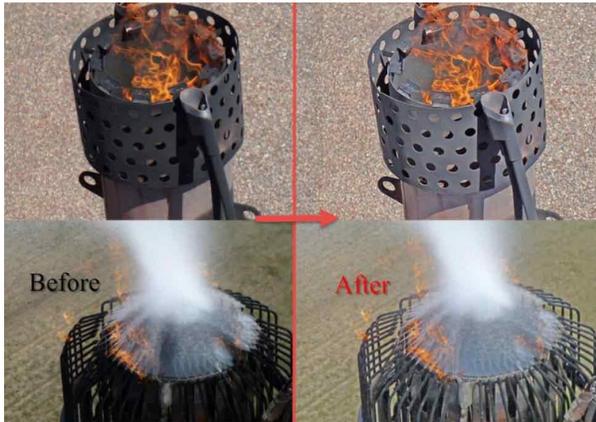


# Flare Stack Inspections

UAV photography has revolutionised the traditional flare stack inspection, reducing weeks of planning, preparation and on-site time, without taking the flare system temporarily 'offline' with resulting lost productivity. The UAV aerial photography deployed by Applus+ now offers greater scope than inspections using other remote-access methods.



## THE Applus+ SOLUTION

The UAV inspections by Applus+ offer unprecedented visual access to hard-to-reach areas during flare stack inspections. Our specialist in UAV aerial photography use the highest-grade professional cameras to ensure that the customer can complete a comprehensive inspection of their asset.

The UAV inspection pilots and crews at Applus+ are specialised in performing live flare stack inspections, and we are able to provide valuable insights into the condition, function and integrity of a gas-flare system through UAV videography. The processing plant and flare system can remain fully operational, thereby helping to prevent major events, such as scheduled shutdowns or unusual flaring events.

The flare stack inspections deployed by Applus+ use UAV technologies capable of capturing a full 360-degree perspective of the asset, and use post-processing software to ensure crisp, precise and valuable images are delivered to the client.

Applus+ can provide a scalable level of service starting with basic monitoring of flow rates and flare functionality and going all the way through to CVI-level visual and thermography inspections accompanied by comprehensive inspection reports.



The aerial photography of the flare stack inspection is captured and collated with ground-based images and an aerial overview 'maps' to facilitate the efficient future use of the data set by anyone who may need to access it.

Applus+ has many years' experience performing safe and efficient flare stake inspection using UAV inspections, spanning both onshore and offshore NDT inspections for all of the major oil and gas providers around the world.

## Target customers

UAV aerial photography solutions are perfectly suited to performing live flare stack inspections and monitoring for a number of different industries. UAV photography inspections can be performed at any time and, in contrast with other inspection methodologies, are fast, efficient, safe and highly effective.

UAV inspection with aerial inspection and monitoring can be used for a number of purposes including general asset integrity inspection, post-incident inspection, pre-shutdown monitoring or during unusual flow process events to monitor the integrity of the flare stake system.

The UAV system can be transported at short notice on conventional commercial airlines and is small enough to be taken offshore via helicopter with the UAV operators.

## Key customer benefits

The offshore drone inspections developed by Applus+ for flare stake inspections are an efficient way for our clients to safely and quickly inspect their gas-flare systems. Use of this technique provides our clients with a number of benefits over existing remote-access inspection methodologies:

- A UAV flare stack inspection is fast, safe and efficient, as well as able to provide a totally unique visual perspective with UAV aerial photography
- The UAV crew can perform a full 360-degree flare stake inspection at the tip in a matter of days, while the flare system remains fully operational.
- The human work crew can remain on the ground and out of danger during the entire unmanned aerial inspection and photography of the flare stack.