

# THYBORØN TRAWLDOOR

## INTRODUCING CONTROLLABLE TRAWL DOORS

*control **SPREAD** - control **DEPTH** - control **RESISTANCE**  
reduce **CO2 EMISSIONS** - reduce **ENVIRONMENTAL IMPACT** - reduce **FUEL***



**THYBORØN  
TRAWLDOOR**

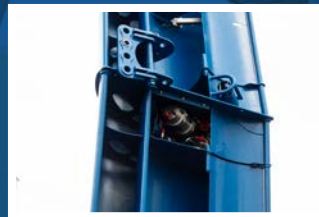
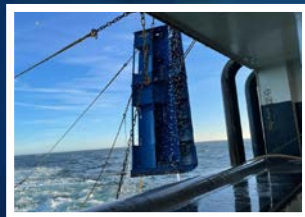
**MADE IN DENMARK** 

# Controllable trawl doors to the fishermen

Invest in our controllable trawl doors for unmatched versatility, allowing you to tailor them to your vessel's requirements and fishing patterns. Experience eco-friendly, cost-effective fishing with reduced CO2 emissions and quick setup adjustments, ensuring better profitability while minimizing environmental impact.

The controllable system can be customized with three different setups:

1. Manually adjustable hydraulic foils – the foils are manually adjusted with a hydraulic pump.
2. Wi-Fi-adjustable hydraulic foils – the foils are adjusted via Wi-Fi when above water.
3. Fully controllable hydraulic foils – the foils are adjusted with acoustic communication when under water and with Wi-Fi when above water.

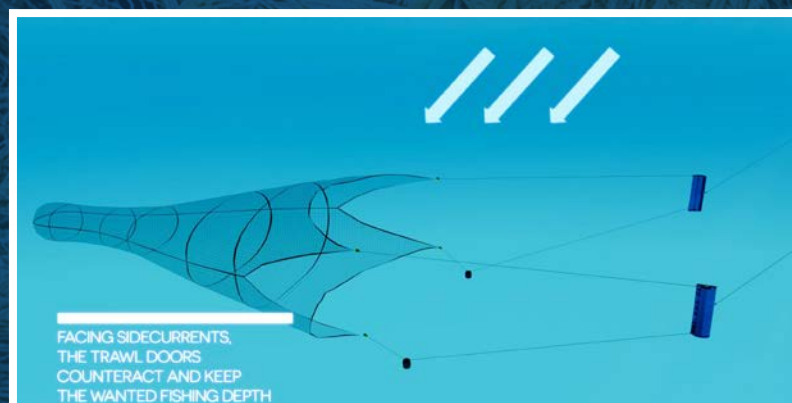
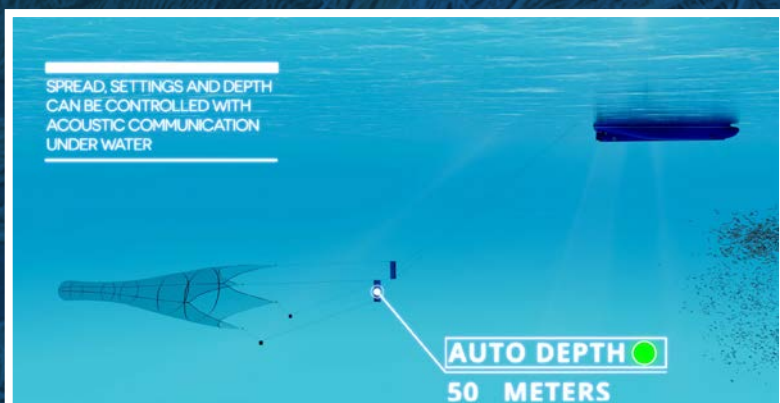


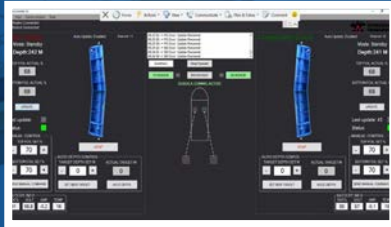
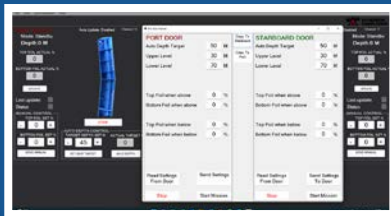
## PISTONS & FOILS:

- Each foil movement goes from 100% (max. spread) to 0% (min. spread) and can reduce the surface area in total up to 27%.
- When upper foil is more open than lower foil it generates lift and makes the trawl door roll in more and fly more.
- When lower foil is more open than upper foil it generates less lift and makes the trawl door roll less, be straighter and dive more.
- With auto-depth mode activated for a certain fishing depth, the moveable foils will adjust according to the pressure on our built-in depth sensor.
- The pistons connected to the hydraulic system are made of stainless steel and very well protected.

## BATTERY & CHARGE STATION:

- The lithium batteries are made for subsea usage and can go down to 1000 m depth.
- Charging the battery from 0-80% power takes approx. 2 hours.
- Charging the battery from 0-100% power takes approx. 3.5 hours.
- The charging cabinet is positioned on the vessel max. 20 meters away from the trawl doors.
- You can easily charge the batteries while they are still in the trawl doors.





## SOFTWARE:

- The software is very easy to use and with a few clicks the doors are in movement.
- The software can be set in different modes to control the trawl doors.
- The software is an open-end program that can be specialized for your usage.
- Our software can be incorporated on existing bridge units.



## HYDROPHONES & INSTALLATION:

- We use our own customized subsea hydrophones.
- The hydrophones can both work in mesh-system and broadcast mode.
- The hydrophones can receive/send signals up to 2000 m distance.
- Two hydrophones must be installed on the vessel and two on the trawl doors for full acoustic control.
- The controllable system can also be controlled via Wi-Fi without hydrophones installed.

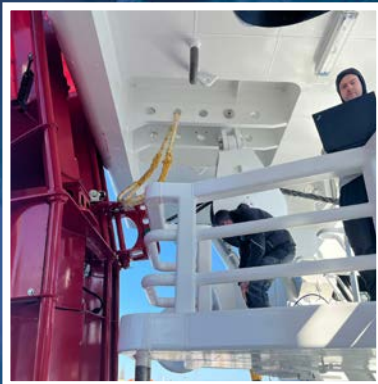
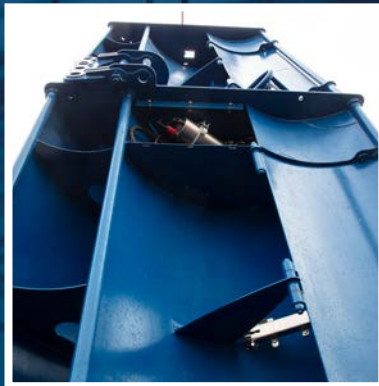
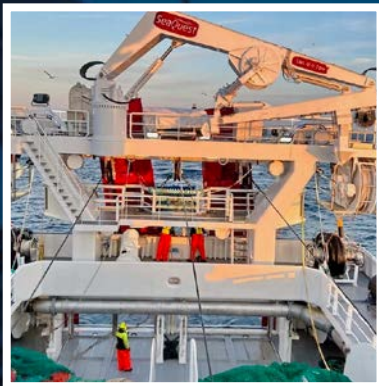
**EASY TO OPERATE**  
**SAFER FOR THE CREW**  
**LESS FISHING TIME**  
**MORE EFFICIENCY**

## BENEFITS:

- Change or keep a certain fishing depth.
- Keep doors off bottom (less environmental impact & less CO2 emissions).
- Control depth of doors individually or simultaneously by the built-in depth sensor.
- Shoot and haul faster.
- Counteract strong tide for better shape of the trawl.
- Have full control of spread. Decrease or increase resistance and spread from trawl doors.
- Change fishing setup in no time, without crew on deck.
- Less strain on winches and the auto-trawl system.
- The system is a one-time investment, since it can be moved and built in on the next set of trawl doors.

THE RESPONSE TIME OF THE MOVEABLE FOILS CAN EASILY BE ADJUSTED TO SUIT DIFFERENT FISHERIES

STARBOARD AND PORTSIDE TRAWL DOOR CAN ALSO BE CONTROLLED INDIVIDUALLY



See video here:



**THYBORØN  
TRAWLDOOR**

**Thyborøn Skibssmedie A/S**  
Sydhalevej 8, 7680 Thyborøn  
Denmark

Tel. +45 97 83 19 22  
sales@thyboron-trawldoor.dk