



KINECTRICS

a **BWXT** company

Transformer Oil Processing & Remediation

Properly Maintained Insulating Fluid is Key to
Operational Performance





Overview

Liquid-filled transformers rely on their insulating fluid for multiple essential functions:

- Electrical insulation to withstand high-voltage stresses.
- Thermal management to dissipate heat from the core and windings.
- Protection from moisture, oxygen, and contaminants.
- Chemical stability through oxidation inhibitors that extend fluid and paper insulation life.

Over time, aging and operational stress degrade the fluid, leading to moisture, gases, and contaminants that compromise performance. Regular fluid processing is critical, not only during maintenance but also during commissioning, inspection, or repair.

Capabilities

Our transformer fluid services go beyond purification. Kinectrics offers a comprehensive suite of value-added services:

- Transformer dry-out.
- Transformer vacuum oil-filling.
- Oil purification and filtering.
- De-gassing.
- Moisture removal.
- Acids and polar contaminant removal using Fuller's Earth treatment.
- Oxidation inhibitor addition.
- Moisture removal from paper insulation using companion Low-Frequency Heating equipment.
- On-site moisture content of oil.
- On-site fluid dielectric breakdown testing.



Why Kinectrics?

With decades of experience in transformer design, operation, and maintenance, our team of transformer engineers and technicians is well positioned to leverage our equipment and tools to properly maintain your critical transformer assets. Whether its initial commissioning and oil-filling, routine maintenance, transformer repair/refurbishment, or specialized dry-out operations, we are here to help.

Advanced transformer fluid processing backed by engineering expertise

Kinectrics delivers precision maintenance solutions to preserve dielectric integrity, thermal performance, and long-term reliability of your critical assets.

More than transformer oil processing. Transformer expertise!

Kinectrics brings more than just state-of-the-art equipment to service your transformers. We bring **decades of transformer expertise** to solve your transformer service issues and to ensure an appropriate solution is delivered in a timely manner.

The right equipment. Properly deployed.

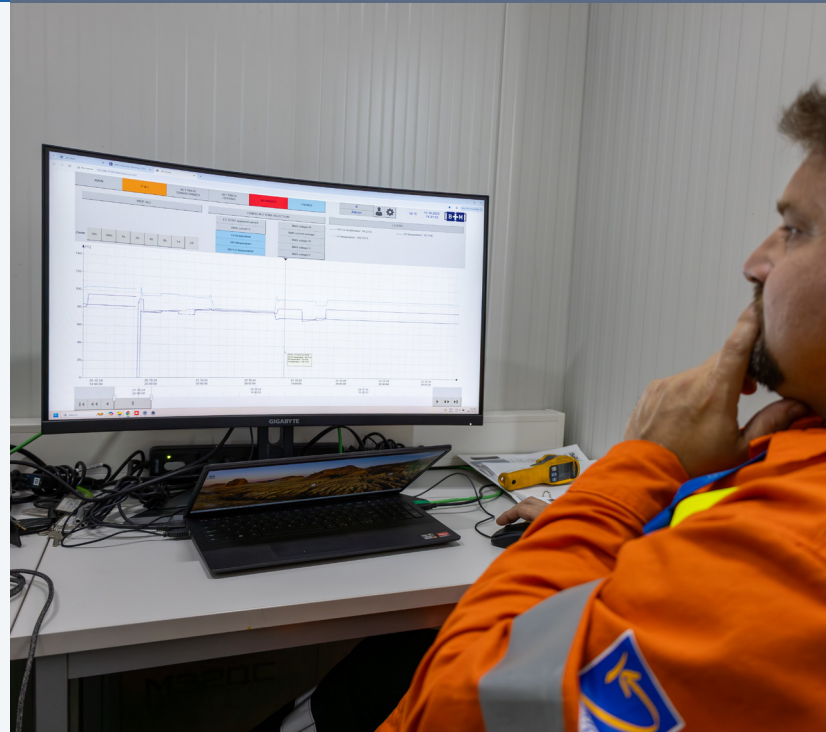
Kinectrics deploys mobile oil processing rigs of various capacities to match transformer size and service needs. Our largest unit handles **up to 10,000 litres/hour with 180 kW heating**, deep vacuum capability, and computer-controlled operation for real-time monitoring and data logging.

Beyond mineral oil: Strong insight across various fluid types.

Modern transformers utilize a diverse range of insulating fluids, including synthetic esters, natural esters, silicone fluids, and high molecular weight hydrocarbons, alongside traditional mineral oils.

While mineral oils remain widely used, effective servicing of all fluid types requires specialized knowledge of their unique properties and behaviors.

Kinectrics ensures safe and reliable remediation across the evolving transformer landscape.



Let's work together!



Contact us to explore how our transformer fluid testing and processing solutions can enhance the reliability, performance, and lifespan of your critical assets.

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and sustainable energy
solutions globally.

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