

NEWS RELEASE

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This builder of liquid filling machines maintains its belief in a motion controller that is separate from the PLC that governs a machine's logic.

A manufacturer of liquid filling machines used chiefly in pharmaceutical, personal care, chemical specialties, cosmetics, and household products, Filamatic (www.filamatic.com), a division of National Instruments Co. LLC, has resisted the growing popularity of the PAC. Short for Programmable Automation Controller, the PAC is a controller that combines logic, motion, and sometimes human-machine interface (HMI) in one device.

"We've kept motion control and logic separate largely because it's more customer friendly where our general customer base is concerned," says Jack Chopper, chief electrical engineer at Filamatic. "If troubleshooting is ever needed, it's easier to perform it when dealing with separate motion and logic controls."



Chopper hastens to add that should a customer request that a machine's controls architecture be built around a PAC, Filamatic can meet such a request easily enough. "But again, for our general customer base, keeping logic and motion separate is our standard approach."

For the logic side of machine functionality, Filamatic relies on PLCs from Rockwell (www.rockwellautomation.com). For motion control, Trio (www.triomotion.com) is the vendor of choice.

"Trio's MC206X motion controller has been a standard controls component in Filamatic machines for the past five years," says Chopper. "It's capable of controlling five axes of motion, and with many machines we build, that will continue to suffice. But in some of our more complex machines where more axes of motion are involved, we'll be switching to the MC464."

A new offering from Trio, the MC464 can support up to 64 axes of motion. Yet it's the size of a small book.

Also attractive, says Chopper, is the MC464's digital drive interface. "It provides a plug-and-play connection between the motion controller and various digital drives. This gives us the opportunity to significantly reduce wiring while enjoying a much higher axis count compared to what is available in comparable motion controllers."

The MC464 also has increased communication capabilities for programming, monitoring, and data exchange between itself and other devices, such as vision systems and bar code readers, says Chopper. "In addition," he says, "we can re-use the exact core code modules that we have already written, tested, and debugged. This will save us significant development time."

Less hardware and less wiring lead to a more robust machine design with increased dependability, adds Chopper. "The increased communications capabilities provide us with more flexibility to cleanly interface with other devices," he points out. "We can provide customers with more functionality and performance, while reducing the hardware footprint."