

Exceeding Expectations

- Experience
- Innovation
- Peace of Mind

“We Want To Make Delivering Grain Easier For Farmers By Building A Centrally Located Grain-Handling Facility.”

What Our Client Said

We are a large, privately owned company that provides agricultural and grain-handling solutions worldwide. Local farmers currently have to haul their grain to two separate locations, both of which are inconveniently located within a densely populated metropolitan area. To improve this situation, we are investing significant resources into constructing a new grain-handling facility that will become the key origination point west of the Mississippi River in the southern United States for soybeans, corn, milo and wheat.

What We Heard

We need an experienced systems integrator like LSI to conceptualize, engineer, procure and construct the automation of a modern-day grain-handling facility on a major waterway. This new facility will be easy to reach with convenient loading and unloading access points for grain trucks and barges. This new location will provide a template for all of our future greenfield sites.

What We Did

LSI started by developing a thorough plan of action for the integration of technology into the new grain-handling facility. The first step was to understand and design the electrical distribution system in order to distribute power to the site. Next we architected the communications networks to meet the needs of the facility. As the construction process began, LSI's team designed the controls system and PLC cabinets, as well as the motor control center, connecting every piece of equipment throughout the facility. A Hazard Monitoring System (HAZMON) was specified and implemented to monitor excessive temperature rises in belts, conveyors and grain bins. This technology automatically shuts down the system and sets off an alarm if there is any potential trouble. LSI worked alongside contractors and the client to successfully integrate the grain dryer, concrete bins, steel bins, drag conveyors and multiple load-out locations throughout the facility.

LSI provided:

- Project management
- Engineering and design
- Automation
- Startup and commissioning
- System training
- HAZMON
- PLC configuration
- FactoryTalk
- Systems integration

The Results Speak For Themselves

Better decisions, thanks to experienced project management

Throughout the course of the project, vendors suggested different products and changes to the client that would have significantly affected the budget and overall scope of work. LSI advised the client throughout this process and guided them through decisions involving power and automation that optimized final installation costs.

Innovation that saved time and money

The customer originally wanted to pull 250 different control wires all the way from the main building to the administration office. Instead, LSI suggested installing a remote I/O panel in the administration office in order to utilize existing network communication connections. In the end, this resulted in significant overall savings for the project.

Processing and loading volume has exceeded expectations

Significant planning was put into the facility's riverside location. As a result, it is able to hold three barges at a time and load as many as eight per day at a rate of 50,000 bushels per hour, exceeding initial expectations.

Simplified communication

Rather than using multiple contractors for electrical engineering and systems integration, LSI did both. This provided the client with one reliable source for questions, answers and guidance.

The peace of mind that comes from experience

Instead of going to the client every time a problem arose, LSI used their knowledge and integrity to solve the problems and present the client with recommendations for the most efficient path forward.

Let LSI listen to your challenges today. Together, we can manage your project and improve the efficiency of your facility.



LSI listened,

then we got to work, researching and brainstorming the best integration strategies to allow the new grain-handling facility to meet and exceed client expectations. LSI guided the client along the way, adding input into decisions that helped the overall project to progress more smoothly and cost-effectively. The end result was a centrally located, state-of-the-art grain-handling facility with excellent loading and unloading access points. Farmers now have a conveniently located facility that has become a model for future grain-handling projects.

LSI's team was able to take the customer's ideas and make them a reality, resulting in a successfully installed and tested grain-handling system (including areas outside of the original scope of work).
