

- FORT WAYNE, INDIANA -



A <u>NEW STANDARD</u> IN HMA AUTOMATION.



# **ABOUT ALmix**

#### WHO WE ARE.

Simply put, ALmix stands for "All Mixes". Founded in the Fort Wayne, Indiana, ALmix is the trade name of Asphalt Equipment Company, Inc. and has been serving the asphalt industry around the world for over 50 years. We provide our customers with a complete range of Drum and Batch type asphalt plants and auxiliary equipment.

At ALmix, we go beyond just making mix. Our focus is to produce it more efficiently with a focus on safety every step of the way. To relocate your plant more quickly and to allow you to operate more economically. To deliver equipment built to last and designed with the details the HMA Industry deserves.

#### WHERE WE'VE BEEN.

To date, ALmix has delivered more than 1000 asphalt mixing plants, ranging from 25 to 600 TPH, operating in the United States and many other places around the world, including Mexico, Canada, Dominican Republic, Haiti, Costa Rica, Panama, Venezuela, Columbia, Argentina, Chile, Morocco, Algeria, Libya, Australia, New Zealand, Ecuador, Russia, Taiwan, Guam, Malaysia and Singapore.

#### WHY THE ICS CONTROL SYSTEM WAS INTRODUCED.

The challenges to the HMA Industry intensify as each new year rolls in. Specifications become tighter. Margins become lower. Material, labor and insurance costs continually trend upwards. Fortunately, available technologies steadily advance, and in many cases, outpace these demands. At ALmix, we understand that it is our duty to leverage these new opportunities in technology and to incorporate them into our offerings to the HMA Industry. The Insignia Control System (ICS) does just that. The following pages describe the very latest in HMA Plant Automation. A new tool built for today and tomorrow.



# THE INSIGNIA CONTROL SYSTEM | OVERVIEW

Over the years, ALmix has become renowned as a provider of industry leading asphalt mixing plants. Throughout this time, we've seen major changes to technologies across the many facets of the industry. As the pace of change and the introduction of new technology accelerates, we are pleased to offer a plant control system that is designed to embrace these changes and keep your operation ahead of the curve.

The ALmix Insignia Control System or ICS, is a Total Plant Control System in every sense of the phrase. It has been organically designed through a collaboration of ALmix software engineers, field service personnel and plant operators. Its open architecture has been designed from the ground up to be able to adapt to the ever-changing requirements of the asphalt plant industry. Welcome to a New Standard in HMA Automation.





## **SYSTEM CAPABILITIES**

The heart of the ICS System is an Allen Bradley Control-Logix<sup>TM</sup> PLC and Industrial Grade PC operating on the latest Windows<sup>TM</sup> platform. The ICS system controls the complete blending process across every plant station and provides real-time plant production data and status of each individual I/O, including component data. The system also has the ability to provide fuel and power consumption data. The data collected and provided by ICS gives you a comprehensive view of your plant's performance that can be used to drive business decision-making. Gone are the days of guesswork and estimations. Unlimited mix designs, individualized moisture control, charting and reporting capabilities, volumetric and scale modes, flexible settings for timing and synchronization and backup/restore all come standard to give you an even sharper edge on your market.







#### EASY-TO-NAVIGATE USER EXPERIENCE

With modern, tailored graphics, a comprehensive main screen view and a series of operator-focused screens all at the click of a mouse, the ICS control system features a visually appealing user experience that is intuitive to learn. The system's clearly identified switches, meters and warnings ensure that the plant operator is in total control of all aspects of plant production.

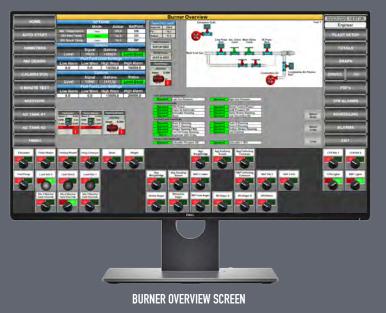


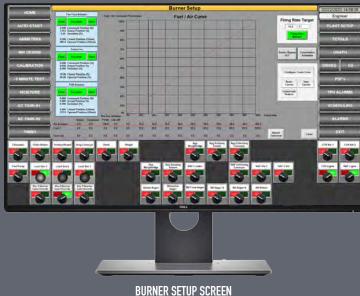


# THE INSIGNIA CONTROL SYSTEM STANDARD FEATURES

- Automatic plant start-up and shut-down with sequence interlock
- Multi-point capability for all calibrations
- Burner ignition sequence and fault display
- Automatic burner control with start-up and firing percentage
- VFD exhauster control with speed percentage and drum negative pressure status
- Automatic baghouse cleaning control with baghouse differential pressure status
- Automatic batcher and silo selection control
- Interlocks, warnings, settable limits and logs for added safety
- No flow switches to alert for an empty or blocked bin
- A Mix Parameter Printer allows selected periodic printing of mix parameters including AC and mix temperature
- Ammeters for all motors (if AB Intellicenter and Drives are used)







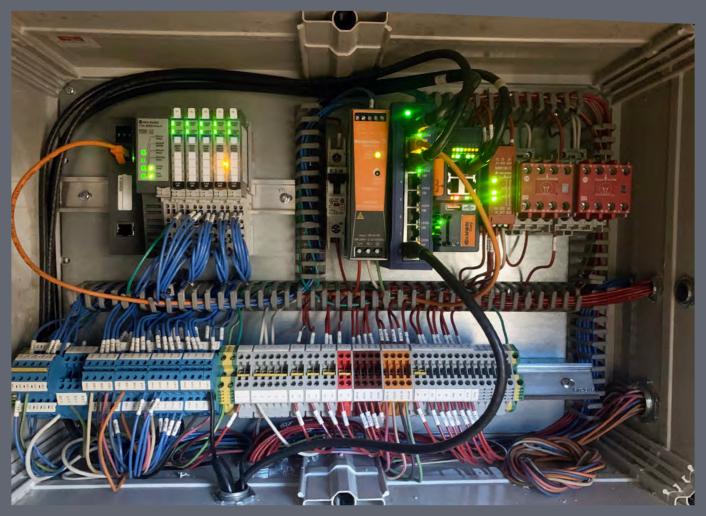




BURNER CONTROL (NESTED ON MAIN SCREEN)

## **BURNER CONTROL DETAILS**

The ALmix Insignia Control System is the only system designed to integrate burner control and tank farm controls, eliminating the need to buy costly additional controls and work through time-consuming integrations. This capability helps to make ICS the most universal system in the marketplace. Our burner control is conveniently nested on the main screen.



ALmix JUNCTION BOX FEATURING ALLEN BRADLEY POINT I/O ETHERNET CONNECTION (TOP LEFT)

# THE POWER OF ETHERNET

Say goodbye to hard-wiring every I/O to a PLC rack. The ICS system is designed to reduce start-up time, downtime and total cost of ownership through the use of a high speed Ethernet network. This network allows connection of all devices directly to an ALmix plant's PLC via Ethernet, which yields information such as run and error signals, motor amps, diagnostics, auto-device replacement and more.

# **REMOTE SUPPORT**

The ICS system comes standard with the ability to leverage the ALmix team of program experts for support, right from our factory to your control house. This remote support provision facilitates fine-tuning and troubleshooting of the ICS system by ALmix engineers through the use of the control house's high speed internet connection. A redundant hard drive insures that your data is always secure.

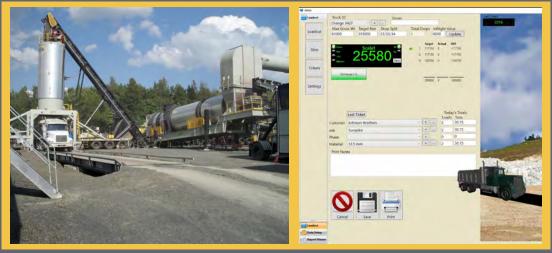




## THE ALmix LOADOUT SYSTEM

The ALmix Loadout System has been designed to exceed the requirements of today's plant weighmasters. Like ICS, the loadout system is designed with an easy-to-use, point-and-click operating interface presented within an ergonomic screen layout. The system presents the operator with all the required information at all times for the timely loadout operation of multiple silos over multiple scales.

Customers, products, jobs and trucks are all easily entered into the system. Automatic data match and fill-in of previously recorded information helps speed loadout and prevent ticket errors. Tickets may be emailed directly from the loadout screen, printed within the control house or sent directly to a remote printer. Remote printers enable the truck drivers to take there own tickets thereby relieving a duty from the plant operator.



LOADING A TRUCK AT AN ALmix PLANT

LOADOUT SYSTEM CUSTOMER DETAILS



**ALmix CONTROL HOUSES** 

**ALmix TWO-STORY CONTROL HOUSE** 

Choose from a wide variety of control house sizes and styles to find just the right setup for your plant operations. Whichever unit you choose, it will be comprised of a custom insulated, steel-framed building featuring high efficiency heat pumps and air handling units. Each ALmix Control House is designed as a total system operator station. Houses are available in single level, split level and full 2-story versions. ALmix also offers multiple portable control house designs.



**ALmix PORTABLE CONTROL HOUSES** 

ALmix TWO-STORY CONTROL HOUSE



ALmix CONTROL HOUSE BLENDING & LOADOUT COMPUTERS

All ALmix Control Houses are designed to provide a strong, clean and controlled environment for your plant controls. Hurricane rated windows and double entry doors, rubberized flooring and industrial coated roofing materials are employed for the utmost in protection. Outdoor-rated knife switches and main disconnects are offered to greatly reduce arc-flash potentials. All controls are factory-installed and factory-tested prior to delivery to expedite plant set-up and operation.



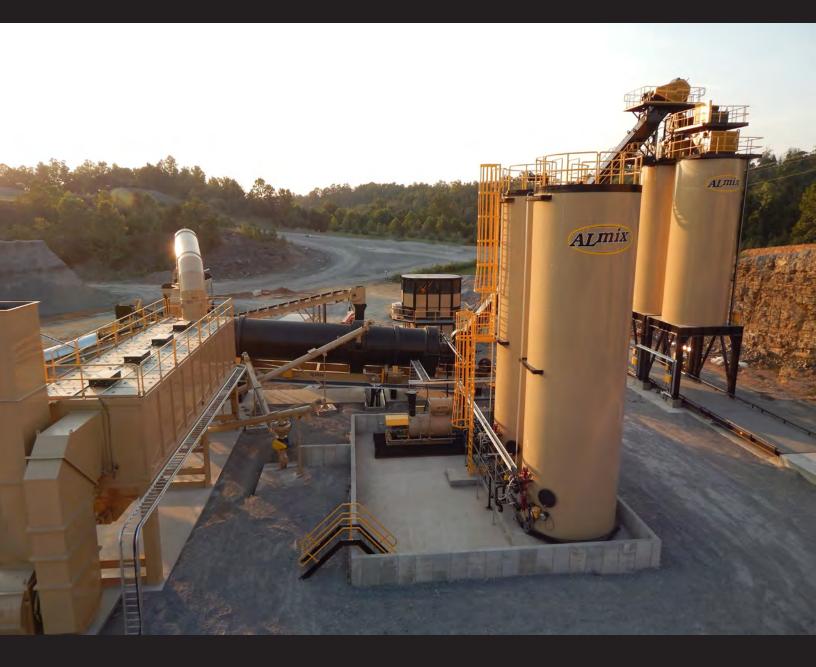
ALmix CONTROL HOUSE MCC

OUTDOOR-RATED KNIFE SWITCH (LEFT) & MAIN DISCONNECT (RIGHT)





- FORT WAYNE, INDIANA -



DRUM MIX PLANTS | BATCH MIX PLANTS | FULL LINE OF ASPHALT PLANT EQUIPMENT