Wire-Cut CAM

A wire CAD/CAM that incorporates all of Mitsubishi's wire-cut EDM knowhow

Packed with specialized and optimized wire-cut EDM functions, this ultimate wire CAD/CAM makes full use of all the existing EDM knowhow.
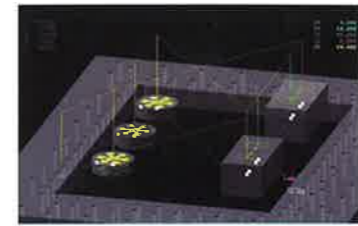
Easy NC data creation

Simply specify the machining operation's initial hole position and the approach position, then press the [Create NC Data] button to create the NC data. It's that easy. Anyone who can draw a shape can also machine it.

Machines multiple workpieces of differing heights

In addition to XY and UV axes, a Z-axis permits the easy creation of NC programs for machining multiple workpieces of differing heights. The system automatically generates NC codes for retracting the nozzle upward during movement between workpieces.

## Automatically recognize sections machineable with wire-cut EDM

The sections which can be machined with the wire-cut EDM can be automatically recognized and the NC data created just by selecting a 3D model. The created NC data can be confirmed with the NC check function to prevent machining mistakes.
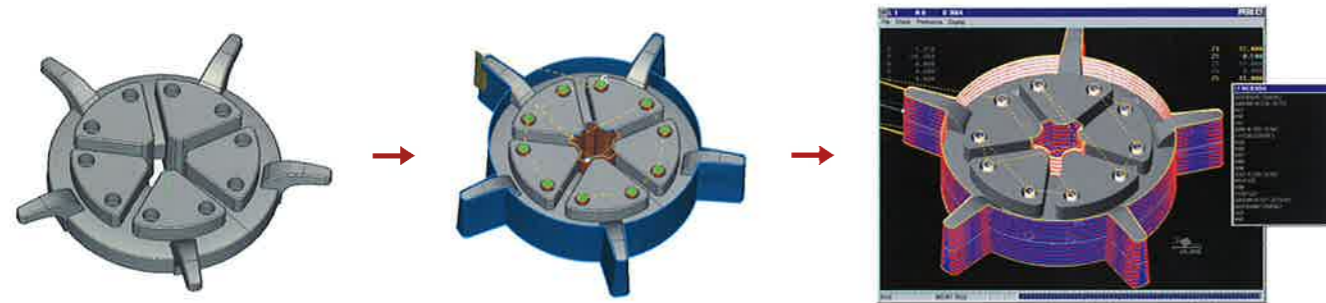
Electrode Design CAD

Detect sections requiring die-sinking electric discharge machining

Sections which cannot be machined are displayed on a 3D model based on the diameter, length and shape of multiple tools used for cutting. An electrode used with die-sinking electric discharge can be created for such section thus making sure that section requiring die-sinking electric discharge machining are not overlooked.
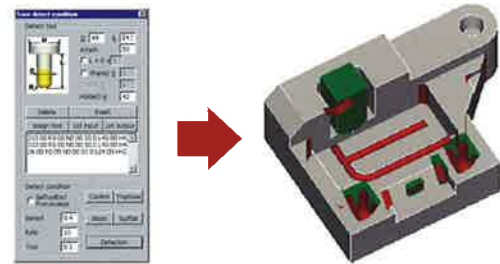
Orbit variation function

This system is compatible with the orbit patterns provided in the Mitsubishi Electric die-sinking EDM. Patterns including circle, square, sphere, radiation, one-axis horizontal or vertical, hexagon 1 and 2, barrel 1 and 2 can be handled. An optimum model which allows for orbiting can be created easily.
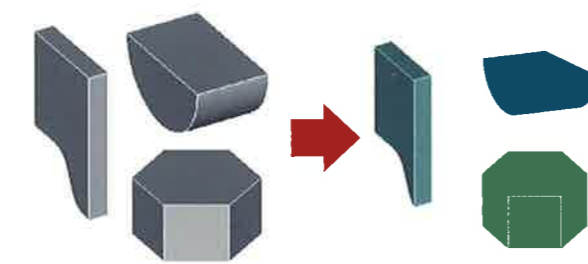
Die-sinking Electric Discharge CAM

Define machining with shift electrode

Machining using a shift electrode, which has several electric discharge points for one workpiece can be defined. Conditions can be defined just by selecting the shift electrode model with the mouse, thus eliminating mistakes when inputting the coordinates.
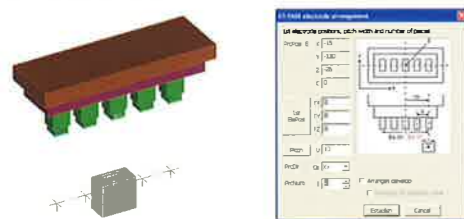
### Machining definition, workpiece movement and copy

Multiple machining definitions and workpiece definitions can be set easily. The shift machining definitions of electrodes arranged in a grid shape, or machining definitions for multiple workpieces can be designed easily. By confirming the model, design can be completed efficiency compared to the conventional manual input method.

High compatibility

Milling CAM

Electrode cutting CAM

A dedicated menu offers a selection of functions required for electrode cutting. After reading (loading) the electrode model, the desired shape pattern, etc., is selected in a dialog format. The NC data can then be generated simply by adjusting the tool radius while referring to the 3D view of the model and tool.

A machining path for a pin-angle finished edge contour can be generated.
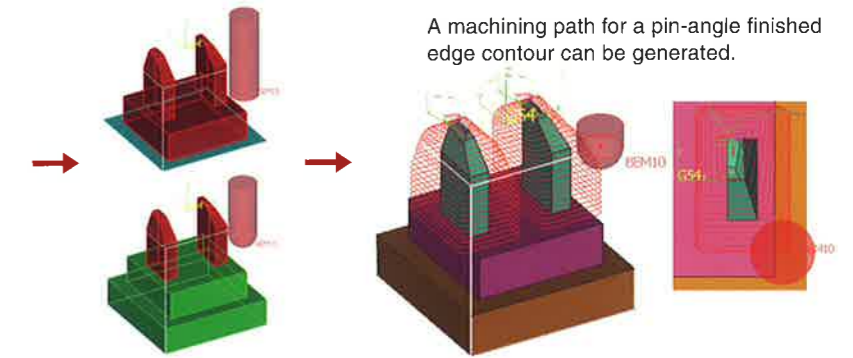
Ample machining paths

Ample machining path types are available for rough to finish machining of 3D shapes. Paths include uniform height line and scanning line machining, corner machining, pencil machining and machining of only horizontal or vertical plane.

Automatic hole recognition

The holes can be automatically recognized and extracted from 3D models, and then machined. In addition, multiple types can be grouped. By selecting a preregistered machining method, the NC data can be generated automatically.
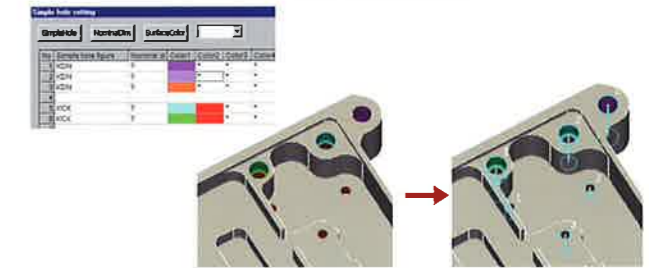
High Precision Simulation

High-precision cutting simulation and display

The product model can be compared with the shape after cutting and displayed. When the random coordinates are picked with the mouse, the XYZ coordinates for that point can be displayed. Sections requiring strict checks can be confirmed with values. By comparing the shape with the product model, the uncut amount can be shown with color-coding. This function allows operators to check whether machining has been completed within a set tolerance range.
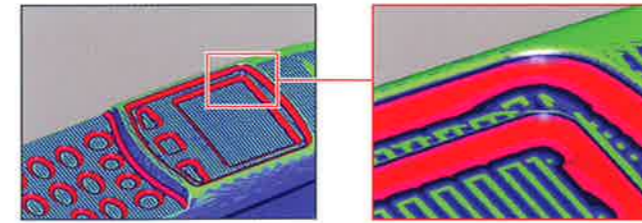
Special tool simulation

By drawing the contour of a special tool with the 2D CAD and registering that tool, high-accuracy cutting can be simulated using the special tool.
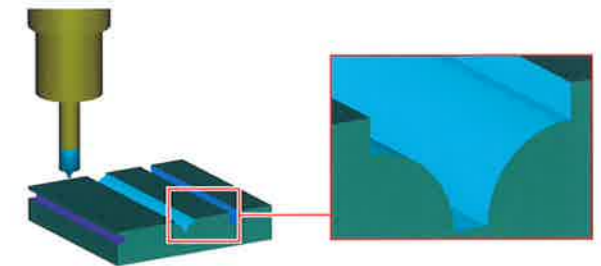
Note) The special tool cutting data creation function is not available.

CAD Data Conversion

Various CAD data usable

Data is completely compatible with the host CAD and CAE systems. This system is compatible with a variety of CAD data conversion formats. In addition, five types of direct converters are available for data input from other CAD brands. IGES, STEP, Parasolid and ACIS intermediate file formats can be input and output, and STL data used for rapid prototyping and CAE can be output.

○ : Standard
━▶ : Input converter only
◀━▶ : Input/output converter
◀━ : Output converter only