

A Hard Clustering Approach To The Part Family Formation Problem

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Summary

The part family problem in group technology can be stated as the problem of finding the best grouping of parts into families such that the parts within each family are as similar to each other as possible. In this paper, the part family formation problem is considered. The problem is cast into a hard clustering model, and the K-means algorithm is proposed for solving it. Preliminary computational experience on the algorithm is very encouraging and it shows that real-life problems of large sizes can efficiently be handled by this approach.

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