

## **A Study on Analysis of Magnetic Field in Induction Generator for Small Francis Turbine Generator**

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**Abstract :** The purpose of this study is to verify validity of design by testing output of induction generator through finite element analysis before manufacture of induction generator designed. Characteristics in the operating domain of induction generator can be understood through analysis of magnetic field according to load (rotational speed) of induction generator. Characteristics of induction generator such as induced voltage, current, torque, magnetic flux density (magnetic flux saturation), and loss can be predicted by analysis of magnetic field.

**Keywords :** electromagnetic analysis, induction generator, small hydro power generator, small francis turbine generator

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