

Example of a Successful Application
Thistlebond saves Oil Company £500,000!

HEADLINE!
**UK Thistlebond Distributor Saves International Oil
Company
over £500,000 by using Thistlebond Polymers!!**

PROBLEM

This concerned a major International Oil storage company with many storage tanks holding crude oil - location United Kingdom.



A leak developed in one of the tanks, but it could not be seen where the leak was due to the outside lagging of the tank.

To try to find the leaking area the lagging was taken off and about 3/4 way up the side of the tank a hole was discovered roughly 6mm in diameter, with further perforations.

What to do?

It was decided that in order to effect a permanent repair it was necessary to weld a plate on the outside of the tank.

However, in order to achieve this, **all of the oil would have to be removed** to another tank or tankers to enable the tank to be dried and surface prepared for welding.

It would also entail adding inert gas to the tank to stabilise the highly flammable gas residue left when the oil was taken away.

It was estimated BY THE END USER that it could cost in the region of £500,000 to do the repair this way.

SOLUTION

After the damaged area had been identified, 15000 gallons of crude oil was removed by tanker to allow the level of the crude oil to be brought to 2 feet below the leaking holes.



The area around the hole was then prepared - using hand held grinders - to roughen the surface to a minimum sa2-1/2 (75 micron) surface finish.



The hole was then initially repaired on the diameter (cross section around 6 - 7 mm) with [Thistlebond TRK19060](#). After mixing the [TRK19060](#) and inserting into the OD of the hole, the repair was then built up using same product.

After initial curing a further layer of [TRK19060](#) was put on top of the repair and [Thistlebond TBRT Reinforcement Tape](#) was pressed into the still soft Metal Repair to add a degree of rigidity to the repair.



After which the tank was re-filled and then a steel plate measuring 1.5m X 1m was welded over the TRK19060 repair.

It is important to point out that the TRK19060 HELD UP AGAINST the pressure of the oil contained in the tank at this stage to allow the welding to take place in a DRY atmosphere.

This repair has now been in operation for several months.

The customer was really pleased with the end result and especially as the [Polymer Repair](#) using [Thistlebond TRK19060](#) saved his company over £500,000!!