

# Professional Station Software Suite

- Powerful engineering capabilities
- Robust and secure plant operations
- Integrated system and device diagnostics



*You can easily engineer and operate your process automation system from the Professional Station.*

## Introduction

Are you looking for an additional DeltaV™ workstation that centralizes operations, engineering and diagnostics to one PC?

The Professional Station delivers state-of-the-art operator interfaces, dynamic engineering capabilities and combined system and device diagnostics in one workstation.

A Professional Station is made up of the Professional Station Software Suite and the DeltaV workstation to run it. Pre-engineered templates, offline and online configuration capabilities, and powerful graphics ensure that you are getting the most for your investment.

Use the unique DeltaV Flexlock feature to securely lock operators into the DeltaV system, limiting user access to only the applications that you choose, while also giving engineers the ability to access Windows applications, as needed.

## Benefits

**Graphical engineering capabilities.** Engineer your system your way. Design your process control system in an environment similar to Microsoft® Windows. Use the high-resolution graphics and drag-and-drop features for total engineering capabilities.

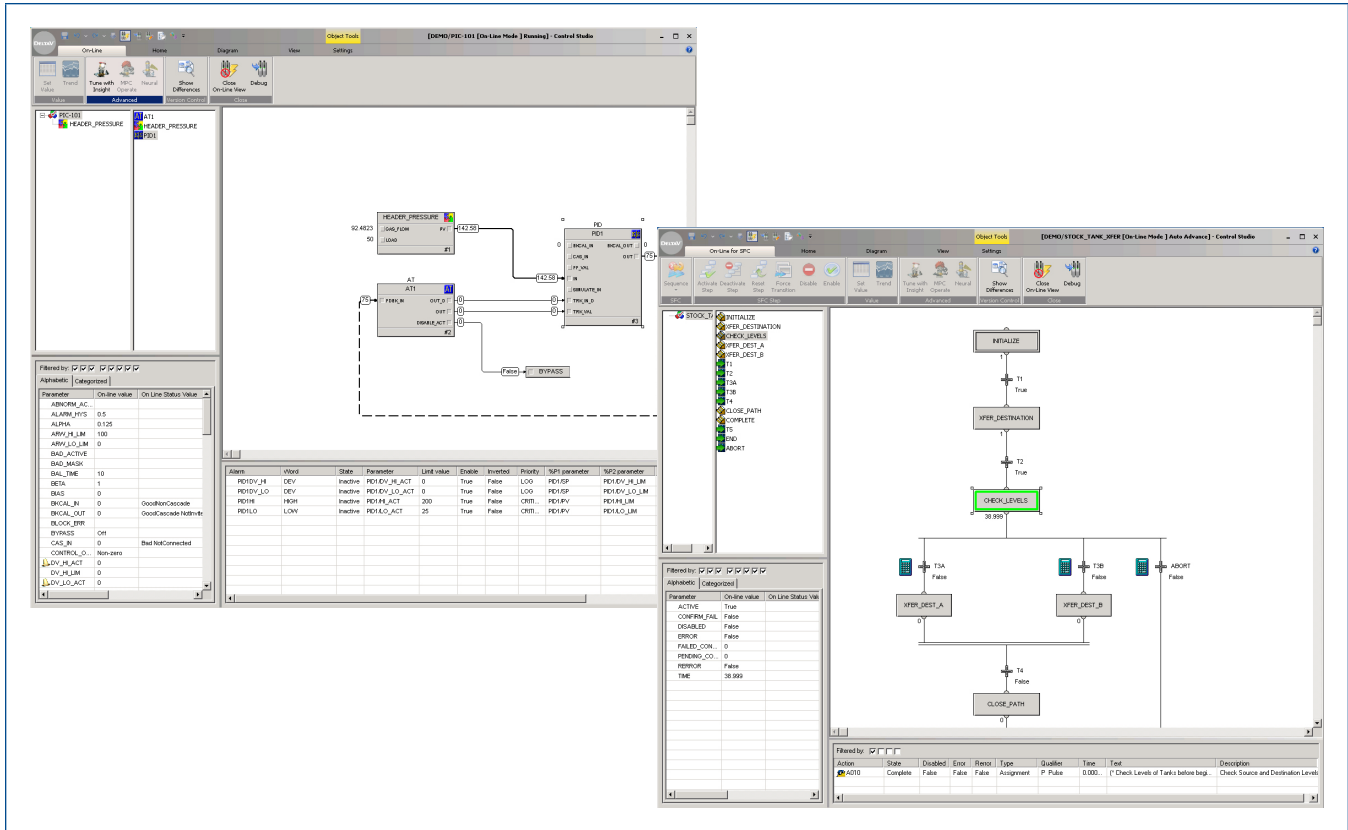
Implement using the pre-engineered library templates or customize them to fit your needs. Your process control system will be up and running in record time using DeltaV system engineering.

**Robust and secure plant operation.** Every DeltaV workstation has direct access to all operating information, from the current process values and operating displays to having alarms with the proper alarm priority, timestamp and alarm help.

Built-in, reliable operation features such as prioritized alarms and user security increase usability. Easily customize the standard operating desktop to fit your specific operational philosophies and work preferences.

**Integrated system and device diagnostics.** The DeltaV system offers an integrated approach to diagnostics with the look and feel of Windows Explorer. No longer do you have to remember which diagnostics package to use or how to work each package—critical when the plant operation depends on immediate diagnosis of the situation.

Remotely configure with your Professional Station Software Suite with DeltaV Remote Client or **DeltaV Remote Access Service.**



Graphically view and debug executing control strategies.

## Product Description

The high-performance Professional Station Software Suite was developed following the Microsoft paradigm. Features such as windows, graphics, drag-and-drop, and cut-and-paste enable you to concentrate on your control strategies—not on the application.

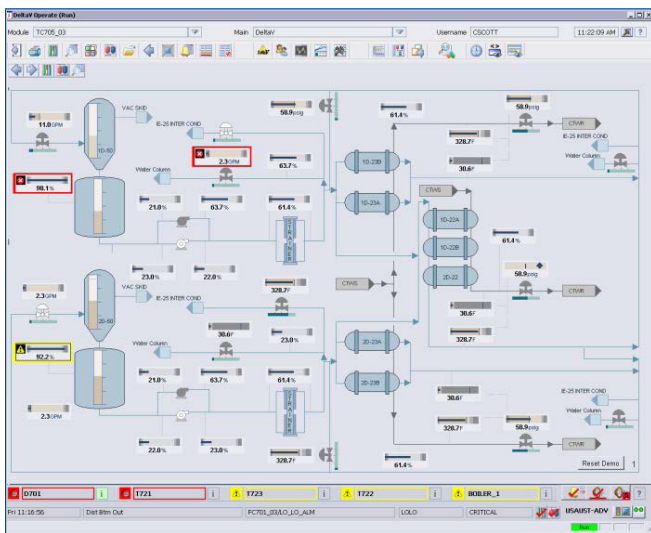
Whether remotely or directly connected to the DeltaV system, the Professional Station Software Suite provides the same capabilities.

You can easily engineer your system at the Professional Station. Our multi-tasking environment runs on Microsoft Windows. Configuration is smooth, fast, and completely integrated - from graphics to control, your system will be up and running in record time.

With the DeltaV system, there are no behind-the-scenes translation programs that convert your graphical control strategy into a different structure. This allows you to easily view and troubleshoot your strategies with the same tools used to configure. Simply select “on-line” for a control module and view its actual execution in the same graphical representation used to edit.

No matter where the control strategy is executing - DeltaV controller, workstation or FOUNDATION™ Fieldbus device, you use the same configuration, on-line view and modification capabilities.

Now hand over the Professional Station to your operators to monitor, troubleshoot, and maintain your process.



Graphically view and debug executing control strategies.

DeltaV Live and DeltaV Operate provide powerful graphic environments for process operation, with built-in features for easy and direct information access. Whether you are viewing the highest-priority alarm, the next display, related historical information or detailed tag information, operator navigation is consistent and intuitive.

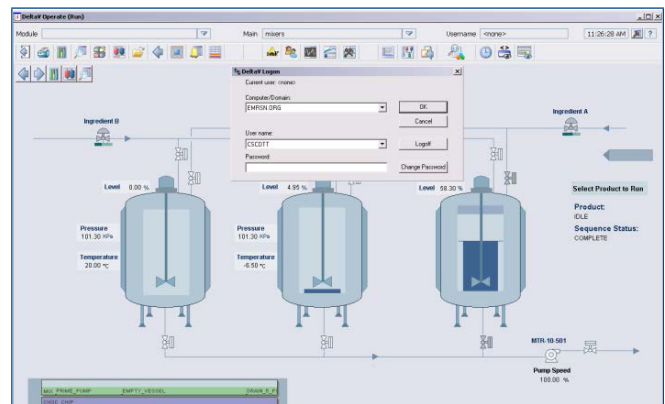
Standard displays, faceplates, detail displays and operations layouts for both single and dual monitors provide a consistent operating philosophy. With DeltaV Live and DeltaV Operate, you have the option to use the standard library, or create your own to meet your specific needs. Predefined functionality includes Human Centered Design (HCD) display components. These components provide integrated alarm, status and operating information, predefined based on industry best practices and display human factors that follow the Center for Operator Performance (COP) recommendations and ISA 101.1 standards, geared specifically for Level 1, Level 2 and Level 3 or 4 displays.

Each workstation manages its own alarms and data access. This includes information of when the alarm occurred, whether the alarm is suppressed, and Alarm Help if it is configured on your system. With DeltaV, there is no additional server PC, or other intermediary required to be able to operate your plant.

Individual users can have specific privileges that determine which functions (e.g., operate and tune) they are allowed to perform and which parameters they are allowed to change. These user privileges can be defined for all or part of your DeltaV system, enabling the privileges to be tailored to certain plant areas.

Each Operator can be limited to certain plant areas for viewing and operating. This security feature can also be defined for an individual station, regardless of who is logged on. Use the DeltaV exclusive Flexlock to ensure that operators remain dedicated to monitoring, troubleshooting, and maintaining the process according to plant operating philosophies.

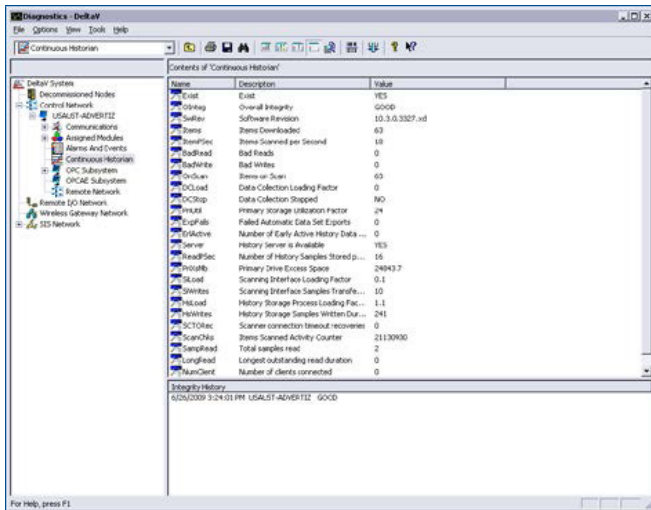
Operator log on and log off are performed without needing to close DeltaV Operate, or any other DeltaV application. The DeltaV system automatically recognizes the different user and adjusts the user privileges accordingly.



Log on and off of DeltaV without disruption.

DeltaV Diagnostics lets you quickly know the status of your control system and intelligent field devices. Diagnostics information is included not only for your DeltaV Workstations, Control Network, Controller, and I/O, but also includes support for AS-i, DeviceNet, Profibus DP, HART and Foundation Fieldbus intelligent devices.

Taking advantage of smart field devices, DeltaV Diagnostics lets you look at information from internal device diagnostics to communications statistics—all from your desktop.



Diagnose the DeltaV system and intelligent devices.

Emerson Automation Solutions is the industry leader in scalable, plant-aware process automation systems. Our state-of-the-art, totally integrated applications give you the power to do more. The included Continuous Historian can collect history locally on this workstation. You can also have additional Continuous Historians on other workstations. You can view continuous, event, or batch historical data, regardless of the DeltaV workstation collecting the data. This allows you to centralize or decentralize your historical collection.

### The following software applications are included in the Professional Station Software Suite.

For detailed information about the following applications, refer to the appropriate product data sheet:

- Configuration Software Suite.** Makes it easy to create Control Strategies and System Graphics to get your plant up and running quickly and efficiently.
- Control Studio On-line.** Graphically monitor and troubleshoot running control strategies.
- DeltaV Continuous Historian.** A 250-parameter DeltaV Continuous Historian is included with every DeltaV workstation. This provides the ability for up to 250 analog, discrete, and text parameters and their status to be captured and stored for future analysis. For DeltaV v12.3.1 and newer, three scale-up licenses are available that enable up to 3,250 parameters of DeltaV Continuous Historian capacity on any non-Application Station node, including the operator workstation:

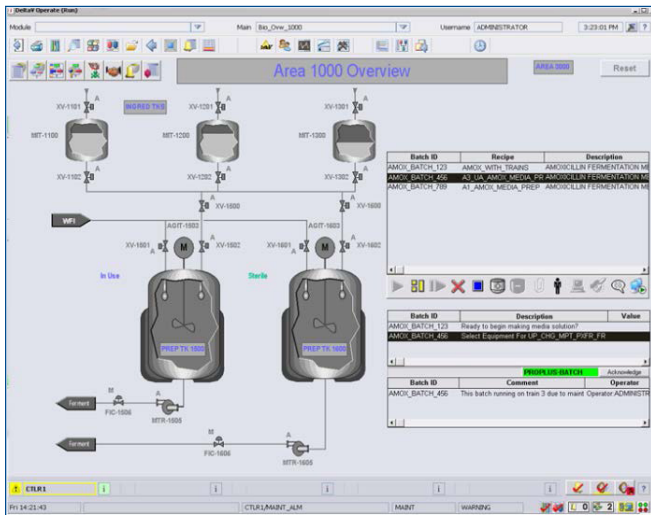
- VE22UPS042OP1** – DeltaV Continuous Historian, Enable 1,250 Parameters

- VE22UPS042OP2** – DeltaV Continuous Historian, Scaleup from 1,250 to 2,250 Parameters

- VE22UPS042OP3** – DeltaV Continuous Historian, Scaleup from 2,250 to 3,250 Parameters.

- DeltaV Operate.** High performance operator graphics, trends and alarms offered in standard operating layouts and utilizing system-wide built-in security.
  - DeltaV Reporter.** View, analyze and report historical process and alarm and event data from the DeltaV Continuous Historian and the Event Chronicle in your copy of Microsoft Excel.
  - Diagnostics.** Facilitates checking the overall health of your system and quickly resolving system hardware, software, and configuration issues.
  - DeltaV Event Chronicle.** Captures process, system and user alarms and events and stores them in a Microsoft SQL Server database.
  - Flexlock.** Creates dual desktops on a single workstation to ensure that operators remain dedicated to monitoring, troubleshooting, and maintaining the process according to plant operating philosophies while also giving engineers the ability to access restricted areas as needed. Flexlock is a DeltaV exclusive.
  - History View Suite.** Monitor your plant's continuous and event data—historically and in real time.
- Products included with appropriate system licenses**
- When the appropriate system licenses are included in your DeltaV system, the following applications are provided:
- DeltaV Live.** HTML5 based high performance operator graphics, hierarchical navigation, trends and alarms offered in standard operating layouts and utilizing system-wide built-in security. DeltaV Live is available in two tiers, Standard and Premium.
  - AMS Device Manager Client SC for device status.** Provides the ability to view the status of HART and FOUNDATION Fieldbus devices (license from AMS Suite: Intelligent Device Manager required for configuration capability).
  - DeltaV Operate for Batch.** Batch Controls allow you to operate your batches from the same DeltaV Operate environment used to monitor and control your process.

- **Campaign Manager Operator Interface.** The interface used by the operator to create and control campaign execution.
- **DeltaV In Sight.** Control performance monitoring and loop tuning application embedded in DeltaV. Identify control problems and improve control performance with automatic process learning, loop diagnostics, on-demand and adaptive tuning, and automatic report generation.
- **DeltaV Neural.** Easily configure virtual sensors that are executed in the DeltaV neural net function blocks.

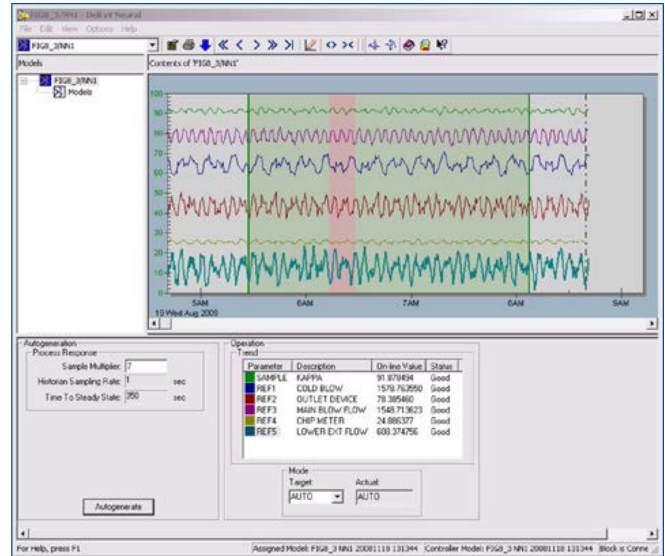


Integrated batch operation.

- **DeltaV Predict and PredictPro.** Model Predictive Control (MPC) which runs in DeltaV to provide multivariable control and optimization for small and large applications. Includes off-line model identification and simulation, plus on-line MPC with operator interface.
- **Recipe Studio.** Powerful yet simple to use application for graphically configuring recipes (with formulas) for successful batch production.

Options

To enhance your Professional Station, the following options may be added:



DeltaV Neural provides easy-to-use tools for developing and training neural network models.

- **Alarm Help.** Provides operators with in-context access to approved alarm response procedures and control engineers with native system configuration capability to administer alarm rationalization data per ISA-18.2 - Management of Alarm Systems for the Process Industries.
- **AMS Device Manager Client SC.** Add full configuration of HART and Foundation Fieldbus devices (license from AMS Suite: Intelligent Device Manager required for configuration capability).
- **DeltaV Excel Add-in.** OPC Data Access client application providing read/write access to DeltaV real-time information in your copy of Microsoft Excel.
- **DeltaV InSight Basic.** Basic control performance monitoring and on-demand loop tuning application available for a single DeltaV workstation. Provides equivalent functionality to legacy products TUNE and INSPECT. Does not include advanced features available in full DeltaV InSight application.

## Ordering Information

Description	Model Number
Professional Station, Full Span of Control*	VE2102
DeltaV Live Operations Premium Performance Pack license**	VE2104P01

\*Span of Control is defined by the assignment of DSTs and view of the Alarms and Events on a workstation (e.g. Zero Span of Control will not allow control of DSTs or view of Alarms and Events on the workstation. Full Span of Control allows viewing of all 30,000 DSTs and can view all Alarms and Events assigned to the workstation.)

\*\*Enables DeltaV Live Operations (runtime) premium tier functionality on the Professional Workstation Node. Please refer to the DeltaV Live PDS for more information.

## Related Products

### Related Software Products

- **Application Station Software Suite.** Integrate DeltaV with 3rd party systems and applications on a DeltaV workstation. Includes a scalable DeltaV Continuous Historian and DeltaV OPC Data Access server.
- **Base Station.** Centralized DeltaV applications, where the combination of applications included are user selected on a DeltaV workstation.
- **DeltaV Remote Access Service.** Enables communications to a remote DeltaV workstation.
- **DeltaV Remote Client.** Remotely connect to your DeltaV system using thin-client technology.
- **DeltaV Web Server.** Enables web-based viewing of operator displays and historical data.
- **Maintenance Station Software Suite.** Centralized system and device maintenance, including device calibration, device and hardware alerts and diagnostics on a DeltaV workstation.
- **Operator Station Software Suite.** Centralized operations and diagnostics on a DeltaV workstation.
- **DeltaV Engineering Seat Software Suite.** Access engineering tools on-demand from a DeltaV workstation or Remote Client session.
- **ProfessionalPLUS Station Software Suite.** Centralized operations, engineering, configuration database and diagnostics on a DeltaV workstation.

### Related Hardware Products

- **DeltaV Workstation Hardware.** Select from a variety of PC and server hardware, tested and preloaded with DeltaV software.
- **Touchscreen.** Allows displays to interact directly to operators' touch.

### Prerequisites

- This software suite must be loaded onto a DeltaV workstation. A variety of hardware is available to meet your specific requirements. Refer to the DeltaV Workstation Hardware Product Data Sheet.
- One ProfessionalPLUS Station is required for each DeltaV system. Refer to the ProfessionalPLUS Station Software Suite Product Data Sheet.
- Use of the DeltaV Reporter or DeltaV Excel Add-in products require a copy of Microsoft Excel (provided by others).

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