demands in terms of space, easiness of handling and price:

- installation is simple, even in narrow spaces, thanks to the small size and the absence of levers
- less expensive than other non-stick valve models

The Alex model is a straight valve with two counter-posed sleeves and a 90-degree lock. The full flow system allows for a continuous passage of liquids, thus avoiding turbulence.

Like the other models, the Alex valve has a bronze body and internal mechanisms with a **protective neoprene coating**.

The hood-shaped **handwheel** is extremely user-friendly, and is fitted with a clearly visible indicator with the words open/close, so that the position of the valve can be identified immediately. It is in self-extinguishing ABS, with a hard surface with excellent resistance to impact, scratching, aging and the action of salt water.



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### **Patents**

Subject of the patent	Article	Italian patent	Deposited
Flanged non-stick valve	2200/2220	TO2004 A00350	25 - 05 - 2004
Threaded non-stick valve	2210/2230	TO2004 A00350	25 - 05 - 2004
Flanged double intake non- stick valve	2240	TO2007 A000451	21 - 06 - 2007
Threaded double intake non- stick valve	2250	TO2007 A000451	21 - 06 - 2007
Safety intake non-stick valve, full flow	2260	TO2013 A000759	18 - 09 - 2013



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## Info

Each valve comes with detailed instructions for installation, use and maintenance.

Our non-stick valves durability probably goes beyond the life of the boat itself, and they are almost entirely recyclable.

Link to the online product catalog: Non-stick valves.



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### The longer life option - Durabilità & Riciclabilità

New products development must consider a more accurate and sustainable analysis of their lifespan.

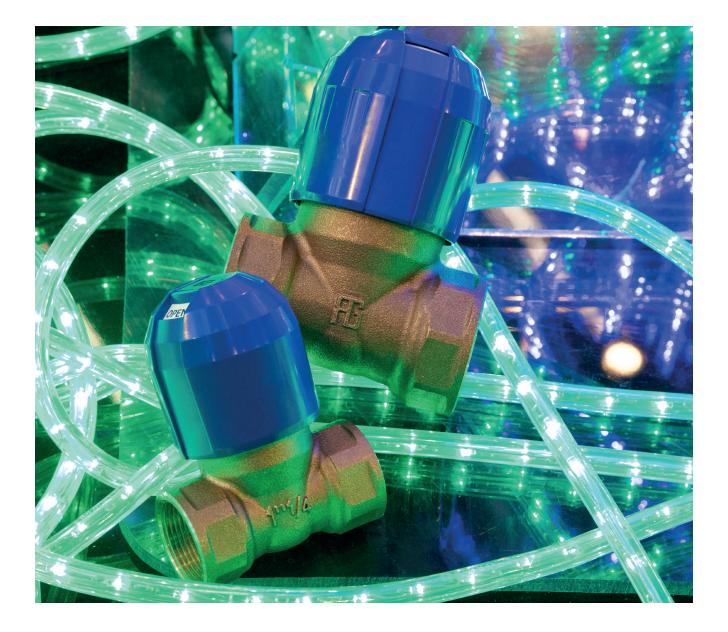
Each product has got a very high durability with a quality and functioning warranty, by keeping its physical and mechanical material characteristics.

Ordinary maintenance while using these products is very low.

Thanks to the easy way of taking components apart it will be possible to extend life of material beyond components working period.

When product life gets to the end, through processes allowing to re-use of raw materials, each product is almost entirely recyclable.

For our water intakes range all items are entirely recyclable.





#### Don't forget to share your ideas with us!

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