

Composite Inspection

Bond Testing C-Scan



- Honeycomb structure inspection
- C-scan display
- Drives up to eight frequencies
- User-friendly design

Bond Testing Reinvented

Eight Frequencies in the Same Scan



Bond Testing Improvements

- C-scan imagery
- Drive up to eight different frequencies at the same time
- Dimensioning capabilities
- Improved probability of detection
- Phase/amplitude display mode



Important to Note

- Detection similar to that of the BondMaster® 1000e+ instrument, since the same probes are used
- Pitch-catch probes
- Two-axis encoding scanner is required to produce the C-scan

Advanced Composite Inspection

Obtain easy-to-read C-scan images using a portable instrument. This OmniScan solution is ideally suited for disbond detection in honeycomb composite, as well as accurate delamination detection. Primarily designed for aerospace in-service inspection, this solution is also useful for the manufacturing sector, including the automotive and naval industries (e.g., for composite boat hulls).

Customers who already own an OmniScan® ECA or ECT module only need to order the standard BondMaster® probes (P14 and SPO-5629) and the BondMaster cable that are required to complete this solution.

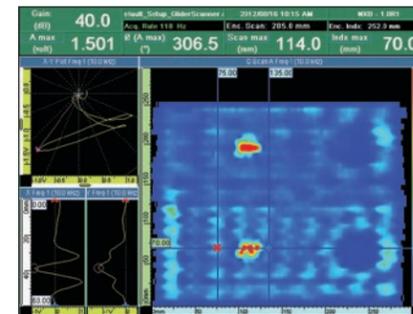
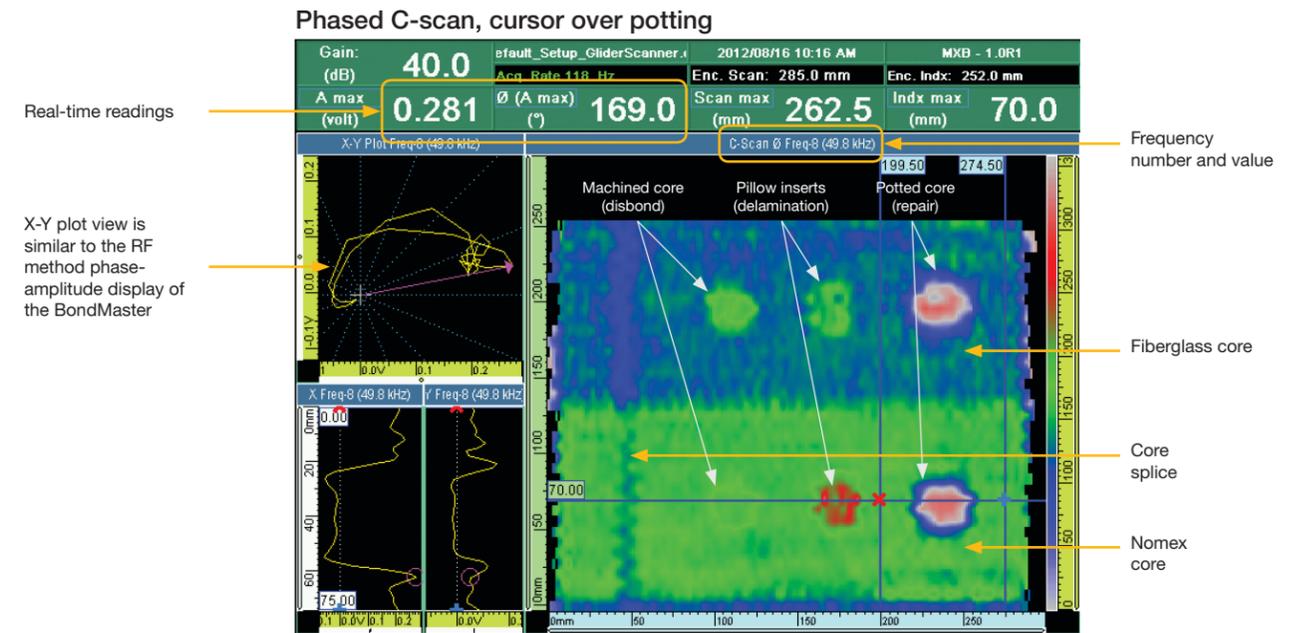
Our customized MXB software has been developed especially for composite inspection; new features, such as the wizard and normalization, help to keep operation simple for the user.



Encoded system: any two-axis encoding scanner can be used to inspect a part. Olympus offers two options: the GLIDER™ scanner, which is well-suited for flat or slightly curved surfaces, and the WING™ scanner, which is specially designed for scanning curved parts (e.g., aircraft fuselages) and can even be used upside-down due to its Venturi vacuum-cup system. For more versatility, a handheld one-axis encoding scanner, equipped with an Indexer Clicker, is also compatible with this system.

Innovative C-Scan Display

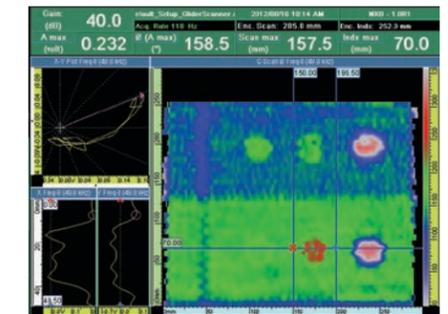
For each C-scan, the operator has two viewing options to choose from: the amplitude C-scan displays color variation based on the amplitude of the signal, regardless of the phase, which is ideal for clear and efficient disbond detection; or, the phase C-scan uses a 0° to 360° color palette to display changes in the phase angle, making it easy to distinguish between different types of indications, such as putty (repair) and delamination.



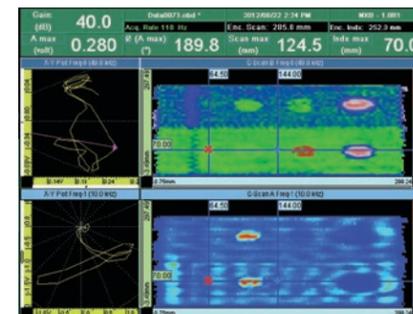
Low-frequency scan; amplitude C-scan cursor over disbond



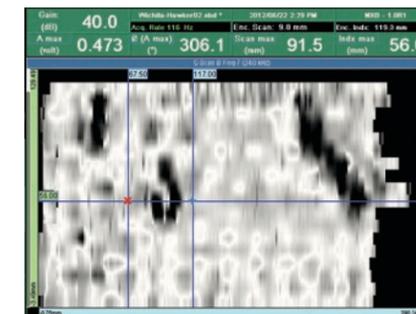
High-frequency scan; phase C-scan, different color palette



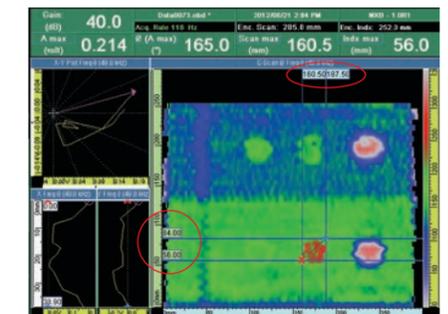
High-frequency scan; phase C-scan, cursor over delamination



Two C-scan view



Full-screen C-scan view



Flaw size estimation feature

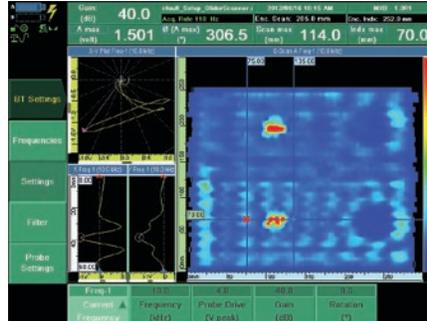
Required Equipment

This solution is available in two different configurations, both requiring these standard components.

Standard components



OmniScan MX1 and ECA/ECT module



MXB software



BondMaster probe adaptor for OmniScan

Manual configuration



HSB-01 handheld scanner

Semiautomated configuration



Two-axis scanner*



SPO-5629-PHV probe with ACIX1520 probe holder



S-PC-P14 probe with ACIX1519 probe holder

Ordering Information

Part number	U8 number	Description
OMNI-A-OBTC	U8779469	Bond Testing adaption kit for OmniScan ECA/ECT, adaptor, and MXB software
ACIX1519	U8780314	Probe holder and yoke required to attach the BondMaster P14 probe to the two-axis scanner
ACIX1520	U8780315	Probe holder and yoke required to attach the BondMaster SPO-5629 probe to the two-axis scanner
9323945	U8800601	S-PC-P14 probe: spring-loaded tips, 15 mm (0.59 in.) tip spacing, high voltage
9322184	U8010039	SPO-5629-PHV probe: spring-loaded tips, 13 mm (0.51 in.) tip spacing, high voltage
9117789	U8800058	SBM-CPM-P11: 11-pin to 11-pin cable, used with pitch-catch and MIA probes
HSB-01	U8270154	Bond Testing handheld scanner with cable, and encoder (S-PC-P14 probe NOT included)
HSB-SPCP14	U8270153	Bond Testing HSB-01 handheld scanner with S-PC-P14 probe, cable, and encoder

* Olympus GLIDER and WING scanner can be used for the semiautomated configuration. Visit our website for more information.

www.olympus-ims.com

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For inquiries - contact
www.olympus-ims.com/contact-us

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