

# LEAK DETECTION SYSTEM

## GAS-OIL TANK, POLICE REGIONAL HEADQUARTERS

We are pleased to launch our true comprehensive double skinned leak detection lining system into the market.

This system incorporates an electronic alarm system which is controlled by a multi-zone panel that is connected to zone sensors which can detect liquids of any type. (pic. 1)

This system works on the principle that conductive liquids must touch one or more of the sensors for the alarm to be activated. The system essentially detects differences in loop resistance on each of the zones. The leak detection and system fault alarms are activated when the loop resistance falls below the set limits.



Pic 1

The procedure of the lining system is as follows:-

1. The tank is prepared to the correct standards to receive the new lining system.
2. Using resin specified for the project one layer of our glass reinforced plastic lining is applied to the prepared surfaces which offers a seamless finish of circa 2mm.
3. The leak detection system is installed into the tank with the zone sensors at the lowest points.
4. A honeycombed glass mat is then applied to all the lined surfaces. It is applied leaving 50mm either side of the sensors which are then enclosed by housing which is laminated into place. (pic. 2)
5. A further layer of GRP is applied over all lined surfaces. This layer will be sanded and top coated to leave a smooth seamless and ceramic like finish. The complete leak detecting lining system can be 10mm thick.



Pic 2

Honeycomb mat consists of two layers of fibreglass mat which are separated internally by a honeycombed interlayer. This mat can be 2mm to 6mm thick including the cavity.

If there is a breach in the inner layer of the tank (which in itself would be unlikely as the lining is 5mm thick) the liquid would enter the open honeycombed centre and travel through until it reached the zone sensors. Once this occurs the sensors will activate the control panel alarm which will inform you of the leak by sound, light – or even ring your mobile phone.

**THE ULTIMATE LEAK DETECTION SYSTEM WHICH OFFERS COMPLETE PEACE OF MIND.**

Please contact us on **08701 650900** for further information on our services.