

Feature-Based Machining Using Macro

M. Razak, A. Jusoh, A. Zakaria

Abstract— This paper presents an on-going research work on the implementation of feature-based machining via macro programming. Repetitive machining features such as holes, slots, pockets etc can readily be encapsulated in macros. Each macro consists of methods on how to machine the shape as defined by the feature. The macro programming technique comprises of a main program and subprograms. The main program allows user to select several subprograms that contain features and define their important parameters. With macros, complex machining routines can be implemented easily and no post processor is required. A case study on machining of a part that comprised of planar face, hole and pocket features using the macro programming technique was carried out. It is envisaged that the macro programming technique can be extended to other feature-based machining fields such as the newly developed STEP-NC domain.

Keywords—Feature-based machining, CNC, Macro, STEP-NC.

Unikl MSI