Development of Fixture for Rotor Assembly and Reduce the Assembly Time

M Tech Dissertation

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ABSTRACT

The washing machine has a drain pump to remove the dirty water. The drain pump is made by the Hostacom G3 N01 (30% glass coupled polypropylene homopolymer) material. Now, as per the industry reports, the customer has raised the complaint regarding of failure drain pump. The pump had failed due to friction produced between the rotor and bearing support. To solve the customer's complaint, fixture has designed. The proposed system consists of metal touch pins which is used for checking the metallic washer, which is placed on the rotor shaft. Applying proposed designed fixture in assembly line, assembly time is reduced and the metallic washer is also checked on the rotor shaft. The average rotor assembly time is reduced and the productivity is also increased and the process is faster with the new design.