

Characterization of Geometrical Defects in Routing of CFRP Composites using Artificial Intelligence

Carbon Fiber Reinforcement Polymer (CFRP) is a composite material which has significant usage in aerospace and automotive industries. In this paper, we aim to present the fault characterization in routing of CFRP using Artificial Neural Network (ANN). The collected data of CFRP machining process is used to characterize between the geometrical faulty and healthy classes. The artificial intelligence is used to determine the quality of a machined part at specific range of machining conditions. The results show the effectiveness of artificial neural network (ANN) in characterization the faulty classes based on experimental data.