Switchgear Oil Filtration Plant Model SGM-1100

No external power requirements

Two stage filtration

PLC control with HMI

Applications

+ Switchgear and tap changer maintenance: All applications up to 400kV
+ No new oil requirement - no drum handling and transportation
+ No oil storage facilities required.
+ Minimum environmental risk.
+ Ideal for urban environments
+ Bulk oil "polishing"
+ Plus, all applications where a final specification of > 70 kV (dielectric strength) and < 10ppm (moisture content) are required. e.g. new installations; top up oil.

Features

+ Self contained; with petrol driven generator and floodlights.
+ Fully mobile; mounted on stainless steel trailer, suitable for use on public roads.
+ 800 litre aluminium storage/processing tank.
+ 15 metre inlet and discharge hoses.
+ Stainless steel pipework.
+ Simple to operate. Low maintenance.
+ PLC control.
+ HMI (Optional touch screen operation)
+ Alternative cartridges may be fitted to reduce oil acidity levels and dissolved compounds.
+ Process logging and downloads.
+ "Moisture in oil" instrument indicates moisture content (ppm) of oil after filtration.
+ Nominal 1100 l/h flow rate.

System Description

The model SGM-1100 oil filtration plant removes particulate (incl. carbon) down to 0.3 micron, free water and dissolved water from electrical insulating oil, resulting in an oil dielectric strength of > 70 kV and a total moisture content of < 10 ppm.

A positive displacement gear pump circulates oil through the filter cartridges. An oil storage tank allows oil to be stored and processed whilst maintenance takes place on the electrical equipment. All necessary controls and safety devices are incorporated into the plant, including a moisture in oil (ppm) meter to indicate the moisture content of the oil after filtration.

All processes, equipment drain, circulate, flush, equipment fill, are PLC controlled via the HMI.

An alarm is activated when the moisture content of the filtered oil exceeds a pre-set value, ensuring electrical plant is filled with oil to the required specification.

The plant may be operated from a 220 V a.c. mains supply or from the integral petrol driven generator. Specifications may be changed to suit customer requirements. Please discuss your particular applications.