

CONDITIONING MONITORING AND FURNACE OPERATION AND DESIGN

(719) - HOW TO CHOOSE THE RIGHT NDT METHOD TO ENSURE QUALITY AND INCREASE ASSET AVAILABILITY

Augusto Jofre (Portugal)¹

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The selection of the right Non-Destructive Testing (NDT) methods will have a significant impact on the outage performance. To ensure an efficient and effective outage, all the necessary inspections and repairs must be performed consuming the minimum time possible. The NDT activities are crucial to providing information about the repair quality and equipment integrity data.

The probability of detection, the type of materials, the safety and environmental risks, and the time needed to execute each NDT method, among many other variables, must be considered during the project planning.

With the latest technology developments, we can now choose among several methods that have been proved to be very reliable. The use of Advanced Ultrasonics to control the welding quality during a repair activity, replacing or complementing radiography, it's an example.

Using Phased Array Ultrasonics (PAUT) we get higher production and higher probability of detection when compared with radiography, without the risk of harming people and the environment.

When choosing the tube inspection method is important to consider the external activities needed, materials to be inspected and the type of output (qualitative or quantitative). Internal Rotary Inspection System and Remote Field Testing are both very valuable, but a critical analysis must be done before selecting them. With the correct selection, we will get reliable data to compare along the years, get trending reports and use it as a predictive analysis tool.

Palavras-chave : asset, quality, NDT

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