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SUMMARY OF THE NONDESTRUCTIVE EVALUATION SESSION OF THE SYMPOSIUM ON WELDING, BONDING AND FASTENING SYMPOSIUM

Advanced material systems and designs require improved nondestructive evaluation (NDE) techniques for quality control, failure analysis and properties monitoring. In this session, papers were presented that highlighted some advanced NDE techniques such as infrared scanning systems, laser holographic applications and the use of the mossbauer effect.

Applications of these techniques were discussed for evaluating the new space shuttle external insulation materials, aircraft structures and engine components and precursors to crack initiation and growth.

It was brought out that recent improvements in instrumentation have made the infrared scanning camera and laser holographic systems applicable to a wide range of materials and structures. At present the Mossbauer effect is in the research stage and considerable development and evaluation must be done to move this technique from the laboratory into general usage.

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