

Transformer Oil

What happens to aging transformer oils?

Transformer oils act as both a dielectric insulating material and a coolant; however, introduced contamination reduces the effectiveness of these characteristics. Particulate contamination can be leftover from transformer production, enter during the filling stage, or introduced through chemical interactions with windings and solid insulation. Water is another form of contamination that plagues transformers, which is most commonly introduced into a transformer via condensation and breathing.

Water and particulate contamination are detrimental to the functioning of transformer oil. Water allows a higher rate of oxidation, which creates sludge forming acidic and polar compounds. More importantly, water and particulate contamination lower the dielectric strength and breakdown voltage of the transformer oil, which, if lowered below the minimum 30 kV rating, threatens electrical discharge that can destroy your transformer.

Are you experiencing any of the following indicators of aging transformer oils?

- System Failure
- Service Outages
- High replacement costs
- High disposal costs
- Moisture in oil
- Contaminants in oil

Solution: COMO Filtration Systems

Restore your transformer oil's dielectric properties to like-new condition with COMO's standard or custom-designed filtration systems. From single element Load Tap Changer Filtration Systems to Oil Recycling Systems capable of processing batches up to 3,000 gallons in volume, COMO has a solution for your transformer oil contamination problems.

Off-site control via a Programmable Logic Controller (PLC), particulate filtration down to one micron in size, and Fuller's Earth sequence are some available options on COMO's Transformer Oil Filtration Systems.