

# On-Line Transformer Oil Processing

The purpose of the on-line transformer oil processing unit is primarily to:

- Remove oxygen and water from the insulating oil.
- Remove particulate contamination and other dissolved gases.
- Run while the transformer is energized making shutdown unnecessary.

The presence of oxygen and water in transformer oil promotes aging of cellulose-based insulation. High water content in transformer oil implies a larger volume of water bound in the coil isolating cellulose material of the copper windings. This cellulose insulation in a transformer is very sensitive to oxygen and moisture and high values present in oil increase the decomposition rate. This decomposition of the cellulosic insulation lowers its mechanical and dielectric strength thereby reducing the transformer life.

Therefore, it is beneficial to dry the paper by drying the oil. The **V30 CJC™ VACUUM FILTER** is designed to do just that. It removes moisture, oxygen and other gases from transformer oil. The unit is PLC controlled and provides highly efficient degassing and drying of oils. Furthermore, the built-in fine filter (3 µm absolute) removes contaminating particles. This particular unit is capable of processing up to a maximum of 250 litres per hour all while the transformer is energized making shutdown unnecessary with no disruption to your operation.

*Dynamo Electric* can assist in extending the life of your transformer by installing a **V30 CJC™ VACUUM FILTER**.



*In this case the V30 CJC Vacuum Filter on-line transformer oil processing unit is being used to add top-up oil and remove moisture from a 6 MVA transformer.*