

Emergency Flare System Replacement Gets Plant Back Online In Record Time.

Case Study

Team Delivers New Flare System In 21 Days.

The Situation

As a John Zink Hamworthy Combustion (JZHC) customer for decades, Qatar Petrochemical Company (QAPCO) didn't hesitate to call us when they experienced an unexpected emergency. We went to work immediately putting together a team to address the issue and provide the most effective solution possible.

The Solution

QAPCO needed a partner willing to accept – and able to deliver on – an incredibly aggressive timeline. Within three days of the initial call, JZHC had traveled to QAPCO, met with the leadership team, and agreed to provide a 90-meter tall, combined HC and acid flare system in just 32 days. The typical quick-turnaround for such a project is several months.

As a result of having established assets in the region, we were able to begin working out the local supply chain even before our meeting at QAPCO. We quickly engaged a key supplier who had the same sense of urgency and customer support as JZHC. We also located the drawings of the original flare system in our archives. This helped save time as we generated drawings and calculations for the new system that met current code requirements for the structure.

For three straight weeks, QAPCO, JZHC personnel, and key subcontractors worked together 20 hours per day in order to keep the project on track to meet the deadline.



"It is a tremendous privilege to work with JZHC."

Dr. Mohammed Yousef Al-Mulla
Managing Director & CEO
Qatar Petrochemical Company (QAPCO)



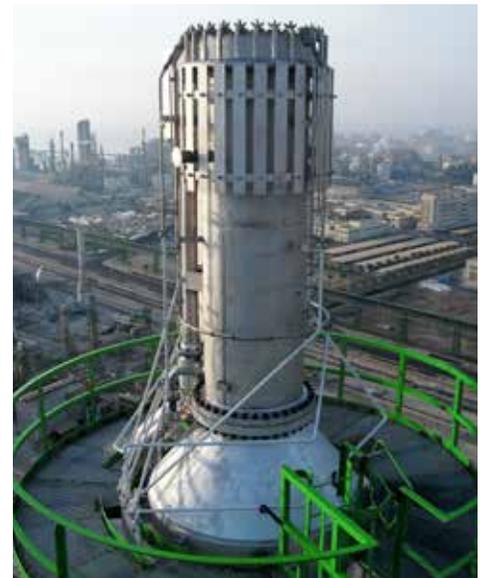
The Results

Thanks to collaboration with QAPCO, clarification and approvals could be made the same day. With our presence on-site, JZHC was able to respond immediately to changes and receive ongoing updates of the delivery schedule. This, combined with our expertise, engineering capabilities, and coordination efforts, we realized a team synergy that helped us exceed expectations.

Flare tips were airfreighted to the site. The bulk of the system was shipped on a dedicated barge to Qatar in a single day. In the end, the final part arrived on site 21 days after we received the purchase order. Just eight days later, the system was fully installed – up and running in 29 days against an original equipment delivery time of 32 days.

Project Overview:

- + Knockout drum (13.5 m x 4 m). New pressure calculations and hydro testing performed. Vessel delivered to site two weeks after order receipt.
- + 42" diameter hydrocarbon flare stack riser complete with all steam and service piping. The flare stack was fabricated in three sections. The first section shipped two weeks after order receipt. The remaining sections shipped in three weeks.
- + 20" diameter, low-temperature carbon steel acid flare stack riser. Fabricated in three sections, we performed a PWHT on this riser and shipped the first section two weeks after order receipt. The remaining sections shipped one week later.
- + 42" MoI Seal with two 360° access platforms.
- + 42" QS flare tip complete with pilots and thermocouples.
- + 20" Acid Gas flare tip with pilots and thermocouples.
- + All interconnecting cables and junction boxes.
- + New guy wires.



360° ACCESS PLATFORM



COMPLETED FLARE SYSTEM



GLOBAL REACH

JZHC has locations all over the map, with thousands of employees worldwide.



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