



ENERGY SUPPORT
MADE IN GERMANY
ENERGY SUPPORT

Online Filtration of Oil during operation

- for insulating oils in transformers
- for removal of water
- for cleaning particles, oil aging products and acidic ingredients



- The filtration takes place in an online closed loop during transformer operation.
- The filtration and drying process is done at a slow and steady pace through special cartridges.
- The filtration efficiency is guaranteed due to a longer lag time between oil and filter cartridges.
- The clean oil has the ability to dissolve deposited residues inside the components or tank; to ensure the cleaning of the entire system.

Depending on the scope of work, a mix of different filter cartridges are used in the system.



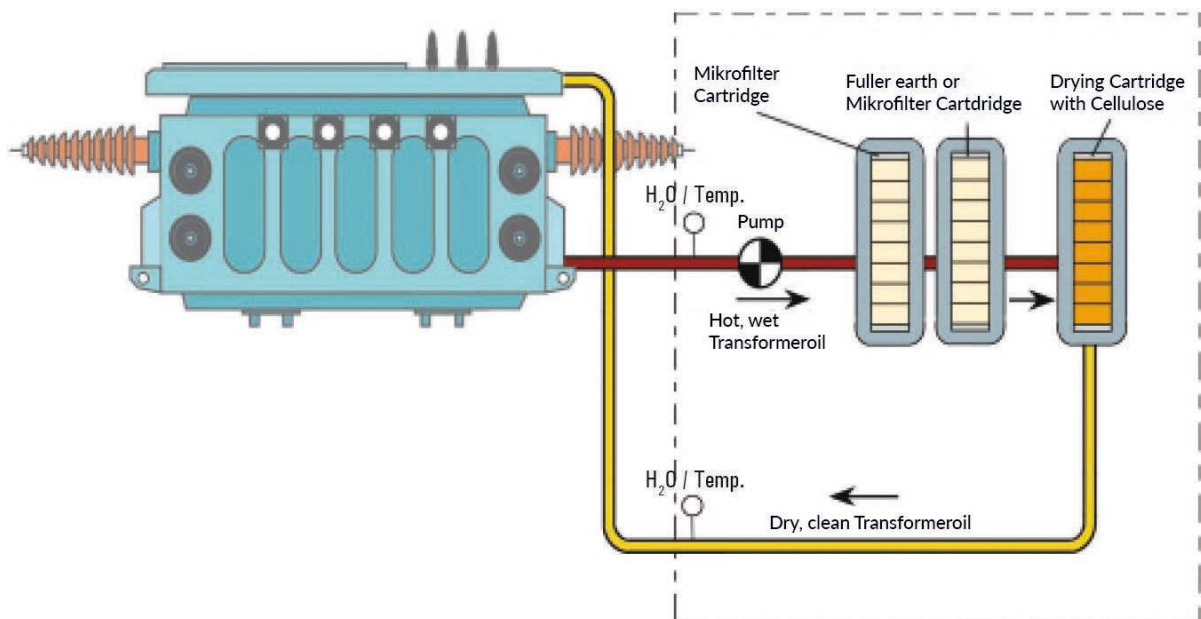
Filter and drying cartridge set **CFP 1000** heat treated Drying capacity: 1,500 ml including set of seals



Microfilter cartridge **TFP 1000** heat treated Dirt absorption: 2,000 g Filter fineness 3 μ m absolute including set of seals



Combined microfilter and drying cartridge **CTFP 1000** heat treated; Dirt absorption: 1,100 g Moisture: 1,300 ml Filter fineness 3 μ m absolute including set of seals



Implementation:

Self-priming pump, including pressure and leakage monitoring, Humidity sensing (degree of drying)

Options:

Electrical control, Mobile version or mounted on an EU pallet



Case Study:

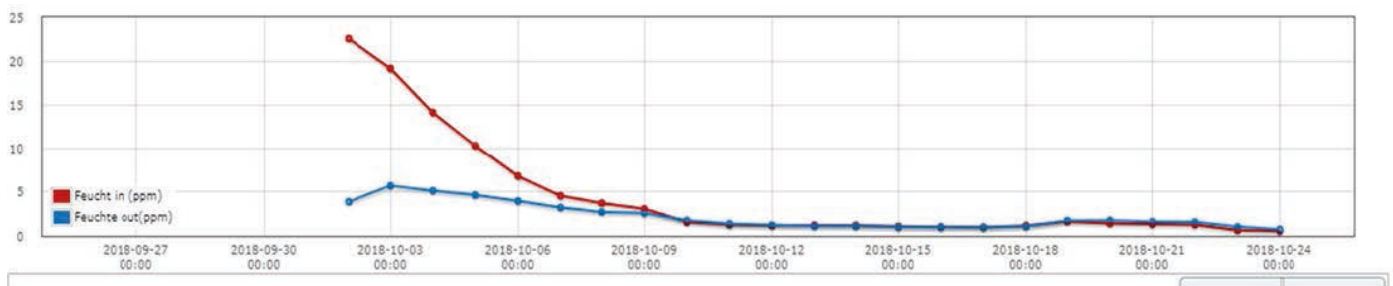
Trend graph of an installation (ESU 4000 with 4 Filter Cartridges) indicating the decline of the critical value of over 20 ppm going towards below 10 ppm residual moisture. The level stabilizes significantly within 3 days at 5 ppm or lower.

During the stabilisation process moisture from the winding will gradually dissolve into the oil and then be

dried directly by the system.

In this case the temperature of the transformer is around 20 ° C.

In the operational state and with rising temperature the transformer will pass the moisture from the insulating material into the oil; so that it can be removed from the circuit.



Providing mobile solutions

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