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Application and Implementation of Residual Life Assessment Techniques for Coal Handling Plant

Makarand Joshi
Coal Handling Plant; Mech. Maintenance II, Koradi Thermal Power Station Koradi , Nagpur
makarandj@hotmail.com

P. M. Padole
Mechanical Engineering Dep., Visvesvarya National Institute of Technology, Nagpur (India)
pmpadole@mailcity.com

Abstract

In the thermal power plants maximum requirements of fuel is a coal. The handling of this fuel is a great job. To handle the fuel i.e. coal, each power station is equipped with a coal handling plant. Maintenance of Critical Equipments for Coal Handling Plants (CHP) of Thermal Power Stations is a typical job. The failures of these equipments have led to high maintenance and operation costs. Assessing the condition and remaining life of coal handling plant components is necessary to optimize inspection and maintenance schedules.

Generally Non Destructive Testing (NDT) techniques adopted in the Residual Life Assessment (RLA) of power plant components like Boilers, Headers, Steam lines, Turbines, Feed water Heaters and Condensers. The reason for inspection depends on the component and its effect on plant operation. But one of the main and major systems of thermal power plant is coal-handling system. No such efforts are carried out to assess the life of coal handling plant component.

This paper summarizes some of the major aspects of RLA for coal handling plant. The concept of NDT, discussed in this paper for Coal Handling Plant is to offer significant benefits. Guidelines for implementation of RLA in CHP are also discussed in this paper.