DESIGNING OF MANUFACTURING PROCESS OF REFORMER INTEGRATED IN SYSTEM WITH HTPEM FUEL CELL STACK

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Abstract

In this paper is shown designing of manufacturing process of reformer in polymeric electrolyte membrane (PEM) fuel cell. The process is based on reformer modelling, analyzing of reforming initial geometry and change of geometry. In addition to the numerical calculation, change of geometry is based on tool path simulation analysis in order to obtain more efficient reformer production. Before machining, tool path simulation was performed and generated by PTC Creo/Parametric software. The recommendations for geometry changing are given in order to decrease of machining costs, and are made so that did not affect the initial reformer performances. The reformer machining is carried out on a CNC milling machine and Wire EDM machine.

Keywords

Reformer, design, CNC milling

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