Machining Process & Information Modeling Based on MBD Procedure Machining Cell

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To describe the machining process and information of mechanical parts in petroleum engineering, the paper defines MBD machining process model from the perspective of process parts; analyzes evolutionary law of geometric features information in the course of part machining process and creates the concept of procedure machining cell; makes clear description about machining process based on procedure machining cell sequence to achieve the expression of machining process information; analyzes geometric features of procedure machining cell, proposes extended AAG based on AAG by combing with examples and links with attribute information table to complete the modeling of geometric and non-geometric features information about procedure machining cell. The research made in this paper provides a basic framework for integration of process information in 3D CAPP system.

Keywords: MBD, Machining process, Procedure machining cell, Information modeling

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