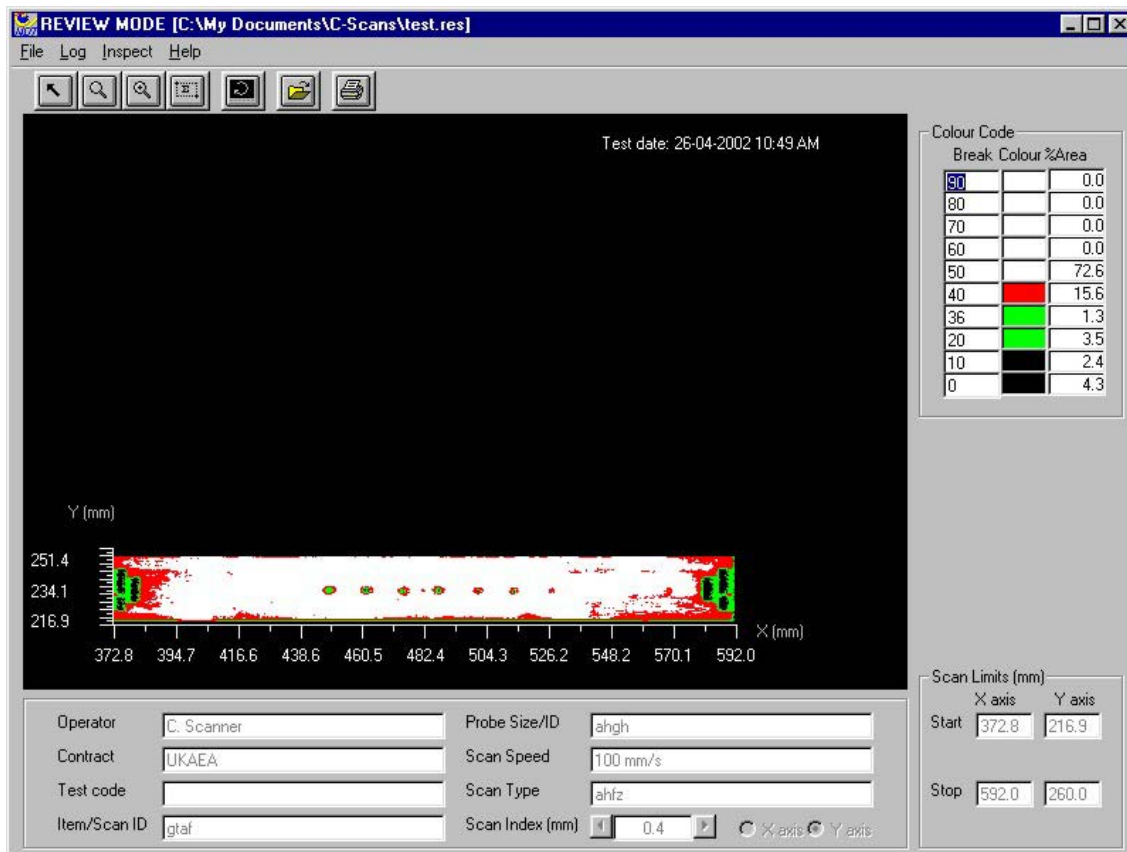


QUANTISED C-SCAN ADD-ON PACKAGE FOR X-Y ULTRASONIC SCANNING TANKS



This C-Scan package is designed to interface to a new or existing ultrasonic scanning system. It can be supplied to work with the existing ultrasonic flaw detector system. Alternatively a new PC based system can be supplied, as required. See the reverse of this brochure.

Resolution 0.25mm in both X and Y directions.

Can be fitted to new or used scanning tanks.

Cost effective, since system can be fitted to existing tank and ultrasonic system.

New High Resolution ultrasonic system can be included if required.



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The system has a nominal resolution of 0.25mm in both the X and Y directions. Scans can be made by scanning in the X direction and index in the Y direction or vice versa. C-Scan data can be collected on the left to right scan, right to left scan or in both directions.

Positional and flaw size measurements at each grid position are stored in memory. These stored scans can then be recalled and re-displayed using variable threshold levels and colours.

Facilities are provided to pan across the image of the tested area; the panned being displayed at a higher zoom level.

Selected areas may also be displayed at a higher zoom level with a mouse by simply dragging a box around the required area on the image of the tested area.

Defect size measurements can be taken at any zoom level. The effective diameter measured is displayed on the main screen.

Main C-Scan Screen

The maximum displayed area is pre-set for each system, and is determined by the area of the scanning tank to which the system is fitted.

The displayed area for a particular scan can be manually entered or automatically captured during the initial set-up. In all cases the C-Scan data is stored with a resolution of 0.25mm in the X direction and a maximum resolution in the Y direction. The Y direction resolution is dependant on the selected index.

Information relating to the test can be entered and saved together with the C-Scan image it's self. This information is also printed when required.

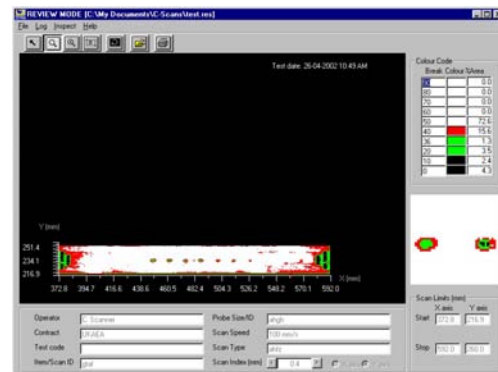
Up to 10 threshold levels and colours associated with these levels are provided. Both the threshold level and the associated colour may be selected and changed as required.

The system also calculates the percentage area of each threshold in the scan, which is then displayed. These percentage figures are updated if the zoom level is changed, since the calculation for this is based on the displayed image.

Pan of C-Scan Image

Selecting **PAN** mode displays a magnifying glass mouse cursor. Positioning this cursor over the

required flaw will result in a zoomed image being displayed to the right of the main image.

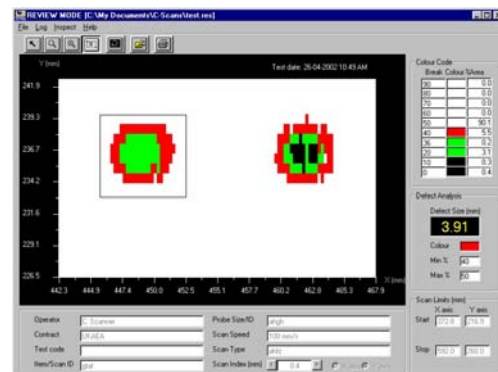


Zoom of C-Scan image

Select the **ZOOM** feature and dragging a box around the required area to zoom. The C-Scan display will then be updated to this level of **ZOOM**.

Defect Sizing

The area of a flaw can be measured using the inbuilt measuring facility. Simply select the required threshold level to which you require the defect to be measured, and then drag a box around the required defect. The resultant measurement is displayed as shown;



Mechanical Requirements

For scanning tanks that do not have encoders fitted or signal to indicate direction of movement, the following may be required.

- Remove existing platen type recording facilities.
- Fit multi-turn precision potentiometers to the X and Y axis
- Fit a direction signal to the main scanning axis, to indicate left or right scan.
- Supply screened interconnections between the PC, scanning tank and existing ultrasonic flaw detector.