

It's Costly To Contact Our Yeast Propagation System's OEM For Control Modifications. Can We Modify Our System So We Can Perform These Tasks Ourselves?"

### What Our Client Said

We are an industry-leading brewing company that operates eight breweries throughout the United States. Our quality and flavor profile rely heavily on our yeast propagation systems. Our OEM's (original equipment manufacturer's) overly complex PLC program makes it impossible for us to perform any logic or control changes ourselves. Instead, we are forced to contact the system's OEM in Germany. Due to the distance between our locations, consultations are slow, costly and inconvenient. Ultimately, our goal is to be able to make changes and modifications to these systems ourselves, without having to contact the OEM.

### What We Heard

Our YPS (yeast propagation system) requires a substantial number of control modifications on a regular basis. The YPM (yeast propagation manager) is a "black box" system, with information viewed in terms of inputs and outputs without insight or understanding of internal workings. This makes it impossible for our technicians to perform these tasks themselves. The complexity of the PLC program also makes troubleshooting extremely difficult. We need a systems integrator with the brewing and yeast propagation knowledge to successfully modify our YPM so modifications can be made faster and more economically by our in-house team.

### What We Did

Before anything else, LSI's team needed to move the YPS from the customer's previously retired brewery to its new location. Once that was complete, LSI utilized its past knowledge of yeast propagation technology to develop a sound plan of action for the conversion process. Overall, the process consisted of numerous programming changes and additions, as well as testing for 35 yeast propagation routines and the commissioning of more than 425 I/O points. LSI upgraded the system's existing ControlLogix PLC from an L62 running V17 to a more user-friendly L72 running V26. In order to simplify usability during the changeover, LSI also upgraded the existing Wonderware HMI version 2012 to a new version, 2014 R2. Upon completion, LSI trained the customer's team on all system functions, as well as the steps to successfully complete all necessary control modifications in the future.

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- Provided in-depth system capability, functional and troubleshooting training
- Improved overall system integrity, hygiene, quality, productivity and ease-of-use

### LSI provided:

- Project management
- Engineering and design
- Startup and commissioning
- Post-commissioning support
- Operational and system training
- I/O commissioning
- Systems integration
- PLC configuration

# LSIE<sup>®</sup> listens

### The Results Speak For Themselves

### In-house modifications save company resources

By upgrading the yeast propagation system's PLC and HMI technology, LSI was able to significantly improve the system's interface. Now that the brewery's own team could make control modifications themselves, costly OEM service calls were no longer necessary.

# Improved visual interface helps users excel at their jobs

By updating the system's Wonderware HMI, LSI was able to provide a much more visually intuitive interface, as well as improved control functionality. The system's previous "black box" PLC program is no longer an impediment to productivity.

# Careful listening led to additional improvements

As the conversion was being carried out, LSI collaborated with the customer on an additional project, performing CIP hygiene optimizations on the yeast propagation system. The system was at risk for serious micro-contamination issues, and these risks were mitigated with LSI's assistance. As a result, the customer enjoyed additional cost savings – these tasks would normally have required the (costly) assistance of the system's OEM.

## Successful outcomes resulted in an ongoing partnership

Overall, the customer was beyond satisfied with the yeast propagation system conversion, as well as the outcome of the micro-contamination mitigation project. In fact, they were so impressed with LSI's in-depth knowledge of the system that the customer asked LSI to perform yeast propagation system upgrades at the rest of its breweries.

Let LSI listen to your brewing and yeast propagation challenges today. Together, we can improve your processes, final products and bottom line.

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### LSI listened,

then we put our knowledge of yeast propagation to work, utilizing the latest PLC and HMI programming methods to upgrade the existing system into something significantly more accessible for the brewery's technicians. Overall, LSI's additions provided an end result that not only met customer expectations but exceeded them.

LSI's team of engineers and experts transformed the brewery's overly arcane yeast propagation system into a functional, adaptable, userfriendly asset.

**Tags:** Yeast propagation system, Brewery, ControlLogix, PLC, Wonderware, HMI, conversion, automation, I/O, commission, systems integration, modification, training

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