

INFOMATE

Introduction

Welcome to the 18th issue of our newsletter. It is used to send **MACHINEMATE**® CNC product and information updates to our customers.

New Press Release

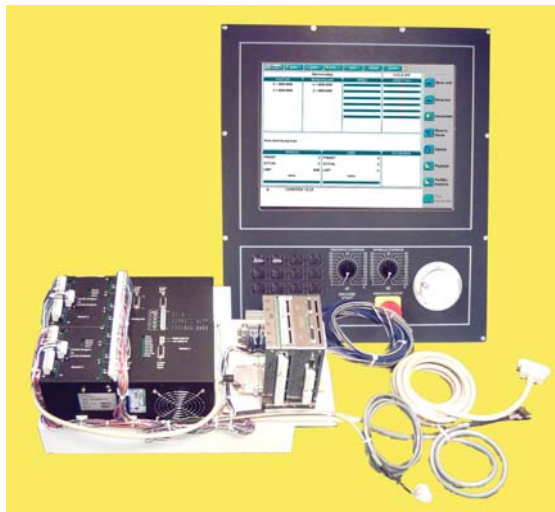
In November 2006, **MACHINEMATE**, INC. announced an agreement with Wescan Systems Limited of Burlington, Ontario for the use of **MACHINEMATE** CNC technology for their flame and plasma CNC controls. This is a long-term partnership for the development of a superior flame and plasma CNC control. Wescan is a leading worldwide manufacturer of plasma and flame CNC products. Now privately owned, Wescan was part of Westinghouse and Northrup Grumman. This alliance is beneficial for all parties. The full terms of the agreement are confidential, but the complete press release is available on our website, www.machinemate.com.

IMTS 2006

In September 2006, the **MACHINEMATE** CNC was on display in the following booths at the International Manufacturing Technology Show held at McCormick Place in Chicago, Illinois.

MAG Industrial Automation Systems

The Maintenance Technologies division of the MAG group (booth A-8218) displayed the Arrow CT retrofit kit. This kit includes the **MACHINEMATE** LW CNC and the M268 front panel. The kit enables a retrofit to be completed in just a few days, with the control replacement often in just a few hours. No new wiring or hole drilling is required since the kit is a plug-and-play package. The complete kit is offered on the market by MAG for about \$15,000. The concept of easy, low cost retrofits will continue to be developed with our partner. The CNC and I/O sub-panel that replaces the old control is shown below. It comes with pre-wired cables to expedite its connection after it slides in place on the cabinet's back panel.



Shown at the left is the Plug & Play Retrofit Kit for Cincinnati Arrow machines.

The MAG group includes a number of the big names in the American machine tool industry, including Giddings & Lewis, Cincinnati Machine, Cross Hüller, Ex-Cell-O, Lamb, Hessapp, Fadal, Hüller Hille, Turmatic, Witzig & Frank and others. The Maintenance Technologies division handles the support, parts and retrofit services for the entire MAG group of companies. Please see our website, www.machinemate.com for a complete case study on the Arrow CT retrofit kit.

American Broach & Machine Company

American Broach & Machine Company (booth B-6934) displayed one of their broach grinding machines. The machine is controlled by the MACHINEMATE eCNC. The American Broach engineers developed a broach friendly software program that guides the operator through the inspection and grinding operations. They found that the integration was so easy with the MACHINEMATE CNC for both their special operator program and the NC macro programming to support it, that it has become their standard recommended CNC.

This started when General Motors Powertrain at Willow Run near Detroit specified MACHINEMATE CNC to several OEMs on new broaching machines. American Broach was awarded the contract. General Motors Powertrain Willow Run continues to specify the MACHINEMATE CNC on retrofits as well as new machines.

Flow International Corp. and KNUTH Machine Tools USA

Our CNC technology was on display in several other exhibitor booths under different product labels. Flow International Corp. used it on a waterjet machine in their booth (B-6200) while KNUTH Machine Tools USA also used it on a waterjet machine in their booth (B-6522).

Assembly Technology Expo 2006

Also in September 2006, the MACHINEMATE CNC was on display at the Assembly Technology Expo held at the Convention Center in Rosemont, Illinois.



SELCO Engineering

SELCO Engineering (booth 1632) displayed the MACHINEMATE SERCOS L2 on a 5-axis machine. In the photo on the left, the small machine is used to demonstrate some of the high-end features of the MACHINEMATE CNC including 5-axes part coordinate transformations.

New Operator Front Panel

We recently introduced a new front panel variation. M630 is pictured on the next page with an L2 CNC. The panel comes with a 12.1" TFT color display and a complete alphanumeric keypad adjacent to it in a 19" rack mount panel frame. Our previous version of this panel (with an identical frame) had a slightly different keypad with fewer keys, but several of the letters or special characters that were infrequently used required a '2nd' key to access them. This new keypad has no '2nd' key, so all keys are a single press.

The panel has a pre-drilled hole covered by the front panel material. This hole can be easily revealed to mount a USB front panel connection, the M164 option with its USB cable back to the CNC computer.

The membrane keypad used on the new front panel pictured below is also available as a separate, stand-alone item. We have several other panel designs in mind for the future and are interested in your needs for a unique operator interface device.



New CNC Operator Display Page Option

We recently introduced a new option for the CNC and its software operator interface, M563. It allows the integrator to set the number of NC part program blocks that can be viewed (both before and after the active block) while the operator is running the program. Some integrators increase the number of blocks shown on the main page viewed while running programs, while other integrators offer a soft key for a full display page (with 20 or more blocks shown) for the active program.

Retrofits – Retrofits – Retrofits

The system integrator network of MACHINEMATE has done many retrofits since we started in 2000. As a result, we have developed G code and compatibility conversions for many of the vintage CNC & NC controls that are still in the field. These conversions allow for the end user to quickly convert his existing part programs to MACHINEMATE format. Therefore, he doesn't have to reprogram when the machine is retrofitted with MACHINEMATE. The current list of the available conversions is on the back page of this newsletter.

Conclusion

Information about our products and applications can be found on our website, www.machinemate.com. A number of MACHINEMATE control retrofits are also listed. In addition, a link can be provided to our customers for the complete MACHINEMATE manual set. Please check the website periodically for news updates.

If you received a printed issue of this newsletter and would prefer to receive it electronically, please let us know. If you do not wish to receive this newsletter, please call us or respond via e-mail with 'unsubscribe' in the subject line. We can be reached by phone at 920-907-0001 or e-mail at info@machinemate.com.

Thank you,

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Vintage Compatibility

Allen-Bradley 7300 compatibility

Customers with machines having X, V, and W axes can run old programs (G2/G3 IJK is uncommon format) with no edits.

Allen-Bradley 9-series compatibility

Customers can run old programs (no decimal point format) with no edits.

MACHINEMATE completed development of cylindrical grinding cycles (G81-G88) that use syntax similar to that in the 9-series to perform the same grinding operations.

Bendix 5 compatibility

Customers can run old programs (no decimal point format, machine's Z axis had opposite polarity from convention) with no edits.

Fanuc compatibility

Customers with Renishaw probes run Renishaw probe cycles written for a Fanuc (sophisticated macro programming). Some customers run old Fanuc programs with several unusual syntax combinations that are detected/converted to run with no edits.

Pratt & Whitney Teammate compatibility

Customers can run old programs (an external file defines the machine size – different old programs come from different P&W machines) with no edits.

Part Program Conversions - NC Part Program Conversion Utility

The following controls have more complete coverage of NC syntax in response to specific customers or integrators:

Allen-Bradley 7300
Allen-Bradley 8400
Allen-Bradley 9-series
AMCB
Bendix 5
Cincinnati Lamb 850SX
Cincinnati Lamb CT
Fanuc
Pratt & Whitney Teammate
Siemens 7
Siemens 820

The following controls have less complete coverage due to no specific requirements defined from customers or integrators. The basic syntax for these controls is recognized and the utility may have been used for any of them in this form.

Acramatic	Allen-Bradley 8200
Anilam	Boss
Dynapath series 5	Fadal
Fagor	GE 1050
Giddings & Lewis 8000	Haas
Hurco	Mazak
Meldas	Prototrak
Yasnac	