

Anti sing edge instructions

Looking at the picture of the propeller blade, the pressure face is the side facing you when you are standing at the back of the boat looking at the propeller. This is the side that will also be cupped.

Anti sing edge will be beveled on the opposite side of the cup (if there is a cup). When you are looking at the pressure face the anti sing edge is on the opposite side were you cannot see.

See arrows pointing to area to apply the anti sing edge A & B.

Grind anti sing edge from blade root to around the tip, about a 20 to 30 degree angle is good.

Get in a good position to be able to smoothly grind from blade root to around tip in one stroke. Several passes with the grinder will most likely be needed.

Practice a little without the grinder running to make sure there is not interference with your movement.

Use a 4.5" grinder with a 100 grit sanding disc. Do not grind on cupped side of prop, on the opposite side of cup. Cupped props can be a little tricky to put anti sing edges on but it is achievable if careful.

See attached information and photos to assist.

Exam

- a. True
- b. False

Cupping

Propeller blades with cup have a small bend in the trailing edge of the blades. The amount and the location of the bend are the two main variables in cup geometry. The bend is always toward the aft of the boat, or toward the pressure face of the blades. The location of the cup can vary along the radius of the blade, but is commonly present on the outer radii. The cup can extend to and even past the blade tips. Figure 2.3B shows a typical cup location, from the 0.5 radius to the tip.

There exists no industry-wide standard on cup measurement and application. The amount of cup in a propeller blade is described using differing terminology. The adjectives light, medium, and heavy are commonly used but difficult to quantify. One method used to define cup assigns a number to represent offset of the trailing edge from the face of the blade. For example, a common value of 0.015 inches of offset per cup number would result in a "number 4" cup being an offset of $4 \times 0.015 = 0.060$ inches. An additional method for specifying cup would be to specify a cup length along with a radius of curvature for the cupped blade to follow. Figure 2.3B shows these two methods.

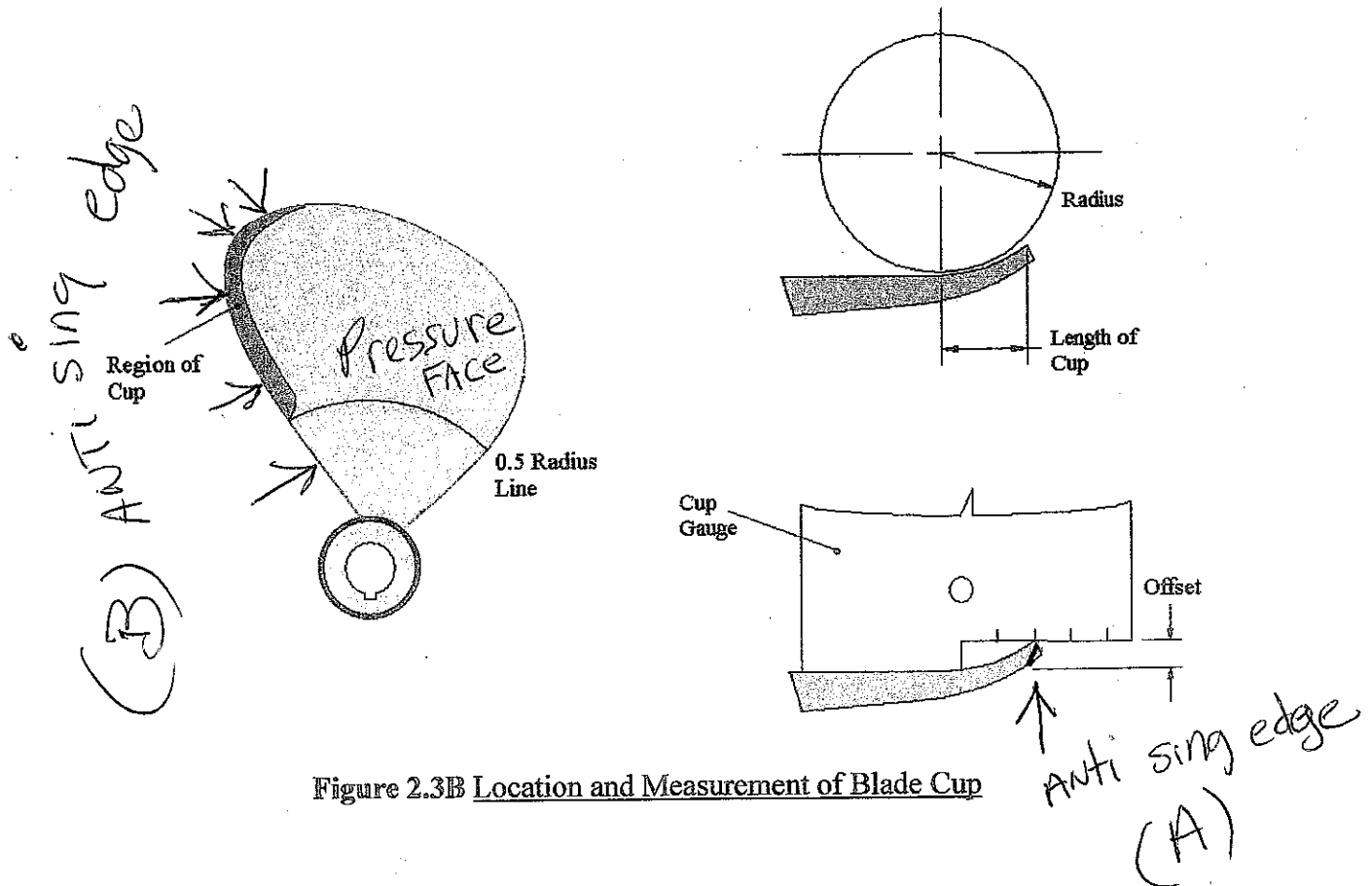


Figure 2.3B Location and Measurement of Blade Cup