

Name of product : i-FB NC Controller

Researcher details

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Faculty : FSTK

Cluster/Area of study : Engineering

Status of the product : Prototype

Product description :

In the beginning IEC 61499 Function Block (FB) Editor is believed can only be manipulated to work under the simplest industrial control measure such as pick-and-place exercise, top-and down drilling process, load-and-unload process, open-and-close activities at airport baggage conveyor services. FB Development Kits (FBDK) is the tool used for developing the function block editor, raw material user interface, machining set-up data interface, and machine tool database. The two examples in the ISO 14649-11 standard are used as the main test parts. The project provides a detailed account of STEP-NC data processing, Graphic User Interface (GUI) and local manufacturing databases, for example, raw material, set-up, machine tool, and cutting tool databases. Machining simulation is validated through physical machining. This is done through machining a number of parts with varying data. The simulation graphic user interface is simple and wire-frame based, but sufficiently illustrates the tool-path information as well as showing the machine tool's limits, and set-up orientations.

