ANALIZING OF CAVITATION BASED ON CHANGING OF PITCH AND NUMBER OF BLADE ON CPP

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Abstract
In the field of engineering changes, cavitations is defined as the process of the forming of a liquid’s vapour phase when the pressure of that liquid descend in the constant ambient temperature. Generally, the liquid can be said as having cavitations process when the bubbles rise in it. Those bubbles rise because of the descending of liquid pressure, which descends above the vapour pressure. To start the rising of cavitations in the pressure level in around the vapour pressure, it needs some small bubbles, namely nuclei. These nuclei are often in microscopic size and contain of permanent gas or liquid vapour involved. Cavitations is a disadvantageous phenomenon to the ship operational activities because it results much detriments. Those disadvantageous impacts are the descending of propeller efficiency and the damaging of propeller materials, so that the ship will go with a slower speed and the vibration and uproar will occur. Therefore it is necessary for an analysis of cavitation on the propeller by using ANSYS CFD software

Key Words: cavitations, propeller, ambient temperature, efficiency, ANSYS CFD
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