

**Customer** Electricity Supplier, North West  
**Sector** Power Generation  
**Date** December 2011  
**Ref no.** 20020

## APPLICATION EXAMPLE

# Repairs to leaking transformer

## Situation

A transformer oil leak on a sub-station supplying domestic homes in Manchester was discovered during routine inspection. The oil was dripping onto the ground and lowering the cooling oil in the system.

## Implication

This sub-station was built in 1978 and spare oil coolers were not available to replace. As the leak was constant the oil levels needed to be topped up on a regular basis. Replacement of the transformer was considered at considerable cost and disruption to service. The constant leak also constituted an environmental issue.

## Solution

The substrate was cleaned using a wire brush to remove loose paint and rust. Due to the low ambient temperature the Resimetal 104 metal repair paste was heated to a workable temperature. A special Resimac metal repair stick was used to plug the hole and a coating of 104 applied.

## Facts

This was a difficult repair to carry out as the substrate was contaminated with the transformer oil. Resimetal 104 has exceptional properties which actually absorb a small amount of oil to enable the repair to be effective. This repair saved the customer a consider cost, and they are now using Resimetal 104 to coat some of the older transformers in a preventive maintenance programme.

