

## Transformer & OLTC Maintenance

### Transformer/OLTC oil replacement and oil treatment

#### How to maintain transformer insulation oil?

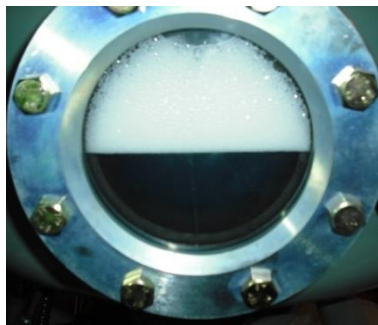
Transformer oil is usually clean and dry. However in a humid environment and overtime, moisture ingress into the transformer is possible through the conservator breather or from points of leakage. To dry and clean the transformer oil, it is necessary to deploy an oil treatment machine at site for filtration, degasification and removal of moisture. The oil treatment process will also help to dry the transformer insulation.



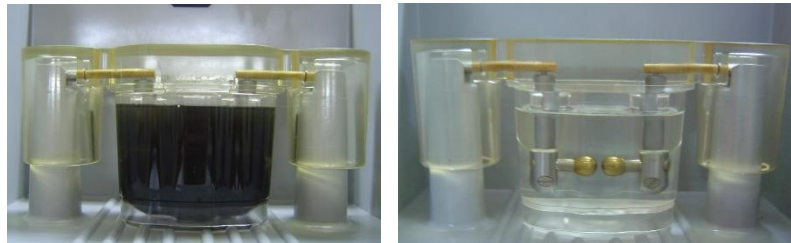
**Oil filtration machine for oil treatment.**



**Operates on the filter machine to purify the oil.**



**Degasification and removal of moisture.**



**Transformer oil from OLTC Before and After maintenance.**

ON-LOAD TAP CHANGER OF TRANSFORMER	DI-ELECTRIC STRENGTH TEST		Moisture Content (AFTER MAINTENANCE)
	BEFORE MAINTENANCE	AFTER MAINTENANCE	
GENERATOR TRANSFORMER No.1 (11 <sup>th</sup> Apr 2008)	32.1KV	70.0KV	7ppm
AUTO T/F #2 RED-Phase (15 <sup>th</sup> Apr 2008)	24.5KV	73.2KV	8ppm
AUTO T/F #2 YELLOW-Phase (15 <sup>th</sup> Apr 2008)	26.6KV	70.6KV	7ppm
AUTO T/F #2 BLUE-Phase (15 <sup>th</sup> Apr 2008)	Not applicable	74.8KV	8ppm
<b>AVERAGE</b>	<b>27.7KV</b>	<b>72.2KV</b>	<b>7.5ppm</b>

**Typical Oil Test Results Before/After Oil Treatment**



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