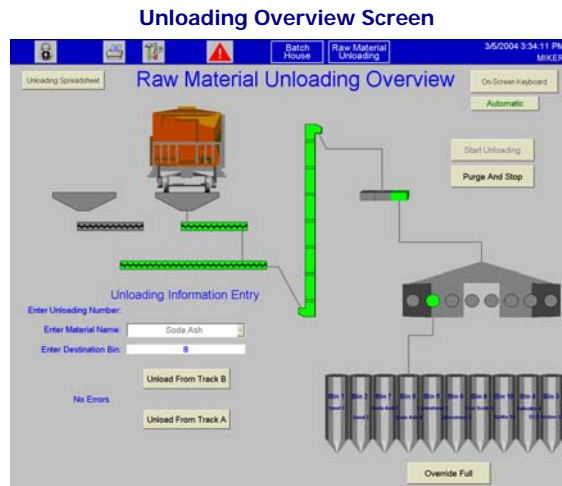


ACSI's Raw Material Unloading Assurance

ACSI's unloading control uses an information-matching strategy to manage material unloading for rail and truck deliveries. This strategy, which relies on supplier-provided delivery information, improves unloading accuracy, contributes to inventory development and provides information for an unloading summary report. Unloading control is a standard component in all ACSI batch control systems.



Rail Car Delivery

Prior to a rail car delivery, the supervisor enters delivery information provided by the supplier on a password-protected screen. This information includes rail car ID number, material, and storage destination (silo or bin number). During delivery, the operator interface screen displays the rail car ID number only. When the operator selects a rail car to unload, the operator must enter the material and storage destination number. If the information entered by the operator matches the information entered previously by the supervisor, the distributor indexes to that storage destination and unloads material. If the information does not match, the operator must re-enter the correct information before unloading can begin.

Truck Delivery

Due to the nature of truck deliveries – smaller loads, local suppliers – there is less opportunity to pre-enter delivery information. The operator enters all information at the time of unloading.

Reporting

The ACSI control system saves all delivery/unloading information to a file when the unloading process is complete. This allows plant personnel to generate reports with information on rail car ID, material name, silo number, operator, as well as, the time/date and amount of material unloaded.

System Integration

Plant unloading systems use various methods such as pneumatic or mechanical transfer mechanisms to deliver raw material from receiving hoppers to the appropriate storage destination. The ACSI system controls these batching sequences in coordination with existing plant equipment to ensure that the proper material is directed to the correct bin. Operator control of all applicable transfer mechanisms is conducted from the interface screens.

SIMULATION – AN IMPORTANT CHECK OUT TOOL EXPANDS TO INCLUDE OPERATOR TRAINING ~Karen Hrabak

Most engineers agree that simulating a process or production sequence prior to commissioning provides great benefits. The operation sequence can be verified, potential problems may be uncovered, critical paths or transitions may be tested, logic lapses may be corrected, and plant personnel can acquire a feel for how the new control system will operate from the safe haven of the test floor, rather than the always hectic, sometimes chaotic world of a plant start up. Or, as one customer puts it, “Let’s uncover the problems now when they are inexpensive to fix.”

ACSI has developed a library of routines to facilitate this type of simulation, which co-resides in the PLC along with the control system code. The simulation may be enabled or disabled through an Administrator page on the HMI. With the Simulator enabled, the operator may use the HMI exactly as he or she would in the plant – from feedback on valve transitions to PID loop operation – except that, it’s all virtual and disconnected from the real-world IO. Even Alarms, Events, and Reports occur as they would in real operation.

ACSI has recently expanded it’s simulation capabilities beyond the test floor and into the arena of ongoing **Operator Training, Qualification, and Certification**. The ACSI simulator can now support “Scenarios”, in which a specific failure or series of equipment failures may be configured, stored, and subsequently played as a training “exercise”.

Perhaps an operator is rusty on how to respond to a feed pump failure. With the Scenario Editor, the instructor may define one or more failures, save them to a named profile, and when the trainee is available, setup the scenario and run it.

During the exercise, the defined failures occur at intervals defined by the instructor. Single or multiple failures may be configured to occur individually or simultaneously.

For example, the operator may be faced with a failed ingredient pump, a control valve that failed to close, and an empty supply tank. Failures may be defined for devices like valves, pumps, and motors, or for situations like an ingredient tank that runs out of product. Operator actions taken in response to the failures may be tracked and later evaluated. Setting up specific scenarios allows targeted training for real-plant experiences. Since, ACSI’s Scenario Editor is easy for a lay person to use, plant personnel can create any number of scenarios on their own without any additional programming required.

(Instructor screens are used to configure scenarios and to capture exercise details, including: Instructor Name, Trainee Name, Start and End Time of Exercise, Scenario Name, and Instructor Comments. MS Excel is used to provide a set of Reports on Simulator use. Reports include Total Simulator time by Trainee, Instructor, or by Scenario Name for the selected date range).

OperatorName	InstructorName	ScenarioName	StartDate	EndDate	TotalTime
Operator 1	Instructor 1	Scenario 1	2/2/2009 11:04		0:0
Operator 1	Instructor 1	Scenario 1			0:0
Operator 1	Instructor 2	Scenario 2	2/2/2009 9:00		0:0
Operator 1	Instructor 2	Scenario 2			0:0
Operator 1 Total					0:0
Operator 2	Instructor 1	Scenario 1	2/2/2009 14:12		0:0
Operator 2	Instructor 1	Scenario 1			0:0
Operator 2	Instructor 2	Scenario 2	2/2/2009 15:00		0:1
Operator 2	Instructor 2	Scenario 2			0:1
Operator 2 Total					0:1
Operator 3	Instructor 3	Scenario 3	2/2/2009 15:14		0:2
Operator 3	Instructor 3	Scenario 3			0:2
Operator 3	Instructor 3	Scenario 3	2/2/2009 16:25		0:0
Operator 3	Instructor 3	Scenario 3			0:0
Operator 3	Instructor 3	Scenario 3	2/2/2009 14:51		0:1
Operator 3	Instructor 3	Scenario 3			0:0
Operator 3	Instructor 3	Scenario 3	2/2/2009 15:52		0:0
Operator 3	Instructor 3	Scenario 3			0:0
Operator 3	Instructor 3	Scenario 3	2/2/2009 14:37		0:2
Operator 3	Instructor 3	Scenario 3			0:2
Operator 3	Instructor 3	Scenario 3	2/2/2009 9:31		0:1
Operator 3	Instructor 3	Scenario 3			0:0
Operator 3	Instructor 3	Scenario 3	2/2/2009 9:52		0:0
Operator 3	Instructor 3	Scenario 3			0:0
Operator 3 Total					1:3
Operator 4	Ken LaJeune	Cooker 5 Problems	2/3/2009 10:18		0:1
Operator 4	Ken LaJeune	Cooker 5 Problems			0:1
Operator 4	Ken LaJeune	Cooker 5 Problems	2/3/2009 10:36		0:1
Operator 4	Ken LaJeune	Cooker 5 Problems			0:1
Operator 4	Ken LaJeune	Cooker 5 Problems	2/3/2009 12:04		0:1
Operator 4	Ken LaJeune	Cooker 5 Problems			0:1
Operator 4 Total					0:4
Operator 5	Ken LaJeune	Cooker 5 Problems	2/3/2009 12:04		0:1
Operator 5	Ken LaJeune	Cooker 5 Problems			0:1
Operator 5 Total					0:2



ACSI 2009 Event Calendar

May 13-14, 2009

Glassman

Cité Centre de Congrès
Lyon, France

October 13-14, 2009

Glass Problems Conference

The Fawcett Center
Columbus, Ohio



We look forward to see you at the upcoming shows in 2009!!

ACSI Implements System Controls in Saudi Arabia

In January 2009, **ACSI** began the integration of a control system for a 600 tons per day **Arabian United Float Glass Company** (AUFGC) at Yanbu Industrial City, on the east coast of the Red Sea in Saudi Arabia.

A customized **ACSI** control system was implemented for the Melter, Tin Bath, and Lehr Systems. ACSI hired by **Shanghai Pony Technologies Company** worked together to commission this "State of the Art" plant project.

AUFGC is using a customized **ACSI** control system to produce float glass of the highest quality and specified thicknesses to accommodate their customer's requirements of architectural glass. The engineering team from ACSI consisted of Dave Douglas and Rob Haydon of ACSI Europe, as well as, James Barnocki and Daniel Jimenez of ACSI USA.

Our multilingual **ACSI** engineers provided onsite technical support during the commissioning (from start up to production) of the lines and also provided extensive training of the control system operation to plant personnel in both Arabic and English languages.

Shanghai Pony Technologies Company chose to partner with **ACSI** because of our outstanding knowledge of the glass industry, excellent work ethic, and willingness to go above and beyond to get the job done on time and with optimal results!

The Quarterly Newsletter Survey Question

Which "Spring Cleaning" project is your top priority?

"Cleaning up the yard from the winter" ~Derek Kieffer

"I was going to clean out my life savings and 401k, but thanks to AIG...now I don't have to!" ~Brad Bowe

"My ears. Once every April whether they need it or not!" ~Joel Helbig

"Uuggghhh ... windows!" ~Karen Hrabak

"Finishing windows and siding on my home"~ Thomas Bowes

I should probably clean under the refrigerator and stove, but since I am getting married in June, I might as well wait and make my new husband do it! I mean that's what guys are for right?!?! ~Katie

Meet ACSI Engineer Thomas Bowes



What is your job at ACSI: Project Engineer

Hometown: Fremont, Ohio

Background: Vanguard Vocational – Electricity/Electronics 11th and 12th grade

AAS in electronics -Terra State Community College, AAS in Industrial Electricity – Terra SCC, AAS in Robotics –Terra SCC – Summa Cum Laude, and a BS in Technical Education – Bowling Green State University

Started with ACSI: November 3rd, 2009 – also my daughter's birthday...

Favorite Movies: River Runs Through It, Broken Trail, Bugs Life, and Wall E

Interests: My children- Jessica, Cory, Ben, and Braxton, coaching and watching sports – football, basketball, baseball, hunting waterfowl, and catching fish

Best thing about working at ACSI: The challenge of learning multiple technical areas that are required to understand the glass producing process. All the people here are just truly unbelievable and I have never seen anything like it. ACSI uses a team oriented concept without ever discussing or teaching the team concept. It's more like a family where everyone works together to help each other.

Meet ACSI Engineer Joshua Kline

What is your job at ACSI: Project Engineer

Hometown: Port Clinton, Ohio

Background: Terra Community College Industrial Electricity and Power Controls Electrical Experience – 5 years

Started with ACSI: January 5th, 2009

Favorite Movies: Any type of Horror or Comedy

Interests: Music, Paintball, and Home projects

Best thing about working at ACSI:

The atmosphere and great people

What I'm looking forward to in

2009: Being able to learn as much as I can



News From ACSI Europe



ACSI Europe's first commissioning job of the year, the float line at Yanbu in Saudi Arabia, was successfully commissioned during the months of January and February 2009. ACSI Europe engineer Rob Haydon was on site and sent this picture of the plant engineers gearing up for the ribbon pull.

Our second float project of the year is now moving into the site-work phase. ACSI Europe engineer Mark Humphreys will travel to South Africa for the FAT inspection on the "line drive system" during April, ahead of the main commissioning scheduled for mid 2009. Adam Harrison has successfully completed another program re-write and commissioning on Emhart Forehearths for Sorg in Belarus to improve Forehearth controllability.


Preparations are underway for our participation in the Glassman Europe 2009 exhibition in Lyon, France, where we hope to test Katie's French Language skills! This takes place the 13th and 14th of May. We hope to feature a review of the exhibition in a later issue.



ACSI USA
8750 Resource Park Drive
Sylvania, OH 43560
Phone: 419-843-4820
Fax: 419-843-4821
Email: stevenixon@acsitoledo.com

ACSI Europe Ltd.
Grove Business Center
Boston House
Grove Technology Park
Wantage Oxon OX12 9FF
Phone: 011.44.123.5227.274
Email: davedouglas@acsieurope.com

improving performance
through advanced control solutions



This Newsletter is published by ACSI 4 times per year.
All rights reserved.
Editor: Katherine Wright, 419.843.4820
katherinewright@acsitoledo.com.
To unsubscribe, send request to the Editor.