

Honeywell's Integrated Control and Safety Systems for Wison FLNG

Case Study

Background

A Floating LNG storage and Regasification unit (FSRU) is an unpowered propulsion barge with 600 million standard cubic feet per day (MMscf/d) capacity regasification plant. It also has a 25,000 cubic meter self-supporting storage tank and a residential block.

As the general contractor of the FSRU project, Wison Offshore & Marine faced a major challenge to achieve control and monitoring of ships and process units through an integrated design. There were several technical difficulties:

- The complexity of the integrated automation system required for the ship
- The complexity of the process automation system
- The integration between these two systems, including construction, installation, interface coordination and joint adjustment.

This complexity required the system provided by the supplier to be open and user-friendly. It would also require sophisticated project management, execution and quality control.

Honeywell's Experion® family of advanced products along with its experienced project teams were chosen to address these needs.

The project was completed successfully one month ahead of schedule.



The Honeywell advantage

Honeywell's scope of supply included the Experion PKS (ePKS) DCS system; the emergency shutdown system; Safety Manager safety instrumented system; the fire and gas system; field equipment and Field Device Manager management system; and the High Integrity Pressure Protection System (HIPPS). The engineering services include software configuration, HMI graphics design, cabinet integration, testing, FAT, SAT and on-site test service.

Using Honeywell technology, the most complex automation system in FSRU was completed one month ahead of schedule, and the project cost was reduced by 2%, providing a good foundation for ensuring the completion of the entire project on schedule. A good return on investment greatly increases customer satisfaction.

Safety Manager has TUV's SIL3 functional safety certification and ISA Secure Level1 information security certification for ESD, FGS, BMS applications and other critical applications. In addition, Safety Manager can also form an integrated industrial control system solution when combined with ePKS. The Safety Manager exchanges data between the two through the CDA protocol, which greatly improves efficiency and ensures safe and reliable integration.

As a result of the smooth integration of Honeywell's technologies, the most complex automation system was completed one month ahead of schedule, laying a solid foundation for ensuring completion of the entire project on time.

Wisom found the system to be open and flexible, allowing atypical design on site according to customer requirements; and found it to be easy to use and human-centric.

Value to customers

Honeywell's advanced technology and project services provide users with an unprecedented experience and customer service.

The completion time for the entire automation system was one month ahead of schedule and the project cost was 2% lower than budgeted.

The system provided an excellent return on investment, greatly increasing customer satisfaction. The integrated automation system was the most complex and cumbersome system in the whole project, so getting the right solution and expertise was crucial. Wisom's verdict is that Honeywell delivered.

After sales service

The attitude of Honeywell's project service team left a deep impression on the customer, Wisom commended their professional skill, with the team able to provide solutions to all issues encountered during the on-site commissioning; and their dedication, willingly working to solve the unexpected issues that commonly occur when dealing with third party systems.

The Honeywell after-sales service team will also continue to provide high-quality services to the customer and provide comprehensive technical support for production and safety.

For More Information

Learn more about Honeywell's solutions, visit www.honeywellprocess.com or contact your Honeywell Account Manager.

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