

# GEC

## Mobile Transformer Insulating Oil Purification Plant



DEHYDRATION

DEGASSING

FILTRATION

RECLAMATION

REMOVAL OF DISSOLVED GASES, SOLID PARTICULATES & CONTAMINATION

GEC Zimbabwe is an engineering company that is in the power generation sector specializing in power machines such as electric motors, generator, and transformers. We supply, install, maintain, service and repair electrical and mechanical equipment which includes electric motors, transformers, generators, and switchgear (protection relays, circuit breakers, battery tripping units).

GEC offers a Mobile Transformer Oil Purification and Dehydration Plant special for purifying all types of electrical insulating oils (from low voltage to high voltage). Its main purpose is to remove moisture, gases, and solid particles from mineral transformer oils as well as natural and synthetic esters, oxidation products from mineral based and synthetic, silicon oils and others. Deteriorating oil is reclaimed extending life and quality of insulating oil thereby ensuring safety of oil-filled electrical equipment. System has a flow rate up to 7000 litres per hour.

The plant works on low temperature, high vacuum principle. Plant mainly consists of heating, filtration, and vacuum system. Heating system aids to the filtration and moisture removal. Filtration systems remove suspended particles down to 1 micron such as rust, dirt, scales, colloidal carbon etc. Vacuum Systems remove moisture (emulsified as well as dissolved) down to < 5 ppm.

GEC ZIMBABWE

44 DOUGLAS RD

WORKINGTON

HARARE

GEC ZIMBABWE

9 CAMROAD

GRANITESIDE

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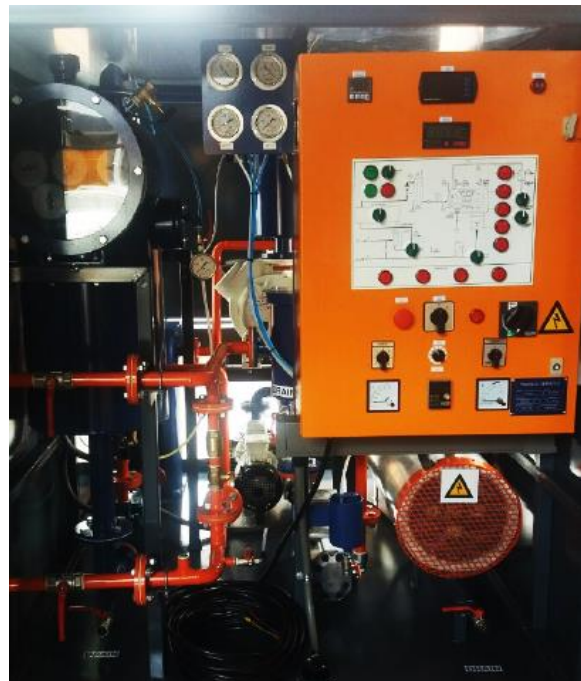
[info@gec.co.zw](mailto:info@gec.co.zw); [www.gec.co.zw](http://www.gec.co.zw)

## SPECIFICATIONS & SKILLS

- Plant Rate Capacity: 7000litres/hour
- Power Input: 400V 3phase 50Hz, 160A max
- Plant available 24/7
- Plant mobile and portable to work at any site
- High qualified and experienced professionals available

## BENEFITS & FEATURES

- Upgrading of new and used electrical insulating liquids, transformer oils. Regenerate black to yellow oil.
- Dielectric Strength: Improve oil breakdown voltage with high efficiency up to >70kV per ASTM 877.
- Double stages vacuum pumps, horizontal double vacuum dehydration, degasification chambers and blower capable of pulling vacuum down to 0.05 mbar.



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- Filtration: Micron filter elements capable of removing 99.5% particles  $\leq 1 \mu\text{m}$ .
- Particulate Matter Removal: - 98% of particles over 0,5 micrometer, or over 1 or 5  $\mu\text{m}$ .

- Moisture Removal: Achieving overall water content of  $\leq 3\text{ppm}$ . By vacuum dehydration to remove free, emulsified, and dissolved water after two passes as measured by the ASTM Method D-1533 with new oil.
- Gas Removal: Achieving soluble air and gas content of  $\leq 0.05\%$  by volume as measured by the ASTM Method D-2945 with new oil.
- Neutralization Value: 0.3 to  $< 0.05 \text{ mg of KOH/gm}$
- Online oil purification processing, vacuum drying and vacuum oil-filling for electric equipment.



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## OTHER PRODUCTS & SERVICES



**TRANSFORMERS**



**SWITCHGEAR**



**ELECTRIC MOTORS**



**MOTOR REWINDING**

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**UTILITY BOILERS**



**ELECTRICAL PRODUCTS**

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**Mobile Transformer  
Insulating Oil Purification  
Plant**



**TRANSFORMER OIL PURIFICATION PLANT**

- OIL RE-GENERATION
- ON AND OFF LINE OPERATIONS
- MOISTURE REMOVAL
- DE-GASSING
- FILTRATION
- REAL TIME PPM INDICATION

**GEC CONTACTS**

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*fluidex*



**7000 litres/hour**

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