Transformer oil filtration system - Trouble shooting and getting prepared for tomorrow while meeting today

In a result-oriented drive, Hering VPT focuses on purity and quality while generating oil filtration system, so that transformer operations are optimized. Such optimization, gives a winning edge to next gen transformers. Transformers are bound with responsibilities which demand effective power transmission and distribution network. Such demands, compel transformers to be checked regularly to ensure reliable service.

The current competition pushes our <u>transformer oil filtration systems</u> to fulfill expectations to be a formidable coolant and effective dielectric material. This in turn helps transformers to withstand stress resulting from heavy loading and short circuit. Age might decay the oil, thanks to oxidation and deposition of thermal by-products which results in interruption and breakdown of the machines. Preventative maintenance thus becomes inevitable. Parameters including electric, chemical and physical features help Hering VPT deliver the right product.

The electric parameters include the BDV kit which is kept near the transformer monitors the breakdown strength of voltage so that health of the oil is constantly supervised. The resistance of the <u>transformer oil</u>, when observed, protects the transformer in an overloaded condition, especially when the temperature shoots up. The need for proper resistivity arrives at this point.

The dielectric dissipation factor of the <u>transformer oil</u> is a loss factor thanks to its insulating capacities. It is accepted as a tan delta which increases with decrease in resistivity and vice versa. Separate tests for resistivity and tan delta are not required as they are interdependent. Checking the dielectric aspects through portable equipments of lab tests, mitigates replacement expenses of the transformer. Coming to the chemical attributes, moisture analysis of <u>transformer oil</u> is vital, as it affects the <u>dielectric properties</u>. Cellulose paper insulation absorbs moisture content and results in loss of insulating property and hurts the lifespan of the instrument.

When the atmospheric oxygen reacts with <u>transformer oil</u>, it encourages the acidic compounds leading to transformer failure. Eventually, the insulating oil is dissolved by the acidic components and accelerates ageing. Coming to the physical attributes, the interfacial stress which deals the existing tension between the oil and water surface, flash point value of <u>transformer oil</u> where it gives vapour and forms a mixture with air and thereby becomes inflammable in nature, the pour point value and viscosity index of <u>transformer oil</u> are understood while employing transformer oil Filtration system.

Transformer oil filtration systems differ in purposes and a streamlined approach is what keeps Hering VPT, a favourite of its customers. Client requirements vary inclusive of advanced overhaul of transformer oil or perhaps a comprehensive treatment of the transformer. The plant may be serving purposes such as maintenance, first oil filling, oil filtration, oil degassing, dehumidification, oil regeneration, transformer evacuation, hot oil spray drying to name a few. Transformer capacity is terms of voltage, power rating and oil content, also comes in the picture. The oil to be treated, be it transformer oil, new oil, used oil or non mineral oil and their respective flow capacity are other criteria. The professional in Hering VPT enjoys navigating into details while providing the desired product. Such expertise powered by German Engineering is obviously tagged as leading and benchmark brand.

By minimizing water content in the fluids, Hering EOK improves <u>dielectric properties of the transformer</u> besides eliminating volatile acids. The increasing voltages and the stress that such voltage is tagged with compels the user to employ rich insulating fluid in initial impregnation and filling. Calculating such demands, plants are categorised as EOK Basic, EOK Standard and EOK Professional. Such a study is inevitable to remove sludge material and contamination in transformer oil.

The components of Hering systems are carefully procured from German and West European brand manufacturers so that longevity, efficacy and reliability are reached.

Hering holds a rich legacy since 1909, which vouches for quality since inception. While the initial product was a vapour-oil boiler which facilitated internal and external <u>oil treatment</u>, the brand maintains lead in the industry till date, thanks to the insatiable research which is never compromised.