

# Optimization design for iron golf club heads

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## Abstract

Abstract. The aim of the present study is to establish the CAD/CAE optimization design for iron golf head. The construction of a complex iron golf head requires consideration of more than one hundred characteristic parameters, all of which will affect its performance. In addition, the construction requirements are further compounded by the need for iron golf head to comply with certain design specifications. It is therefore necessary to establish the optimization design for greatest efficiency. Consequently, it is urgently necessary to be able to effectively integrate the information between CAD and CAE packages. In this study, the automatic molding system developed for the CAD/CAE optimization design of iron golf head first changes the parameters in order to rapidly construct the model. The model is then loaded into HyperWorks, an optimum analysis software package, and the ABAQUS nonlinear analysis software package is then used as a solver to generate the optimum parameters, which are then written into a corresponding file. Finally, the optimum parameters are read by the CAD automatic molding system, which subsequently re-constructs the model to complete the optimum design of the iron club.

Keyword : Key Words: Iron golf club head, Optimization, CAD