

# THE ON-LINE MOLECULAR SIEVE TO DRY OUT POWER TRANSFORMERS

# T R A N S E C



TRANSEC on-line molecular sieve has been developed and is manufactured in the U.K. to offer the ultimate in moisture removal from Power Transformers. It offers a highly cost efficient solution that can be widely applied to many transformers that would benefit in terms of reduced ageing, increased plant life resulting in good asset management.

The sieve material has been widely researched using computer modelling to achieve the optimum flow across a manageable bed length giving maximum water absorption. The sylobead material is sourced with 4 Å (angstrom) pore size, which reduces any tendency to become blocked with extraneous matter, but will not allow aromatics, benzene and xylene, which are 7.2 Å and 8.4 Å respectively, to be absorbed. The sylobeads are hydro-phobic, which means that they will always absorb water as a priority, even displacing other molecules that have previously been absorbed. However, once water molecules have become bonded, they will never be released back into the oil.

TRANSEC is designed to remove up to 15 litres of water before total saturation occurs (CL3)

## Features:

- ❑ **Economic and Low maintenance system that is easily installed and commissioned to a live transformer.**
- ❑ **Uses oil as the transfer medium to extract water from the paper insulation, where 95% of water is retained.**
- ❑ **Weigh-in, weigh-out following regeneration ensures control of exact amount of water removed during absorption cycle.**
- ❑ **Integral in-line oil filter will trap particulate matter and improve the dielectric strength of the oil.**
- ❑ **Can incorporate on-line monitoring of temperature and moisture in oil.**
- ❑ **CL3 Model for oil volumes above 10,000 litres. CL1 Model for oil volumes below 10,000 litres. Midel 7131 can be accommodated although 3 phase pump is required.**

## Benefits:

- ❑ **Reduces the effects of ageing on Transformers**
- ❑ **Increases reliability and service life of transformers by continuously removing moisture and fibres.**
- ❑ **Enables transformers to be run on higher load cycles with greatly reduced risk of failure.**
- ❑ **Increases plant utilisation and will allow capital expenditure to be deferred.**