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To cross a river or a water body, boat is the first thing that comes to our mind. Earlier, people used to row the boat manually. Nowadays a boat can be automatically moved forward by using a boat propeller. A propeller is a kind of fan which can pass on power in the form of thrust by converting rotational motion into thrust. A pressure differential caused between the front and rear surfaces of the blade which is airfoil shaped and water is accelerated behind the blade.

The functioning of boat propellers is based on Newtonâ€™s third law of motion. Newtonâ€™s third law of motion states every action has an equal and opposite reaction. When the boat propellers rotates, the action of the blades of the propeller pushes the water backward which results in the opposite reaction of the boat moving forward. A vacuum is formed in the front of propeller blade when the boat propeller pushes water backwards. This vacuum helps the boat move forward by pulling on the propeller blade. The speed of the boat increases when the intensity of vacuum increases with the propeller spinning faster which results in pushing higher volume of water backwards.

Boat propellers have to be chosen based on the requirement and type of boat. Boat propellers are available in different sizes, material, number of blades and types.

Aluminum and stainless steel are the most common propellers used. For emergency situations, Composite and plastic propellers are often used. Diameter, pitch, rake of the propeller has to be checked as the performance is directly dependent on this. The cup is the curvature at the blade tip. An increase in pitch or rake can be done by varying the cup.

The boats are a very important mode of transport and choosing the right propeller can enhance the performance and help the boaters in the long run.

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For more information on a boat propeller, check out the info available online; these will help you learn to find the http://www.deltaprop.com/ !

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