

## Simulation of Spinneret Micro-hole Spade Drill Drilling Based on DEFORM-3D

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**An emulation study of the drilling by the spade drill on the spinneret micro-hole is conducted by using FEM analysis software Deform-3D. According to application of finite element software Deform-3D, some characteristic parameter of the work piece and the cutting tool material are set. The distributed situation of cutting force, cutting temperature and tool wear in different cutting parameters are simulated analysis. By discussing the location of the spade drill drilling wear, further optimization of parameters cutting and tool for the spinneret micro-hole drilling provide the better basis.**

**Keywords:** Deform-3D, Spade Drill, Spinneret Micro-hole, Cutting force, cutting temperature, Tool wear

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