

New Digitizing Probe Offered

There are many ways to design a part.

1) You can draw it in a cad program, import it into a CAM program, place your tool paths, generate the CNC file, machine it.

2) Visualize the part and write the G codes by hand (if it's simple).

Or

3) Digitize an existing part for which no drawing is available.

Many times you need a new part that is similar to an existing one with some minor changes to size or features. There are machines that are specifically designed to do this job called CMM's. (Coordinate Measurement Machines).

These are available manual controlled or computer controlled. These are generally designed to be extremely precise but they are very expensive and take up space and another computer. What if you could simply use some type of sensor in your existing CNC mill and with the right functions added, you could command and use your milling machine as a CMM? It turns out that it is very practical to implement this and we've decided to offer a digitizing probe to do exactly that.



The objectives of the initial design are to provide the following functions:

- 1) Automatically touch off on a square part edges and top surface to locate (0,0,0)
- 2) Automatically locate (0,0) as the center of a bore or boss.
- 3) Automatically identify geometry of specific features such as a circle by 3 point method and a pocket by tracking method.

We will have a limited number of probes available to existing owners to coincide with the next software release. Stay tuned...

Coming Soon....Turret Tool Changer for Your Lathe

As a fantastic productivity accessory, MicroKinetics will be offering an automatic tool turret for the 1236 and 1340 CNC Lathes. Now in the prototyping stage, the system will use standard 5/8" tooling with indexable carbide inserts.

A working model will be demonstrated at our upcoming training workshop and a video will be posted on our website shortly thereafter. Initial production will be limited to 5 units. Inquire for availability.

In this issue:

| | |
|-------------------------------|---|
| New Digitizing Probe | 1 |
| Tool Changer | 1 |
| From the President... | 2 |
| High Torque Motors.. | 2 |
| CNC SQ Mill Capabilities..... | 3 |
| Post Your Youtube Video..... | 3 |
| Free Software updates | 4 |

Dear Colleagues:

It's interesting to reflect on how technology has transformed our industry. I've seen the progress of CNC and motion control take major strides over the last decade. The Internet, Global economy, and technology improvements have made it practical for almost everyone to have high precision CNC machines in their garage! From the typical CNC milling machines to CNC lathes and CNC wood routers as well as CNC torch and plasma cutting machines. It is truly amazing!

A quarter of a century ago I started this business in my garage. I was young and admittedly naïve. There were no cell phones. There were only car phones that had to be installed in your vehicle. Then there were bag phones. There was no Internet and I remember having to physically go to the university to research motion control algorithms. I also remember ordering photocopies of certain articles from Georgia Tech Library to be mailed to me. It was tedious and I frequently stayed up late through the early morning hours hand coding 6502 machine language on an Apple IIe computer. Regardless of the obstacles, I had a phenomenal sense of commitment to success and to my then few clients.

Over the years much has changed, but my sense of commitment remains solid. In 2009, we're continuing to innovate with improvements to our existing products and the development of some new ones. We've also improved our production efficiencies allowing us to lower prices on 100's of products.

In a few months we'll be celebrating our 25th anniversary and I wish to extend my personal thanks to all our customers, vendors and employees... past and present. I am excited about what the future holds and look forward to becoming more a part of your CNC endeavors in the next 25 years!

Sincerely,



Maurice S. Khano, President

Two New High Torque Motors Added to Product Line



The new square stepper motors offer a lot more torque for their size because almost the whole body is the stator. This means a lot more power for you.

We've added two 34 frame models, offering a 750 oz in and a 1200 oz in torque ratings. As with most new motor additions to our product line, these offer the simplicity of 4 wire design, ideally suited for the superior performance of bipolar constant current chopper drives (the only kind we make).

The winding for these motors are designed to be high current and low inductance offering high

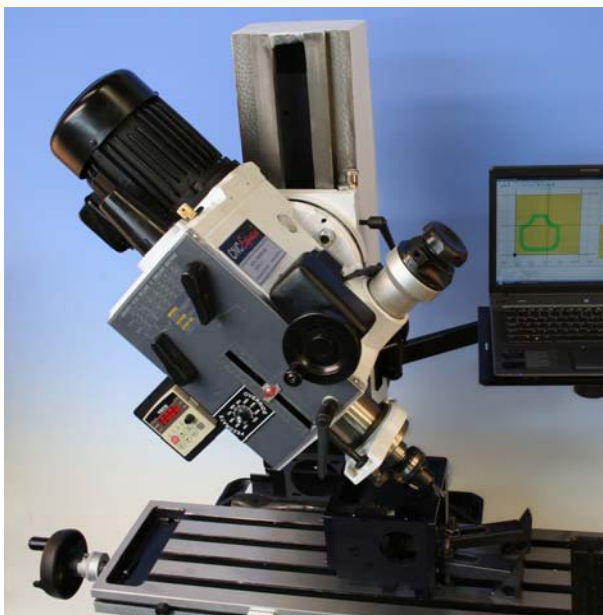
speed response comparable to similarly sized servo motors without the dithering at standstill and the tuning and lag that can afflict those.

Supersized Square Column CNC Mill

Our new larger CNC Express XL has substantially greater X and Y travels. When your parts are frequently larger than what the standard CNC Express can accommodate, or if you simply want more capacity and flexibility in how you fixture your materials, take a look at the CNC Express XL.

Current inventories are depleted and the next production run will be available 2nd quarter 2010.

If you don't need the massive machining size of the XL, you may be interested in the SQ model, the mid size square column CNC Express. Check out www.microkinetics.com/express for details.



Post Your Video on Youtube

If you think your MicroKinetics CNC lathe or Mill is great and would enjoy sharing what you do, feel free to make a video and post it on Youtube. Videos can be easily made with the Moviemaker software included with Windows. (the Vista one is better than the XP one) Keep in mind the Youtube 10 minute limit and try to keep the size of the file down to 100mb or less. There are several such videos already up there. Search on Microkinetics and you'll get some ideas.

MillMaster Pro 2009 & TurnMaster Pro 2009 Now Better Than Ever!

During 2009, we've made over 48 new productivity and time saving enhancements and corrections. Here are some of the highlights:

- ⇒ A new column in tool chest allows immediate selection of any tool.
- ⇒ Easy touch off and programming of tool lengths and offsets.
- ⇒ Coolant On/Off and Spindle On/Off buttons on the Jog screen for easy access.
- ⇒ Improved safety by prompting for user confirmation on large distances (>10") in jog mode.
- ⇒ Support added for the R (Radius) Parameter in the G2/G3 commands for fast simple arcs without digging out your scientific calculator.
- ⇒ (0,0) can now be the center of material. This is great for designs that need bolt-hole circles or other features where a center reference is ideal.
- ⇒ Round stock material graphical support for MillMaster pro.
- ⇒ Automatic tool diameter recognition in MillMaster Pro helps you get the right tool in each position.
- ⇒ Machining time displayed at the end of running a part now separately display both the actual machining time and the time waiting for user (for tool changes or pauses).
- ⇒ Smart tool changes automatically raise the head if necessary to accommodate the next tool plus a user defined amount (defaults to 0.25" and user settable) to provide clearance for removal and insertion of tool holders. If the next tool is shorter the move down happens after the new tool is installed. This eliminates the need to code anything different regardless of the tool sizes used!

The updates are **FREE** for downloading at www.microkinetics.com/cncsoft.htm and the latest releases are MillMaster pro: 5.1.160 and TurnMaster Pro: 5.0.8.

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