

NON-DESTRUCTIVE EVALUATION FOR STRUCTURAL HEALTH ASSESSMENT

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Various non-destructive evaluation (NDE) methodologies have been developed and applied for structural health assessment. Activities on NDE were initiated in the early 1990's under the component integrity evaluation program (CIEP) and ultimately led to the formation of a Centre for Non-destructive Evaluation at CSIR-NML. NDE techniques and methodologies based on acoustic emission, ultrasonic and electromagnetics are being used for evaluation of materials and components from the power plants and petrochemical industries. In several cases, the damages encountered in-service in thermal power plants have been simulated in the laboratory to correlate the damage to select NDE parameters, thereby making on-site and/or on-line evaluation of structural integrity of components possible in the plant.
