

Emerson Modernization Solutions

Getting there with minimum risk and cost is Emerson's goal for all modernization projects. It is time to modernize your aging, unsupported PLCs. The DeltaV™ control system delivers cutting edge technology, flexibility, and ease-of-use to positively impact your business for the next generation.

DeltaV™ PK Controller

At the heart of the solution is the new DeltaV PK Controller. Powerful and versatile, it can standalone, be the mainstay controller in a new DeltaV system or easily integrate with an existing DeltaV system at any time.

To enable a fast, error free cutover without lifting existing field wiring, an innovative solution has been developed to fit in the same footprint as a standard Rockwell Allen Bradley® 1771 I/O chassis.

Utilizing the PLC 1771 I/O module/card swing-arms, existing field wiring terminations are guided back onto specially designed DeltaV signal conditioning cards to pass the field signals to standard High-Density Series 2 Plus DeltaV 16-channel analog input and 32-channel discrete I/O cards with mass-termination I/O terminal blocks.

Reusing the same footprint will reduce project costs by eliminating the need for new cabinets and re-terminating field wiring. Maintenance personnel will appreciate that they will be able to use a multi-meter at the swing-arms to test the field signals.

The following 16-channel non-isolated and isolated channel-to-channel card types are supported, as listed below:

- **1771-IAD**, discrete input, 120 VAC,
- **1771-OAD**, discrete output, 120 VAC,
- **1771-IBD**, discrete input, 24 VDC,
- **1771-OBD**, discrete output, 24 VDC,
- **1771-IFE**, analog input, 4-20 mA, single-ended.
- **1771-ID16**, isolated, discrete input, 120 VAC,
- **1771-OD16 & -ODD**, isolated, discrete output, 120 VAC,
- **1771-OW16**, isolated, discrete output relay, 120 VAC.

For 1771 I/O cards not listed above, we have partnered with Weidmuller to supply passive interface adapter cards with flying-lead cables (1, 3, 5, 10, 15, 30-meters in length). These adapters fit onto the new DeltaV mounting kits: the same way the DeltaV signal conditioning cards are attached. The flying-lead cables can be pre-terminated to standard screw terminal DeltaV I/O terminal blocks.

This solution is also fully applicable for 1771 I/O found under SLC™ 500, ControlLogix® and other control systems.

***Modernize to DeltaV Control
with minimal rewiring and
no additional space.***

Typical Installations

The solution is a great fit to replace standalone PLC systems with a DeltaV PK Controller based system which can remain standalone, grow as a plant's main automation platform or merge into a new or existing DeltaV system at any time.

Scalable DeltaV PK Controllers and the 1771 I/O solution can be cost effectively used to replace PLC-5®, SLC 500 or ControlLogix systems currently interfaced to a DeltaV system. The benefits of natively merging into a common platform will be realized with reduced spare parts, elimination of tag mapping, common engineering tools and lower training costs.

Services

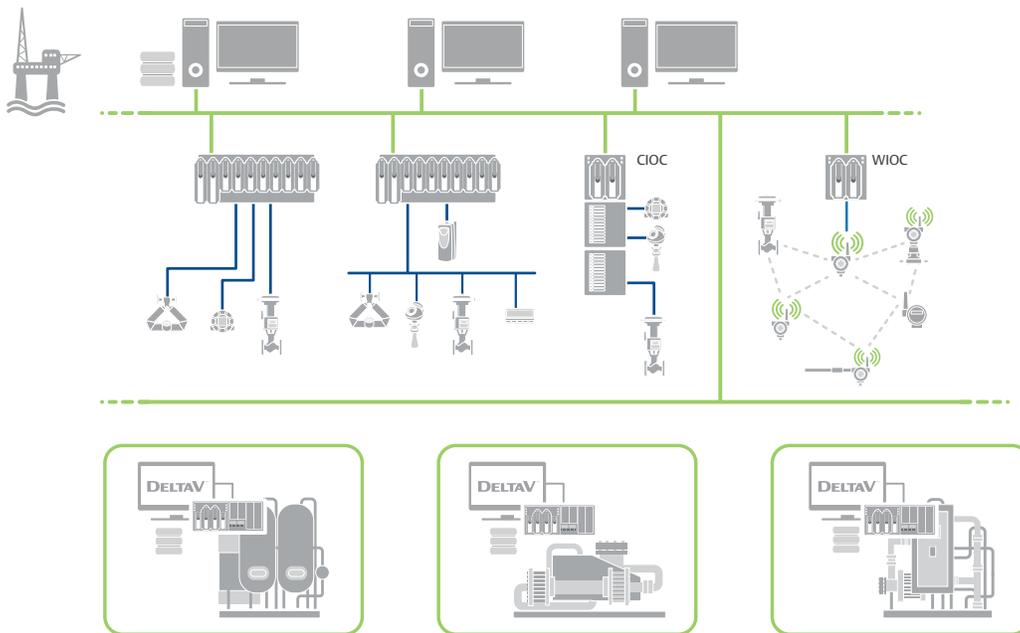
Emerson and our Impact Partners have vast experience modernizing legacy systems with over 7500 projects delivered. Of these more than 1400 have been PLC systems. Unrivaled project management, planning, and execution services will ensure a smooth transition to a new DeltaV control system. In addition, sophisticated tools are available to lower the risk of errors when engineering the application and ensure the latest control capabilities are utilized to improve operations.

For more product solution details:

To locate a sales office near you: **Contact us.**

To learn more about Emerson modernization capabilities: **Modernization & Migration.**

For large power, water, or wastewater applications: **Ovation.**



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