

Mint®NC – CAD to Motion

- › HPGL, DXF and G-Code to motion
- › No graphic or CNC programming language to learn
- › Offline mode for planning and object ordering
- › Graphical interface allowing re-ordering of geometry
- › Machine control panel for direct machine control
- › Interfaces to NextMove multi-axis motion controllers



The Mint®NC front end is a comprehensive front end allowing full control of any job both on and offline. Geometry from different sources can be imported into MintNC and optimized to suit the operation. Geometry can be re-ordered to optimize job speed, or to maximize material use and minimize waste. With its multiple document interface, geometry can be integrated from various CAD/CAM sources.

Geometry is shown in both a 2D graphical format and as a list format, detailing all the vectors that make up the geometry. This geometry can be easily manipulated in both views, including re-ordering, copying, deleting etc.

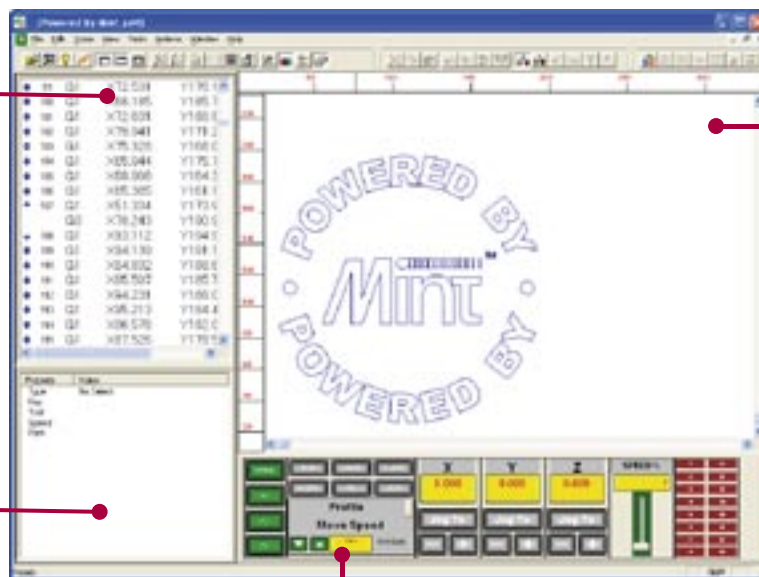
MintNC allows components larger than the machine frame to be cut with support for overlapping frames in both longitudinal and lateral directions.

Using the Machine Control Panel, full machine control is possible, allowing axes to be homed and jogged to new positions. Alternatively, MintNC can be used to translate different CAD and CNC formats to Mint code which can be executed directly on the motion controller.

Machine configurations are easily dealt with using a Mint application resident on the NextMove controller. This acts as a scripting language for complete machine configuration. Whether a start-up sequence or new tool sequence is required, Mint provides complete control over I/O and motion.

Applications:

- › Tangential Knife
- › Cutting
- › Grinding
- › Glue Laying
- › Welding
- › Engraving
- › Inspection
- › Water Jet



Object List displays the shape segments in a list format. These can be shown in native format or G-code. Selected items also appear on the graphical representation to enable optimum selection of an object. Objects can be re-ordered or grouped.

The Object Property window presents detailed information about the object including tool assignment and coordinates. Coordinates and control data can be easily managed from this window.

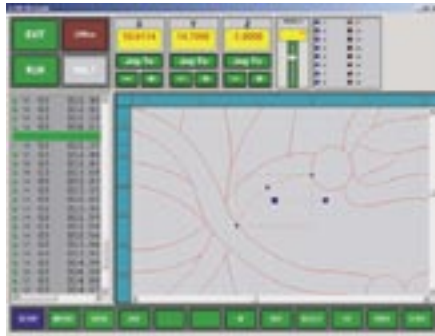
Graphical presentation of the job is shown in multiple document windows. Objects can be manipulated on-screen, including re-sizing, moving, flipping, rotating and tool assignment. Objects can be cloned and nested for optimum use of material.

The multiple document interface allows objects to be exchanged between different drawings.

Machine Control panel allowing online for control of machine or offline for job planning.

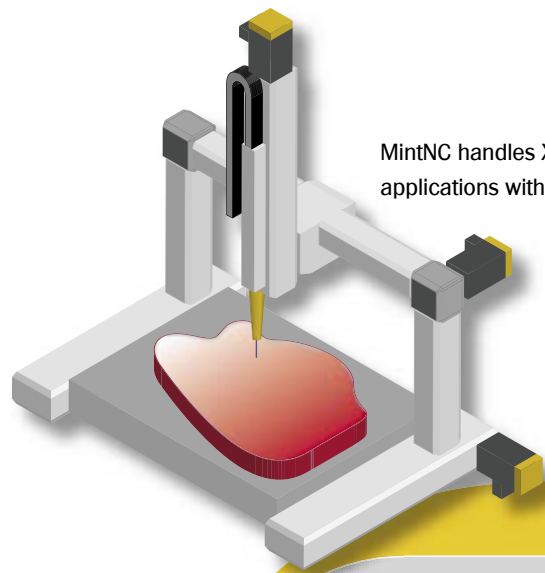
Customization through ActiveX

Where a simpler operator interface is required, a developer library is available using ActiveX technology. This allows custom front ends to be quickly and easily realized in applications such as Visual Basic and Visual C++.



MintNC interfaces directly to the NextMove controller through either the USB or PCI interface.

A demonstration version of MintNC is available for download from the Baldor motion website www.baldormotion.com.



MintNC handles XYZ applications with ease

> Ordering Information

Catalog Number	Description
MNC001-501	MintNC Single Machine License

HPGL – Low Cost, Industry Standard Interpolation

HPGL (Hewlett Packard Graphics Language) is an open standard that describes 2D vectored drawing and is typically used in plotters. With many CAD and drawing applications offering HPGL output, Baldor's HPGL interpreter is ideally suited for low cost XY and 2.5D applications such as pen plotters, routers, engravers and knife cutters.

Standard Commands

The HPGL interpreter is able to take standard commands sent over the serial interface and interpret these in real time. Commands in HPGL allow straight lines, circles and rectangles to be executed.

Fast Profiling

Full use is made of Mint's move buffer to provide fast and accurate profiling. Features such as inter-vector angle allow Mint to make decisions about when to slow down or stop for corners. Feedrate control allows the machine speed to be controlled by the operator using, for example, an analog pot



Mint – Power and Flexibility

Baldor's HPGL interpreter is written in Mint, demonstrating not only the power and flexibility of the programming language, but also providing a fully customization solution. The HPGL interpreter is available as Mint source and can be tailored to suit applications such as:

- › Routers with different Z depth
- › Pen plotters
- › Knife cutting with tangential knife control
- › Glue laying
- › Engraving

HPGL is supported on all NextMove controllers. The HPGL data is sent to Mint's serial buffer. This is supported on RS232/485, USB and PCI buses.

HPGL is available to download from the Baldor motion website www.baldormotion.com.