

A Systematic Review on Experimental, FEM Analysis and Simulation of Metal Spinning Process

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Abstract : This review presents a through survey of research paper work on the experimental analysis, FEM Analysis & simulation of the metal spinning process. In this literature survey all the papers being taken from Elsevier publication and most of the from journal of material processing technology. In a last two decade or so, metal spinning process gradually used as chip less formation for the production of engineering component in a small to medium batch quantities. The review aims to provide include into the experimentation, FEM analysis of various components, simulation of metal spinning process and act as guide for research working on metal spinning processes. The review of existing work has several gaps in current knowledge of metal spinning processes. The evaluation of experiment is thickness strain, the spinning force, the twisting angle, the surface roughness of the conventional & shear metal spinning process; the evaluation of FEM of metal spinning to path definition with sufficient fine mesh to capture behavior of work piece; The evaluation of feed rate of roller, direction of roller, & type of roller stimulated. The metal spinning process has the more flexible to produce a wider range of product shape & to form more challenge material.

Keywords : metal spinning, FEM analysis, simulation of metal spinning, mechanical engineering

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