

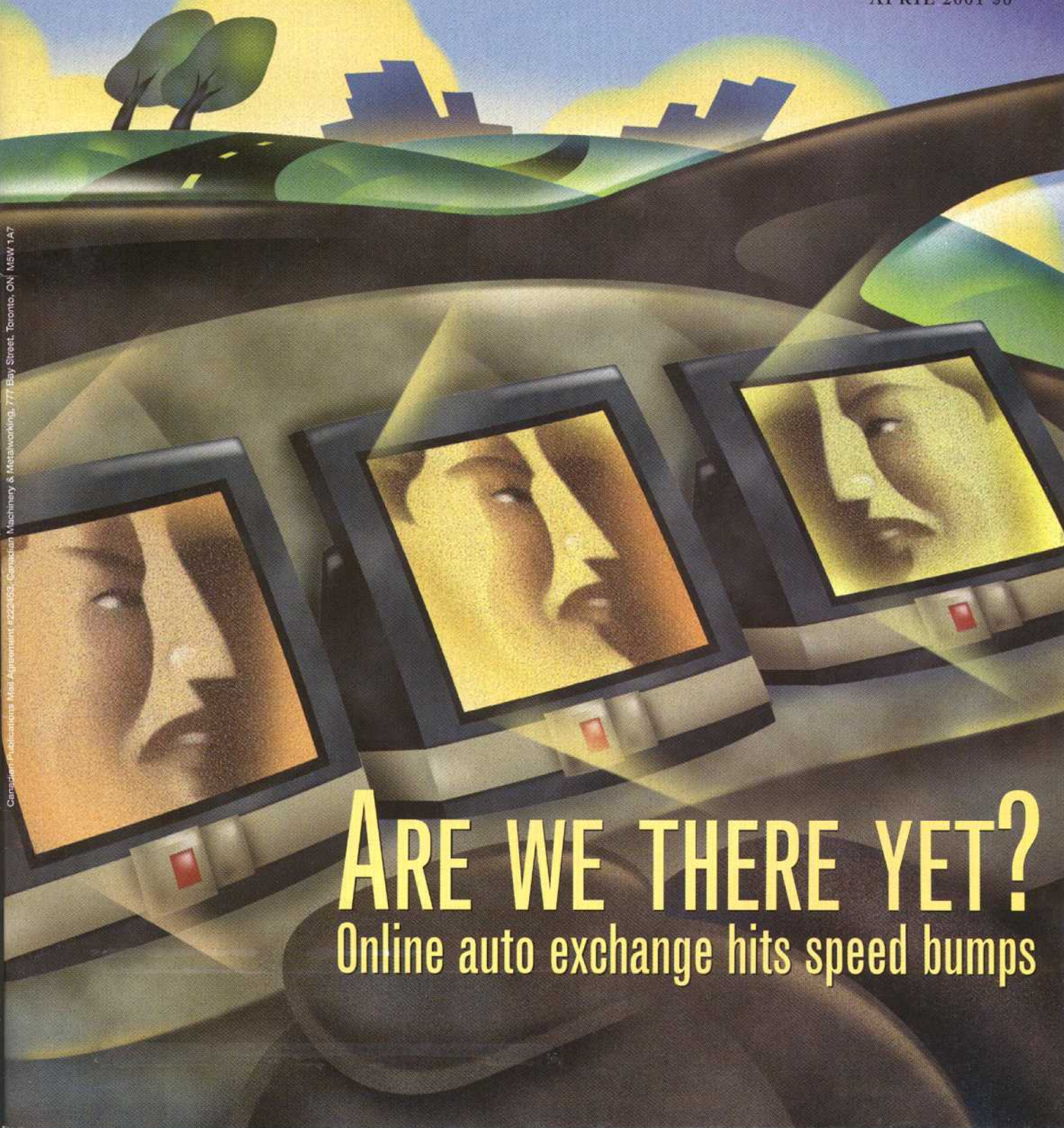
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ARE WE THERE YET?

Online auto exchange hits speed bumps



Spinning your wheels on the web

Since its inception, the Internet has been viewed as a research tool with few manufacturing applications. During the past decade, most manufacturers developed in-house intranets, but the Internet, on the other hand, was viewed as inefficient. In the last few years, more elegant compaction and bundling software, as well as access to higher baud rates, have made the Internet an invaluable asset. Both sophisticated multi-axis CNC and production grinding have benefited from the Web.

TOOL AND CUTTER GRINDING SHOP

As tool geometries have become more sophisticated, the associated CNC programs have grown dramatically. With this programming complexity has come more susceptibility to operator error. As a result, strong support from the manufacturer is essential.

Traditionally, the support took the form of tedious telephone calls and costly on-site visits by applications engineers. But the Internet has changed this. It provides a cost-effective method of communicating between the machine tool builder and the end user. The implementation of file compression techniques has allowed lengthy programs to be transferred efficiently. As program sizes have increased further yet, hosting services for the Web have limited these files to 2 MB or maybe 5 MB; this limitation can now be circumvented through the use of breakdown and bundling software better known as File Transfer Protocol (see www.globalscape.com, cute

FTP software).

Another interesting Internet capability that many shops are now using is Cyber Service, now possible with the aid of PC Anywhere (www.pcanewhere.com). Through Internet access, two-way audio and visual representation of the operator's process allows application engineers to remotely examine exactly what the operator is doing, while allowing the engineer to visually demonstrate the quick fix.

Cutter grind shops have traditionally required the support of the manufacturer to interpret industry specific terminology. Shops can get

ment by e-manufacturing (www.e-manufacturing.com) has empowered management with the ability to track their machine tool usage from any Internet access point. The following processes are actively monitored with e-manufacturing: electronic data collection, alarm/event trapping and multiple level security.

Production shops, unlike job shops, are being forced to compete globally. Through the Internet, they can advertise their skill sets globally with minimal expenditures. By the same token, production shops can seek new business by searching the Web for supply chain e-business.

The Internet provides a cost-effective method of communicating between the machine tool builder and the end user.

instant, around-the-clock access to answers to common questions, through things like FAQs. Should an answer be unavailable, the question is forwarded to the applications support team for interpretation and the reply is posted on the Internet database.

A final development in CNC cutter grinding has been software upgrade technology. Again, through the use of the Internet, manufacturers can download the latest versions of software to clients.

CNC PRODUCTION GRINDING SHOP

The production shop differs from most cutter grinding shops in that productivity and around-the-clock manufacturing are expected. Traditionally, production shops have used in-house intranets to monitor their machine tools. A recent develop-

One phenomenal opportunity within e-business purchasing has been General Electric with their very impressive commerce site (www.GE.com). This supply chain management site controls bidding via formatted submissions that go live to the Web, creating a highly competitive, yet streamlined purchasing system.

The greatest change in manufacturing has been the shift from the intranet to the Internet. What will prohibit the future permeation of the Internet to manufacturing will be high-speed access to manufacturing sites. Once it is readily available, manufacturers can start spinning their wheels. CMM

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