Background

EAE Tech has been designing and installing Glass Industry Control Systems solutions since 1982. Satisfied customers and associates alike previously knew us as the Process Control Group of SAI. With a strong expertise in weighing applications, the group started with Batch Weigh/Mix/Delivery systems in the early 1980's, and today is one of the leading suppliers in North America of such systems to the Float, Container, Lighting, Fiberglass, and Specialty industries.

Today our expertise extends beyond the Batching side of the process to encompass most aspects of glass production. From Unloading and Batching, Furnace/FH, Bath/Lehr, to Cutting and Packing, the staff at EAE Tech has the talent and experience to handle it all. EAE Tech has installed systems for a majority of the glass manufacturers in North America.

Typical EAE Tech Operator Interface Screen for Batching (above) Gas Reversal (Below)

What We Do….

EAE Tech Designs, Builds, and Installs custom PLC, DCS, and PC based process control and Level 2 Data Collection Systems tailored to the specific needs of the customer. Our unique approach is to use our extensive Glass Industry knowledge and automation expertise, and couple it with the customer's plant process knowledge to produce the best solution. We have recognized over the years that the best systems arise out of a Vendor/Custom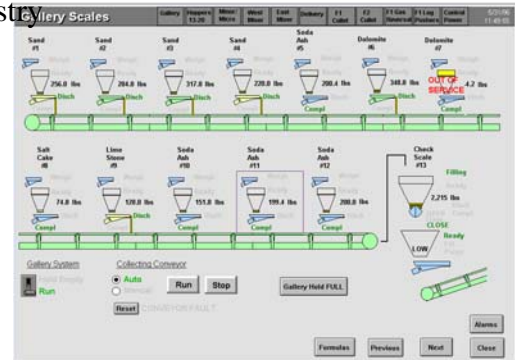er partnership. In addition, we integrate both EAE Tech proprietary designs with off-the-shelf products, as appropriate, to assure a cost effective, and maintainable system for the customer.
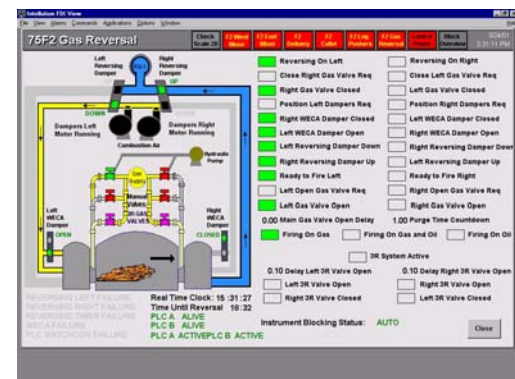

Online Glass Cutter

Industry Partners

In some applications it takes more than just controls to provide a total customer solution. Recognizing this, and that multi-vendor coordination by the customer can be difficult; EAE Tech has strategically aligned with several Industry Partners. These are companies that provide complementary products and services. This allows EAE Tech to provide turnkey systems that involve not only controls, but also other aspects of your system such as special Instrumentation, or the Mechanical and Civil work - without multi-vendor finger pointing.
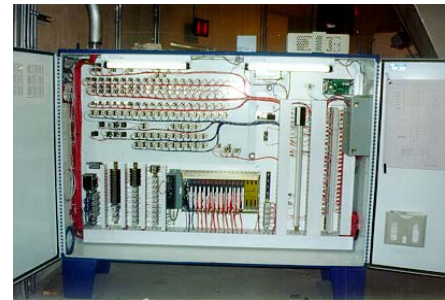
Glass Industry Expertise

- **Batching Systems** - Including PLC controls (Multi-Platform), Color Graphic operator interfaces, Unloading Systems, Material Handling Systems, Weighing Systems, and network interfaces to Plant DCS or Reporting Systems.

- **Furnace Charging** - Cullet and Batch feed systems.

- **Process Control** - Gas reversal systems, Combustion systems, Furnace/Forehearth, Boosting, Bushing control, Bath/Lehr, Drives, PID control & Cascaded Loops, monitoring, trending, alarming and reporting.

- **Defect Inspection System Interfaces** - Categorizing, Reporting, and Communication of Glass Defect information to associated plant systems, such as Cutting, Marking, Mainline, and Spur Leg Routing.

Charging System with EAE Tech Controls

- **Defect Marking** - Control of Marking Bridges to Ink Mark defects.

- **Cutting & Optimization -** Level 2 computer systems to optimize cutting based on orders, defects, and spur line pack rates.

- **Cutting -** Online X+Y (EAE Tech Proprietary cutting, and interface to Reliance systems), as well as controls for offline X+Y cutters, Complete systems including Servo, Mechanical Bridge and PLC or retrofits.

- **Vision Systems** - Custom interfaces to systems for breakage detection & orientation for Robotic Packing.

- **Main Line, Spur Line** - PLC and Level 2 controls for material handling, routing, and automatic packing.

- **Multi-Vendor Systems Interfacing** - We specialize in making UFOs (Unfriendly Foreign Objects) communicate with each other - A must in today's Enterprise Computing environment.

Standard & Customizable Systems Offered By EAE Tech

- **Raw Material Unloading -** Including Vehicle RF ID tag verification, Material handling equipment control, Bin Level Sensing, Operator Interface, and Inventory Reporting.

- **Batch/Mix/Delivery -** Standardized and industry proven PLC software modules (A-B, Modicon, GE) for weighing algorithms, and material handling control. Intuitive, easy to use operator interfaces with detailed reporting and control. Total Batch House design and build in conjunction with our Industry Partners.

- **Process Control or Hot End Control -** Standardized and industry proven PLC software modules (A-B, Modicon, GE) for all typical and cascaded PID loops. Intuitive, easy to use operator interfaces with detailed reporting and control. Complete turnkey supply in conjunction with our Industry Partners.

- **IAL Inspection System Interface and Marking -** Filtering Tracking, and analysis of defects, as well as handoff to cutting systems. Control of fixed or moveable head marking bridges. Glass Tach pulse re-generation with scaling and calibration.

- **Online Cutting Control -** Utilizes state of the art servo motion control with adaptive algorithms for accurate and square cuts. Handles multiple patterns with jump cutting, and interface to Plant MIS systems. Upstream/Downstream control and interfacing provided.

Our Clients Return to EAE Tech, Their Glass Automation Partner….

AFG Industries, Cardinal FG, Ford Glass, GE Lighting, Guardian Industries, LOF/Pilkington, Owens-Illinois, Philips Lighting, PPG Industries, Techneglas (to name a few).