TransVolt Power Solutions Limited

CASE STUDY

TRANSFORMER OIL PURIFICATION · UNITED KINGDOM

UK MANUFACTURING FACILITY

10,000 L/hr transformer oil filtration & dehydration plant

TransVolt Power Solutions delivered a high-capacity, fully containerised transformer oil treatment plant to a **major UK manufacturing facility** — restoring insulating oil to as-new dielectric condition on site, extending transformer life and avoiding the cost and downtime of a full oil replacement.

SPECIFICATION | SUPPLY | DELIVERY | INSTALLATION | COMMISSIONING



High-vacuum pump set and roots blower — insulated, weather-protected enclosure with integral lifting points for rapid site mobilisation.

10,000 L/hr	Containerised	On site	High vacuum	Monitored
THROUGHPUT CAPACITY	ROAD-TRANSPORTABLE SKID	TREATED AT THE TRANSFORMER	DEHYDRATION & DEGASSING	INTEGRATED CONTROL PANEL

Plant specified, supplied, delivered and commissioned by TransVolt Power Solutions Limited.

The challenge

In-service insulating oil steadily accumulates moisture, dissolved gas and particulate contamination. Dielectric strength falls, cellulose insulation ages faster and the risk of an unplanned outage climbs.

The site needed serious throughput — enough to process large oil volumes inside a planned maintenance window, working around production rather than dictating it.

Our solution

A fully containerised **10,000 litre/hour** filtration and vacuum dehydration plant, supplied, delivered and commissioned by TransVolt.

Multi-stage particulate filtration, controlled oil heating and high-vacuum degassing are integrated into a single weather-protected skid with its own control panel, allowing continuous monitoring of process parameters throughout treatment.

The outcome

Oil condition restored on site to the agreed project specification — without the capital cost and lead time of a full oil replacement.

Transformer service life extended, the capital cost of new oil avoided, and thousands of litres of oil kept out of the waste stream. A capability the site can call on at every future maintenance cycle.

What we solve

Transformer oil & insulation condition — complete capability, one supplier

FILTRATION

Multi-stage removal of particulate, sludge and solid contamination to restore oil cleanliness and protect insulation.

DEHYDRATION

High-vacuum drying strips dissolved and free water from oil and from cellulose insulation, recovering dielectric strength.

DEGASSING

Removal of dissolved gases that mask fault diagnosis and accelerate oil oxidation and ageing.

REGENERATION

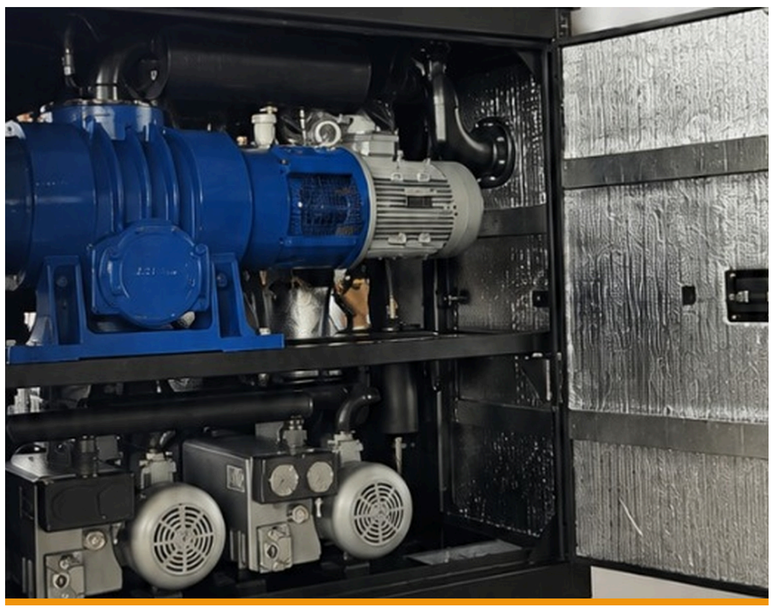
Sorbent regeneration strips acids and oxidation by-products — restoring oil chemistry, not just drying it.



Compact, road-transportable enclosure — ready for lifting and site installation.



Integrated control panel with process instrumentation for monitored, repeatable treatment.



Roots blower and two-stage vacuum pump set — the core of the dehydration process.

Talk to us about your transformers

www.transvolt.co.uk

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TransVolt Power Solutions Limited

What we solve
TRANSFORMER OIL & INSULATION
Filtration · Dehydration
Degassing · Regeneration

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