



What types of materials can be inspected?

In general, any material that propagates sound can be inspected using phased-array technology. M2M customers typically work with steel, aluminum, titanium and various alloys, as well as composite materials, including carbon-fiber-reinforced plastics. Material properties that affect ultrasonic wave propagation must also be considered, including attenuation, anisotropy, and heterogeneity. For non-trivial cases, simulation can be used to determine the suitability of ultrasonics for the application. Bercli offers modeling and simulation services. For phased-array modeling we use CIVA simulation software.



Image shows inspection of an advanced composite at Dassault Aviation, using an M2M system to drive the linear array probe. Used by permission.