

## Case-Based Reasoning Approach for Process Planning of Internal Thread Cold Extrusion

**Authors :** D. Zhang, H. Y. Du, G. W. Li, J. Zeng, D. W. Zuo, Y. P. You

**Abstract :** For the difficult issues of process selection, case-based reasoning technology is applied to computer aided process planning system for cold form tapping of internal threads on the basis of similarity in the process. A model is established based on the analysis of process planning. Case representation and similarity computing method are given. Confidence degree is used to evaluate the case. Rule-based reuse strategy is presented. The scheme is illustrated and verified by practical application. The case shows the design results with the proposed method are effective.

**Keywords :** case-based reasoning, internal thread, cold extrusion, process planning

**Conference Title :** ICME 2015 : International Conference on Mechanical Engineering

**Conference Location :** Montreal, Canada

**Conference Dates :** May 11-12, 2015