

Improving Safety and Compliance for Elevated Flare Monitoring

INDUSTRY**Industrial Gases****SOLUTION****Non-Contact Flare Monitoring****EQUIPMENT****Quasar 2 and FlareSpection™ Systems****CHALLENGE**

A leading industrial gas company needed a safer and more reliable way to monitor flare temperatures. Traditional contact sensors were prone to failure, difficult to access for maintenance, and required manual intervention in hazardous environments.

Traditional contact-based temperature sensors led to increasing operational inefficiencies and safety concerns:

- Failing thermocouples risked compliance, uptime, and reliable flare performance monitoring.
- Temperature measurement points were difficult to access on high, heat-exposed flare stacks.
- Manual maintenance increased safety risks due to work at height and outage-related inspections.

As the organization advanced its safety standards and focused on long-term asset reliability, it became clear that a more robust and maintainable approach to flare monitoring was required.

SOLUTION**Non-Contact Temperature Measurement Quasar 2**

Quasar 2 was deployed to provide reliable temperature measurement for pilot flame detection and verification. The non-contact solution eliminated common failure modes associated with thermocouples while providing accurate measurements in extreme heat and difficult-to-access flare locations.

Continuous Monitoring and Visualization with FlareSpection

FlareSpection systems were implemented where visual confirmation and broader flare monitoring were required across multiple flare assets. The system provided continuous flame visualization, improved operator confidence, and centralized monitoring capabilities.

RESULT

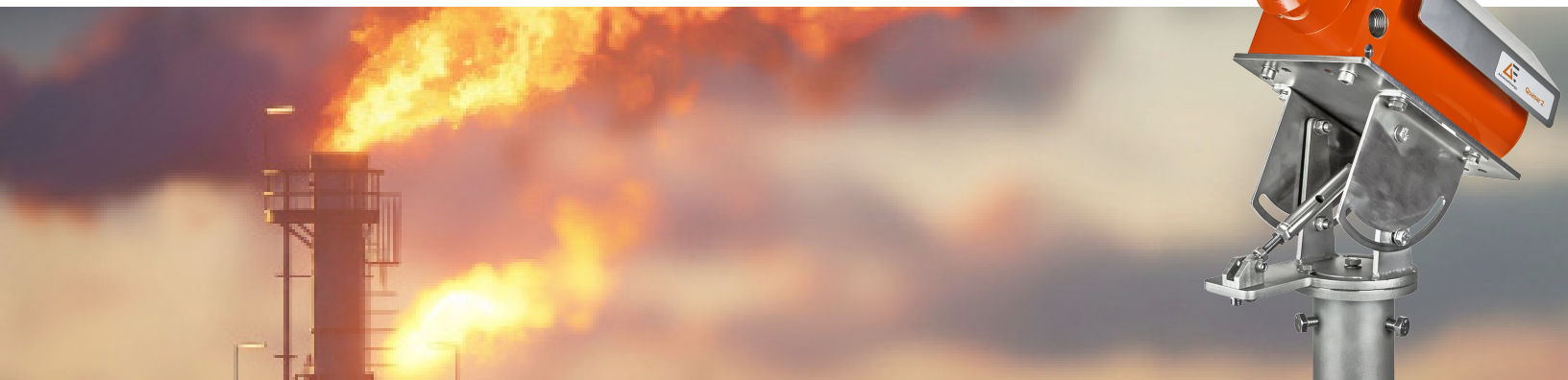
The flare monitoring solution improved confidence in pilot flame verification while reducing dependence on visual inspections. The system provided continuous monitoring capability in challenging environmental conditions and helped operators respond more quickly to potential flare events.

Benefits/Key Outcome

- Continuous pilot flame verification improves reliability.
- Reduced need for field inspections improves safety.
- Early outage detection accelerates response times.
- Reliable performance and visibility in adverse weather conditions.
- Supports long-term digitalization initiatives.

CONCLUSION

By implementing non-contact flare monitoring with Quasar 2 and FlareSpection, the customer established a safer, more reliable, and compliance-ready approach to monitoring elevated flare systems. Continuous temperature measurement and visual verification reduced maintenance requirements, improved operator confidence, and enhanced visibility across critical flare assets. The solution also supported safer operations and stronger regulatory compliance while providing a foundation for long-term asset lifecycle management.



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