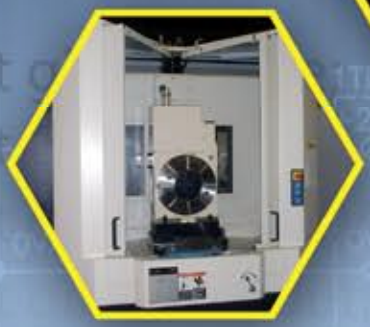


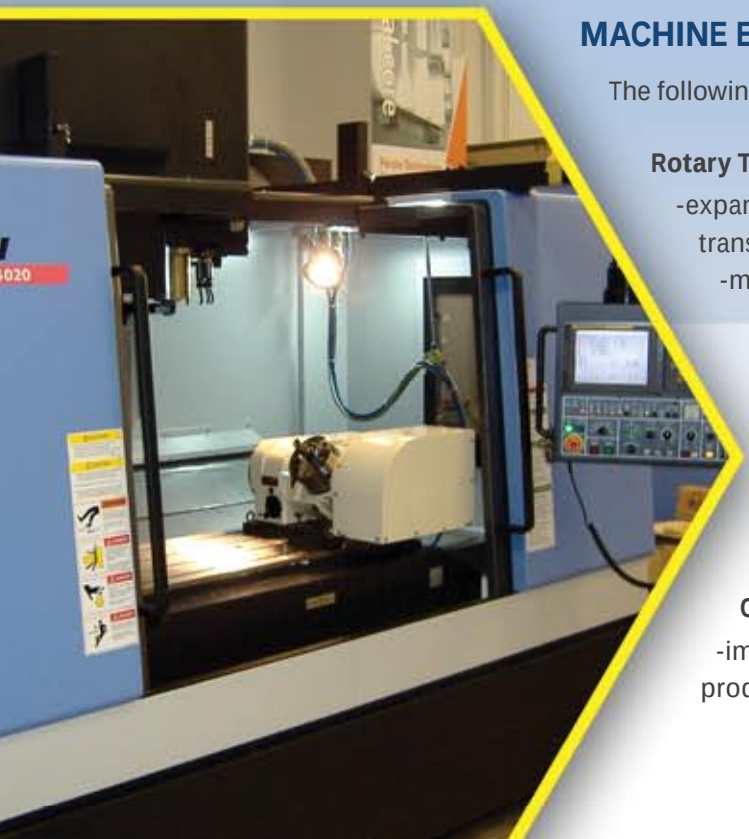
MACHINE ENHANCEMENTS PROVIDE

More Capability... More Power... More Productivity

ENHANCE THE PRODUCTIVITY OF YOUR MACHINE TOOLS

With over 25 years experience as a leading integrator of GE Fanuc controls we have gained a thorough knowledge of machine tools and CNC controls. This understanding allows us to o□er solutions that take into account a machine tools unique characteristics and enables us to incorporate such things as additional axis, rotary tables, probing, vision systems and robots. Custom programming, system integration, and training services help insure that the upgrade integrates with your companys manufacturing processes, operator and maintenance procedures.

In today's global economy, companies need to produce more with less. With our extensive list of products and services, we o□er additional value added solutions that can increase productivity, without the need to increase personnel.



MACHINE ENHANCING TECHNOLOGIES

The following can greatly enhance your machines capability and productivity;

Rotary Tables / Additional Axis

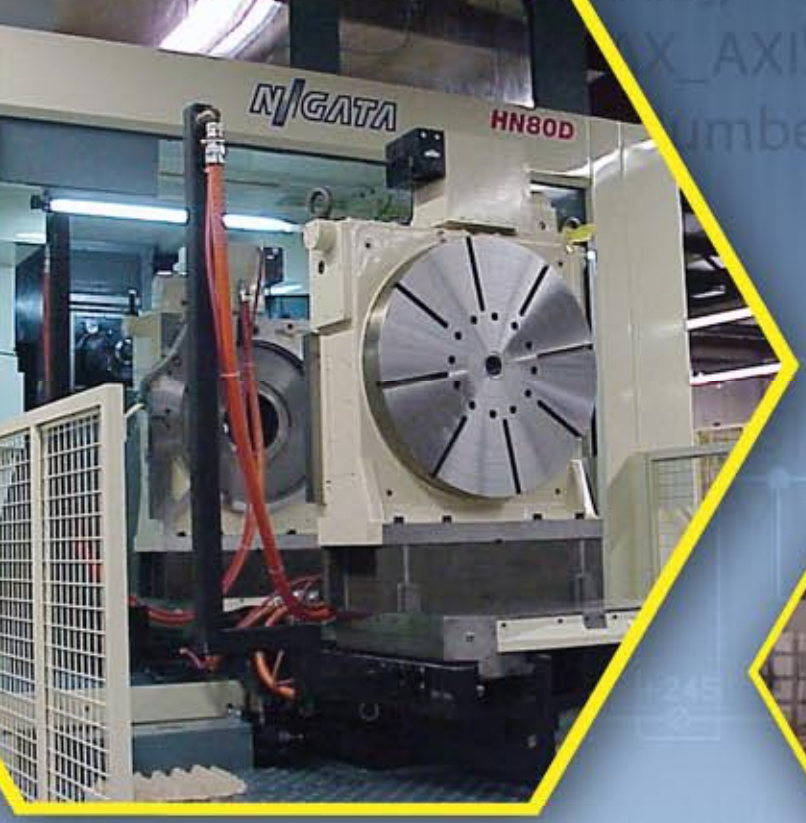
-expand your machine capability and reduce setup times such as part transfer, part load/unload and machine idle
-machine complex geometries

Probing & Tool Setting Lasers

-inspect parts on the machine
-check tools for wear and breakage during production
-combine with tool monitoring systems to automatically adjust feeds and speed for varied cutting conditions

Custom Integration Software

-implement software speci□c to your manufacturing process and product speci□cation



ROTARY TABLES EXPAND YOUR MACHINE CONFIGURATION

Adding a rotary or a rotary / tilt axis to a standard machine allows a number of bene□ts including:

- Reduce production time such as setup, part transfer, part load / unload and machine idle by combining multiple setups.
- Fixture costs can be reduced by the ability to present di□erent part sides (views) to the spindle.
- Complex geometries can be machined.
- Portions of a large part can be machined by rotating it into the work area.

CNC Engineering specializes in turnkey rotary table installations – providing control updates to meet the needs of the rotary table integration.

After using their □rst rotary table, many customers realize how many of their jobs bene□t from being run on a rotary table and quickly order additional units. It is not uncommon to hear that the cost savings were more than they imagined and they don't know how they ever survived without one.

TECHNOLOGY FOR INNOVATIVE APPLICATIONS

Integrations on machine tools without pallet changers are usually straightforward since the rotary table is constantly connected, however machines with pallet changers have unique requirements.

For these complex applications we have developed a variety of solutions:

1.) A number of sophisticated cable management systems to allow pallet changes

2.) A "switching axis circuit" which allows one axis to be shared by two rotary tables, thereby saving hardware costs and allowing the same part program to work for both pallets

3.) An auto-coupling system that, without human intervention, connects a rotary table which has been delivered via a linear pallet system

CNC Engineering uses only the highest quality materials available. Our installations are performed turnkey including setting gridshift, backlash parameters, training and updated documentation. Take advantage of today's technology and enhance your machines capability by integrating additional axis/rotary tables. You will be glad you did.

USE PROBING TO ENHANCE YOUR MACHINES CAPABILITIES

To compete in the world economy, US companies must be as productive as possible while minimizing labor content. At a minimum, companies are striving for machine setups that allow their machine tools to run for hours with minimal operator intervention. Or, if possible, let their machine tools run after everyone has left, completing the parts that are loaded on the machine. Other companies reach further, attempting complete lights out operation.

Today's high accuracy probe and laser measurement systems increase productivity by inspecting parts, compensating for work piece variances and qualifying (touching o□) tools with minimum or no operator intervention.

TOUCH PROBES:

Touch probes are available to inspect parts or measure tools. O□sets can be automatically updated and part orientation can be con□rmed. Additionally, tools can be checked for wear and breakage, thereby reducing scrap from cutting with bad tools.

NON CONTACT LASERS:

Laser systems are available today that o□er non-contact solutions to check for broken tools. They provide the ability to quickly measure small tools and form tools.

Together these accessories can help you control your processes while reducing labor cost.

CNC Engineering has installed hundreds of probe systems throughout North America on all types of machine tools. Our quali□ed manufacturing engineers will properly con□gure a probing system to each customer's particular needs. A standard package includes probe hardware, an interface unit, probing software, professional installation, and thorough training. CNC Engineering uses Blum and Renishaw probe and laser hardware. Other services include specialized macro programs based on user requirements.