



NRC/NIFG Meeting

Guidance on Scanning Time Considerations

Tony Oliveri

NDE Integration Committee, Compliance TAC Chairman

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Guidance on Scanning Time Considerations

- Purpose
 - Provide guidance for understanding and documenting appropriate scanning times for dissimilar metal (DM) welds
 - Due to the complexity of manual examinations of DM welds, maximum scan speeds for effective examination are greatly affected by weld joint characteristics

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- Specific weld characteristics can greatly influence the actual scan speed used during an examination.
 - Grain structure
 - Internal geometric reflectors
 - Embedded weld flaws
 - Accessibility of the component
 - Distracting environments
- A review of previous examination reports can provide valuable insights which can be used to predict when slower scan speeds may be more appropriate

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- Recommendations for DM weld examination
 - Determine the minimum procedural scan time for each DM weld as a function of the weld joint size, required coverage and procedural scan speed limitations
 - Review previous examination history, looking for specific weld characteristics that may require further scan speed adjustment (e.g. slowing down to interrogate known embedded flaws within the weld volume)
 - Document in the scan plan the recommended adjusted minimum scan time to provide better guidance for performing the examination
 - Document actual time for each individual scan on the data sheet

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- Benefits

- Raises the level of awareness of realistic scan times
- Provides a process for assessing and implementing proper scan times prior to the examination based on joint specific considerations
- Provide a more accurate examination time estimate that can be factored into ALARA planning

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