WINSPECT

Transducer Characterization User's Guide

Version 5.5.1

build 12 or later

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Contents

Introduction

Winspect Transducer Characterization is a set of tools that automates characterizing an ultrasound transducer. The tools are easy to set up and their operation is simple once they are configured.

How to find information in this guide

This guide covers the use of Winspect's Transducer Characterization tools. It is an appendix to the ***Winspect User's Manual***. It is assumed that Winspect and your scanner hardware has been installed and configured correctly and that you are familiar with the basic operation of a Winspect inspection system.

Chapter 1 – Getting Started
Provides you with all the information you need to perform a transducer characterization scan and generate a report from live data or saved files.

Chapter 2 – Setting Up
Includes instructions to set up your workspace and configure your transducer characterization system for the first time.

Reference
This is a comprehensive guide to all of the features and functions within *Winspect Transducer Characterization*. It also contains instructions about modifying your system configuration and about performing more complex types of scans.

For more general information about using Winspect, please refer to the ***Winspect User's Manual***, or to the ***Winspect Reference Guide***.

It is recommended that you take the time to read, or at least review, the ***Winspect User's Manual*** before operating Winspect for the first time.

Conventions used in this guide

The following conventions are used in this manual:

<Esc>	Angle brackets enclose the name of a key, or a set of keys that you must press to perform an action. If multiple keys must be pressed at the same time, they will all be enclosed within one set of brackets. For example, the common Windows reboot command is <Ctrl-Alt-Del>.
Dialog	Bold text is used to highlight the name of a window or dialog box that contains a group of related tools. For example: the Winspect **Instrument Manager** window contains all the tools you need to view and control your ultrasonic and eddy current instruments.
Menu	Bold and italic text is used to identify a Winspect menu item.
→	The arrow symbol is used to indicate a sequence of selections or options that will lead you through a menu list or dialog box. For example: To open a new workspace, click the mouse on the menu command ***File → Open Workspace***.
	The pointer symbol is used to highlight an important note.
	The yellow triangle indicates a strong caution.
	The bubble indicates that additional information is available and tells you where to find it.

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System Requirements

There are specific requirements for your system and software that must be met before you can make full use of the transducer characterization tools.

You must have:

- A Winspect License extension for Transducer Characterization Tools
- A licensed copy of ***Microsoft Office 2000™*** installed on your computer
- One or more Winspect report document templates for ***Microsoft Word 2000™***

Your immersion tank should be of sufficient size to accommodate the target and allow sufficient distance between it and the transducer for complete measurement of the transducer sound field.

Please note that accurate probe fixturing and calibrated motion axes are important to obtain consistent and reliable results.

CHAPTER 1 - Getting Started

In this chapter

- how Winspect Transducer Characterization works, and how to use it
- a quick reference chart and sample workspace orients first-time users, and provides a handy reminder for more experienced users

How Winspect Transducer Characterization Works

Characterizing a transducer with Winspect is simply a matter of opening the appropriate workspace, typing in some information about the transducer, aligning the transducer and target, then clicking the ***Begin*** button.

Winspect will configure and run the scans automatically, acquire the scan data and save it for later retrieval. By simplifying the setup of these tasks and automating the entire process, Winspect leaves you free to do other work.

Transducer reports can be produced automatically at the end of the scan, or from saved data files at any later time. In either case, the procedures are simple and fast and the reports have a clear, professional format.

Before you begin…

Take a moment now to install your transducer and target in the tank, start Winspect and open a **Transducer Characterization** workspace.

If you need to make a workspace from scratch, please refer to ***Chapter 2 – Setting Up*** for instructions about how to do this.

If you have any concerns about workspaces or about using Winspect in general, please take some time to review the ***Winspect User's Manual***.

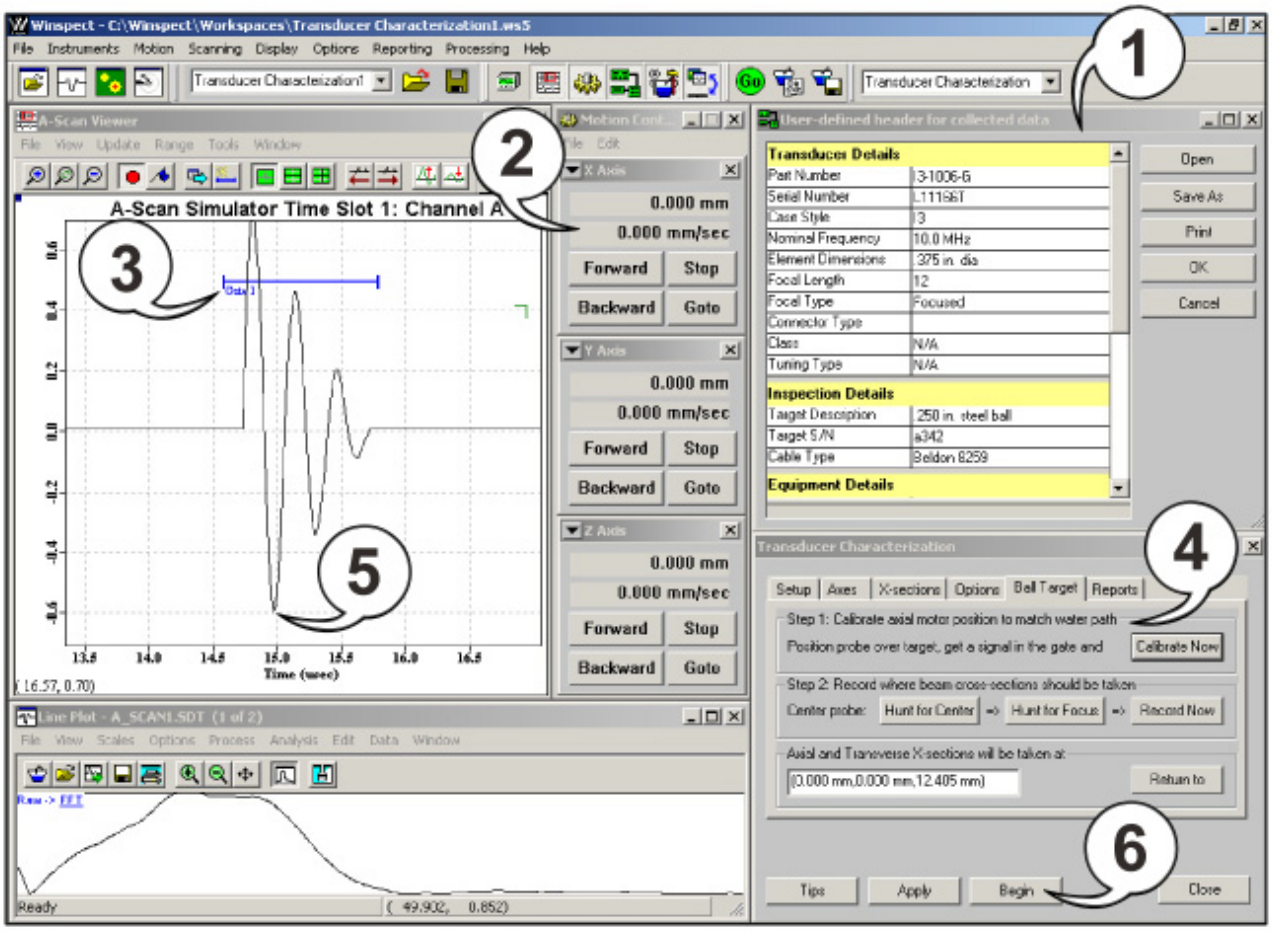
Quick Reference: 6 Easy steps to characterizing your transducer

Setting up a transducer characterization scan is done in 6 steps using 4 tools within the workspace. This table explains the steps, which are highlighted as labels on the workspace diagram on the opposite page.

Step	Action	Reminders
1 User Defined Header	Type the information that identifies this transducer into the ***User Defined Header*** table.	You must specify a transducer serial number. Winspect uses this to name the data file. The serial number must have no spaces. Letters and hyphens are allowed. You must specify focal type and length. Winspect uses this to set the scan start point and scan length.
2 Motion Controller	Position the transducer over the center of the ball target and at the approximate focal distance.	Adjust this position until the best echo signal is observed in the **A-Scan Viewer**. You need only an approximate position. Winspect will automatically refine the center position for you.
3 A-Scan Viewer	Position the gate so that it closely captures the target echo without excess gate width.	Click and drag the left side of the gate to move it. Click and drag the right side of the gate to re-size it.
	Verify the gate properties. It should be collecting peak amplitude.	Double click on the gate to reveal its properties. Collect only the amplitude. Automated reports may produce inconsistent results if other data is collected.
4 Scan Configuration Editor	Click ***Calibrate Now*** to calibrate the water path.	Winspect will measure the delay time for the gated echo, calculate the water path and update the axial position indicator.
	Click ***Hunt for Center*** to align the transducer over the target. Winspect will move the transducer in both transverse axes.	You may repeat this step to slightly improve the centering accuracy.
	Click ***Hunt for Focus*** to find the axial focus position.Winspect will move the transducer in the axial direction.	This step is optional, and may be skipped for unfocused transducers, or those with a long focus.
	Click ***Record Now*** to record this position.	Winspect uses this position to establish scan start points and calculate distances.
	Review the scan settings.	Select optional scans on the **Setup** tab. Click on the **Options** tabs to confirm default scan configuration or set new values.
	Configure automated reports if desired. Enable automated reports on the **Setup** tab. Configure them on the **Reports** tab.	You do not have to specify any reports. Winspect will record the scan data even if no reports are selected. See ***Generating reports from saved data***for more instructions.
5 A-Scan Viewer	Verify that the A-Scan is not clipped, and that the gate is correctly positioned.	Increase instrument gain to normalize the signal at full screen height. Decrease gain to prevent clipped signals.
6	Press the **Begin** button to start the scan.	Winspect will prompt you to confirm a file name under which to save the data, and will then automatically perform the transducer characterizing scans.

Sample Workspace

Your Winspect Transducer Characterization workspace should look something like this:
The numbered labels correspond to the steps in the Quick Reference Table opposite.



Selecting Additional Scan Options

In addition to the standard transverse and axial profiles, Winspect can:

- use a flat target to perform the axial profile scan
- perform automated C-scans of the transducer sound field
- capture an echo from a flaw target

You select these options on the **Setup** tab. Additional tabs appear in the ***Transducer Characterization*** configuration window when you select **C-scans** or **Use Flat Target** options.

Automated Scan Procedure:

Once you press the **Begin** button, Winspect performs the transducer profile scans automatically. No further intervention is required unless you have requested a flaw characterization.

Standard scans:	**Winspect performs the default scans as follows:**	**Reminders**
These scans are performed automatically for every transducer.	☑ Capture the gated A-scan signal ▸ Move to axial start position and ☑ perform the axial profile scan ▸ Move to transverse X start position and ☑ perform the transverse X profile scan ▸ Move to transverse Y start position and ☑ perform the transverse Y profile scan	No other input is needed unless you want to override the default scan configuration.
If you Selected:	**Winspect will ...**	**Reminders**
Flat Target for Axial	☑ Capture the gated A-scan signal ▸ Move to axial start position -on flat target ☑ perform the axial profile scan ▸ Move to transverse X start position - on ball target ☑ perform the transverse X profile scan ▸ Move to transverse Y start position - on ball target ☑ perform the transverse Y profile scan	Follow the setup instructions on the **Flat Target** tab.The flat target must be at the same elevation as the ball target.
C-Scans	***perform these scans after the basic profiles are complete:***	
	▸ Move to transverse X start position and ☑ perform the transverse X C-Scan ▸ Move to transverse Y start position and ☑ perform the transverse Y C-Scan ▸ Move to spot beam start position and ☑ perform the spot beam C-Scan	The setup for C-Scans requires no other input unless you want to override the default scan configuration.
Flaw Characterization	***prompt you to move the transducer into position over the flaw***	
	Click **OK** to capture the gated A-scan when the transducer is in position over the flaw.	Use a flaw target with known properties.

How data files are saved:

The default scan is saved in a single data file with 4 data sets:

- captured A-Scan
- transverse X profile
- transverse Y profiles
- axial profile

Each C-Scan is saved as a separate data file, as is the flaw echo if one is captured.

The transducer serial number is used to name each data file. It is inserted as a prefix, followed by text that describes the file contents.

Example:	
Transducer Serial Number	00123-ABC
Standard data file	00123-ABC Ascan and Profiles.sdt
C-Scan data files	00123-ABC Transverse X Cscan.sdt 00123-ABC Spot Beam Cscan.sdt
Captured Flaw Echo	00123-ABC Flaw Characterization.sdt

Generating reports from saved data

Winspect transducer characterization reports can be generated manually from saved data files at any time after the scans are completed. The procedure is very similar to configuring automatic reports during the scan setup.

Step	Action	Notes
1	Start Winspect and open a transducer characterization workspace.	
2	In the **Scan Configuration Editor** (Transducer Characterization) window, click the **Reports** tab.	A list of pre-configured reports should be displayed.
3	Click the checkboxes to select one or more pre-configured reports.	If there are no pre-configured reports displayed in the list, please see ***Creating and saving report configurations***..
4	Click the **Generate Reports Now** button to start the Winspect report generator.	Winspect opens a browser window and prompts you to select a data file.
5	Find the data files for your transducer by searching for the serial number, which is the first part of the file name.	You need to select only 1 data file. Winspect reads the serial number from the filename and finds the other data files with the same serial number if you have selected multiple reports.
6	Click **OK** to confirm your selection.	Winspect will generate the selected reports using the transducer data files.

Creating and saving report configurations

Winspect report generation works by merging a scan data file with a template document that controls the layout of the report. When you create a new report configuration, Winspect saves it in a list on the **Reports** tab. The next time you need to create a report, you can simply select it from the list, without needing to re-specify the report configuration.

To…	Click…		
add a new report	the **Add** button.		
edit an existing report	the report name then click the **Edit** button		
In the Edit Report Window…	**Step**	**Action**	**Reminders**
	1	Select a template for the type of report you want Winspect to generate. Click the **[…]** button to browse.	Winspect report templates are saved as ***Word2000*** ™ files and have a file extension of ***.DOC**.
	2	Select the data file that will be used to fill in the report.	
	3	Specify whether you want Winspect to automatically save and print the report. Check the boxes to select your choices.	If you have multiple reports to produce, do not select "Close Word".
	4	Specify a name for the report configuration. This name appears in the Reports list. It is also the name used for saving the report document.	Winspect adds the transducer serial number as a prefix to this name when saving the completed report.
	5	Specify a directory path for the completed report. Click the **[…]** button to browse through the folders for your computer.	We recommend that you store all transducer reports together in a folder where they can be easily searched and retrieved.
	6	Click **OK**	Winspect will save the configuration on the report list.

Chapter Notes:

CHAPTER 2 - Setting Up

Setting Up Your Workspace

Four essential tools you will need are the **User Defined Header, A-scan Viewer**, **Scan Configuration Editor**, and **Motion Controller**.

Step	Action	How (on the Winspect components toolbar)	See Also…
1	Open the **User Defined Header**	Click the User Defined Header button 	***Saving a User Defined Header template*** in Chapter 2
2	Open the **A-scan viewer**	Click the A-scan Viewer button 	***Configuring an A-Scan gate that follows a motion axis*** in Chapter 2
3	Open the **Motion Controller**	Click the Motion Controller Button 	***Naming the scanner axes*** in Chapter 2
4	Select the appropriate scan configuration	Click the ▼ button at the right side of the scan type selection box, and then click on the list to select ***Transducer Characterization***	
5	Open the **Scan Configuration Editor**	Click the Scan Configuration Editor button 	

For displaying standard transducer profile results, you will also need the **Line Plot** viewer. For displaying C-Scan color plots of the sound field, you may also need the **Color Plot** viewer.
Save the workspace by using the menu command: ***File → Save Workspace As…***. Use a file name that will be meaningful to you and others who may also use the system.

Winspect recalls all of your tools and settings with the workspace, saving you time when restarting.

☞ You should save the workspace any time you have made any significant changes to the instrument or scan configurations.

Saving a User Defined Header template

If you have several transducers to characterize, it is helpful to save a template for the **User Defined Header**.

By saving a partially completed template, you can skip the repetitive steps of describing the equipment configuration, entering only those details that have changed, such as the transducer serial number and focal length.

Action…	Remember to…	Notes
Fill in the system data	Enter the system information that is common for every scan.	You may want to make several templates for different transducer types or system configurations.
Remember:	Do not fill in the Transducer serial number in the template. Doing so can cause accidental file overwrites when scanning different transducers.	
Click the **Save As…** button to save the template under a new name.	Use a file name that is relevant to your system, so that it will be easy to find later.	The default location for Winspect user defined header files is: **C:\Winspect\Setup Descriptions**, but you may store your template files anywhere that is convenient. Winspect uses a file extension of *.XML to identify header information files.

You may wish to make the template files "Read-Only" so that they will not be accidentally altered. You can set file attributes by using the Windows folder tools or Windows Explorer. Right-click on the file to view its properties. Then, check the "Read-Only" box in the properties window to set this attribute for the file.

Configuring an A-scan Gate that follows a motion axis

The next steps require that you have a transducer and target set up in the immersion tank, and a gated A-scan signal. If you have not already done so, please take a moment to set up your system.

You must have a single gate in the A-scan, which is configured to follow the axial motor. This will track the transducer as it moves in relation to the target and prevent spurious signals or water multiples from corrupting your transducer profile data.

Creating an Axis Following Gate

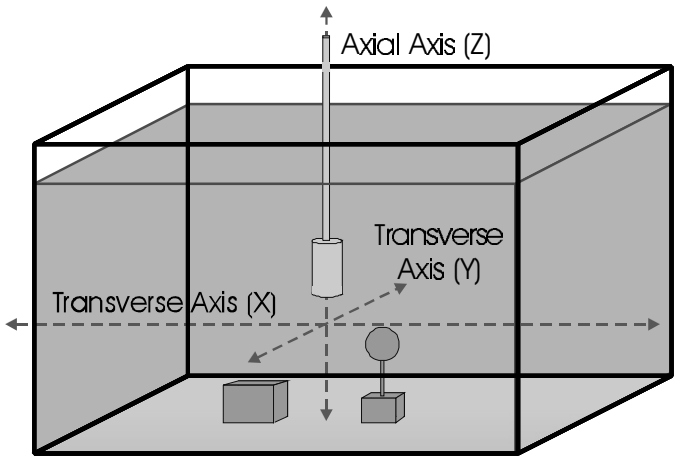
Step	Action	Notes
1	Right-click in the A-Scan viewer to insert a gate. Position the gate so that it closely brackets the target echo.	Transducer Characterization scans must have only a single gate in the A-Scan.
2	Configure the gate properties so that only peak amplitude is collected.	Adding any other data will cause irrational results when the report generator scans the transducer scan data file.
3	Double click in the A-Scan viewer to open the Instrument Manager window.	
4	Click the Gates tab in the Instrument Manager window.	
5	Select the gate and then check the box beside Follow Axis.	
6	Click the **Setup** button to open the **Configure Axis Following** window. Follow the instructions in the next table to configure the axis following controls.	Jump to the next table: ***Configuring the Axis Following Controls***

Configuring the Axis Following Controls

Step	Action	Notes
1	Select the axis that the gate will follow.	The list of available axes is based on your **Motion Controller** settings. Choose the axial motor.
2	click the **Record Now** button to correlate the current gate and axis positions.	Winspect logs the gate and axial motor positions.
3	Move the axial motor to a new position. Reposition the A-scan gate to capture the echo at the new location.	In the ***Configure Axis Following*** window, you can also set the speed of gate movement manually. If you know the speed of sound for your immersion medium, you can enter the sound velocity instead of moving the gate and recording the new position. You must also specify Pulse-Echo or Pitch-Catch when using this option.
4	Click the *second* **Record Now** button.	Winspect will calculate the following speed for the gate based on the new axis and gate positions. It then updates the value in the **Speed of sound** box.
5	Set upper and lower time limits for gate movement.	This prevents the gate moving out of the A-Scan viewer window when you reposition the axis to change transducers, or move the axis to a home position.
6	Click OK to accept the gate following set-up and close the window.	
7	Click the  **Instrument Manager** button to hide the instrument manager window.	

Naming the scanner axes

It is always a good practice to be explicit in setting up your workspaces and configuration options. For this reason, we recommend that you assign meaningful names to your motion control axes when using your scanning system for transducer characterization.



Depending upon the size and configuration of your tank, you may need to use different axis definitions. For example, if you are using a shallow tank, you may need to aim the transducer horizontally at the target, and name your axes accordingly.

To name your motion axes:

Click on the menu selector ▼ at the left of each axis, and select ***Edit*** from the menu.
Name each axis according to its function in the transducer profiling system

- Axial
- Transverse X
- Transverse Y

Other Considerations

You may want to enable software limits for each axis, to prevent damage to the transducer or tank.

You can save this motion control configuration:
Click on the menu command: ***File → Save As…*** in the **Motion Controller** window's menu bar. This enables you to recall this configuration for use in other workspaces, or to quickly rebuild the workspace if it is damaged or deleted.

Winspect saves all motion control parameters, including axis names within the workspace file. Please save your transducer characterization workspace by using the Winspect main menu command: ***File → Save Workspace As…***

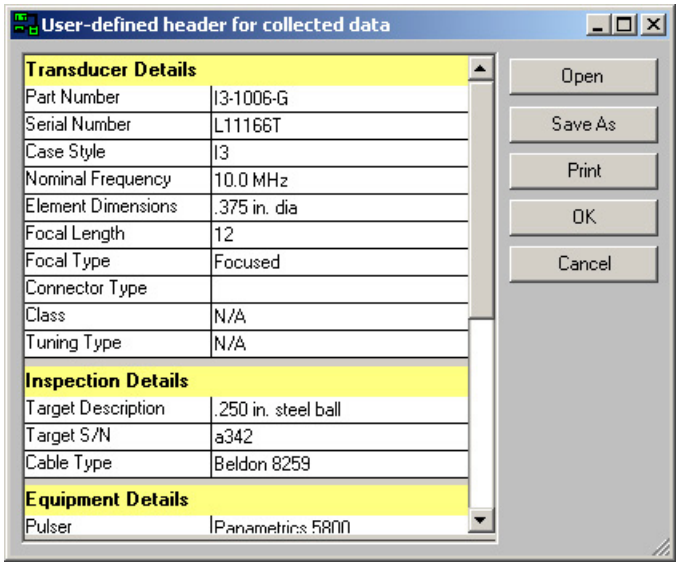
REFERENCE

The User Defined Header

The **User Defined Header** is a table of data that Winspect attaches to every scan data file. For transducer characterization, a specific table must be used, which includes the transducer serial number and focal characteristics.

The **User Defined Header** is revealed by clicking the  button, or by clicking the Winspect main menu command: ***Scanning → Collected Data → User Defined Header***.

The default location for Winspect header files is **C:\Winspect\Setup Descriptions**. Winspect uses a file extension of *.XML to identify header information files.



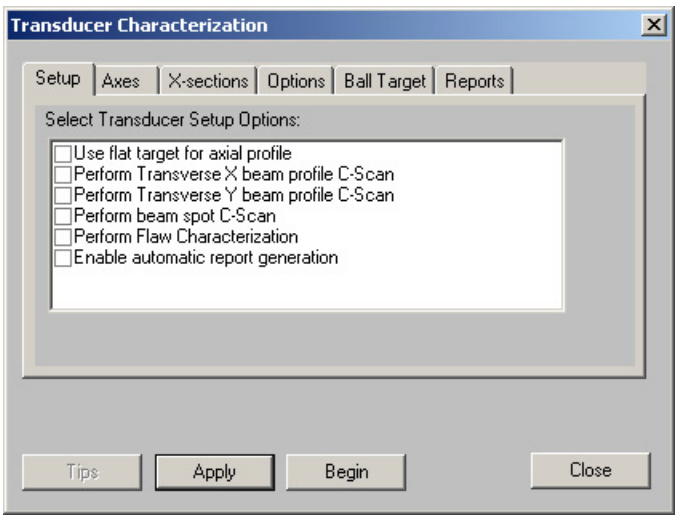
The Save As button is used to save a table with some or all of the data filled in. This can be recalled to save time when setting up similar scans for multiple transducers.

The Scan Configuration Editor

This section describes each feature or control on all of the tabs grouped in the Scan Configuration Editor.

The Setup Tab

The Setup tab is used to specify what type of optional transducer characterization scans Winspect will perform. Check boxes to indicate your choices.



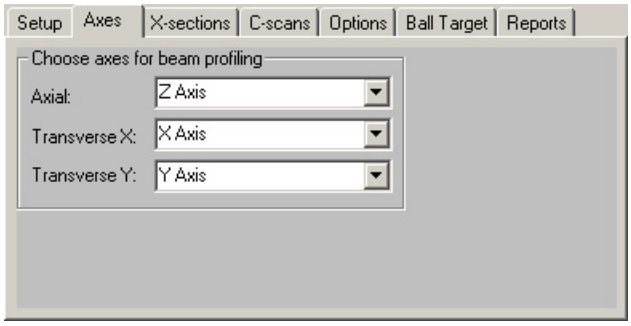
Use flat target: enables you to use a flat target adjacent to the ball target for axial profiling. Check this box and click on the Apply button. This will create an additional tab for specifying the flat target options.

Perform Transverse X / Y beam profile C-Scan: Winspect will perform a C-scan using the axial and the X or Y transverse axes. Check any of these boxes and click on the **Apply** button to add the **C-scans** tab to the setup window.

Perform beam spot C-Scan: Perform a C-scan using both X and Y transverse axes. The Z-Axis is at focus during this scan. Check this box and click on the Apply button to add the C-scans tab to the setup window.

Perform Flaw Characterization: Captures the gated A-scan from a flaw echo. You must have a target with a flaw of known properties.

Enable Automatic Report generation: When the scans are complete, Winspect will automatically generate any reports that are selected on the **Reports** Tab using the current scan data.



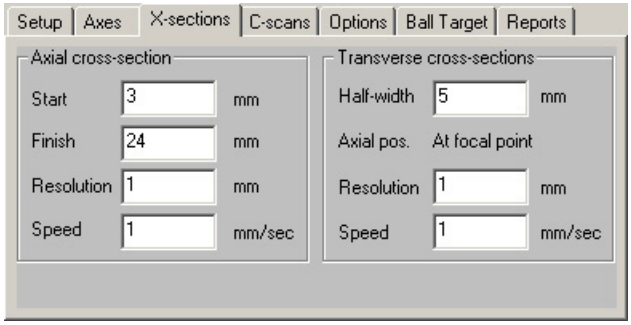
The Axes Tab

The Axes tab is used to specify which machine axes Winspect will use to perform transducer characterization scans. This configures Winspect to match the physical setup of the tank and scanning system.
Axial: the axis through the center of the transducer parallel to the sound field.
Transverse X: Indicates one of the axes that are perpendicular to the sound field.
Transverse Y: Indicates the other axis that is perpendicular to the sound field at 90 degrees from the transverse X axis.Select an axis by clicking on the ▼ button inside the indicator box for each profile axis.

The axes available for selection are derived from the **Motion Controller**. If the correct axes are not shown, check the motion controller setup. In the Motion Controller Window, click ***File → Open*** to browse available motion controller setup files.

The X-sections Tab

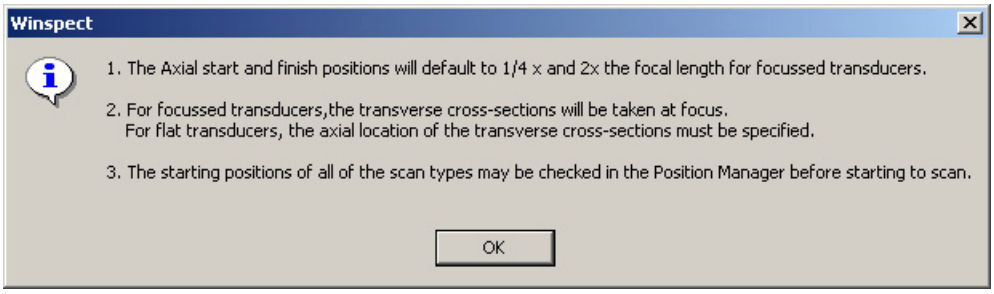
The X-Sections tab contains settings to configure the scan start and end points, and the scan resolution and speed. The default resolution and scan length are automatically defined by Winspect, based upon the focal length entered in the User Defined Header. To override the default settings, type the desired values in the spaces provided.



Axial Cross-section
Start: Default is 1/4 the focal length.
Finish: Default is 2 times the focal length.
Resolution: the interval at which amplitude data is recorded.
Speed: the speed at which the axis will travel.

Transverse Cross-sections
Half-width: The transverse profile scans will cover a distance from the focal point, to the half-width value, in each direction of travel.
Resolution: the interval at which amplitude data is recorded.
Speed: the speed at which the axis will travel.

The **Tips** button presents reminder notes about default settings and recommendations for configuring the transverse scan pattern.

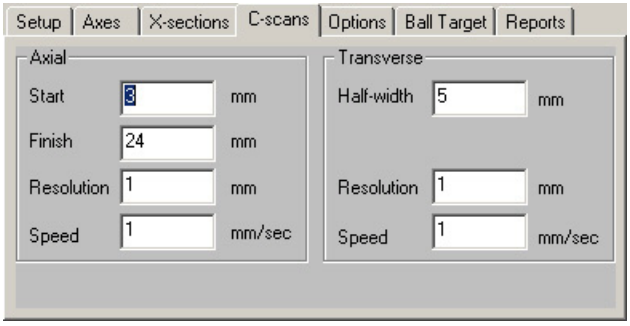


The C-scans Tab

The **C-scans** tab contains functions to control the size and resolution of the optional C-scan profiles. This tab is made visible by checking any of the C-Scan boxes on the **Setup tab**, and then clicking the **Apply** button.

The default resolution and length are automatically defined by Winspect, based upon the focal length entered in the **User Defined Header**. To override the default settings, type the desired values in the spaces provided.

Axial
Start: Default is 1/4 the focal length.
Finish: Default is 2 times the focal length.
Resolution: The interval at which amplitude data is recorded.
Speed: The speed at which the axis will travel.



Transverse
Half-width: The transverse C-scans will cover an area from the focal point to the half-width value in each direction of travel.
Resolution: the interval at which amplitude data is recorded.
Speed: the speed at which the axis will travel.

About Scan Resolution:

It is typical to specify a resolution that is approximately ¼ to ½ the diameter of your transducer. This ensures complete coverage of the scan area, without overlap.

A small resolution number will produce a detailed image of the sound field; a large resolution number will produce a coarse image.

There are three complications that can occur if you set extremely fine resolutions for the scan:

- A smaller resolution will increase the size of the data file. A scan with resolution of 0.1mm X 0.1 mm has a data file 100 times larger than the same scan at 1 mm X 1 mm resolution
- If your resolution is too small on the Scan axis, data may be missed, especially when scanning at high speeds.
- If your resolution is too small on the index axis, the scan time will be extremely long.

Enter the desired travel speed for both axial and transverse scans axis on the **C-scans** tab. The units should be in in/sec or mm/sec, corresponding to the way your axis is defined in the **Motion Controller**.

Remember that the maximum travel speed for each axis is set within the Motion Controller configuration. Winspect will prompt you with an error message if you specify a scan speed greater than the allowed maximum.

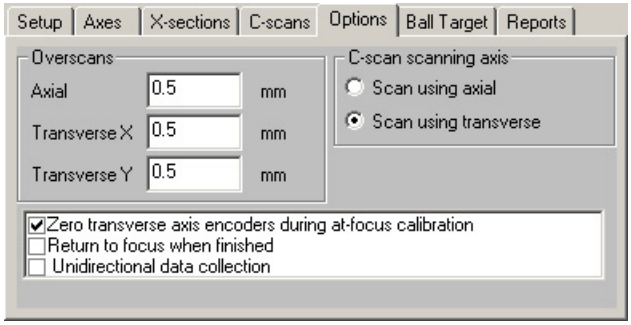
If you are using a very fine resolution for detailed imaging, you may have to reduce the scan speed significantly, in order to scan without missing data.

See **Chapter 8 –*Setting up the scan*** in the ***Winspect User's Manual*** for more information about setting scan speed options. Refer to the ***Advanced Topics Guide*** for more information about setting scan speed and other **Motion Controller** configuration options

The Options Tab

The Options tab contains controls to modify the behavior of the scanner.

Overscans: The overscan distance for each profile scan is the distance the scanner will move past the end point specified on the **X-Sections** tab. This helps compensate for mechanical play and ensure that the last data point is collected on each profile scan axis.



C-scan scanning axis: The C-scan options enable you to specify which is the scanning axis (as opposed to the index axis) when performing C-scan profiles of the transducer.

Zero transverse axis encoders during at-focus calibration: This will set the location to (0,0,Z) when the transducer is at focus.

Return to Focus when finished: select to have the scanner return to the focus location when all scans are complete.

Unidirectional data collection: If your scanner has significant backlash, you may wish to specify unidirectional scanning to improve scan image quality, especially when performing fine resolution C-scans.

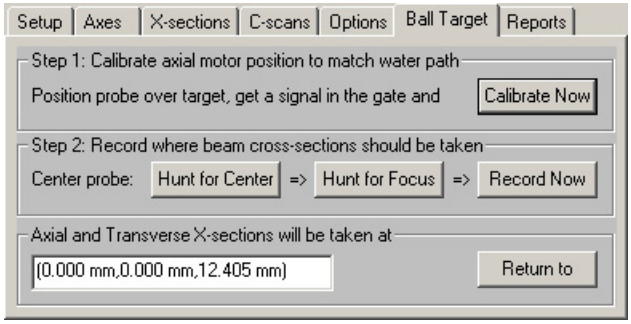
The Ball target Tab

The Ball Target tab contains tools and stepwise instructions to:

- find the on-center zero position of the transducer with respect to the target in both transverse axes
- find the focus of the transducer in the axial direction
- calibrate the water path distance to the target

Calibrate Now: Measures the time delay to the target, and calibrates the axial encoder position to match.

Hunt for Center: Instructs Winspect to find the center of the transducer with respect to the ball target by scanning along both transverse axes. The center position is recorded at the point of maximum echo amplitude in each direction.



Hunt for Focus: This button instructs Winspect to find the focus of the transducer by scanning in the axial direction. The focal position is recorded at the point of maximum amplitude.

Record Now: Updates the position manager with the current position, and uses the current coordinates as the start point for transverse and axial profile scans.

Return To: Works just like a ***Go To*** command in the **Motion Controller**. It returns the system to the position where you last clicked the **Record Now** Button.

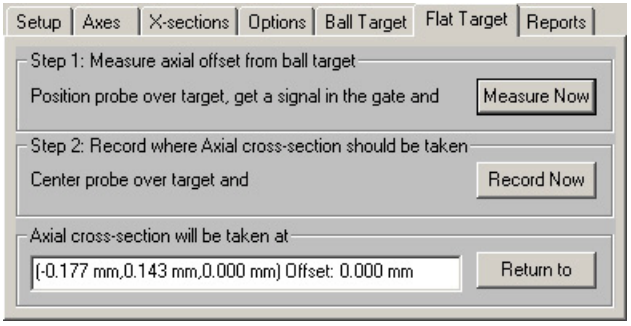
The Flat Target Tab

The **Flat Target** tab contains the controls to measure and calibrate the position of the flat target with respect to the ball target. It appears when the appropriate box is checked on the **Setup** tab and the **Apply** button is clicked.

Follow the two-step instructions on the tab to calibrate the location of the flat target with respect to the ball target.

The flat target must be at the same elevation (Zero axial offset) as the ball target. It can only be offset in X and Y dimensions.

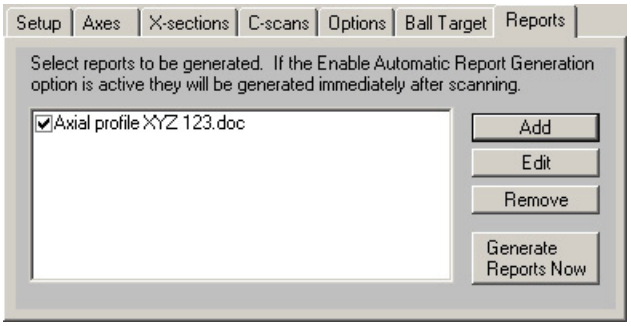
You must calibrate the ball target location first in order to obtain accurate offset measurements on the flat target.



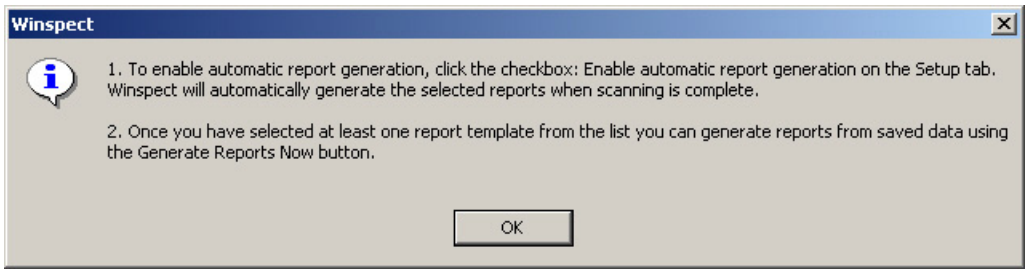
Measure Now: Measures the time delay to the target, and calibrates the axial encoder position to match.
Record Now: Updates the position manager with the current position, and uses the current coordinates as the start point for the axial profile scan.
The Return To: Works just like a ***Go To*** command in the **Motion Controller**. It returns the system to the position where you last clicked the **Record Now** Button.

The Reports Tab

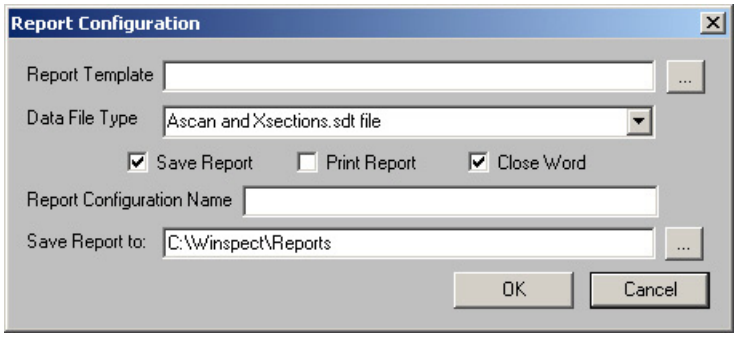
The Reports tab contains controls to configure the transducer reports.



Add: Opens the Report Configuration window to configure a new report. You can create several reports and store their configurations in this list.
Edit: Is used to select a report from a list and modify the existing report definition. The Report Configuration window appears when a report configuration is highlighted in the list and the **Edit** button is pressed.
Remove: Is used to delete a report from the list.
Generate Reports Now: Generates reports from saved transducer characterization data files. You will be prompted to provide a transducer serial number to search for the files associated with it. The reports to be generated must have been added to the list and checked before you can generate a report in this manner.
Tips: Provides useful information about the generation of reports. See below.



The Report Configuration window



Report Template: The **[…]** button browses through the available folders to select a Word template.

Data File Type: The ▾ button lists available scan data file types that can be used to fill in the report. Click on the list to select one.The list of scan types is generated based on the scan types you selected on the **Setup** tab. The *Ascan and Xsections.sdt* is always available, because Winspect always captures the A-scan and performs the axial and transverse profiles.

Save Report / Print Report / Close Word: Choose as many as desired. Do not choose Close word if you are genrating multiple reports.

Report Configuration File Name: Choose the base name for the generated report. The transducer serial number will be appended to this name when the report is generated and saved.Report Save Path: Select the location that you wish to save this type of report to. The **[…]** button browses through the available folders to select a location.