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## **Abstract Details**

**Title:** Selection of a Machine by Studying Their Features Among Various Types

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**Abstract:** Life is so fast that a lot of changes are coming in daily routine. Every person wants that his profit should maximum and his cost should be minimum. In the fast growing economy new inventions are coming. In mechanical sector there are lots of machines in the market. If we are able to find that machine which is more suitable then we can get more benefit. In this paper, we use the Sanchez's approach to identify the type of suitable machine. This method is based on the relation between the features (can also say factors) and types of machines by intuitionistic fuzzy sets. For this purpose, we develop a hypothetical case study with assigned degree of membership, degree of non membership and hesitation index containing some information about machines and their features.

**Keywords:** Fuzzy Sets, Intuitionistic Fuzzy Sets (IFS), Fuzzy Relations, Machine Information, Hypothetical Case Study.