

## LS-200 PA – A Fully Integrated Phased Array and Conventional Ultrasonic Scanner

Engine disks are important components of turbine based jet engines. However, the stringent requirements of their ultrasonic inspection standards take a significant toll on manufacturing time.

One way of reducing inspection time is implementing the phased array ultrasonic inspection technique as part of the inspection plan.

ScanMaster is now introducing the LS-200 PA, a fully integrated phased array and conventional UT based immersion scanner for inspection of engine disks. The LS-200 PA system significantly increases inspection productivity while maintaining highest detection and evaluation capabilities.



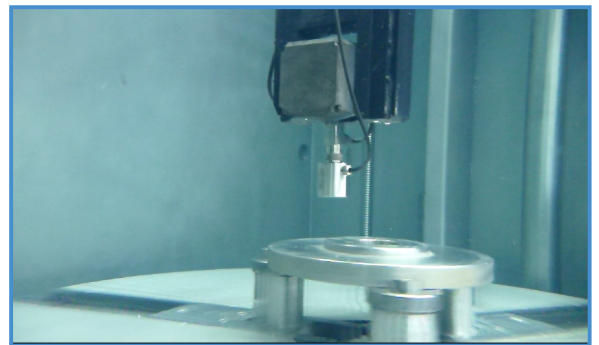
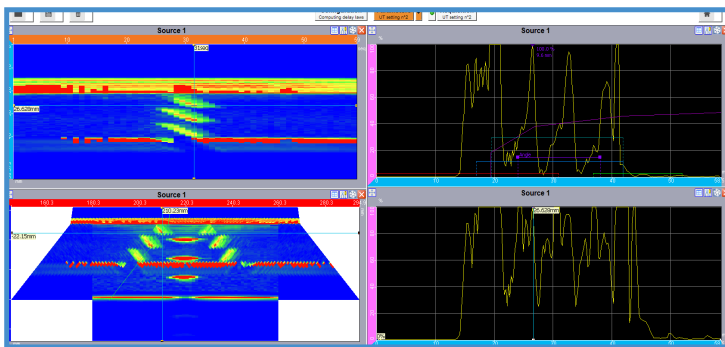
The LS-200 PA is based on the standard LS-200 Series scanner, which is equipped with a state-of-the-art fully parallel phased array instrument supporting linear, annular and matrix transducers, as well as a conventional high performance UT instrument.

The phased array and conventional transducers are directly connected to the standard gimbal-gimbal probe manipulator, and the system can be switched from phased array ultrasonic to conventional UT in a matter of minutes.

These UT technologies are fully integrated within an application-oriented version of ScanMaster's CSI (C-scan Imaging) software, supporting both conventional and phased array UT.

Phased array and conventional UT share the same scan definitions, data presentation and analysis tools, supporting well-established inspection and evaluation procedures.

The new system is able to perform in various UT modes such as multi-zone inspection, "one pass" scanning with different sound beam incident angles (longitudinal and shear waves), and more.



## Providing existing systems with new capabilities

A "Phased array kit", which includes a 128-channel phased-array instrument, linear, annular or matrix transducers and application-oriented software can be provided as an add-on to existing LS and DS Series immersion systems, enabling the user to implement conventional and phased array UT on the same system.

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