S.P.O.T. DEPLOYMENT

The SPOT tool is carried onto the tank roof in separate parts and then assembled, and gas purged. A survey can be conducted using two people however three is better if the manpower is available. Once assembled, purged and inserted in the tank entry, several measurements are taken. The SPOT tool is deployed and operated remotely via the computer within the van at the base of the tank. The user needs to be trained to operate the system.

Placement on tank roof
The tank needs to be full for a successful survey. This gives the best coverage and also usually means breathing apparatus is not required to work on the tank roof.
The range of SPOT coverage is usually around 30m, but this depends on the crude type, the oil and sludge height. Lighter crudes and higher oil levels mean a greater area can be scanned from each entry position. Typically a 60 metre diameter tank can be surveyed from 3 positions, but for a larger 100 metre diameter tank 5 or 6 entry positions would be necessary. This will vary depending on type of crude in the tank.
The diagram opposite shows the ideal positioning of the entries for a large tank. The optimum position is approx 20 metres from the tank shell.
**SPOT Entry Positions**

The SPOT has a diameter of 92mm, potential entry positions usually have a layer of caked dried sediment, corrosion and prominent weld lumps. The minimum internal diameter of an entry position is 100mm / 4”.

The SPOT tool can use manways, vacuum breakers, emergency roof drains or leg sleeves to be inserted into the oil. The area below the access must be free of obstacles, to allow the SPOT tool to deploy itself and rotate through 360°.

**SPOT probe deployed in a leg tube**

The roof leg is removed and the SPOT inserted in the sleeve (min 100mm / 4” internal diameter). The sleeve length must be know prior to insertion to ensure the SPOT can be deployed. The SPOT is shown in the deployed position.