

# GS Engineering & Construction Selects Honeywell’s Integrated Control and Safety Solution for Qatar Petroleum



“The Honeywell team we worked with was incredibly professional and had a great attitude. Our team combined with the Honeywell engineers helped Qatar Petroleum stay ahead of schedule and the technical support provided both onsite and off went unmatched. We are thankful to the incredible support we received from Honeywell and look forward to working together again in the near future.”

H.S. Kim, Instrument Lead, GS Engineering & Construction

## Benefits

GS Engineering & Construction, an international construction services company, selected Honeywell and its Experion® Process Knowledge Solution (PKS) for a complete automation solution for Qatar Petroleum’s Mesaieed refinery.

As the main engineering contractor for Qatar Petroleum, GS Engineering & Construction implemented Honeywell’s Experion PKS control platform integrated with the Fail Safe Controller (FSC®) system, an advanced safety platform. Both GS Engineering & Construction and the refinery benefited from the following:

- Implemented an integrated control and safety system with zero technical issues
- Met and exceeded rigorous schedule and delivered on-spec production a month ahead of schedule
- Simplified project execution with a one-stop solution provider for integrated control and safety system
- Increased safety and process availability with a unified safety solution
- Improved production and profitability
- Improved access to HART related field data based on full integration into control system



GS Engineering & Construction selected Honeywell as control and safety system provider for Qatar Petroleum’s Mesaieed refinery.

## Background

Formerly known as LG Engineering & Construction Company Limited, GS Engineering & Construction (GSE&C) was founded in 1969 and is headquartered in South Korea. Through its human resources and technology, GSE&C has achieved tremendous growth in the fields of architecture, civil engineering, housing and plants with project execution experience around the world.

The company’s principal activity is the provision of construction services that specialize in the following markets: oil and gas, petrochemicals, power and electrical, water and wastewater treatment, incineration and recycling systems, civil engineering (involves improving roads, bridges, railroads and airports), healthcare, educational, cultural and sports, and residential housing.

## Challenge

GSE&C faced the challenge of finding a vendor to provide a full scope automation solution to support an expansion at Qatar Petroleum, Qatar's state refining organization. This required a solution to optimize process control and safety systems at its Mesaieed refinery.

## Solution

GSE&C had worked with Honeywell before and knew it could rely on Honeywell as a partner to deliver an integrated control and safety solution and also provide onsite technical support required to help meet the 10-month timeline. GSE&C selected Honeywell's Experion platform and FSC safety system for the Mesaieed refinery.

"Honeywell's commitment to plant operational safety and integrated control was a key factor in our decision to select its products for the Qatar project," said H.S. Kim, Instrument Lead, GS Engineering & Construction.

With Honeywell as a partner, GSE&C was able to integrate SIL-rated transmitters and safety valves with comprehensive field device diagnostics, and the overall control and safety solution to improve field asset management and elevate plant maintenance and operational performance.

Honeywell's FSC, as well as its next generation Safety Manager system, is completely integrated with the Experion system. FSC-based safeguarding solutions form the basis for functional safety, providing protection of people, plant equipment and the environment combined with optimum availability.

The dual benefits of Honeywell's safety management solution provide integration with Experion PKS while maintaining the security of an independent environment from the mainline control system. The result is a unified safety system solution, elevating safety and process availability, as well as production and profitability.

With the Honeywell solution, Qatar Petroleum is able to lower the cost of safety and improve plant performance by reducing the risk of safety incidents, maximizing production uptime, reducing the cost of compliance and providing productivity tools that help plant safety.

The automation solution also included full integration with HART field devices using Honeywell's Field Device Manager, a standalone configuration tool for HART devices that allows configurations to be managed, monitored and changed for a large number of HART devices. With the Field Device Manager, users can determine whether the correct field device is connected and basic configuration is correct, and that the device is operating without fault.

Concluded Kim, "Honeywell's professionalism and onsite, team-driven approach helped us meet our customer's product demands ahead of schedule. Their engineering expertise and unbeatable technical support proved fruitful during our project and we look forward to working with them again in the future."

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## More Information

For more information on Honeywell's control and safety solutions, visit [www.honeywell.com/ps](http://www.honeywell.com/ps) or contact your Honeywell account manager.

## Automation & Control Solutions

Process Solutions

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