

## **A Study on Improvement of Straightness of Preform Pulling Process of Hollow Pipe by Finite Element Analysis Method**

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**Abstract :** In this study, we have studied the design of intermediate die in multipass drawing. Research has been continuously studied because of the advantage of better dimensional accuracy, smooth surface and improved mechanical properties in the case of drawing. Among them, multipass drawing, which is a method to realize complicated shape by drawing, was discussed in this study. The most important factor in the multipass drawing is the dimensional accuracy and simplify the process. To accomplish this, a multistage shape drawing was performed using various intermediate die shape designs, and finite element analysis was performed.

**Keywords :** FEM (Finite Element Method), multipass drawing, intermediate die, hollow pipe

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