

Ultrasonic Leaking Fuel Detection Systems

Proven performance and reliability for detecting leaking fuel rods

Challenge

Speed and precision are critical to a successful outage. In order to ensure success, outage teams need fast and accurate test results when performing automated ultrasonic fuel inspections.

Solution

ECHO-330® and Ultratest®, Framatome's fully automated ultrasonic fuel inspection systems, combine advanced multiple-probe designs with computerized control and data evaluation to deliver proven performance and reliability for detecting leaking fuel rods. These unique systems inspect all fuel rods with minimal passes through the fuel assembly to ensure fast and accurate test results. Plus, they immediately identify any leakers and display their location at the control console — before the assembly leaves the inspection station. This eliminates the need for extra handling of the fuel assembly if rescans are required. ECHO-330 and Ultratest have proven results on a variety of fuel designs, including PWR 14x14, 15x15, 16x16, and 17x17 configurations, in addition to BWR 8x8, 9x9, 10x10, and 11x11 configurations.

Field-proven ultrasonic probes are at the heart of each system. Each probe features transducers that ultrasonically transmit and receive, mounted on a single flexible blade. The transmitter generates an ultrasonic pulse, which produces a wave that travels around the fuel rod to the receiver. The amount of energy recovered by an advanced receiver determines the integrity of the fuel rod.

Following comprehensive inspection, ECHO-330 or Ultratest withdraws the probes and clearly displays the integrity status of the fuel rods. This enables the operator to advise the fuel handler to remove the fuel assembly from the station, or to locate the assembly for a rescan at a different position. The computer then prints a hard copy of the inspection result.

Customer benefits

- Full automation and computerized operation simplify use
- Easy-to-read data format prevents mistakes
- Poolside or remote operation reduces dose
- Exceptional accuracy ensures reliability
- Extensive Framatome experience provides peace of mind

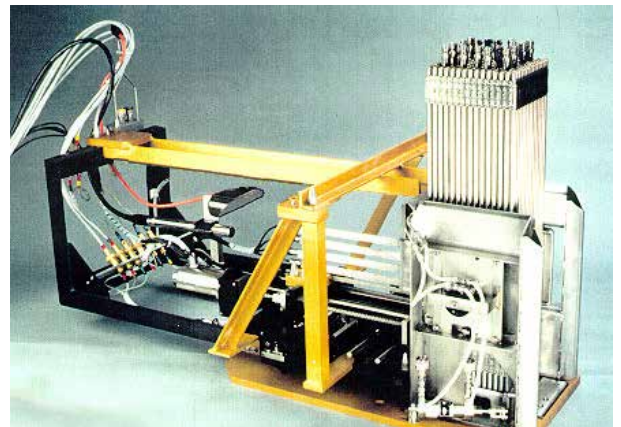


ECHO-330 Control Consoles

Your performance
is **our** everyday **commitment**



ECHO-330 Leaking Fuel Detection System



UltraTest Leaking Fuel Detection System



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