

# FAULTS DIAGNOSIS IN POWER TRANSFORMERS

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Comprehensive review of condition monitoring and fault diagnosing methods are presented in this lecture. This covers the traditional and recent fault diagnosis techniques that are applied to a power transformer incorporated in the power system networks. Due to the development of more powerful FE-based packages and advances in computer technology, fault diagnosis methods based on magnetic flux patterns have received more attention in recent years. Each proposed technique for detecting and locating the fault in transformers has its own advantages and disadvantages. Normally, each method is suitable for diagnosis of one or more fault types, and there is no unique method to be applied to different fault detections. Another problem, which must be taken into account, is the on-time applicability of the method. As experience shows, the primary fault diagnosis or abnormal condition monitoring of transformer prevents the occurrence of the next irreparable faults.