CNC Control Systems made easy
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**Introduction to Industry Controls, Inc. CNC control system.**

The Position Page

This page displays Machine Position, Absolute Coordinate Position, Encoder reading and distance to go. The left side of the screen has the ability to select and display only one of the positions at a time.

Axis are referenced or "homed" on the right hand side of the screen. It can be done automatically or individually as needed by the operator.

The Program Page
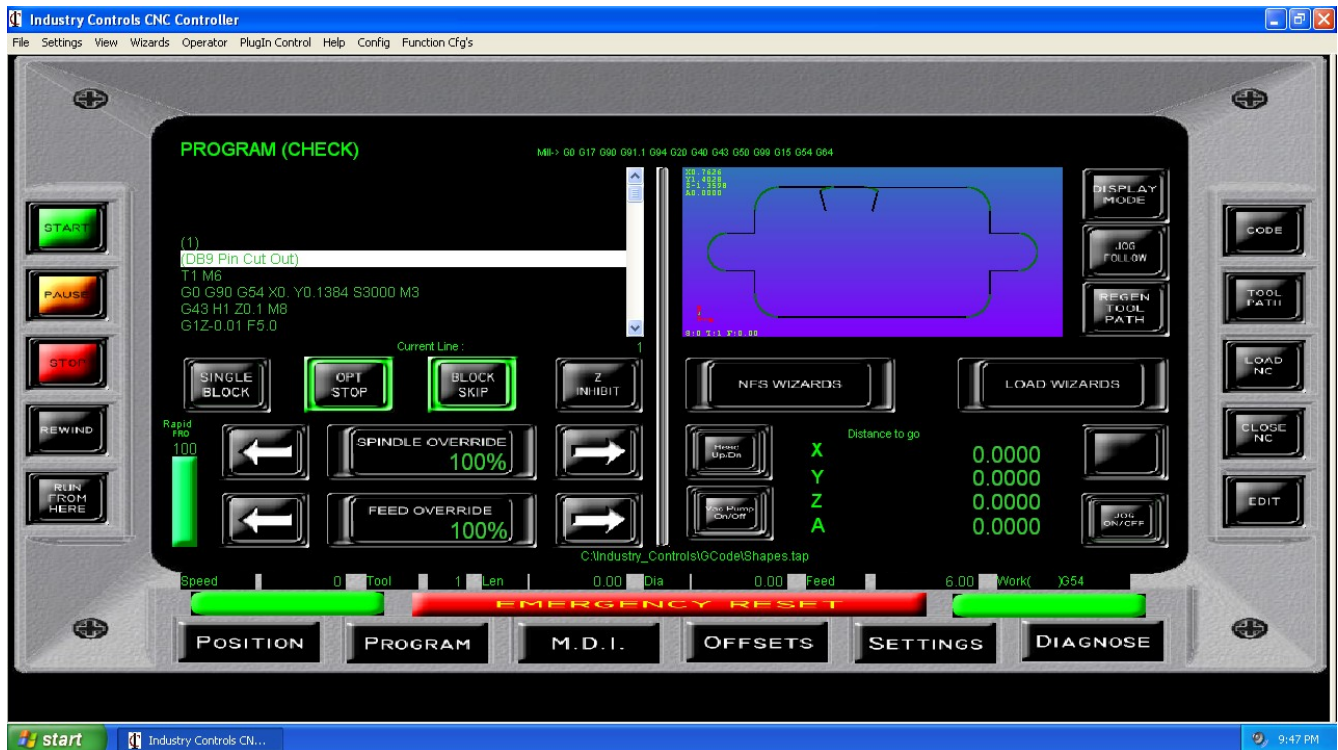
This page is where programs are loaded in to memory and the actual program is executed from. Functions on this screen are Edit, Tool path Graphics, Single block, Optional stop, Z axis inhibit, Spindle and Feed rate overrides, Cycle start, Feed hold and Reset. Conversational functions are available from here as well along with the "distance to go" position.

The MDI Page
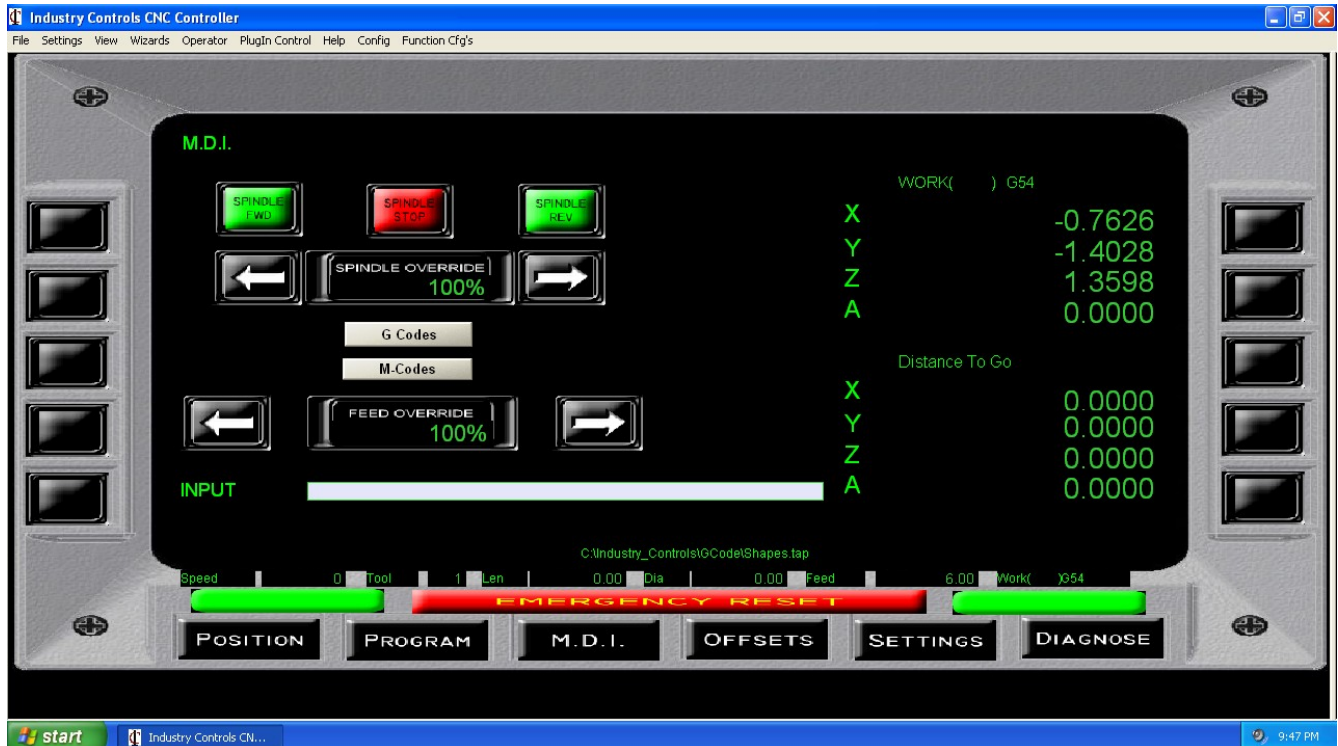
The MDI page (Manual Data Input) is used for a single movement or to execute a series of codes for testing or what ever short program you may want to do.

This page has buttons that will supply you with a list of G and M codes by simply clicking on them. The spindle can be manually operated from this page and over ridden. Absolute and distance to go positions are displayed here.
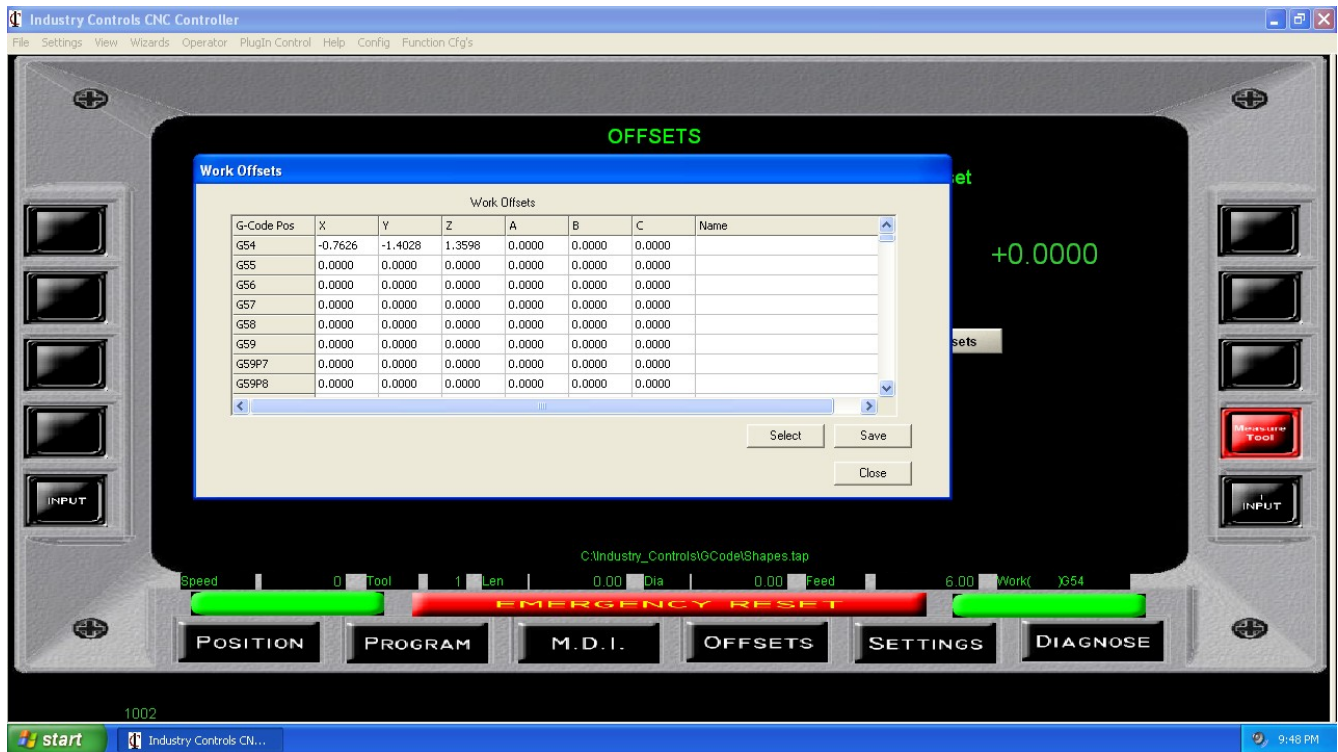
Offset Page
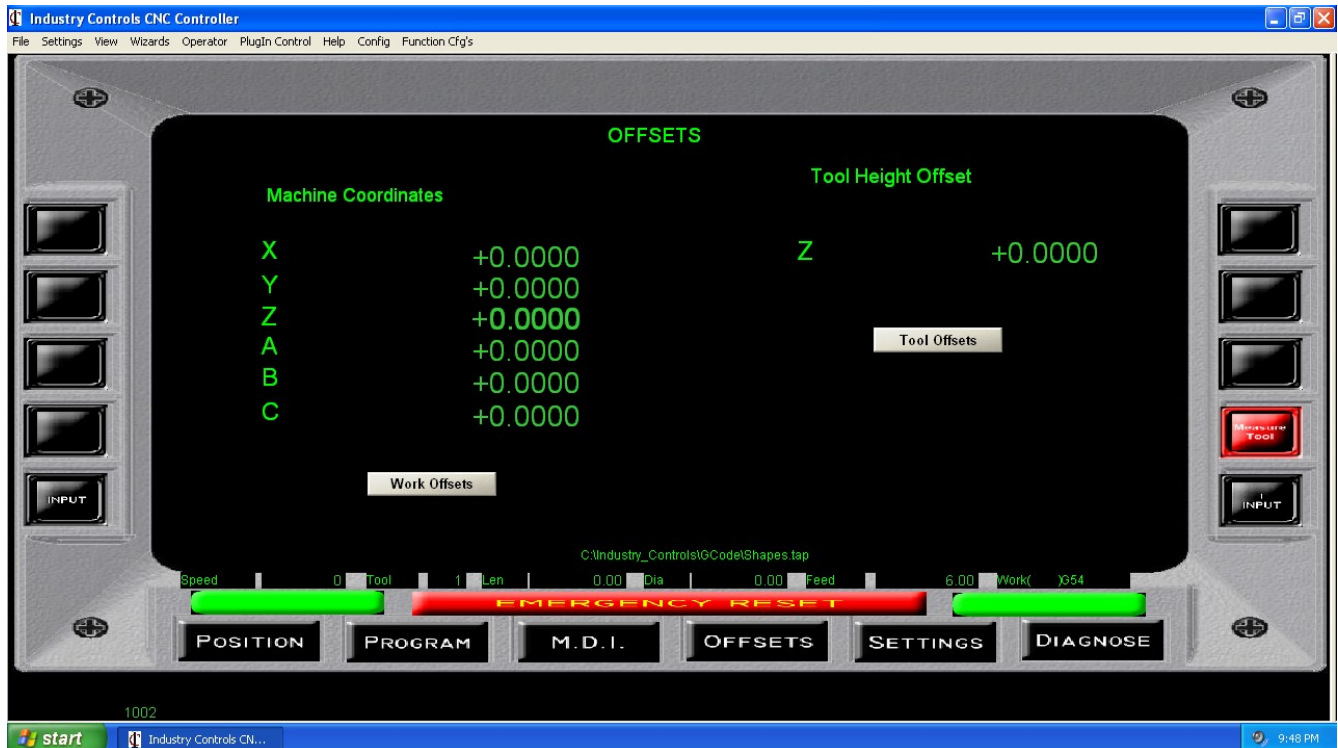
Offsets are used to establish a new zero position for programming a part. There are 2 basic types of offsets. They are work coordinates and height offsets.

This page displays machine coordinates and 2 tabs for Work and height offsets.
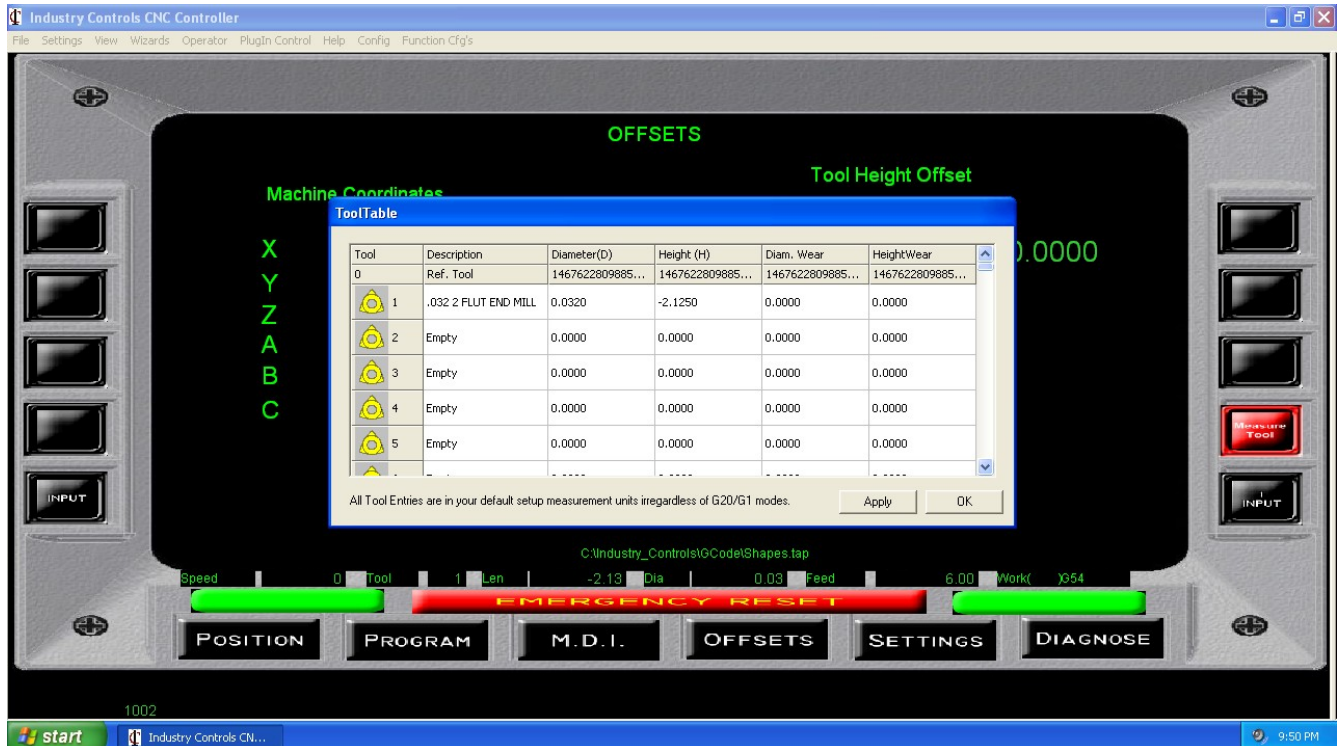
Work Offsets

This displays what is see when the work offset tab is clicked from the offsets page.

A work offset is stored dimensions. The dimension is simply the distance from machine home to where our new zero point for programming is. There are over 250 work coordinates available.

Tool Offsets

This displays what is see when the tool offset tab is clicked from the offsets page.

A tool offset is stored dimensions. The dimension are for each individual tool. They include
Height - distance from machine home to the top of your part,
Diameter – The actual cutter diameter
Height and diameter wear. These are used for minor adjustments as needed.

There are over 250 tool offsets available.

Settings Page
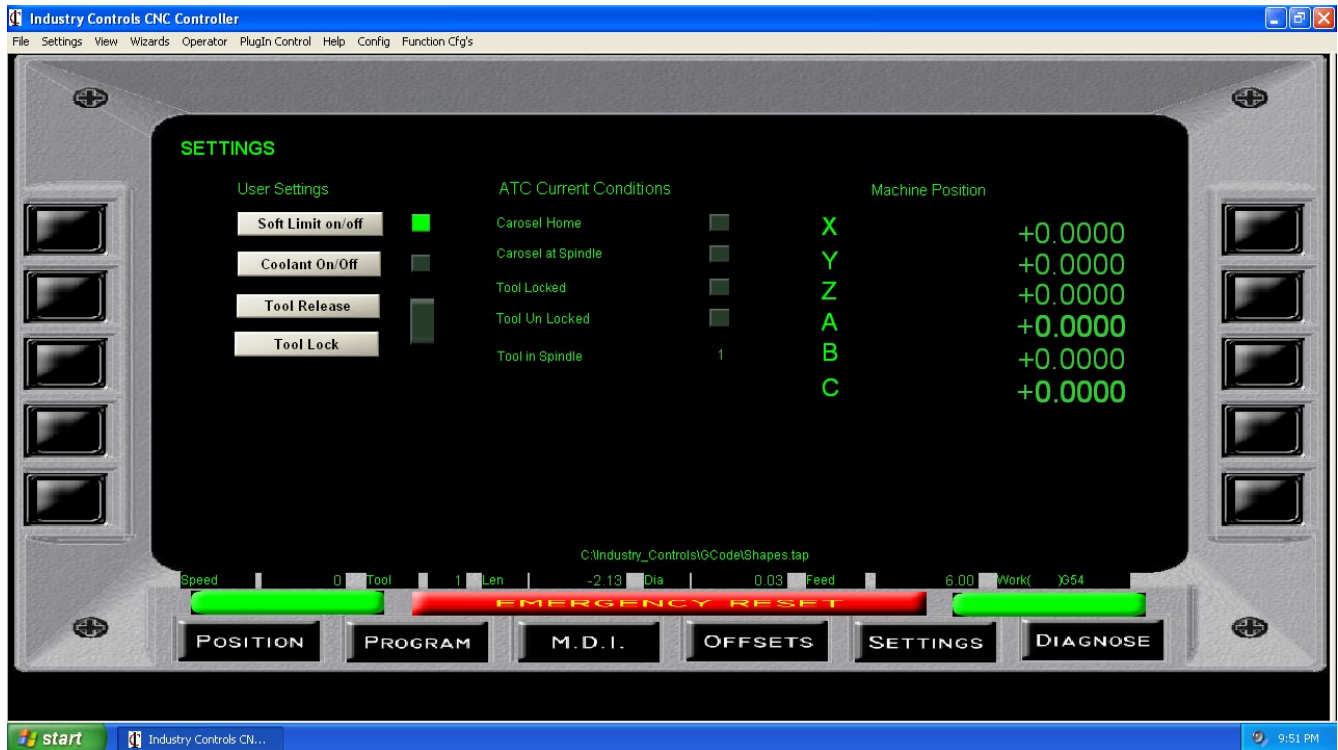
The settings page is used for numerous things. As shown on this configuration the soft limits are turned on. This is a stored value how much travel you have. If your program will exceed the allowable limits, you will get a warning prior to running the program. It also displays an automatic tool changer current positions or anything special or frequently viewed that you might find necessary. It also displays all 6 machine coordinate locations.
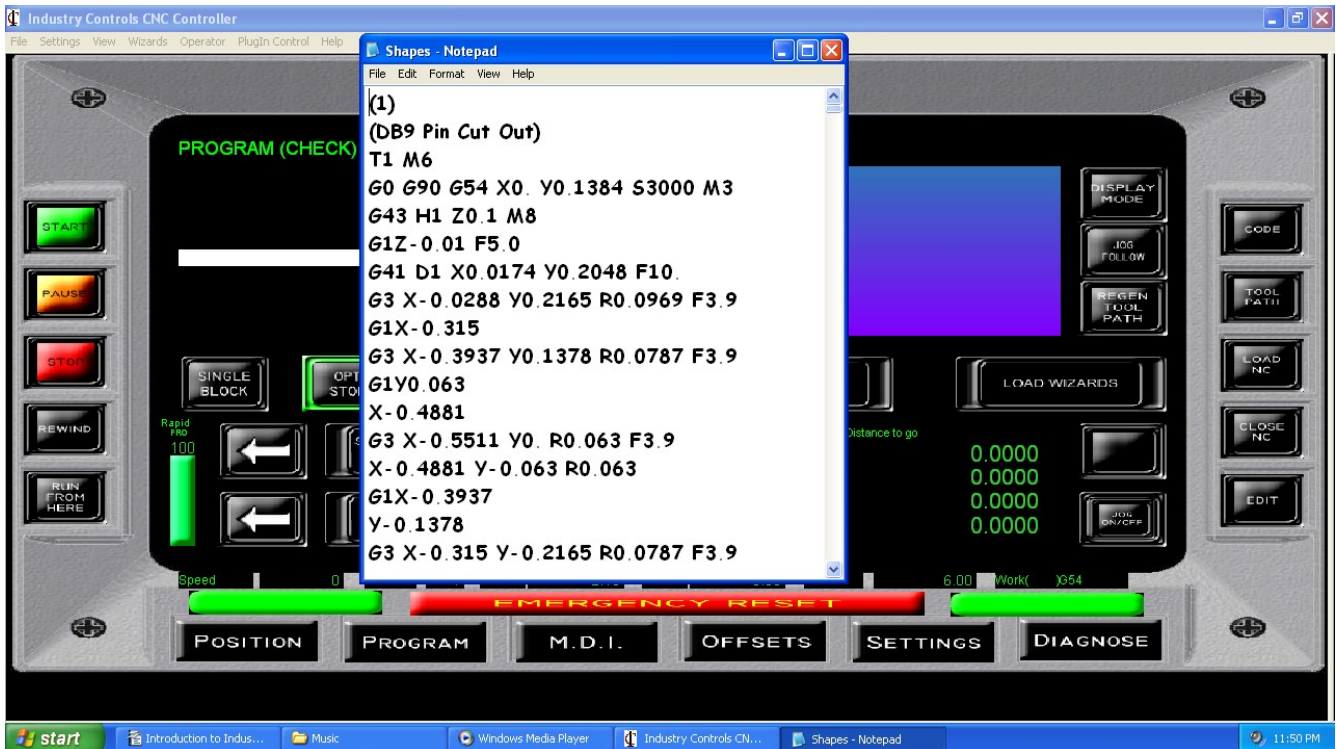
Diagnose Page
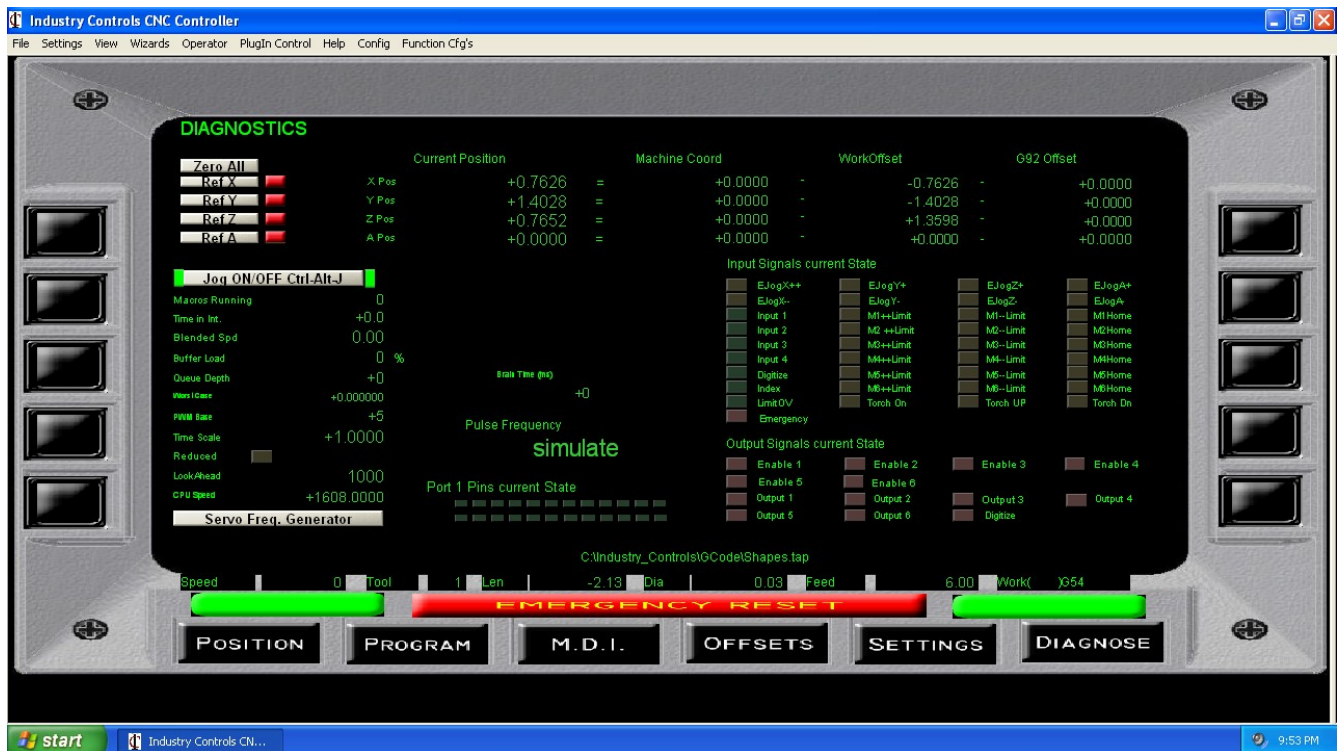
This page displays all current conditions of Inputs and Outputs. It is the simplest way to troubleshoot. It makes repairs fast and easy to find as it tells you exactly what the Control sees.

Totally configurable to any machine.

"G" Code

By pressing the Edit button, the "G" code editor will open in notepad or any specified text editing software you have installed on the PC. This makes using software's such as Bobcad, Mastercam or what ever you choose very easy.
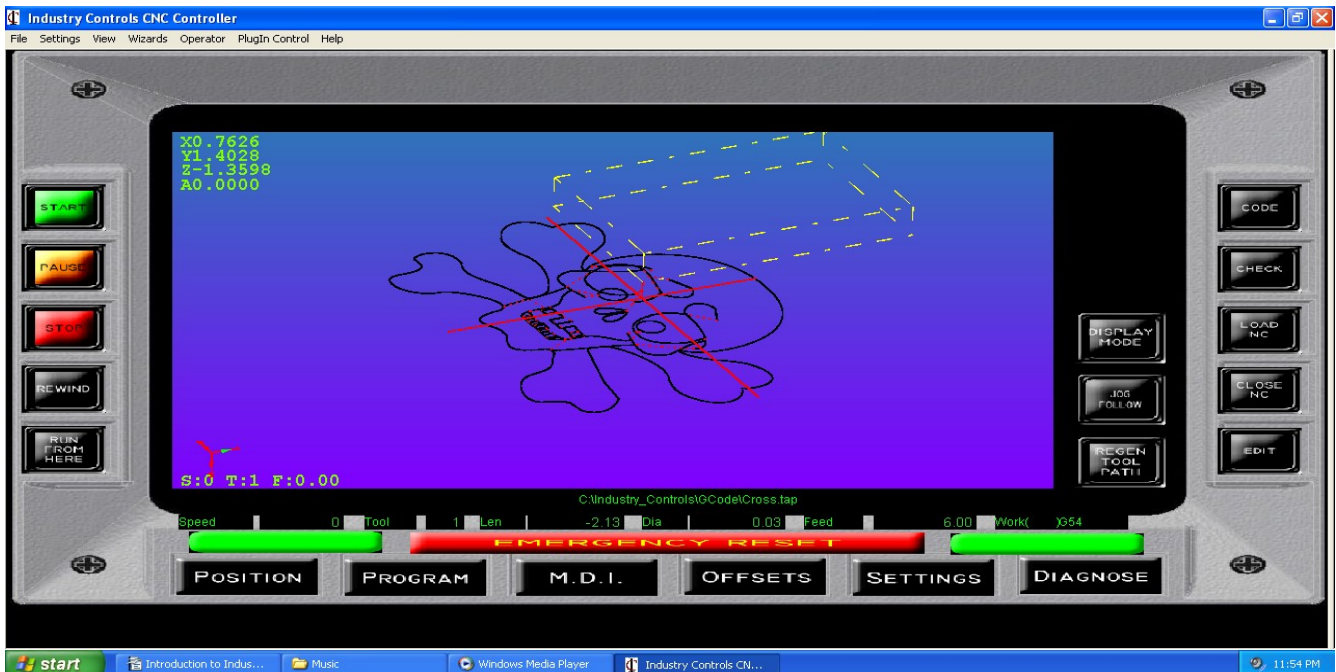
The "G" code used by Industry Controls is standard ISO programming. This form of programming is used by other CNC control companies such as Fanuc and Mitsubishi etc.
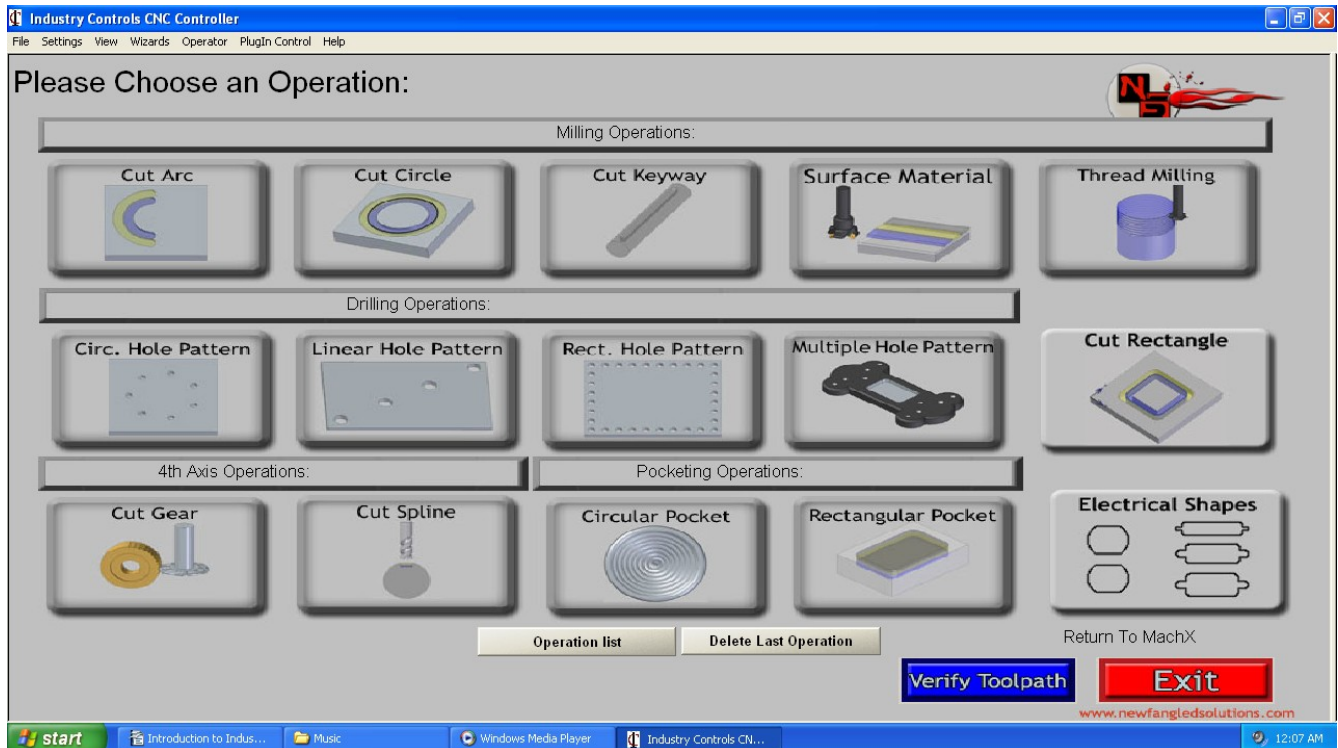
Tool Path Graphics
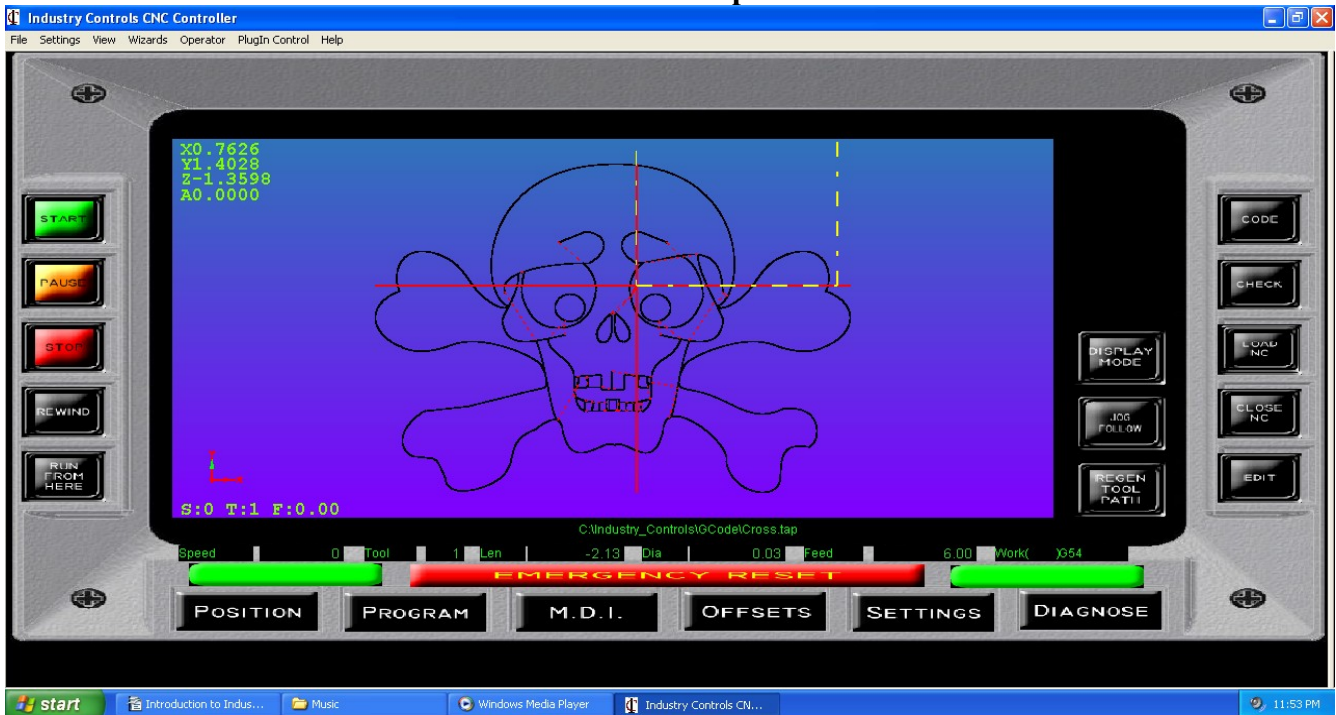
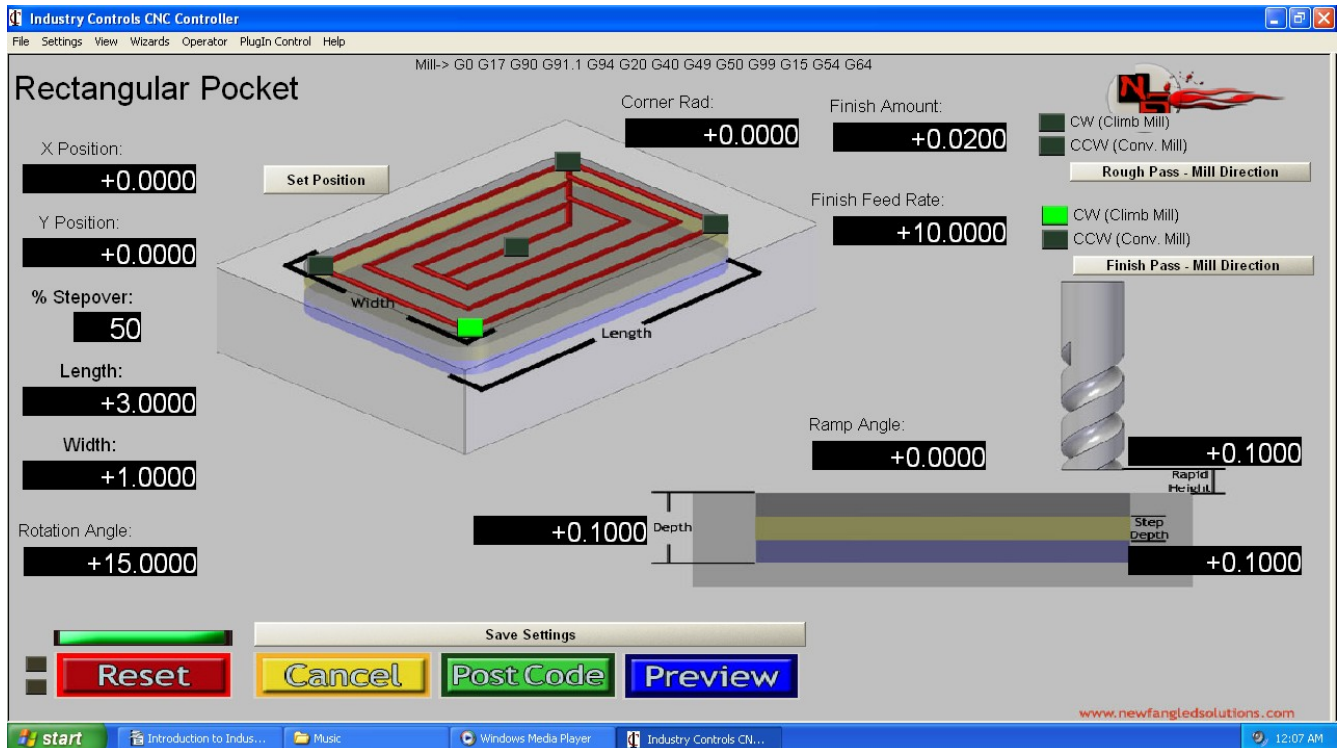**You can tilt, pan, zoom and see your tool path before you run the part.**

Conversational Programming

Select an option

Conversational Programming (cont'd)

Fill in the blanks and click post code. It will write the program for you or click preview and check what your part will look like before you have it write the code for you.

Thank you for taking the time for this brief introduction and please contact us to see what we can do for you !

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