



simplifying
automated
inspections

Customizable
HMI
Software

UT
Supervisor

Seamless integration

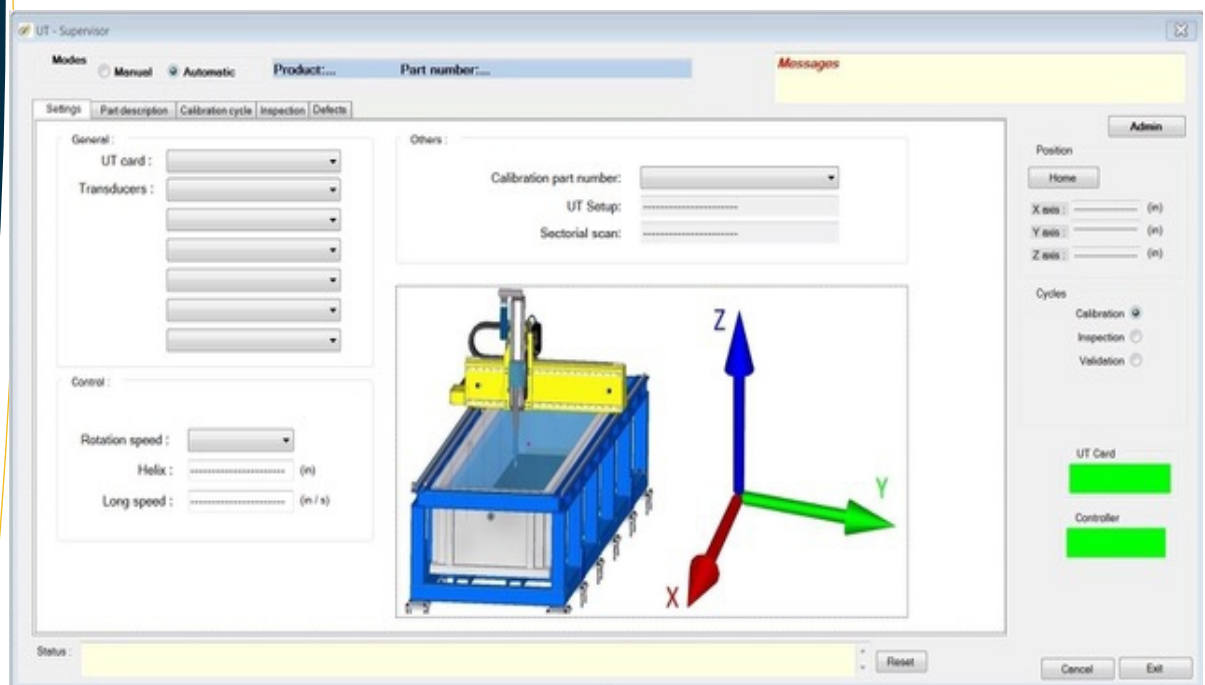
Integrated with UT hardware/software & Automation



The UTSupervisor (UTSUP) takes overall control of all operations. It interfaces with the UT software and the controller. Typically, the operator enters the inspection system information at the beginning of a batch. For example, information such as UT instrument, Transducer part number, Speed, Helix, Speed, UT set-up and calibration block maybe entered. This is customizable to the types of parts at the site location.

a customizable interface to enhance production and improve quality control

This interface is accessed with a password. The level III or his equivalent has access to all views. The operator has the control of a reduced scope of parameters.



SPECIFICATIONS - Typical information

- System information
- Part information
- Hardware used
- Speed, scan plan
- Set-ups (operator has only access to the list selected by level III)
- Calibration
- Scan, re-scan, marking
- Return to defects
- Defect analysis
- Inspection Report

The software, written in C#, is logically structured to assist the operator through the inspection process. The process starts with the system data: Instrument, probe, speed, set-ups, etc. Then the specific part information is entered: part number, serial number, dimension, scan and scan areas. Check calibration and calibration process are recorded and processed according to the specifications. For example, calibration check can be imposed after a number of parts, shift change or part number changed.

DEFECT IDENTIFICATION

There are three methods of importing defects into the system. The first one is manual based on a cursor selection. The second one uses the amplitude of the detection gate. The third one uses the C scan image to analyse the image based on criteria such as signal proximity and number of minimum indication for an indication.

Linear L1 : 1-12	4,100
Linear L2 : 3-14	4,800
Linear L3 : 5-16	5,200
Linear L4 : 7-18	3,500
Linear L5 : 9-20	4,500
Linear L6 : 11-22	6,600
Linear L7 : 13-24	5,900
Linear L8 : 15-26	5,300
Linear L9 : 17-28	4,800
Linear L10 : 19-30	5,400
Linear L11 : 21-32	5,100
Linear L12 : 23-34	5,400
Linear L13 : 25-36	5,100
Linear L14 : 27-38	3,500
Linear L15 : 29-40	5,200

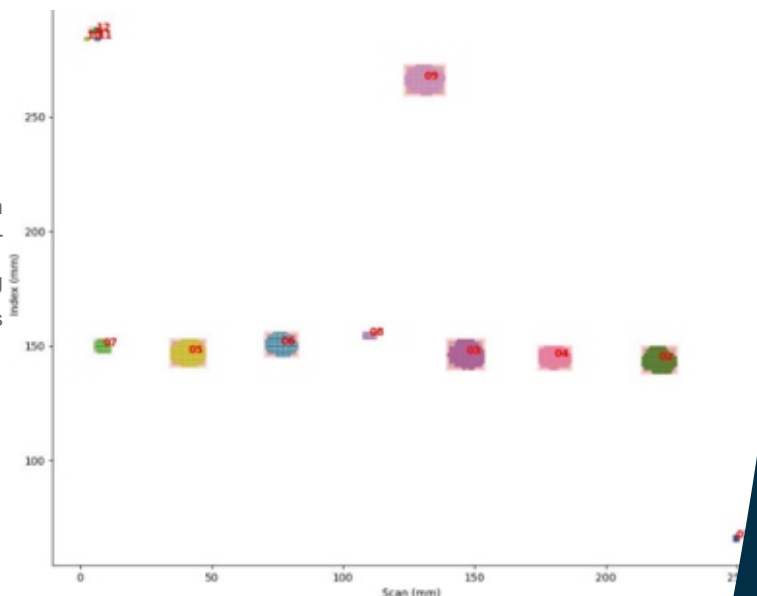
Automated Calibration Routines. For Phased Array all delays laws calibration are recorded to monitor probe status.

automated defect recognition

The screenshot shows the 'Defects' tab in the UT SUP software. On the left, there are buttons for 'Add defect', 'Import defects', and 'No defect?', 'All defects identified?', and 'Number of defects: 3'. Below these are input fields for 'Identification: Defect_03', 'Positions (in): X: 0.000 Y: 0.000', 'Depth (in):', 'Amplitude (%)', and 'Comments:'. There are also radio buttons for 'Confirmed' and 'Rejected'. On the right, a table titled 'Defects' lists three defects with columns for 'No', 'ID', 'Scanned', 'Confirmed', and 'Rejected'.

No	ID	Scanned	Confirmed	Rejected
1	Defect_01	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Defect_02	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Defect_03	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Defect analysis is an assistant to the NDT specialist ensuring that no defects is missed.



CUSTOM SOLUTIONS

UT SUP software is customized to your applications. Based on the same core, it is adapted to fit your operations.



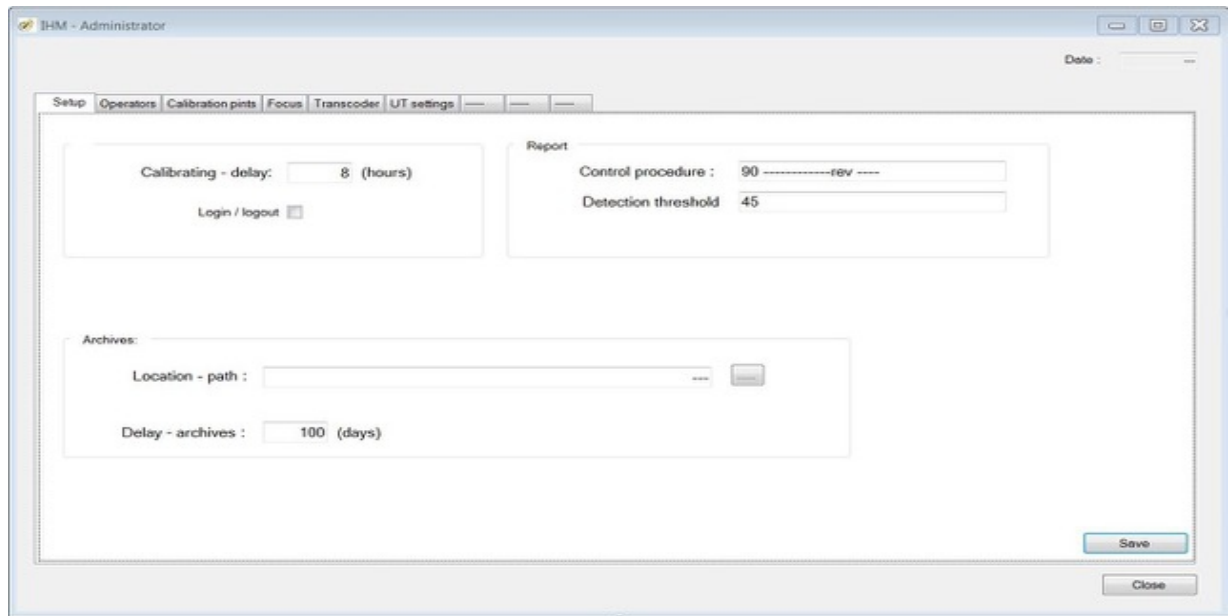
INTEGRATED SOLUTIONS

We can interface to your network. Interoperability is offered to connect and communicate inspection status and results.



AUTOMATED SOLUTIONS

Automation is integrated to the level you required. Starting from scan plan generation, to part loading, data acquisition and finally to analysis. No operation is the same and flexibility is the key to our offering.



a controlled environment

SPECIFICATIONS

- Transducer and instrument identification, qualification
- Operator qualification level
- Calibration Standard, location, defect type
- Defined set-ups
- Set calibration routine -interval and types
- Calibration standards monitoring
- Marking control
- Archiving and compression routines
- PLC alarms status and history

SPECIFICATIONS

This expert mode is used to set important parameters only available to expert users. In this mode, the set-ups to be used are selected, the detection threshold, the calibration modes, the user qualification, the probe and instrument qualification and other elements specific to your industry.

All results and actions are recorded in a SQL database. The inspection data can be automatically compressed and saved locally or on the network.

The software is modified to fit your operations and to meet the UT specifications of your industry.

UTSUP Software



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