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INFOMATE

Introduction

This is the second issue of our newsletter. This newsletter will be used to send product and information updates to our customers on a regular basis.

Kent Has Introduced The e-Machine

At the recent Taiwan International Machine Tool Show (TIMTOS) in Taipei (from March 20 to 25), Kent Industrial Co., Ltd. introduced the e-Machine. The Kent e-Machine includes a new concept to the machine tool industry: the opportunity for 'pay-as-you-go' leasing of a machine tool. Its control is the MACHINEMATE.

The unique marketing of this machine involves the OEM leasing the machine/control to the customer with the payments based on the utilization of the machine features and the control features. Utilization is measured by the CNC through monitoring feedrate, spindle speed, time, feature utilization, etc. This new idea will utilize the Internet to monitor and purchase utilization. The Kent e-Machine is based on the MACHINEMATE CNC control. Its open PC-based NT architecture enables the installation of a standard network card with an NT device driver. Its single processor design with an integrated soft PLC offering a DDE server enables the development of the software required to monitor the CNC utilization and to provide that information to the OEM via the internet.

Once the control is connected to the OEM via the internet, there are many options available to both the machine tool OEM and to the end customer . The OEM can enable features as required and those features can also be disabled. Third party software packages can be enabled, disabled, and/or monitored as well. The open software interface to the CNC enables the support for a variety of packages, including diagnostics, machine monitoring, process control, etc., that can be made available to the end customer.

In addition to the leasing option, the e-Machine also offers excellent machine tool performance for high-speed machining applications. As demonstrated with a common test part, the MACHINEMATE CNC provides both a higher maximum feed rate (3m/min) and higher part processing speeds (as measured in blocks/sec) than were possible with the previous Kent controls (which could not perform at higher than 1m/min).

MACHINEMATE At TIMTOS

In addition to the Kent e-Machine, MACHINEMATE controls were on two other machines involved in the TIMTOS activities. In the PMC booth (our partner in Taiwan to work with the Taiwan machine tool builders), the Poshtech JM200 machine (shown at upper right) demonstrated a small three axis application with a high speed spindle (24000 RPM). The machine has a handheld pendant for manual machine control so the control needed very few operator switches beyond the MACHINEMATE user interface.

In the KaFo factory in Taichung, Taiwan, a two-hour drive from Taipei, available for visits from the show, a VMC (shown at lower right) demonstrated the capabilities of the MACHINEMATE. KaFo and PMC teamed to demonstrate the internet capabilities of the MACHINEMATE. Two laptops in the PMC booth were connected via the internet to the KaFo factory. One laptop could remotely monitor the machine's control via PCAnywhere using the internet connection between the show and the factory. The other laptop displayed a video image, also via the internet, from a digital movie camera pointed at the machine while it was cutting its parts.

Also in the PMC booth, a MACHINEMATE simulator demonstrated its multiple station capability. The single CNC had two analog axes running one part program while at the same time two SERCOS axes were running a different part program. A MACHINEMATE can run up to 8 CNC stations simultaneously.

At right is a picture taken at TIMTOS. In 2000, Taiwan was the world's fifth largest supplier of machine tool exports.

Westec

MACHINEMATE INC had a booth at the recent Westec 2001 Advanced Productivity Exposition in Los Angeles (from March 26 to 29). The booth was well attended and we are building relationships with those that expressed a strong interest in our products.

In our booth, we demonstrated our control with our 5-axis Reickhoff machine. We also hosted software from several different partners. The machine's control demonstrated Weber Systems' Synergy CAM software and Manufacturing Science Technology's (MST) Dynamic Feed Control. Synergy is capable of solid modeling and 5-axis programming; all of the part programs run on the machine were generated by Synergy during the show. Dynamic Feed Control is process optimization software; it monitors the operator's management of the part cutting (i.e., the adjustments to the feed and speed overrides during the run) and that optimization can be played back on subsequent part runs to take advantage of the optimized part production. MST also had a booth at Westec in the same hall.

Our booth also had a standalone simulator, running SERCOS and analog axes, that hosted the Multi-DNC software from Spectrum, part of e-Manufacturing Networks Inc. Multi-DNC software provides shop floor CNC management, including remote machine monitoring and production reports. The network card in this simulator was connected via a high-speed wireless network to the server in the Spectrum booth located a few aisles away in the Kentia Hall; their server was available over the internet and could generate production reports for the data being obtained from the simulator via this link.

The products developed by MST and Spectrum demonstrate how the convenient DDE access to the MACHINEMATE allows many add-on software capabilities for special requirements.

Eastec

MACHINEMATE INC will be present at the upcoming Eastec 2001 Advanced Productivity Exposition and Conference, the East Coast's largest annual manufacturing event. Our booth is number 6386 located in building # 6, also called the 'Temp Building,' in the NE corner of the Eastern States Exposition Grounds, in West Springfield, Massachusetts. The Expo runs from May 22 to May 24, while the Conference begins on May 21.

Our Westec booth equipment has been shipped to Eastec so if you missed us at Westec come visit us at Eastec.

New Products

The Synergy conversational shop floor part programming software for MachineMate will be released for shipment next month. The CAM software was developed jointly with our partner Weber Systems. The prices for this software on new MachineMate CNC shipments are: for MM1 and MM3 lathes: $325 list; for mills: $350 list; for MM5 and MM7 lathes: $475, for mills: $500.

The new handheld MPG (includes the handwheel, a six axis select switch, a feed multiplier switch, two jog pushbuttons and the e-stop pushbutton) is now available for shipment at the list price of $695. One is pictured at right.

The new MachineMate MTBP (machine tool builder's panel) is now available for shipment at the list price of $695. This panel includes the e-stop pushbutton (push in to lock, twist out to release), the feed and speed overrides, the cycle start and stop pushbuttons, the machine start pushbutton, the jog + and – pushbuttons and six general-purpose pushbuttons. All of the pushbuttons except the e-stop can be illuminated. One is pictured at left.

Conclusion

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If you received a printed issue and you wish to receive it via e-mail in the future, please tell us that by sending an e-mail to us at info@machinemate.com or call us at 920-907-0001.

Thank you,

The staff of MACHINEMATE INC

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