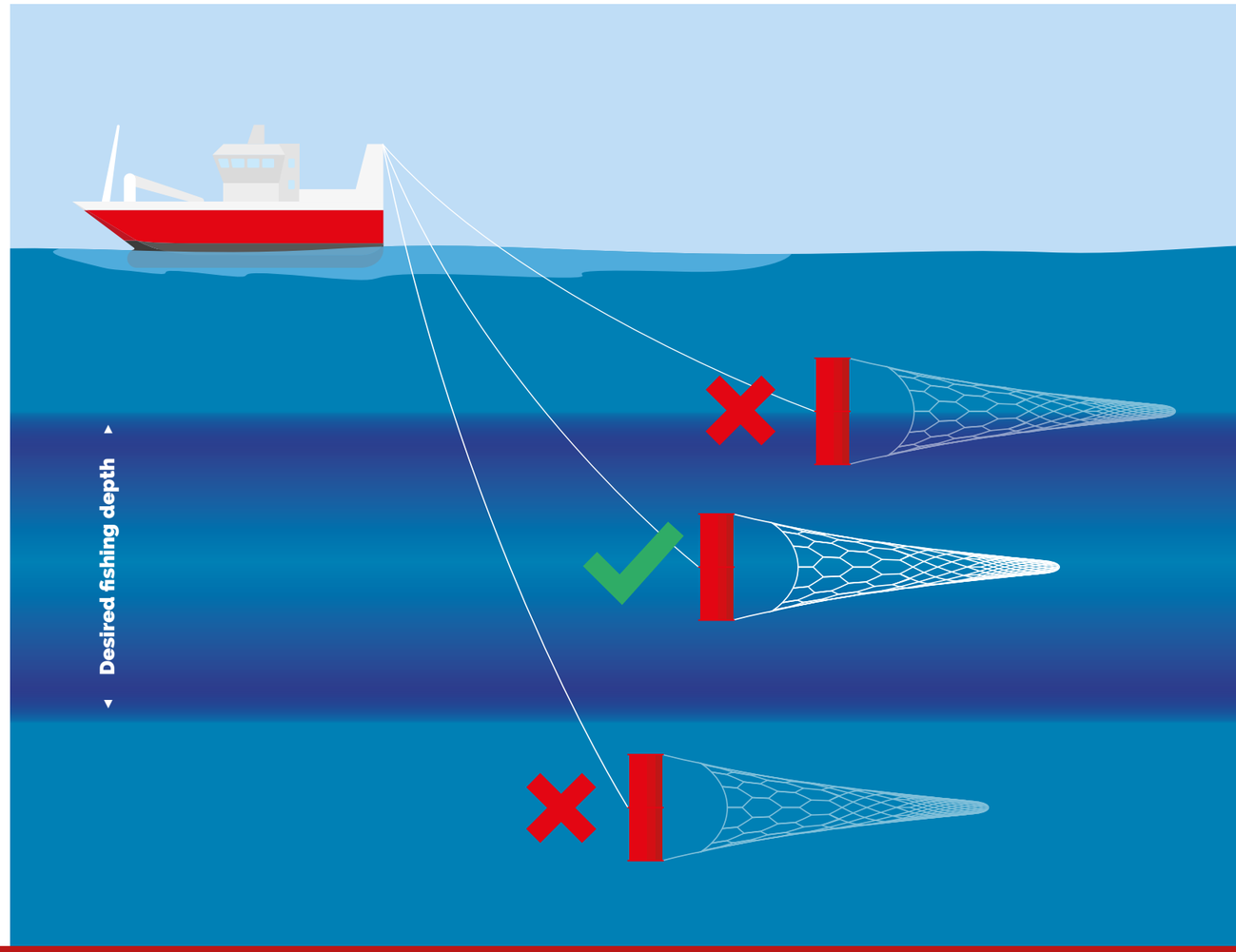
MLD
Trawl Steering System™

Rigged to perfection

Optimizing for the perfect trawl

YES!

The MLD Trawl Steering System™ really is that simple!



Now you know all the tricks for optimal fishing!

MLD
Trawl Steering System™

Susåvænget 1A
6710 Esbjerg V
Denmark

+45 60 86 67 36

sales@mld.one

/multileveldoor

www.mld.one

Fine-tuning the performance of your steerable doors

Rigging ▸ **Backstrops** ▸ **Weights**

Steerable trawl doors, like traditional trawl doors, have a natural "balance" point that stabilizes the trawl opening and depth, affected by the following four factors:

1. Fishing speed (water speed)
2. Wire length
3. Spreading power of the doors
4. Weights on the net

Although the MLD Trawl doors can steer the trawl under all kinds of changing conditions the chosen rigging has a significant impact on the performance. There are three main types of rigging, each providing very different steering capabilities as outlined below:

1. V-rig. The door is free to move in all directions, providing maximum steering capability. The trawl doors can compensate for most of the changing conditions.
2. Parallel rigging. The door is primarily controlled by the trawl net with slow and limited adjustment in the vertical direction. The spreading power can be adjusted nearly entirely, as horizontal movement is largely unrestricted.
3. M-rig. This rigging combines elements of both the parallel rig and the V-rig, offering steerability similar to the V-rig while retaining the stable door positioning entering the gallows from the parallel rig, due to the limited vertical movement.

The performance of the steerable trawl doors is largely determined by the chosen rigging. Similar to traditional trawl doors, it's important to ensure the operation is calibrated close to the natural "balance" point, where the trawl achieves the optimal opening and desired depth, as this delivers the best performance.

For example, if you aim to maintain a depth of 15 meters, the flaps can easily keep the trawl at that depth. However, if the flaps are set to their maximum position all the time to achieve this, the control of the trawl becomes less precise, and unnecessary drag is generated to maintain the desired depth.

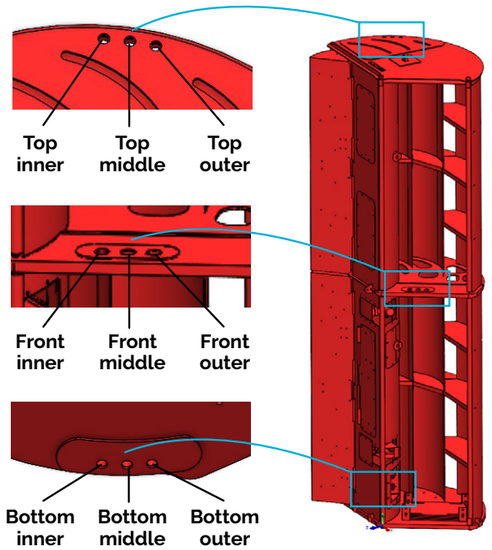
By properly rigging the doors for the specific fishing conditions, you can significantly improve the control and efficiency of the trawl.

Tips for improving the trawl

1.
Changing the rigging points

The MLD doors have 9 rigging points, as shown in the picture, distributed as follows:

- ✔ 3 Front rigging points
- ✔ 3 Top rear rigging points
- ✔ 3 Lower rear rigging points

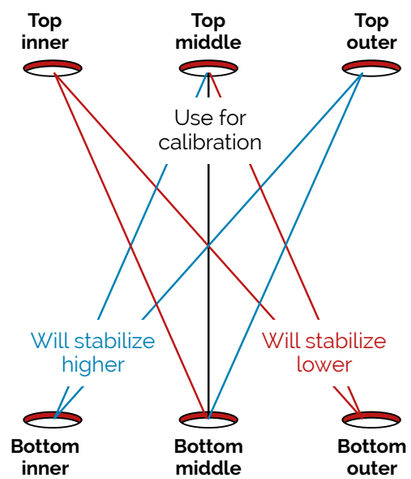


Change the rear rigging to drive the doors closer to the surface or deeper in the water

MLD recommends starting with a neutral rigging using the two middle rigging points at the top and bottom before calibrating and optimizing the setup.

For example, if you want to fish at 15 meters and notice excessive lower flap movement to maintain this depth, you can improve performance by adjusting the rigging points as shown by the blue lines in the image.

Similarly, if you're fishing at 100 meters and observe excessive upper flap movement to maintain depth, the rigging performance can be optimized by adjusting the rigging points as indicated by the red lines in the image.



2.
Adjusting the backstrops

MLD recommend starting with a neutral backstrop length of approximately 3 to 4 times the height of the trawl door.

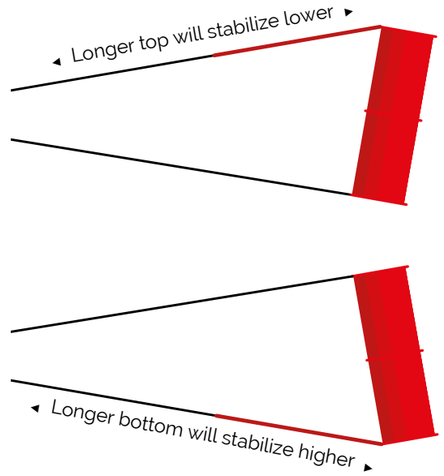
For example, if you want to fish at 15 meters and notice excessive lower flap movement to maintain this depth, you can improve performance by adjusting the length of the upper backstrop, as shown in the picture.

Similarly, if you're fishing at 100 meters and observe excessive upper flap movement to maintain the depth, performance can be optimized by adjusting the lower backstrop, as indicated in the image.

The same applies to an M-rig, where both upper backstrops are adjusted longer to stabilize the door closer to the surface, while the lower backstrops are lengthened to stabilize it deeper.

Parallel rigging can also be fine-tuned by extending the upper and lower backstrops.

Another way to adjust the position of the trawl is by adjusting the wights, just as is done with traditional doors.



3.
Adjust the front rigging to modify the spreading power of the doors

MLD recommends starting with a neutral rigging using the middle rigging points at the front, as well as the middle rigging points at both the rear top and rear bottom – refer to the picture showing all 9 rigging points. In the adjacent table, using a 10 m² door as an example, you can see the effects of adjusting the rigging points.

The difference between the minimum and maximum lift is approximately 20%, meaning a 10 m² door can be adjusted to spread between 9 m² and 11 m².

MLD doors can adjust the lift capacity by changing the rigging.

	Rear inner	Rear middle	Rear outer
Front inner	Design lift 10	Maximum lift 11	Reduced lift 9,5
Front middle	Reduced lift 9,5	Design lift 10	Maximum lift 11
Front outer	Minimum lift 9	Reduced lift 9,5	Design lift 10

Note: Top and bottom rear points are always used in the same point in the table above.