



## How to bring renewed reliability and profitability to your manufacturing operation

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If you take a good look at your current production equipment, there's no doubt you're looking at a significant portion of your business assets. But, if you're like many operations today, that legacy equipment is, while quite capable physically of performing the basic tasks at hand, not even up to a 1990s standard when it comes to technology potential. Even more troublesome is the fact that the original OEM for the equipment may no longer even exist, or may no longer support the system controls on which you rely.

On the brighter side, as you look at this good, "old iron", you are truly looking at a wealth of untapped value: your present factory equipment can be revived and modernized to support new levels of safety, efficiency, throughput and productivity. And that, altogether, can mean great things for your operation's bottom line. Best of all, this can be done at a fraction of the cost of a total equipment makeover — if you approach this refresh with the right know-how.

### **Putting technology to work.**

How can these renewed levels of safety, productivity, extended value — and therefore profitability — be reached? By integrating the latest factory automation technologies into your existing machinery. You can

bring that legacy machinery up to modern standards with a variety of today's tools like controllers, environmental sensor arrays, safety solutions, SCADA platforms, etc. that take advantage of the Internet of Things (IoT) within the factory setting. It all adds up to pushing the "refresh" button on your existing factory assets, while keeping capital expenditures at a minimum.

### **Safety First.**

Your equipment may not be up to date, and chances are your operators are not backdated to the origin of the equipment. Put technology to work for the safety of your operators before you begin to quench your thirst for big data. Safety controllers, safety relays, and safety sensing equipment can, and should be, implemented — even if your old iron is not destined for long term production plans.

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### **Choose Reliability.**

The number one objective in reviving your old iron is to regain and surpass the original equipment reliability. While your assets were built to last, the controls systems of yesteryear have gone by the wayside; lacking the technology to provide insight and adaptability, and are no longer supported by the OEM. Bringing your control system into the modern age, and selecting a platform with well supported communications protocols, stable OEM support, and dedicated operating systems will ensure that you've set yourself up for long term success in equipment reliability and connectivity options. Once you've provided a new control platform, you can teach the old dog new tricks.

### **Power in numbers.**

What it comes down to is the power that can be found in the numbers, or data, generated by these latest automation technology tools. Today, you can get accurate metrics from sensors which monitor your machine's throughput, uptime, downtime, even data based on what's happening with the equipment from a physical or environmental standpoint. More advanced continuous process or batch mode applications deliver even greater amounts of data on a macro level over time.

Gathering data is just the first step, however; all of those numbers are of no use to you if you don't act on the insights they represent and formulate strategies based on those insights. Chances are, your engineers are itching to know what the key influencers are when it comes to how your assets perform — or don't perform. That kind of information has rich potential when it comes to their decision-making regarding not only short-term production fixes but also longer-term practice and policy improvements. It's no doubt that, once you begin to take advantage of the power that automation data represents, you'll never go back to being a merely reactive operation. You'll revel in the ability to be proactive, forward-thinking and even predictive in the way you approach everything from daily tasks to scheduling to maintenance and more.

### **New tools, new potential.**

What exactly are these new automation technologies that can be integrated into your existing assets to give them — and your operation — new life? Generally, they fall into these categories:

- **Operator Safety solutions:** These solutions meet ANSI safety integration standards and include things like interlocks, light curtains, safety controllers, and guarding mechanisms.
- **Sensing, Metering and Regulating tools:** These include state-of-the-art systems for part presence and quality assessment, environmental control, MRP systems, AI and business intelligence.
- **Programmable Logic Controller (PLC) Upgrades:** These modern solutions improve performance, reliability, and operator/machine interface, as well as assure parts availability and mitigate risk presented by out-of-support controllers.
- **SCADA:** These next-generation Supervisory Control and Data Acquisition (SCADA) architectures are integrated with existing or new networks, and facilitate high-level process management for maximum efficiency and profitability.

### **How to get started.**

Whether you plan to dive head first into integrating these new automation technologies or wade into the waters slowly, it's important to make sure you're getting a solution that meets your specific technical, operational and budgetary requirements — not a one-size-fits-all, off-the-shelf solution.

Before you commit to anything, sit down with production and engineering staff to get a feel for what questions would be most helpful to be answered by any data generated and resulting analytics. Concurrently, think about who will be affected by these changes; incorporate their concerns into the solution. This revival is more than old iron and new data, it's also efficiency, operator safety, and maintainability.