

Aircraft Hydrant Fuelling Inspection

Aviation hydrant systems at airports must be regularly inspected for corrosion and assessed for the condition of the jet-fuel pipelines. The testing and pre-commissioning of jet-fuel pipeline systems is a critical operation that must be carried out by specialist contractors to ensure a clean supply of fuel to the aircraft.



THE Applus+ SOLUTION

Applus+ has developed customised technology to inspect airport hydrant-system fuel lines, making most inspections of an airport's difficult-to-inspect pipelines possible. These hydrant and jet-fuel line inspections provide quantitative data to allow the asset owner make effective decisions.

The technology at Applus+, involving pipeline inspection tools (PIT), ultrasonic techniques and corrosion mapping, is unmatched in terms of coverage, detectability and manoeuvrability. These capabilities overcome common pipeline challenges, such as short-radius bends (1D back-to-back bend radius), unbarred full-bore offtakes and diameter changes. Thin-walled pipelines of just 1.5 mm can also be measured.

By removing a flanged spool piece in the pipeline, such as a valve, the inspection system can be inserted and retrieved from the jet-fuel pipeline. With this service, our clients can assure the integrity of their hydrant systems without interfering with their day-to-day operations through unwanted system shutdowns.

Jet-fuel pipeline inspection systems are available for each part of the hydrant fuel infrastructure. Following an inspection, the client receives a detailed report containing information about indentations, the remaining wall-thickness, damaged inner liners, etc.

The inspections can be performed regularly following the inspection and maintenance programme and on all parts of the airport hydrant system. This comprehensive service helps ensure safety and fault detection, and gives a better understanding of any degradation in order to assess the overall serviceability and lifespan of the system.

Target customers

An airport hydrant system can be inspected at any stage of its life cycle.

Aviation hydrant-system Inspections involve the complete fuel lines running from the storage facilities to the manholes near the airport gates, including the following assets:

- Risers
- Piping vaults
- Hydrant fuel lines
- Jet fuel
- Tank farms
- Runways
- Aprons

Key customer benefits

By partnering Applus+ for aviation hydrant-system inspections, our clients will benefit by:

- Ensuring the safety of their fuel hydrant systems
- Detecting system degradation in a timely manner, thereby enabling targeted repair and maintenance work and avoiding the need for the replacement of a complete system
- Assessing the remaining life of the system accurately
- Reducing system downtime and maintaining productivity, with the resultant cost savings