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EXPERIMENTAL CHARACTERIZATION OF WARM DEEP DRAWING PROCESS FOR EDD STEEL

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Abstract

The experimental characterization has been carried on the warm deep drawing process of extra-deep drawing steel. The results of the experimentation conclude that the extent of thinning at punch corner radius is lower in the warm deep-cup drawing process of EDD steel at 200^oC. it was also found that the peak punch load is low in the warm deep drawing process. The peak load for drawing 73mm diameter blank at 200^oC is lower than drawing 67mm diameter blank at room temperature. The predicted values of thickness using finite element analysis (FEA) are closer to the experimental results.

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