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COMPUTED TOMOGRAPHY INSPECTION AND ANALYSIS FOR ADDITIVE MANUFACTURING COMPONENTS

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Computed tomography (CT) inspection was performed on test articles additively manufactured from metallic materials. Metallic AM and machined wrought alloy test articles with programmed flaws were inspected using a 2MeV linear accelerator based CT system. Performance of CT inspection on identically configured wrought and AM components and programmed flaws was assessed using standard image analysis techniques to determine the impact of additive manufacturing on inspectability of objects with complex geometries.