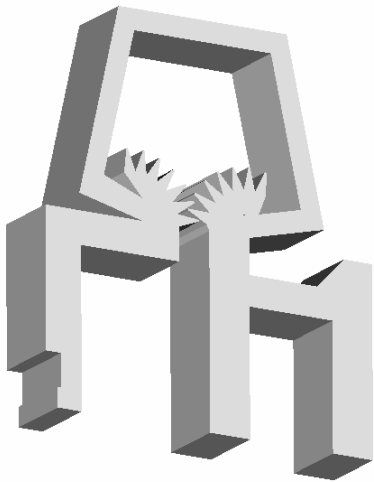
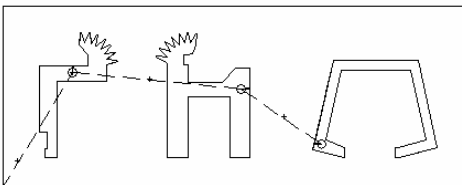
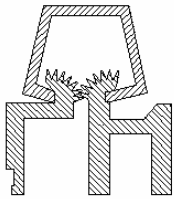


# NC Polaris



*A WireEDM machine requires precision data. This demand is easily accommodated by the integration of NC Polaris and AutoCAD® or Mechanical Desktop® (AMD). Quality parts begin with precise CAD data. The NC Polaris WireEDM Knowledge Base produces precision cutting cycles inside AutoCAD or AMD for any WireEDM application.*



## ACCURACY

A WireEDM is perhaps the most precise CNC machine tool in your shop. Achieving precision results from your WireEDM, in the form of finished parts, requires much more than just accurate coordinate data. In addition, the process requires cutting cycles with wire cutting "know how." The Knowledge Base of the NC Polaris WireEDM application has the "know how" built into a host of cutting cycles to satisfy the most demanding die part applications. You simply select the cycle that suits your application, and the system does the rest--automatically.

## FLEXIBILITY

Producing tool path and the resulting NC code for any part shape, regardless of complexity, is accomplished in seconds--effortlessly. This provides you with the opportunity to run test cuts on the CAD screen before committing your machine to the multiple pass cuts re-

quired for the finished die. NC Polaris automatically inserts a glue stop command after cutting 90 percent of the part, or you can select the glue stop position. The choice is yours.

When you have multiple parts to cut in a single die block, NC Polaris automatically outputs the necessary preset commands and automatically generates wire clip and wire thread commands, making the entire procedure error free.

Users can mix and match existing cycles to satisfy any cutting situation. The system can accommodate an unlimited number of variations. The flexibility of the NC Polaris WireEDM Knowledge Base will dramatically shorten programming time and improve your machine performance, while producing precise quality parts every time.

# Manufacturing Reality

## Application Knowledge

The 2 and 2-1/2-axis WireEDM application is fully supported in the NC Polaris Base System. X, Y or X, Y with angle controls are integrated inside the NC Polaris WireEDM application. The Knowledge Base for production of specialized results for any CNC WireEDM machine with NC Polaris is standard to the base system. Proven manufacturing methods of wire cutting are modeled inside the NC Polaris WireEDM application.

Wire cut cycles that range from simple once-around cycles to complex multiple-pass-draft-angle cycles are fully automated in the WireEDM application. Each cutting method has been designed to consider its special requirements. These application requirements are at the fingertips of the part programmer. By simply selecting the WireEDM application, all WireEDM application knowledge is presented to NC Polaris. Decision Modules are already defined for the application. Changes or additions to the Decision Modules (tasks) are easily accommodated.

## WireEDM Application

Industrial standards for cutting with a WireEDM are totally defined in the system. When implementing a cut cycle, the decisions for appropriate lead-in, wire compensation, direction of cut, glue stop position, and lead-out are automatically defined. Simply selecting "Cut" from the menu and selecting the shape (s) completes the generation of a cutting profile. NC Polaris automatically produces lead-in/out length to optimize performance of your WireEDM.

## Parametrics

Gone are the days of answering a multitude of prompts to operate a WireEDM programming system. The NC Polaris WireEDM Knowledge Base automatically scans the parametric entries in a cutting cycle and outputs cutting motions accordingly. These cutting parameters are contained in user-friendly dialogue boxes. Since these parameters rarely change from part to part for a given cutting cycle, the user is relieved of the tedious, error-prone job of answering repetitious prompts. NC Polaris parametrics include cut cycle control for:

- Wire compensation
- Cut side
- Cut direction
- Number of passes
- Type of lead-in/out
- Length of leads
- Cycle description (for reporting)

- Taper hand
- Taper amount
- Cutting conditions
- Overcut amount
- Cutback on overlap
- Gap for slug
- Feedrate
- Power setting
- Material thickness
- Dwells
- Cutting Cycles

A cutting cycle is controlled by the values placed in the parametric dialog box. Every cutting cycle supplied in the WireEDM Knowledge Base was developed to perform a specific series of activities by simply placing the appropriate response in the parametrics of a basic cycle. After the desired activities have been entered, the cycle is saved and given an appropriate name. This unique capability provides you with the opportunity to easily add additional custom cycles to the WireEDM Knowledge Base for your application. You no longer need to purchase additional capabilities. No other numerical control programming system offers such versatility and flexibility. Parametric control provides fully automatic cut cycle generation for a wide variety of user applications. Your NC Polaris system is delivered "ready to use".

## Flexibility

The WireEDM cycles, as delivered, will accommodate stamping dies; precision fit dies, extrusion dies, progressive dies, and more. Multiple die cutting in overnight operation is easily accommodated using NC Polaris. You can mix and match cycles to satisfy virtually any application. The open architecture of NC Polaris lets you control the system instead of the system controlling you!

The flexibility of the NC Polaris WireEDM Knowledge Base will dramatically shorten programming time, improve machine performance, and produce precise, quality parts every time.

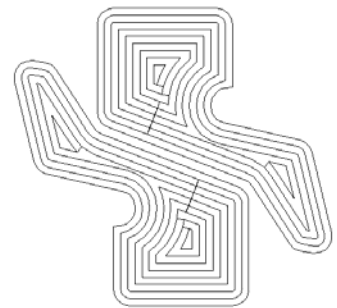
## More-More-More

The 2-Axis WireEDM application is a part of the NC Polaris Base Package. It contains features beyond those mentioned here. Contact your local NC Polaris dealer for a demonstration

## 2-Axis WireEDM



## Application



The NC Polaris WireEDM Application includes nocore cutting.

For More Information:



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