

How are phased arrays typically used?

Phased arrays are used for a wide variety of inspection and measurement applications, and they can be used for any job done by conventional ultrasonics. For example, phased arrays are used to detect and image defects including cracks (see figure below), voids, and pits caused by corrosion. They are used to measure material and coating thickness, and to detect changes in material properties. Another common application is to assess the quality of welds and rivets. Phased arrays are also used to inspect joints and interfaces, for example, to detect and map adhesive.

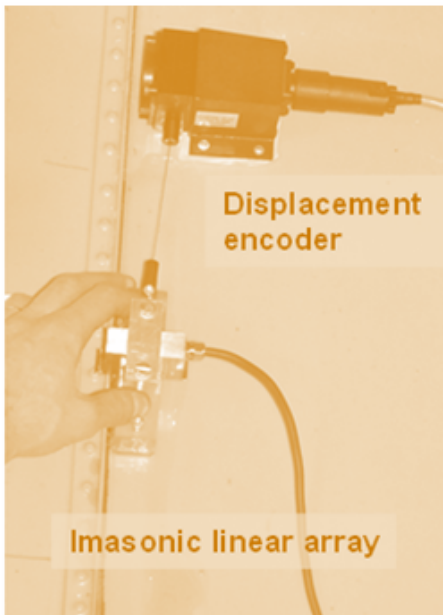


Image depicts crack detection in an aluminum sample using an M2M system, an IMASONIC probe and a displacement encoder. Courtesy of Dassault Aviation.