

# OIL LEAK DETECTION SYSTEM SOLUTION

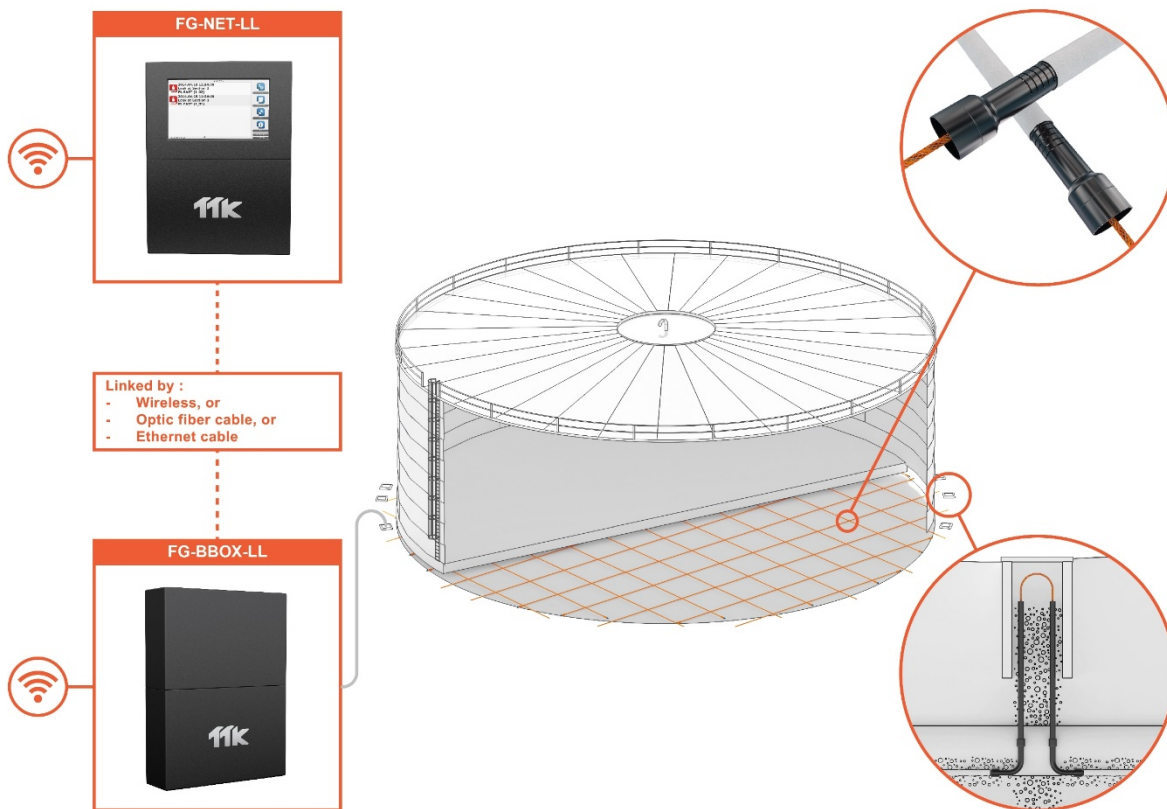
## OIL STORAGE TANKS



### HYDROCARBON LEAK DETECTION FOR OIL STORAGE TANKS (GASOLINE, JET FUEL, DIESEL, ...)

Oil storage tanks may leak through the tank walls or through the tank bottom. After some years of operation, it is common for an oil storage tank to experience corrosion at its base, due to either the stored fluid (e.g. salty water contained in crude oil) resulting in internal corrosion, or soil humidity causing external corrosion. TTK oil leak detection system with the [addressable FG-OD sense cable](#) provides continuous monitoring and protection to oil storage tanks, assisting in the prevention of soil contamination and loss of product. The [FG-OD oil leak sense cable](#), developed by TTK, is fast responding, re-usable and ATEX approved. It provides fully mapped,

simultaneous leak locations across the network of cables, together with an alarm and logging system.



## GENERATORS



### DIESEL OIL LEAK DETECTION FOR GENERATORS

On many facilities, emergency generators are the last line of defense when there is a utility failure or a catastrophic event. Non-detected diesel oil leakage on generators (which are often located in areas without daily inspection) can be extremely detrimental with potentially severe consequences, especially in data centres, health care sites, airports, or critical mission facilities.

The TTK diesel oil leak detection solutions for generators are specially designed and developed to protect diesel generators and their supporting diesel system as storage tanks and diesel distribution pipes.



## TTK ADDRESSABLE DIESEL LEAK DETECTION SYSTEM ALLOWS RELIABLE AND FAST DETECTION AT A VERY EARLY STAGE OF OIL LEAKS ON ANY DIESEL GENERATOR SYSTEM.

The [FG-NET unit](#) is versatile, since both oil and water sense cables can be monitored and managed independently by one single unit. If a TTK water leak detection system with FG-NET is already installed, it is easy to extend the existing system by adding oil sense cables or point sensors to monitor the required area for possible oil leaks.

In cases where a TTK system is not already installed, an alternative cost-effective solution would be to use a separate small locating alarm unit (eg [FG-ALS8-OD](#) or [FG-ALS4-OD](#)). This type of leak detection panels allows a quick installation of up to 8x12m / 4x12m meters of oil sensing cables.



## AIRPORTS (JET FUEL HYDRANT SYSTEMS)



### HYDROCARBON LEAK DETECTION FOR JET FUEL HYDRANT SYSTEMS

A leak in the underground pipes of hydrant fuel systems in an airport, an air force base or a petrol station could result in significant environmental, safety and negative-cost impacts.

The key of leak detection in airports or in air force bases is to accurately locate the leak on a few kilometers of pipelines which are positioned under the apron.

TTK proposes the suitable answer to detect and locate leaks for airport fuel hydrant systems with its oil leak detection system. The sense cables are installed along the pipelines and serviced through access risers in the apron, ensuring a continuous protection of the whole pipeline. In the event of fuel / gasoline / jet fuel leak, the TTK system provides accurate location of the leak, thus greatly reducing the time and financial cost associated with identification and repair.

## PIPELINES

Oil Leak Detection System Solution





## HYDROCARBON LEAK DETECTION FOR PIPELINES

The main challenges of hydrocarbon leak detection in the pipelines come from the underground installation and the long distance.

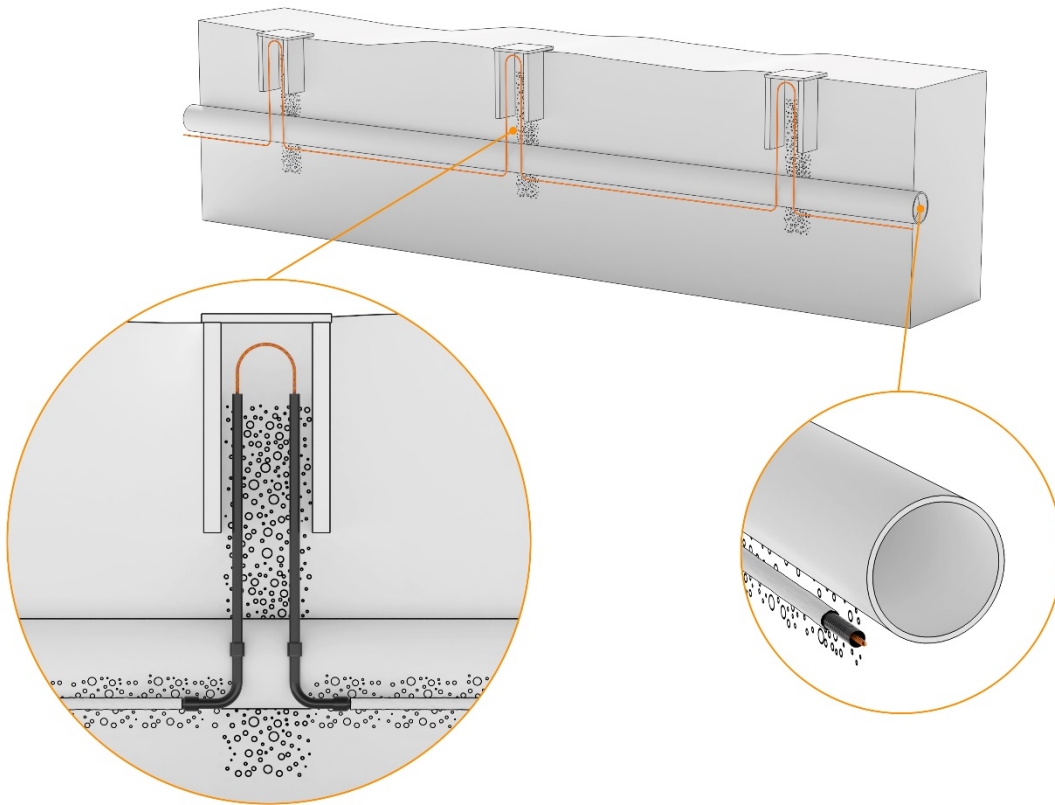
The TTK oil leak detection system is based on detection by physical contact (absorption) between the liquid hydrocarbon and the sense cable ([FG-OD](#)). The sense cable will be located along the pipeline.

Liquid, even in small quantity, is detected as soon as it comes into contact with the sensing cable. FG-OD leak sense cables are addressable, fully reusable and can simultaneously detect several leaks over long distances.

TTK has developed special connectors ensuring high level water tightness (corresponding to IP68 rating); this guarantees trouble-free operation in underground service.

Additionally, the TTK leak detection system has a dedicated leak detection [digital unit FG-NET-LL](#) to ensure proper monitoring of pipelines on long distances, detecting and locating accurately one or several leaks at an early stage.

Furthermore, compared to traditional methods, it offers the unique feature “Dynamic Leak Evolution Analysis” which allows the operator to monitor the leak’s progression in time and therefore react quickly and repair the leak according to its magnitude. ([Find out more](#))



---

## TO VIEW OUR SOLUTIONS :

- [FG-NET-LL Locating digital unit for industrial “Long Line” application](#)