

# The Automator

CIR Industrial Automation Newsletter Volume 2 Issue 2

## What Every HMI Must Have.

### Human Machine Interfaces: The criteria for a well-designed system.

Your team is about to debut the new batch processing system. The big brass wants a walk through. Confidence is high. Why? Because the HMI (human machine interface) has been exceptionally well designed.

What goes into a well-designed HMI system?

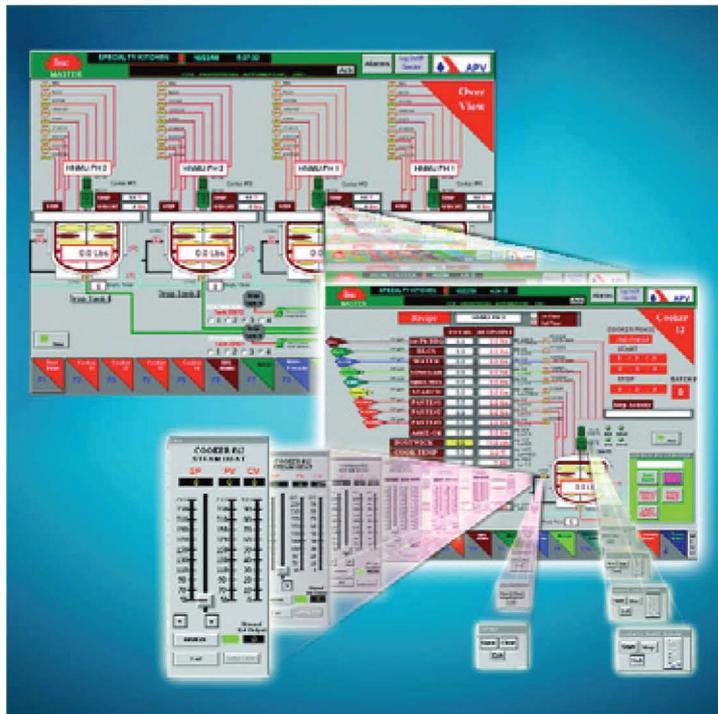
There are three basic components to any well-designed system. It must be intuitive for the operator. The better the system communicates with the operator the better the system. In order for the system to communicate it must be comprehensive. The system must represent virtually every condition and sub routine of the process. And only if the HMI is truly comprehensive can the alerts and alarms provide the protection your engineering investment demands.



John Mackenna



Mark Siuta



*CIR systems feature a liberal use of pop-up windows. With a simple click, pop-up windows bring critical details forward. These windows are particularly effective for special warnings as well as monitoring various functions.*

At CIR, we believe an operator must be able to evaluate the readiness of a system and the status of the equipment in an instant. That means the display must be clear, straightforward, easy to control and immediately understandable. A simple click or touch of a screen should instantaneously verify actions.

At the heart of a well-designed HMI system is a comprehensive overview screen. Because CIR designs automation systems from the ground up, we know first hand that HMI systems

must cover every condition. If the system doesn't control a process it can't report it. The overview screen must quickly communicate what it's controlling. Navigation to more detail views from this screen must help the operator drill down or zoom-in on specific areas quickly and intuitively. We have found that interactive screens that let the operator click the area of the process he wants to monitor work exceptionally well. Helping the operator make error free decisions particularly in manual change situations is critical.

The third leg of a well-designed system is the strong alert interface. Establishing alarms, warning and equipment states that do not create confusion are critical. Accompanying alerts with "Acknowledge" buttons lets the operator recognize the condition and take the appropriate actions before the process continues. It goes without saying that a well-organized alarm summary page is critical to eliminating confusion.

Well-designed HMI systems deserve well-written documentation. At CIR, we have found it pays to take the extra care developing comprehensive training and operating manuals. Not only does it aid in troubleshooting and debugging it makes operators much more productive. In most systems we build the manuals into the system so the operator can access it right from the interface.

Published by  
**CIR**  
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INDUSTRIAL INC.

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# Why trust CIR Industrial Automation as your HMI expert?

HMI Systems have impact on your company beyond the factory floor. HMI systems give engineering and operations more control over processes and provide important protection for your engineering investment. But perhaps more important is it also provides critical information to run the business more intelligently in real-time. So this is not a time to gamble

your reputation or company's future. When you're considering a HMI System it is impairitive to find a partner you can trust.

"Why should I trust CIR?" you might ask.

First, we're automators. We know what it takes to make plants and processes run smoothly. We earned the trust of engineers and managers just like you developing and

implementing total packages across several industries just like your's. Cliche-free. We have experience with all the major software and hardware packages. So CIR is particularly well suited to design and implement smarter HMI systems. And most of all we know first hand that good information makes decision-making faster.

And when it comes to

HMI, we love showing people how our systems work. Our creativity doesn't stop at designing a process, but goes the extra step to make using them as intuitive as possible.

Call us, we want to share the hard data on the positive impact our systems have had in our customers plants. Find out why customers ask us to make their HMI smarter.

***It's all inside.***

***Productivity Gains.  
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Solid Growth.***

***CIR Industrial Automation***

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