CFD SIMULATION DRAG FORCE ON GOLF BALL

MOHD RAJALI BIN JALAL

(2003472772)

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Faculty of Mechanical Engineering

Universiti Teknologi MARA (UiTM)

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ABSTRACT

The speed of golf balls can be regarded as the fastest in all ball games. The flying distance of a golf ball is influenced not only by its material, but also by the aerodynamics of the dimple on its surface. By using Computational Fluid Dynamics method, the flow field and aerodynamics characteristics of golf balls can be studied and evaluated before the golf balls are actually manufactured. This work uses FLUENT as its solver and numerical simulations were carried out to estimate the aerodynamics parameters for various kinds of golf balls having different dimple configurations. With the aerodynamics parameters so obtained the flying distance and trajectory for a golf ball can be determined and visualized.

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