

TRANSFORMERS







4 REASONS TO RETROFILL TRANSFORMERS WITH Natural and synthetic esters

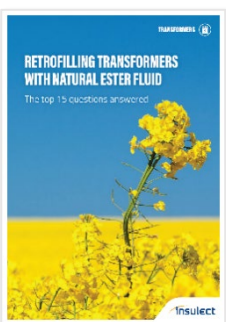
WHY RETROFILL TRANSFORMERS WITH MIDEL NATURAL AND SYNTHETIC ESTER FLUIDS



When retrofilling mineral oil transformers, every situation is unique: from an urgent need on a single asset, to rolling out a network-wide program. Operational factors can also vary considerably such as load, asset design, age, location, and environment.

In many situations, a compelling case can be made for using a natural or synthetic ester fluid. Here are the top 4 reasons for replacing mineral oil with an ester fluid.

 <p>FIRE SAFETY reduced risk through much higher fire point and flash point</p>	<ul style="list-style-type: none">• Over 1,000,000 installations worldwide with MIDEL esters. Not one single reported ester fire.• High Fire Point > 300°C (K Class fluid)• Synthetic ester will self-extinguish when heat source is removed.• No pool fires
 <p>ENVIRONMENTAL PROTECTION minimise impact and facilitate compliance</p>	<ul style="list-style-type: none">• Readily biodegradability (CIGRE Brochure 436)• Lower clean-up costs compared to mineral oil• Lower environmental impact
 <p>REDUCED SEPARATION DISTANCES AS2067 Compliance</p>	<ul style="list-style-type: none">• Can allow transformers to be located closer together and next to buildings without the need for blast walls.• Compliance with AS2067 can be met and insurance premiums can potentially be lowered.• MIDEL esters are FM Global approved
 <p>TRANSFORMER LIFE EXTENSION significantly beyond what is possible with mineral oil</p>	<ul style="list-style-type: none">• MIDEL synthetic and natural esters absorb moisture from the insulating paper. This slows the rate of degradation, hence increasing the transformer life.• MIDEL synthetic and natural esters allow transformers to be run hotter without any reduction in transformer life. Alternatively they can be run at the same temperature as mineral oil with increased paper life.



Want more info? [Download the eBook.](#)

15 Questions on Retrofilling Transformers with Ester Fluids

TOP REASONS TO RETROFILL TRANSFORMERS WITH ESTER FLUIDS



When retrofitting mineral oil transformers, every situation is unique: from an urgent need on a single asset, to rolling out a network-wide program. Operational factors can also vary considerably such as load, asset design, age, location, and environment.

In many situations, a compelling case can be made for using a natural or synthetic ester fluid. Here are the top reasons for replacing mineral oil with an ester fluid.

 <p>FIRE SAFETY reduced risk through much higher fire point and flash point</p>	 <p>SAFETY COMPLIANCE meet fire codes, insurance audits; clearances, fire wall, deluge system</p>	 <p>ENVIRONMENTAL minimise environmental impact and facilitate policy compliance</p>
 <p>OIL QUALITY decrease the levels of undesired contaminants and dissolved gases</p>	<p>Reducing risk with minimal cost</p> <p>Risk is the most common, underlying reason for retrofitting mineral oil filled transformers with an FM Global approved ester fluid.</p> <p>Synthetic and natural esters like those from MIDEL can deliver significant risk reduction with minimal CAPEX and OPEX.</p>	 <p>LIFE EXTENSION significantly beyond what is possible with mineral oil</p>
 <p>SLOW AGEING and delay capital investment for transformer replacement</p>		 <p>REDUCE MOISTURE Lower water content in the oil</p>
 <p>PCB CONCENTRATION remove contaminated oil</p>	 <p>OVERLOAD CAPABILITY gain increased safe overload</p>	 <p>SPILL REMEDIATION simplified and less costly bio remediation and containment</p>

Contact us today!

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