

SPRINGBACK REDUCTION BY USING IN THE FORMING PROCESS DESIGN THE NEURAL NETWORKS OR FUZZY LOGIC METHODS

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Abstract: The present paper analyses the conditions and steps needed in the application of the Neural Networks and Fuzzy Logic methods in the case of the drawing processes of metal sheets. The optimization system based on the above mentioned methods, has as main purpose the optimization of the drawing tools geometry and process parameters by reducing or eliminating the springback effects. The system can bring the following benefits: elimination of the next corrections of tools geometry or process parameters; reduction of the number of needed experiments; reduction of the manufacturing time; reduction of the material consumption etc.

Key words: Springback, Neural Networks, Fuzzy Logic.