CRYSOUND

Acoustic Imaging Camera for Vacuum Leak Detection of Composite Vacuum Bagging

Only 10 minutes to finish Vacuum Leak Detection of Large Composite Parts

Using acoustic imaging technology, large areas can be quickly scanned, increasing detection efficiency by 10 times, and leak size is estimated in real time.

Pinpoint Exact Vacuum Leak position in Noisy Industrial Environments

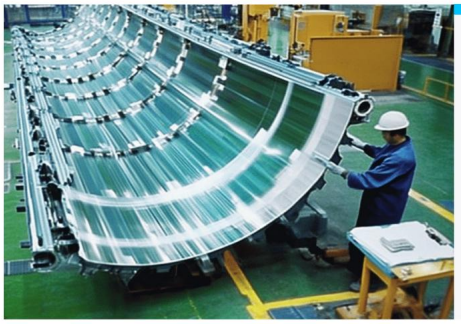
Equipped with 200 high-sensitivity microphones covering a frequency range of 2kHz-100kHz, it can capture ultrasonic signals from even the smallest leaks. Advanced frequency filtering and beamforming technology minimize environmental noise, providing a clear visual display of leak locations.

Superior Testing Performance to Ensure Vacuum Pressure Above 85kPa

Best performance in the acoustic imaging camera industry, to ensure the inspection of tiny leaks and guarantee system pressure above 85kPa.

Industry Application

Used in the vacuum bagging process for turbine blades, airplane wings, rocket and missile fairings, reducing leakage detection time by 70%.



Used in the manufacturing of large blades, with real-time vacuum leak detection and visualized localization via acoustic imaging camera.

Used in the production of lightweight hulls, decks, submarine outer shells, and corrosion-resistant bulkheads and pipelines for chemical tankers, acoustic imaging camera can efficiently detect leak points and reduce the maintenance costs.

Used in high-speed train front covers, fire-resistant seat brackets, luggage racks, and bogies, acoustic imaging camera can shorten inspection cycles and meet the mass inspection needs of rail transportation equipment.

CRYSOUND

Composite Manufacturing Process

Vacuum Bagging

Used for prepreg molding to prevent air infiltration, avoiding delamination and porosity.

VARTM (Vacuum Assisted Resin Transfer Molding)

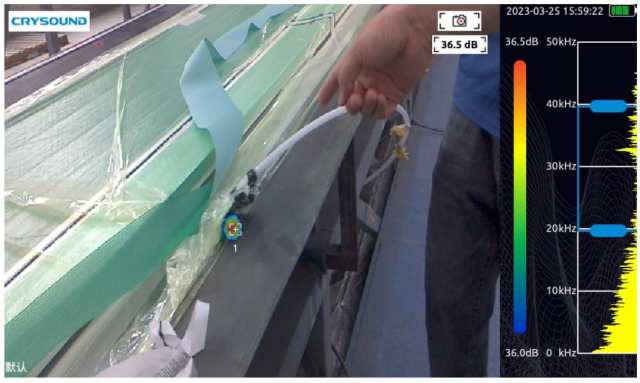
Ensure the uniform resin impregnation of fibers, preventing uneven resin distribution caused by leaks.

High-temprature Consolidation

Eliminate the air bubbles under high temperature and pressure, since even small leaks can cause curing defects.

Application Case

A top U.S. aircraft manufacturer in Wichita, Kansas uses CRYSOUND acoustic imaging camera to detect vacuum leak during composite part manufacturing.



A top wind turbine blade manufacturer uses the CRYSOUND Acoustic Imaging Camera to replace traditional pressure testing.