

## Sprinkback Research of V-type Sheet Metal forming based on the Adjustable Drawbead and Variable Blank-holder Force Cooperative Control Technology

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Springback of v-type sheet metal must be controlled during the high precision forming process. While, variable blank-holder force technology is an effective measure to control sheet metal springback, but it only overall control the stampings. The project was put forward through the v-type sheet's variable blank-holder force and adjustable drawbead to control springback, which is place electric adjustable step drawbead around the blank- holder. Changing the blank-holder force, meanwhile, adjusting the height of the drawbead according to the needs of the stamping real time, so as to control the quality of sheet forming. To get the optimal combination of variable blank-holder force and adjustable drawbead, this rearch for the technology to control the springback, which has carried on the theoretical analysis and numerical simulation, then providing test for it.

**Keywords:** v-type sheet metal forming, variable blank-holder force, adjustable drawbead, springback, numerical simulation

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