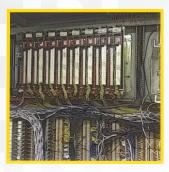
Control Systems Upgrade



LSI can help your plant transition from outdated legacy systems like PLC-5 and S5 to current and supported control technology with less costly downtime.

Many industries – including food and beverage, pulp & paper, specialty chemical and material handling – are finding themselves in need of control system upgrades and DCS migrations as legacy systems reach "end-of-life." Old processors control old processes and before investing in an upgrade, it is important to consider process optimization. "Replace in kind" (RIK) is an option but may not be the most effective use of capital investment considering the multitude of benefits of optimizing while upgrading. Benefits include increased throughput, reliability, quality and safety while minimizing costs and downtime. Understanding these benefits and their return on investment can help justify the cost of the upgrade.



REPLACING LEGACY CONTROL SYSTEMS

Even though manufacturing facilities continue to use legacy controls, control system vendors have already or are in the process of ending support for a number of currently installed legacy products. Examples include:

- Rockwell 1774, PLC2, PLC3, PLC5 and SLC
- Bailey Net90, Infi90
- Siemens S5
- Honeywell TDC
- Moore APACS
- GE 90-30, 90-70
- Modicon 484, 984, Quantum

All of these products are at the official "end of life." If these products continue to function in your facilities, they put your manufacturing process and packaging lines at risk of extended outages at unscheduled times. This obsolete hardware and software are the "brains" of the plant systems used for maintaining production, and they are too important to operate without proper support.

REPLACING LEGACY OPERATOR INTERFACES

Operator interface software provides the operator with the means to control the starting/stopping of the systems, monitoring and managing the operation and the well-being/health of production. These operator (HMIs - Human Machine Interfaces) are typically desktop computers located in a centralized control room. As they reach end of life, many common issues manifest themselves with HMI systems:

- Windows 7 This popular operating system is used in many older HMIs and inhibits almost any potential for an upgrade. Support for Windows 7 ended on January 14, 2020. Continued use of this operating system leaves industrial systems vulnerable to the latest security threats.
- Hard-to-get parts Critical components are individual parts within the "brains" that are at end of life, discontinued and are no longer available for purchase. They present a significant vulnerability when maintained with refurbished spare parts procured from third-party suppliers.

WHAT IS THE BEST FIT?

By listening to the business requirements of your unique application, our team of engineers, programmers and experts will help you to upgrade your systems in a way that improves the overall operation of your facility. In fact, our upgraded designs can accomplish the incredible, satisfying the needs of your head office, operational team and maintenance crew - all at the same time. This is accomplished by using system upgrade principles that focus on delivering the value of the new system at the most effective value-added cost. For example, upgrades can be performed in phases in operational facilities or over scheduled planned outages. You set the schedule and cost boundaries, and the LSI team will drive the schedule, manage the costs and provide the quality system you expect. We act as the "brain surgeons" for your plant, and that means we must earn your trust and confidence. Interested in finding out how we can upgrade your operation? Contact LSI today.

TIME TO UPGRADE

LSI has significant experience in a multitude of industries with performing control system upgrades and DCS migrations. We have developed proven processes and procedures to ensure successful conversions and upgrades following demonstrated metrics. LSI is one of the country's largest independent systems integration firms. This means that we can and have executed large system upgrades of well over 15,000 I/O points. Inversely, we often work on upgrades involving fewer than 100 I/O points. Plus, LSI is independent and not tied to any one OEM. This allows us to offer solutions based on any platform you choose, including:

- · Rockwell's ControlLogix
- Emerson's DeltaV
- Siemens SIMATIC S7-300, S7-400, S7-1200, S7-1500
- · Other less prominent brands

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