BEST: International Journal of Management, Information Technology and Engineering (BEST: IJMITE) ISSN 2348-0513 Vol. 2, Issue 3, Mar 2014, 1-10

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DRAG COMPARISON ON CUT OFF AND ROUNDED WING TIPS

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ABSTRACT

The Induced drag is a form of a pressure drag which is caused because of the increment of lift which increases when angle of attack increases. Induced drag is also called Drag due to Lift or Lift induced drag or Vortex drag. Induced drag can be minimized by attaching a wing tip cap at tips. There are many wing tip caps. Cut off, rounded, hoerner, end plate, drooped, upswept are few of them. The major aim of this project is to show that the induced drag produced by the cut-off wing tip is lesser when compared to that by the rounded tip. Flow analysis results for cut off and rounded tips are discussed. A comparison between these two is made and finally concluded by suggesting which one is better.

KEYWORDS: Induced Drag, Wing Tip Cap, Cut Off Tip, Rounded Tip, Flow Analysis

