Typical WorkBoat Rudder and Propeller Placement

A HydroComp Technical Report
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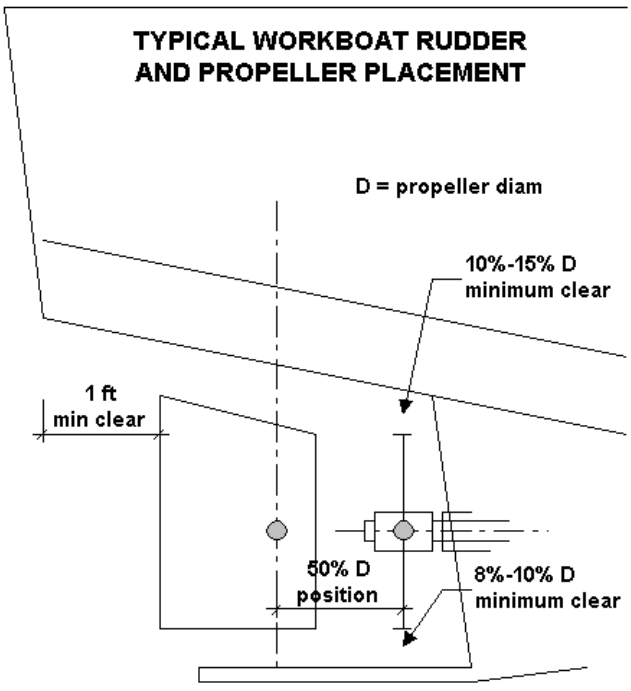
The following graphic displays the typical placement of rudders and propellers for commercial workboats. As the hydrodynamics of each vessel is different, we cannot necessarily consider these to be the "best" or "recommended" placements, but they are representative of existing vessels whose operation has been considered successful. These figures are suitable for both single and twin-screw vessels.



TIP CLEARANCE

The figures shown represent absolute minimum figures. Additional clearance - up to twice as much as the minimum figure - is better and recommended. Twin-screw vessels can typically get by with a bit less clearance than single-screw vessels.

RUDDER SIZE

The profile (i.e., projected) area of the rudder is often sized at 3.5% of LWL * DRAFT.

ADDITIONAL COMMENTS

Remember to plan for the removal of the propeller and shafting. The space from the end of the shaft to the rudder must allow enough clearance for the hub of the propeller as it is removed or put in place. Also, it is common to offset the shaft to the side of the rudder, so that the shaft may be withdrawn without having to remove the rudder.

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