Choosing the right Sidepower thruster for your boat.

Every boat operator can benefit by having a thruster installed on their boat. The key to getting the full benefits of the thruster is to select the correct one to ensure that it will do the job you want it to. This is one of two main factors to consider when deciding on a thruster for your boat.

Today most pleasure craft over 45' have a bow thruster as standard equipment. The thruster will usually meet the expectations of most customers when using the boat under normal weather conditions. The sizes used by boatbuilders will vary depending on the boat's intended usage and price level. In today's production boats of around 45'-50', the typical thruster will push the boat's bow against a direct sidewind of 20-22 knots.

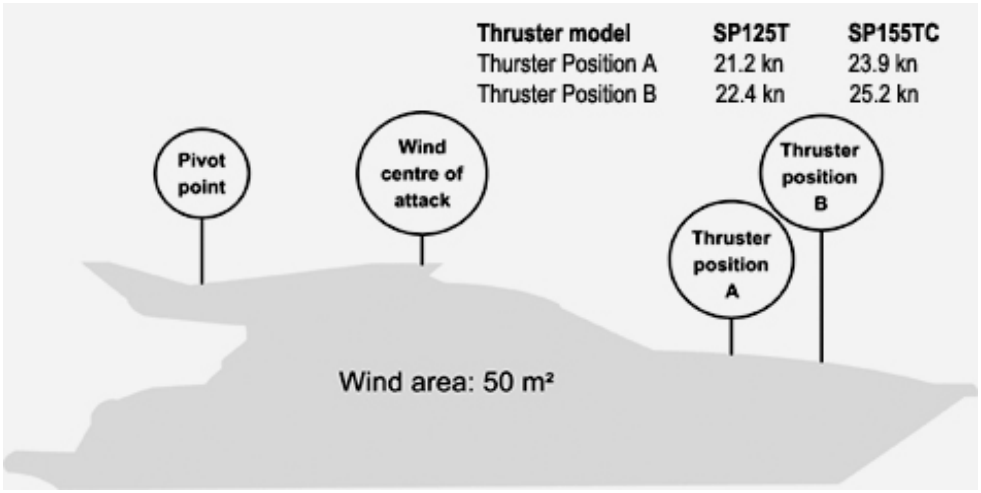
Some custom built or very high end boats may have a high power bow thruster that pushes the bow against a direct sidewind of 24-26 knots. For boatowners who use their boats in more demanding conditions or have a strong current in their local marina, or requiring high performance, boatbuilders can offer upgrades to a more powerful thruster system. However, few pleasure craft need a thruster that can push the bow against a direct sidewind of more than 25-27 knots.

The thruster's performance on a boat is basically determined by the boat's wind area, the wind area distribution and the thruster's tunnel position in the hull. By knowing these factors we can calculate the wind pressure on the boat and the center point of this wind pressure. From these calculations we can determine what thrust is needed to counter the wind pressure with the given thruster position. The boat weight is normally not a major factor for most pleasure craft.

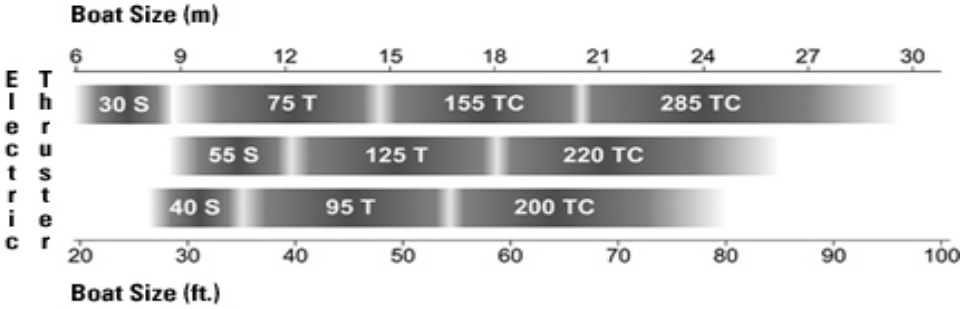
Conclusion
The two main factors that decide correct thruster sizing are:

- boatowner performance requirements
- boat size, type and shape

The example below shows the different wind speeds that two different thruster installations can encounter and the increased leverage gained when the thruster is positioned further forward.



The chart below gives general guidelines to help in selecting a thruster for your boat. We do offer a more involved thruster calculation process for determining the correct model for your boat. If you would like to contact us to request further details, please feel free to do so by calling us at (508) 995-7000 or by e-mail at info@imtra.com.


Boat Size (m)
6
9
12
15
18
21
24
27
30
Electric Thruster
30 S
75 T
155 TC
285 TC
55 S
125 T
220 TC
40 S
95 T
200 TC
20
30
40
50
60
70
80
90
100
Boat Size (ft.)