



GUIDANT

Fusion4 Loading Automation Solutions

Advanced, accurate, and reliable control



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Advanced, Accurate, and Reliable Control

Scalable and versatile, Fusion4 brings intelligent features and powerful functionality to loading, blending, and additive injection operations. It enables terminal operators to continuously control and monitor system performance.

The Fusion4 Portfolio

Fusion4 MSC-L

MSC-L is one of the world's most advanced multi-stream controllers (MSC) for loading up to six arms with additive and blended streams.

Fusion4 MSC-A

MSC-A is the world's most advanced multi-stream controller, capable of controlling up to 24 additive injection streams independently or integrating with up to four master devices.

Fusion4 MultiPak

MultiPak has unmatched control with the MSC-A multi-stream controller, combining the industry's most-used additive injection block—Mono-Block™—providing a complete additive injection skid for the most complex applications.

Fusion4 SSC

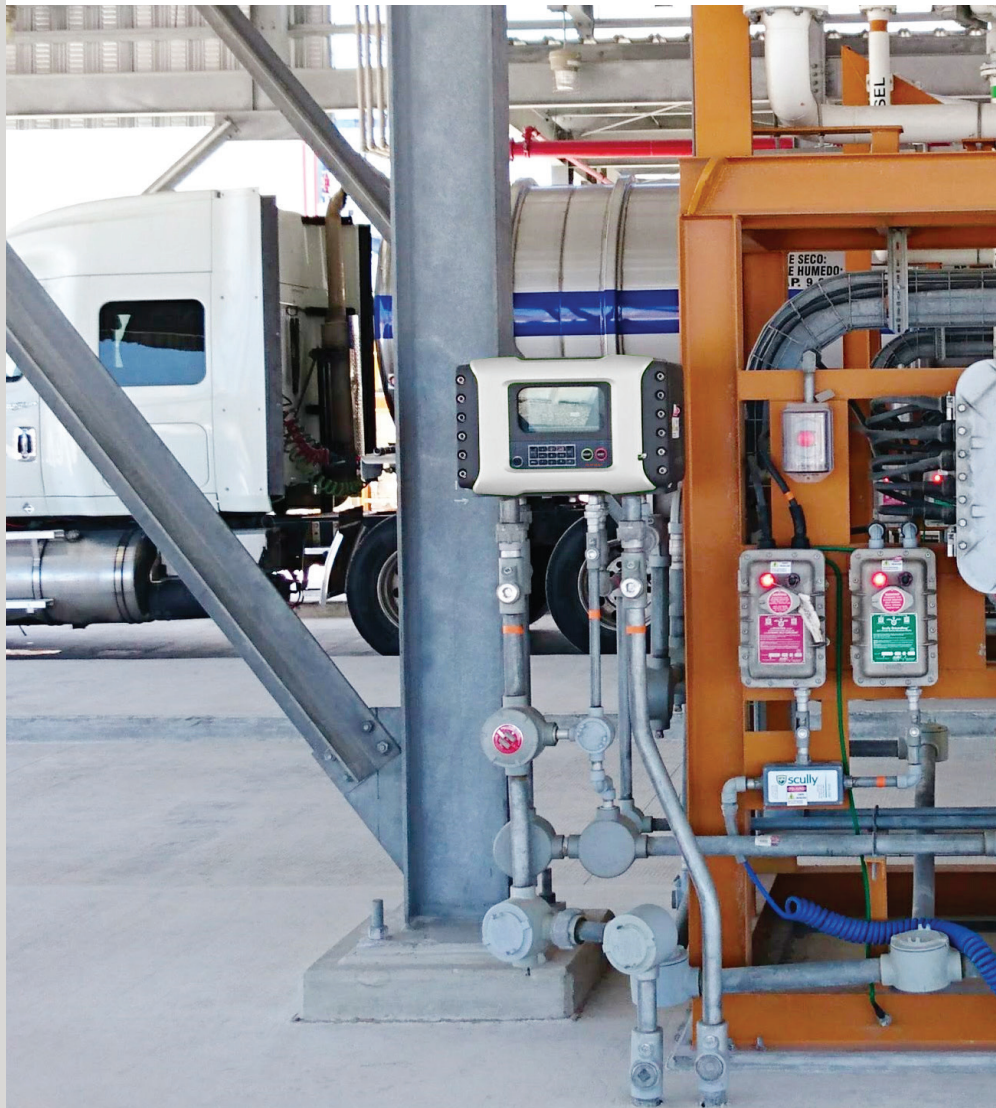
Our state-of-the-art single-stream controller (SSC), that features proprietary software algorithms crafted from decades of control expertise, specifically designed for precision blending and additive injection.

Fusion4 MiniPak

MiniPak provides the highest standard of precision for a single-stream additive injection solution.

Fusion4 safeguards your operations by minimizing losses through powerful functionality and a simplified user experience for loading, blending, and additive injection.

As the industry's most advanced controller product portfolio, Fusion4 simplifies operations and ensures the safety and efficiency of your process. Leveraging our midstream experience and control-system design leadership, we offer a wealth of global expertise to ensure your loading rack never misses a drop.



A Smarter User Experience

Our unique user experience is designed for the way people work. Taking its cue from smart phone and tablet computing applications, self-explanatory icons provide easy access to all operations and functions.

With a consistent look and feel across the portfolio, our intuitive user interfaces help you cut training times, eliminate human errors, and boost productivity. Highly configurable and with multiple-language support, they are made for your operations, giving users unparalleled insight and control.

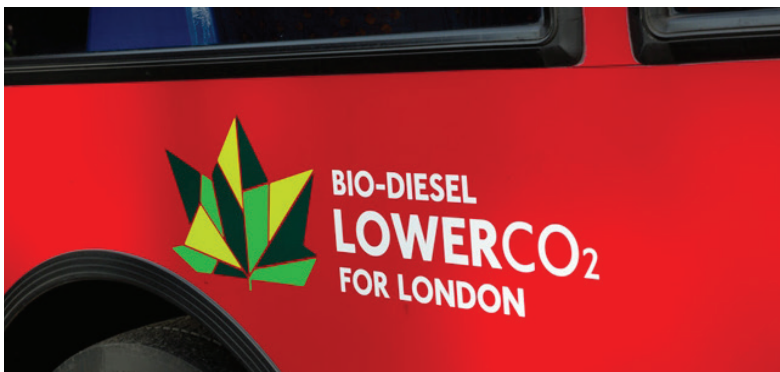
Precise and Compliant

Fusion4 is designed for market-leading accuracy, helping you precisely monitor and control critical operational parameters to eliminate waste and protect your high value products.

Approved for use in hazardous areas and with powerful alarm handling, the controllers are built for safety. Able to meet the requirements of the European Union (EU) Measuring Instrument Directive (MID) and United States (US) National Type Evaluation Program (NTEP), amongst others, it also delivers for weights and measures approved custody-transfer applications, while the Calibration Wizard automatically captures every record for traceability and security.

See More, Do More

With an 8-inch color display for the MSC or 3.5-inch color display for the SSC, Fusion4 gives you visibility and clarity where you need it. Supporting multiple languages—including French, Mandarin, Spanish, and many others—drivers and operators can fully control and monitor operations from a loading rack.



Fusion4 blending solution helps reduce bus emissions in London.

Lower Cost of Ownership

The Fusion4 controller portfolio is focused on efficiency. Smart, powerful features and a modular design help you do more with less, driving down capital and operational expenditures.

More Streams

The ability to monitor 24 streams and up to six loading arms with the Fusion4 MSC, means fewer, more powerful devices controlling your loading racks.

Modular Upgrades

Common building blocks add more functionality for sophisticated operational requirements and a definitive scalable solution. Common parts used across devices also optimize inventories for spares.

Optimized System Connectivity

Plug-and-play connectivity to our terminal automation solutions—the Fusion4 Portal software suite—between Fusion4 controllers and third-party systems using standard Modbus (TCP/IP or RTU) protocols to protect investments.

Fast Installation and Set Up

Start ups in under a minute, quick configuration, the Calibration Wizard and configurable input/output get you working faster.

Easier Maintenance

Keep operations reliable with negligible-downtime firmware upgrades and real-time diagnostics. Replace or upgrade hardware without removing a single field cable.

A Powerful Portfolio

Fusion4 offers an advanced portfolio of controllers with intuitive user experiences for efficient loading, blending, and additive injection. It ensures precision, compliance, and lower cost of ownership solutions for the terminal industry.

The Fusion4 portfolio provides a complete solution for loading, blending, and additive injection. A common look-and-feel across the portfolio reduces training requirements and human errors. Wide-ranging integration capabilities offer plug-and-play expansion and scalability.

Fusion4 MSC-L: Control At the Heart of the Operation

A large, full-color display and keyboard combined with our icon-driven interface provides the most powerful weights and measures approved loading-control solution on the market. Control up to six loading arms simultaneously with blending and additives.

With the intuitive app-based interface, drivers are easily steered through identification and vehicle entry information, product and recipe details, and batch control. A selectable workflow function enables customer-specific operational sequencing. The large screen facilitates at-a-glance monitoring of all operations.

MSC-L combines seamlessly with other systems in the Fusion4 portfolio to add blending streams and additive injectors.

Fusion4 MSC-A: Pinnacle of Additive Control

The most advanced dedicated hazardous-area approved multi-stream additive controller in the world, the MSC-A puts you in control of operations with up to 24 streams by a single MSC-A. The simple interface gives you access to rich, clear information about the transfer operations. Have full visibility and insight on precision, traceability, and security. Detailed transactional data, alarms, diagnostics, and calibration-event logging provide a secure audit trail for business and regulatory auditing.

Fusion4 MultiPak: Streamlining Operations with Precision

Fusion4 MultiPak combines the industry-standard Mono-Block additive metering and control manifold with the Fusion4 MSC-A. Purpose-built for additive injection, this system monitors up to 24 streams with unparalleled input/output density, ensuring exceptional functionality and precise stream control. The free-standing frame of Fusion4 Multipak enables swift installation, reducing commissioning and start-up times.

Fusion4 SSC-A/B: Excellence in Single-Stream Blending or Additive Injection

Fusion4 SSC is capable of managing additive operations and blending operations based on the loaded software package. The best-in-class software enables on-specification product deliveries with a built-in make-up algorithm based on years of industry experience.

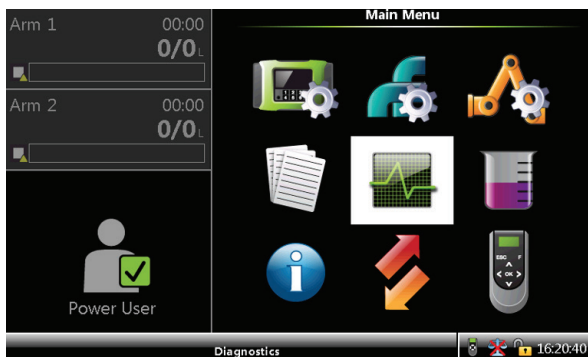
Easy-to-use but offering sophisticated control, the SSC coupled with application-specific designed blend streams is suitable for blending ethanol, bio-diesel, butane mid-grade fuel, chemicals, and fertilizers.

Our Fusion4 SSC-B is certified in compliance with EU MID accuracy levels for custody transfer.

Fusion4 MiniPak: Zero in on Accuracy

Get precision single-stream additive control and the Fusion4 user experience with the MiniPak. Our industry standard Mono-Block metering and control manifold pairs with the SSC. Designed exclusively to manage additive injection, the SSC continuously monitors the additive volume, maintaining the correct ratio throughout each transaction.

Fusion4 is designed for market-leading accuracy, helping you monitor and control more critical operational parameters more precisely to eliminate waste and protect your high-value products.



Fusion4 User Interface



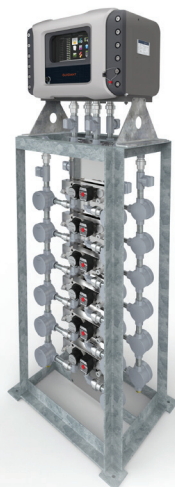
Fusion4 SSC-B



Fusion4 MSC-L



Fusion4 SSC-A



Fusion4 MSC-A

Powerful Features Across the Fusion4 Portfolio

Unique Icon-Driven Interface

Almost no training required with the Fusion4 user experience.

Advanced Alarm and Event Handling

Monitors nearly twice as many parameters as any other device.

Real-Time Diagnostics

Diagnostic dashboards for fast identification of any problems.

Live Data Transfer

Even in hazardous areas using local access device (LAD) transfer data, screen captures, and update firmware.

Configurable I/O

Assign any function to any input or output.

Calibration Wizards

Capture and record every calibration record.

Multiple Supported Languages

Including Dutch, English, French, German, Italian, Japanese, Mandarin, Polish, Portuguese, Spanish, and others.

Flow Profile View

Trace your flow rate and tell the story when needed.

Control Excellence

Our field-proven control algorithm minimizes off-specification losses.

More Functionality

Smart, powerful firmware design enables you to configure the same firmware for liquified natural gas (LNG), liquified petroleum gas (LPG), rail, marine, and road-tanker loading to decrease your capital and operational expenditures. Increase your system's functionality using Fusion4 Portal software and LAD.

The Fusion4 LAD

Using LAD, you benefit from the first device in the world capable of live-data transfer in hazardous areas. Safe, secure two-way data communication enables rapid transfer of transactional data, configuration files, and calibration records.

Use the Fusion4 LAD to adjust parameters, reset alarms, upload language packs, and calibrate devices, as well as complete minimum-downtime firmware upgrading in the field. The removable secure digital (SD) card makes safe-area data transfers easy.

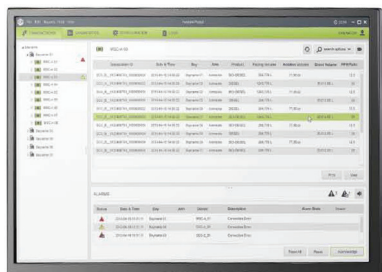
Fusion4 Portal

The Fusion4 Portal software suite for monitoring, printing, and configuration of devices remotely facilitates remote management by Ethernet or serial communications for centralized control and the highest standards of reliability.

Available as a modular package, you can bundle only the functional modules you require into a single on-screen dashboard.

Our modules include:

- Monitor module
- Print module
- Configuration module



Fusion4 Portal

Mono-Block

Building on the legacy of the industry's first-ever additive injector, the Mono-Block is globally the most widely used additive injector. It can be installed in diverse industrial settings, such as loading racks, pipelines, chemical storage facilities, mining, and mineral processing facilities, and aviation fuel delivery facilities.

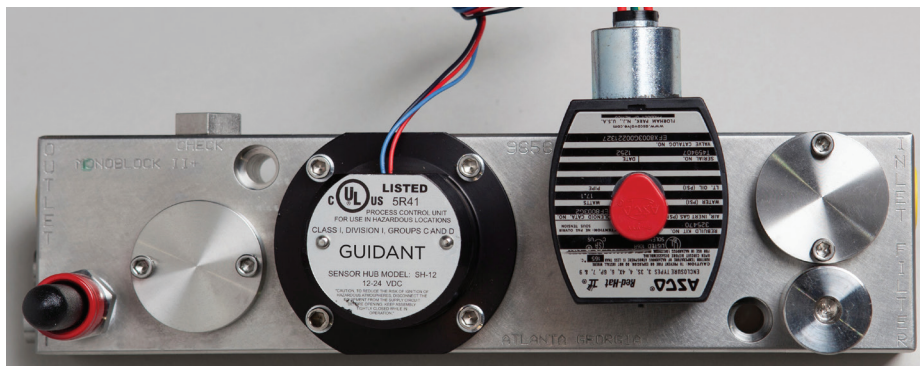
The Mono-Block is designed to work seamlessly with all Fusion4 smart injector controllers, as well as any latest-generation loading preset or a programmable logic controller (PLC) system.

Wider Offerings

Use Guidant as your single source for automated loading and unloading to draw on a comprehensive and integrated portfolio of products, systems, and services.

Our expertise encompasses:

- Complete portfolio of instrumentation
- Terminal management systems
- Equipment health monitoring systems



Mono-Block Additive Injector



Guidant's Legacy

- Decades of experience in providing tailored terminal automation solutions
- Over 100,000 injectors sold worldwide
- A pioneer in smart additive injection and blending
- Solutions for every application
- Single-source provider with wide portfolio of products

Wide Range of Support Services

- Telephone and e-mail support
- Software patches and enhancements
- On-site field support for troubleshooting
- Routine and preventive maintenance
- Spare parts management
- System upgrades and technology refreshers
- Customer training programs

About Guidant

As the undisputed leader in liquid and gas custody transfer solutions with the largest global install base, Guidant's legacy is built on more than 80 years of expertise, accuracy, reliability, and best-in-class technologies. We are a private company focused on the measurement solutions business, serving emerging and established energy markets across the globe.

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