

Automating oil & gas production monitoring with AI video analytics



There is an ever greater need for remote monitoring oil & gas production facilities driven by escalating supply chain costs, lack of skills and labor to monitor production, and the growing pressure to become more sustainable.

Multinational oil & gas companies now benefit from Azena-powered security cameras using AI video analytics from the Azena Application Store. These cameras not only provide raw video footage, but analyze the data right on the edge and help automate monitoring production and safety operations. Our partner in this project is Twin Eagle Solutions, a leading North American energy consulting firm and provider of edge-based operational analytics for the oil and gas industry. Since the project is still ongoing, the companies served want to remain unnamed.

Objective: Automate monitoring of production and safety operations

We focused on applications that help the oil and gas companies meet critical requirements as easily and quickly as possible:

- Optimize site operations and profitability
- Improve environmental performance and comply with U.S. Environmental Protection Agency (EPA) regulations
- Reliably manage hazards and ensure worker safety even at remote sites

"Azena's open platform enables a new level of automation and remote monitoring for our customers in the energy industry. We were able to add smart apps to existing surveillance systems that monitor energy facilities around the clock while providing reliable, real-time operational data."



Andrew Hinz
VP Sales Twin Eagle Solutions

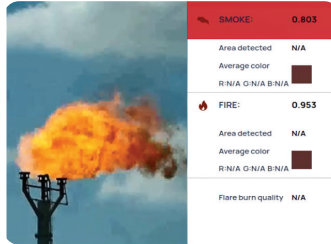
Azena AI video analytics can be added to existing video surveillance infrastructure at production facilities or added as a new installation. New functions and capabilities can be added to the camera systems as needed, allowing each device to perform entirely new roles and tasks. AI Analytics run on the edge directly on the camera saving internet and processing bandwidth in remote locations and providing real-time operational insights which can be transferred into SCADA systems.

SOLUTION:

AI cameras provide valuable operational insights

#1 Flare monitoring

- Comply with environmental regulations and prevent heavy fines
- Automate monitoring to ensure clean flaring
- Reliably control remote onshore and offshore facilities
- Reduce effort and costs for manual monitoring



#2 Tank level monitoring

- Prevent overflow of water, oil and other liquid tanks
- Automate monitoring tank levels to ensure supply
- Complement or replace conventional sensors
- Reduce effort and risk through manual monitoring



#3 PPE detection and monitoring

- Ensure workers wear personal protective equipment, such as vests and helmets
- Automate PPE monitoring even in remote locations
- Increase compliance and reduce penalties



CAMERAS USED:



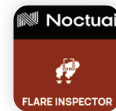
INTEGRATOR:



APP DEVELOPER:



APPS USED INCLUDE:



Flare Inspector



PPE Inspection

Want to get more out of your video cameras and take management at your remote facilities to the next level?

azena.com/energy-solutions