

## عنوان مقاله:

Modeling and Analysis of Reverse Drawing Process of Steel Sheet and Comparison with Simple Drawing Process

## محل انتشار:

پنجمین کنفرانس شکل دهی فلزات و مواد ایران (سال: 1390)

تعداد صفحات اصل مقاله: 6

## نویسندگان:

M. Maarefdoust - *Islamic Azad University, Gonabad Branch, Iran*

M. Kadkhodayan - *Ferdowsi University, Mashhad, Iran*

M. Goharimanesh - *Iran University of Science and Technology, Tehran, Iran*

## خلاصه مقاله:

In this paper, using finite element analysis, an analytical comparison process of deep drawing steel sheet in two ways, ordinarily and reversely is considered. The results show that, under plane strain, steel sheet is caused suffering throat in the ordinary method, when achieves stretching deformation factor  $m=0.162$  (Ratio of final 13mm Initial width 80mm), after suffering the effects of tensile deformation mechanism of activation failure. Whereas the same conditions of the process to reverse the stretching method, a whole sheet steel deformation without failure gives the amount of force needed to punch, per the same amounts of deformation of Reverse process of stretching is less than ordinary process. Changes in the stress of plate and displacement curve sheet for two stretching modes and simple inverse elasticity are compared.

## کلمات کلیدی:

Simulation, Reverse drawing, Stretching, Finite Element Method

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/203181>

