

ATMoS

AUTOMATIC TRANSFORMER MOISTURE SUPERVISION

ONLINE
DRYING AND
MOISTURE
MANAGEMENT



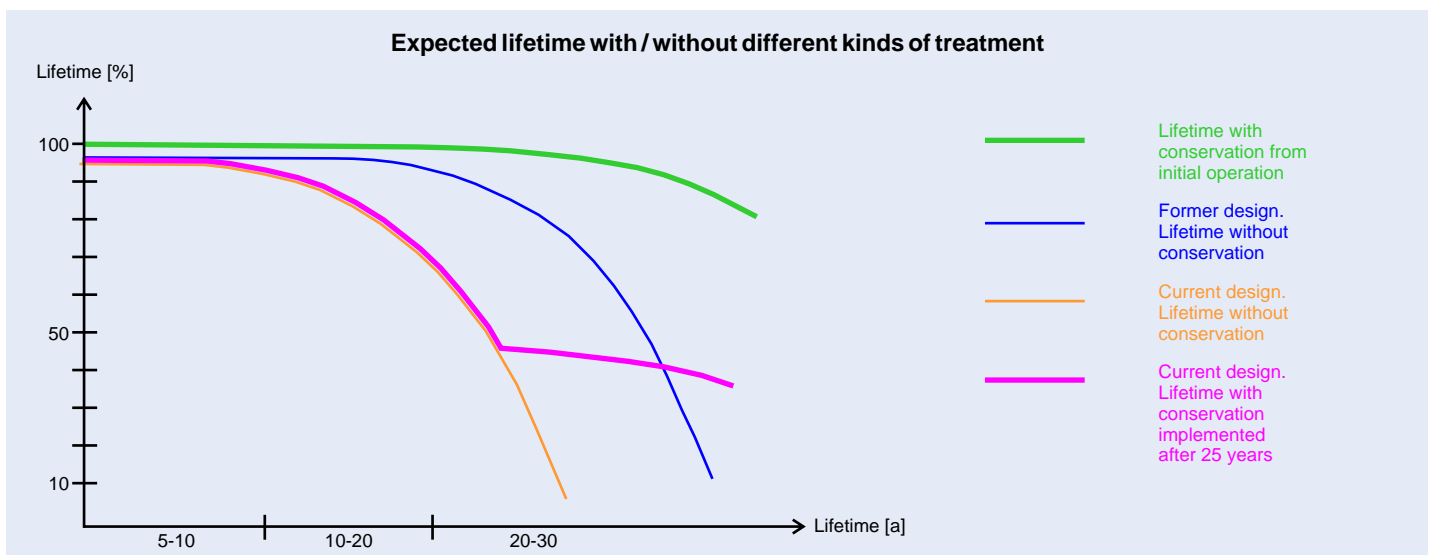
IMPROVED
OPERATIONAL
SAFETY
ENHANCEMENT
OF DURABILITY

Moisture in the insulating system together with decomposition of paper insulation strongly impacts the aging processes of transformers and with this, the transformer's service life.

A high moisture content in the insulation causes low dielectric strength of the insulating oil and accelerated aging of the cellulose insulation. Consequences:

- Premature failure of good transformers
- Considerable shorter life expectancy
- Endangered operational safety

Without conservation, the life expectancy of modern transformers amounts to 25 to 30 years only:



DRYING AND MOISTURE SUPERVISION ARE ESSENTIAL FOR THE OPERATIONAL SAFETY AND LIFE EXPECTANCY OF YOUR TRANSFORMERS!

TRANSFORMER
EXPERTS

THE SOLUTION for continuous, material saving and sustainable drying and moisture supervision of your transformer:

ATMoS

AUTOMATIC TRANSFORMER MOISTURE SUPERVISION

ATMoS is a filter system which removes moisture from the insulating system (oil and cellulose) during normal operation. Additional particle filters remove dirt and suspended materials from the insulating oil. At this, age, manufacturer and even installation site are unimportant- ATMoS can be adapted to the given actualities and environmental conditions.

Installation and operation are carried out during the transformer's normal service, no shutdown or even dismantling is required. Due to the state-of-the-art intuitive control system, ATMoS can be operated comfortably via remote access; target values can be set and controlled very simply, no cost- and time consuming user trainings are required.



Concept: The insulating oil is led through cartridges which contain special filtering granulate- moisture is removed and bound on molecular basis. The effect is immediately measurable. Conventional oil drying is deemed completed at this point.

industrial particle filters remove suspended particles and dirt, whereas solved gases remain in the oil: Reliable DGA (Dissolved Gas Analysis) for evaluation of the transformer's condition and early detection of possible failures can still be carried out:

However, the main moisture amount is located in the paper insulation and diffunds into the oil very slowly- a time consuming process.

Control and monitoring are managed by a PLC, accessible via Ethernet-, W-Lan or GSM connection from stationary devices (control room) or mobile devices like tablet computer or smartphone.

ATMoS runs during normal transformer operation and is designed for long-term service. Insulating oil is dried constantly and due to the persistent concentration gradient and diffusion of the water solved in the paper insulation, also this moisture is removed. The filter granulate binds the water molecules and with this, makes re-moistening impossible.

Moisture target values can be set individually for both, cellulose insulation and insulating oil. Attainment and maintenance of these values are supervised by the PLC.



- FOR NEW AND OLD TRANSFORMERS
- AUTOMATIC FILTER REPLACEMENT SIGNAL
- SIGNIFICANT DECELERATION OF AGING
- OPERATIONAL SAFETY, MINIMISED RISK

- REMOTE CONTROL VIA LAN, W-LAN, GSM
- NO REMOVAL OF GASES, RELIABLE DGA
- DATA LOGGING OF AW, PPM_w, TEMPERATURE
- INSTALLATION WIZZARD (CONTROL)

SAVE YOUR POWER TRANSFORMERS & CONTACT US FOR MORE INFORMATION!