SCANTECH

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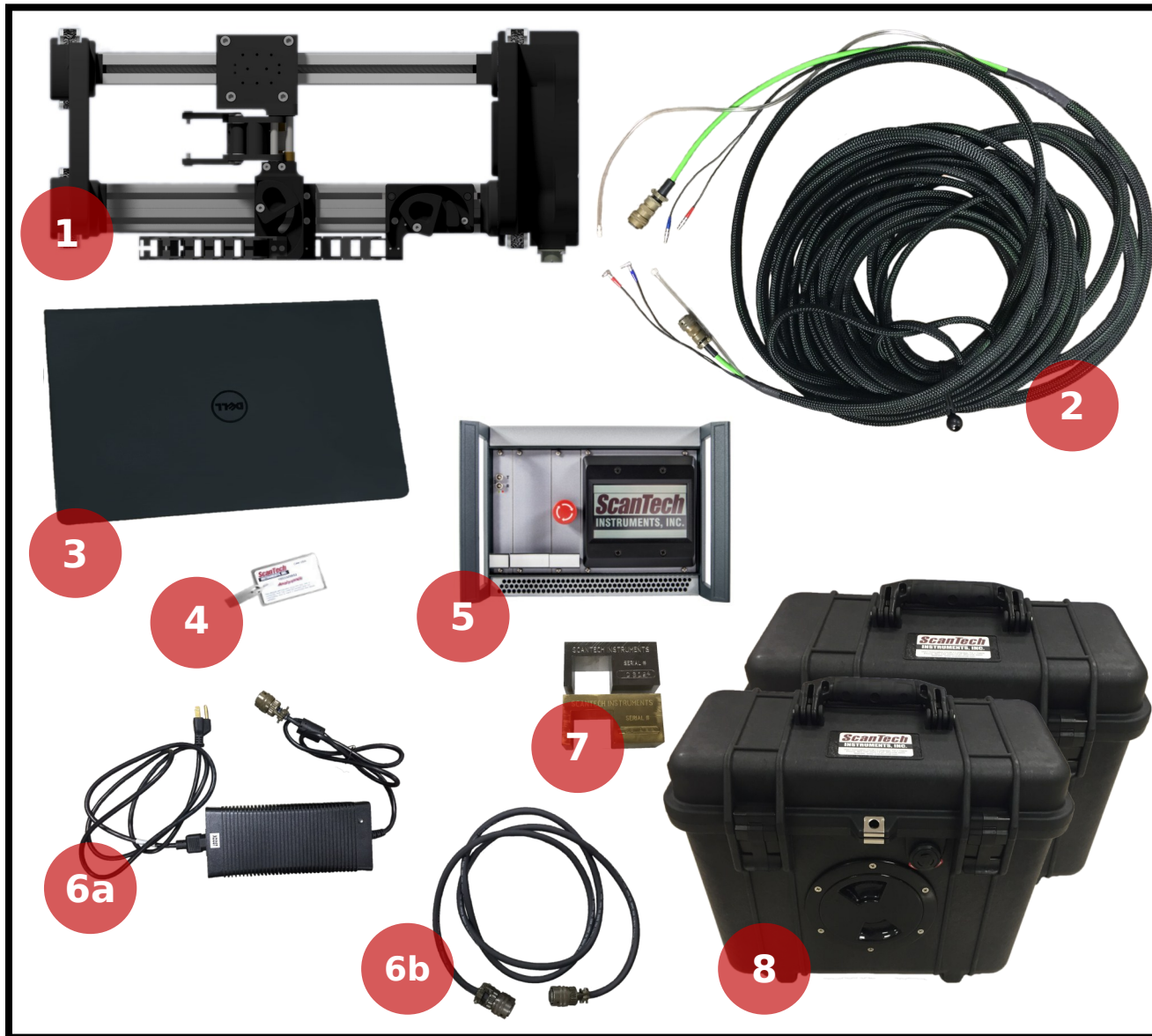Fax: (903) 234-2033

XS "Switchgear": XS-A Configuration

Quick Start Guide for XS "Switchgear": XS- A Configuration

Unpacking your system: Identifying the components in your system

1	XS Scanner*
2	Main Cable Assembly
3	PC Computer
4	Flash drive with Software
5	X Controller
6a	X Controller Standard Input Cable
6b	X Controller BPS Input Cable**
7	Calibration Blocks
8	WS3 and BPS**

* The scanner length may be different than pictured

** Optional

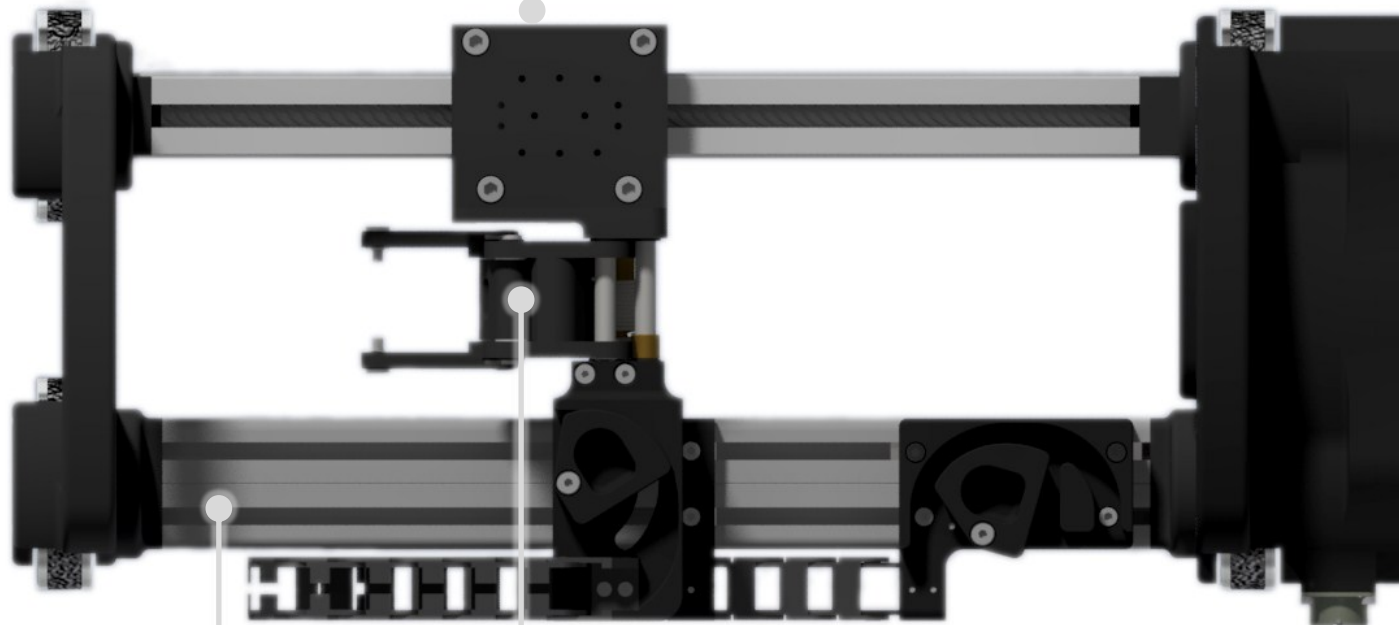# Unpacking your system: Identifying the parts of your scanner

Carriage
The foundation that the Probe Guides mount on.

Drive Section
Holds the wheels and provides a place for the Power Packs to mount.

Interchangeable Power Pack
This Pack can be changed out to alter the type of scanner.

Extrusion Assembly
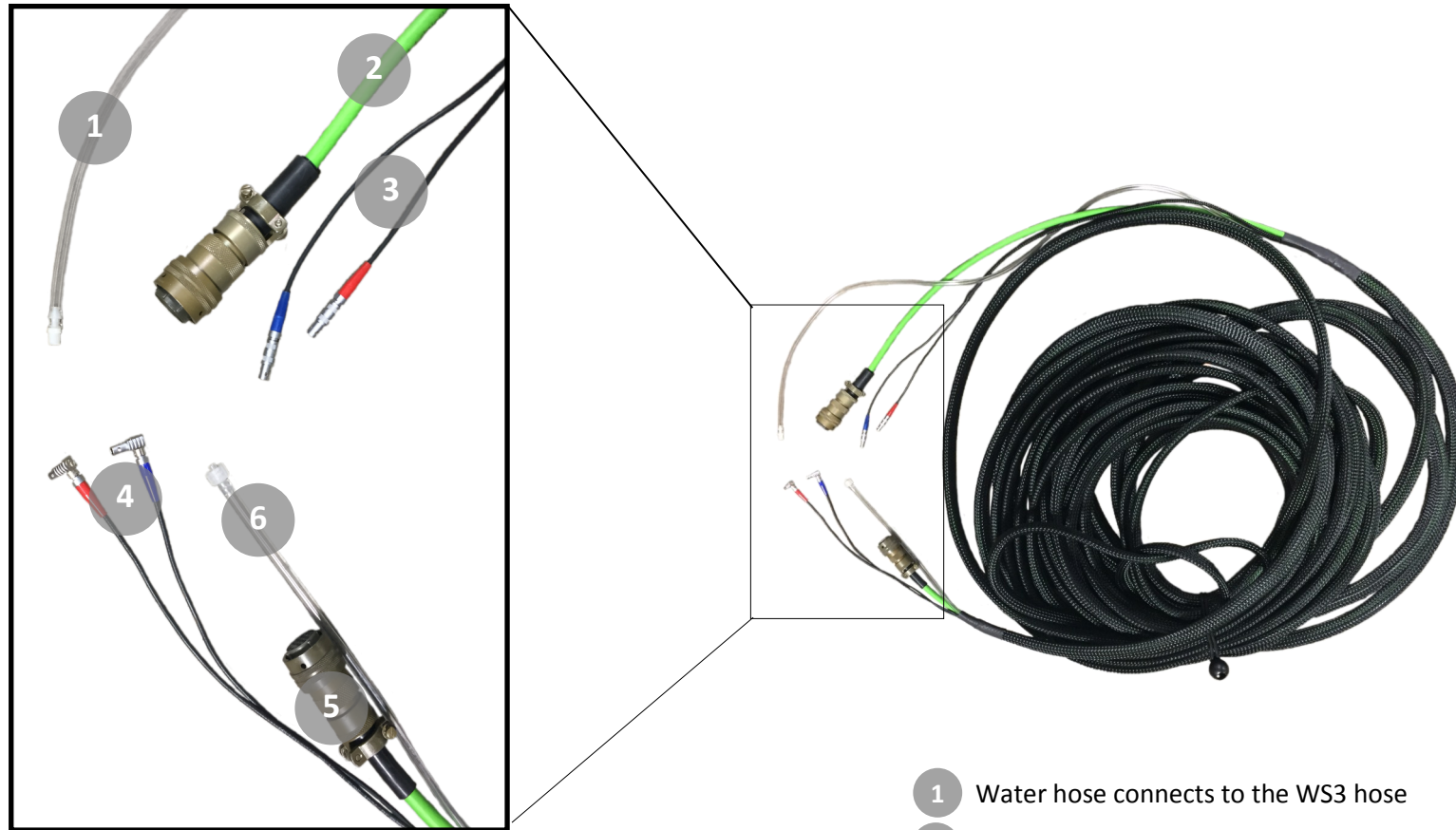The carriage mounts and slides along these. They come in a variety of lengths.

Probe Guide
Holds the transducer normal to the surface of the material. Customizable for different transducer types.

Cord Ports
Plug the main cable assembly into these ports to send information to and from the scanner.
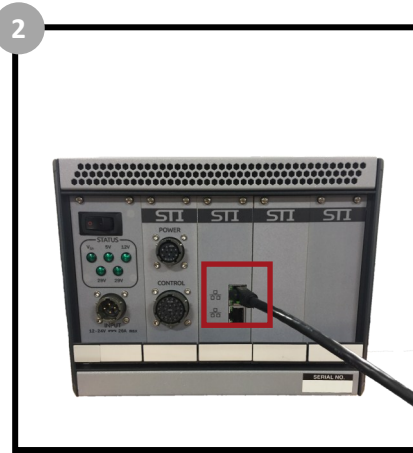
Main Cable Assembly: Connecting the main cable assembly

1. Water hose connects to the WS3 hose
2. Power cable connects to the rear of the controller box
3. Wires connect to the front of the controller box
4. Wires connect to the front of the scanner
5. Power cable connects to the front of the scanner
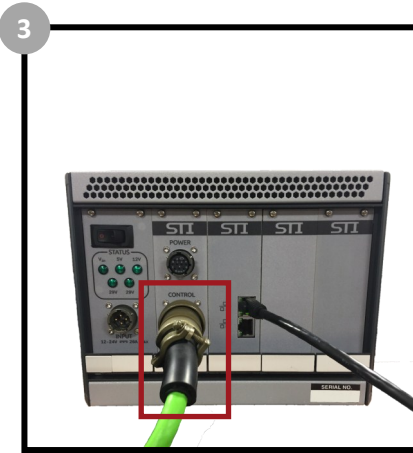6. Water hose connects to the front of the scanner

Setup: Connecting the controller box, laptop, and optional BPS
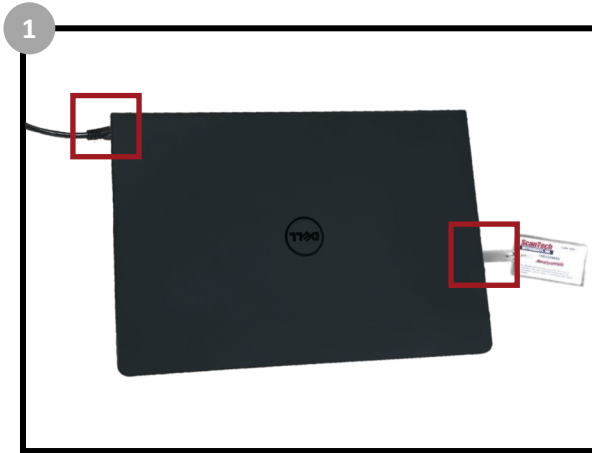
1

Connect the laptop to the controller box using the ethernet cable and plug in the software key. Turn on the computer.
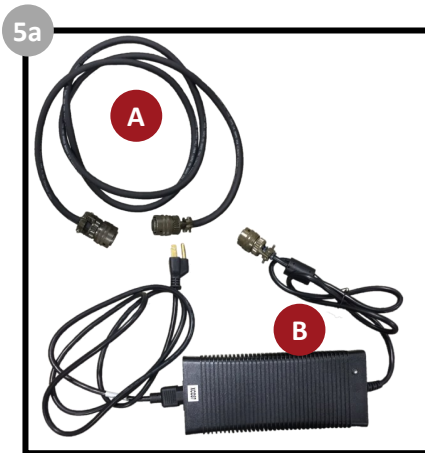
2

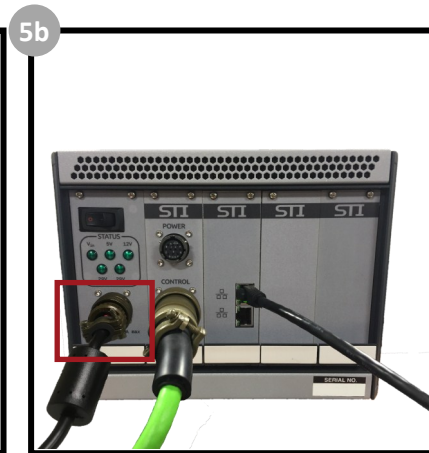Connect the other end of the ethernet cable to the rear of the controller box.

3

Connect the control cable (#2 - refer to the main cable assembly diagram) to the rear of the controller box.
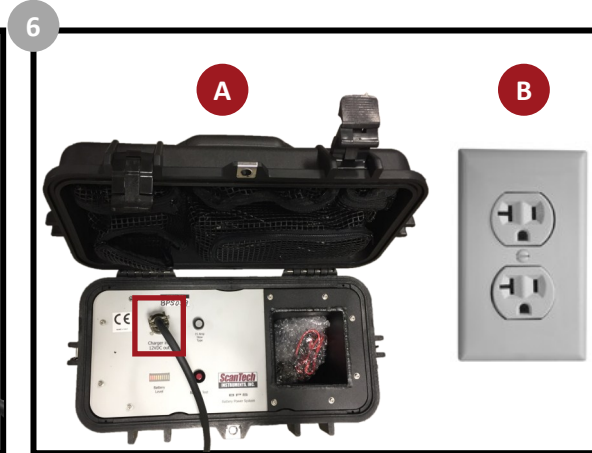
4

Connect the main cable assembly wires #3 (refer to the main cable assembly diagram) to the front of the controller box.
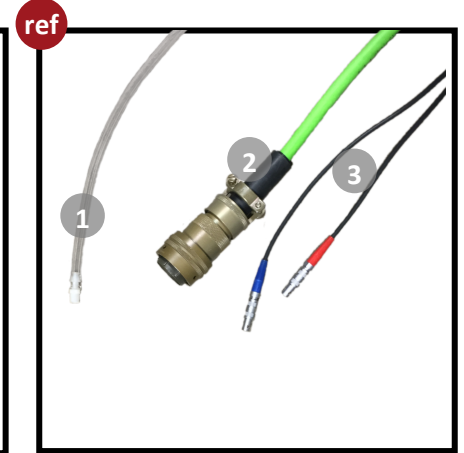
5a

A

B

If your system includes the BPS, you will be using cable A.
If your system does NOT include the BPS, you will be using cable B.

5b

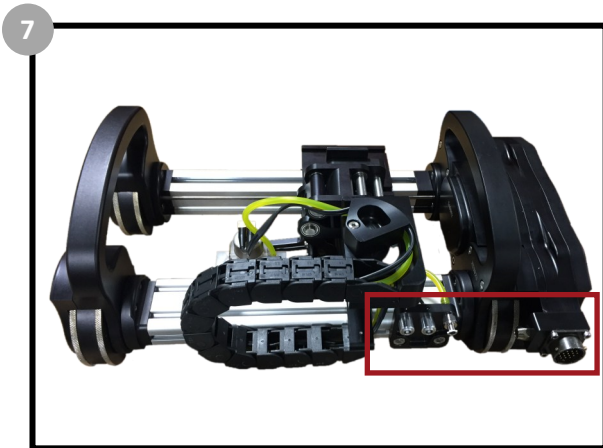Plug the input cord into the rear of the controller box.

6

A

B

If you used cable A: plug the other end of the input cord into the BPS.
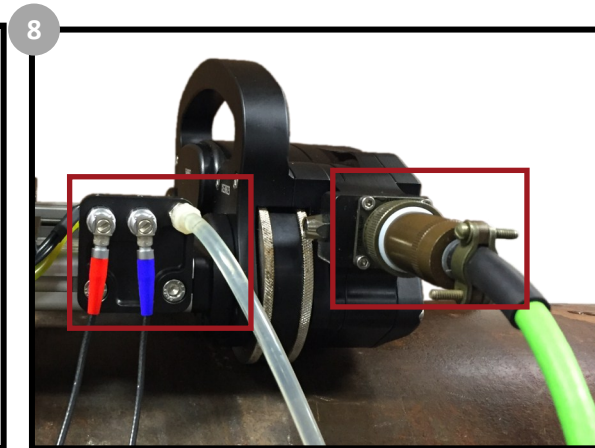If you used cable B: plug the other end of the input cord into a wall socket.
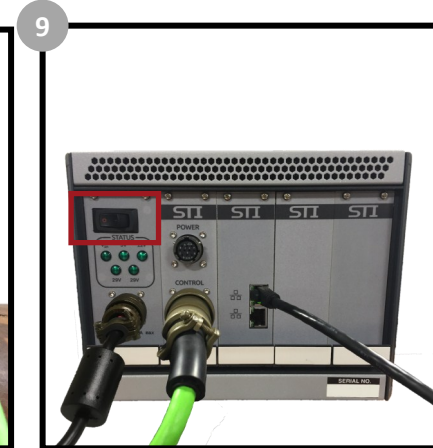
ref

Main Cable Assembly Diagram

Setup: Connecting the scanner and the WS3

Locate the connection ports on the scanner for the main cable assembly.

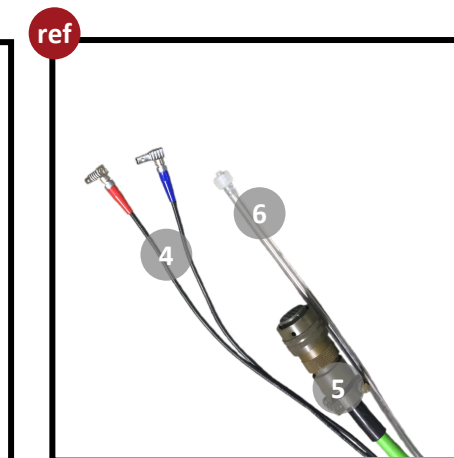Connect cables #4,5, and 6 (refer to the main cable assembly diagram) to the scanner.

Turn on the controller box. The green lights beneath the power switch should all light up.

Remove the front panel of the WS3

Connect the hoses as shown. The top hose connects to the main cable assembly and the bottom hose connects to a water source.
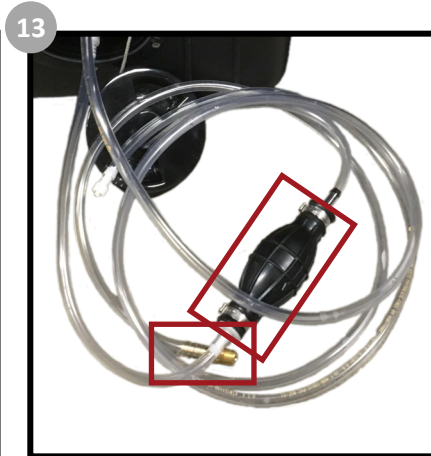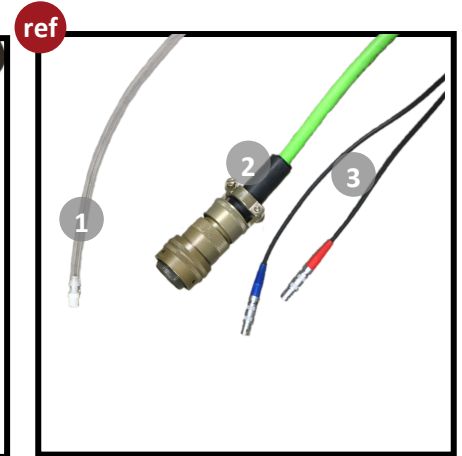
Main Cable Assembly Diagram

Setup: Connecting the WS3

Connect the top hose to the main cable assembly hose #1 (refer to the main cable assembly diagram).

Connect the bottom hose to your water source. Turn on your water source and squeeze the pump to start the flow.

Open the lid and connect the power cable to the WS3 and connect the other end to a wall socket or to the battery pack. Flip the switch to turn the pump on.

Main Cable Assembly Diagram

CI

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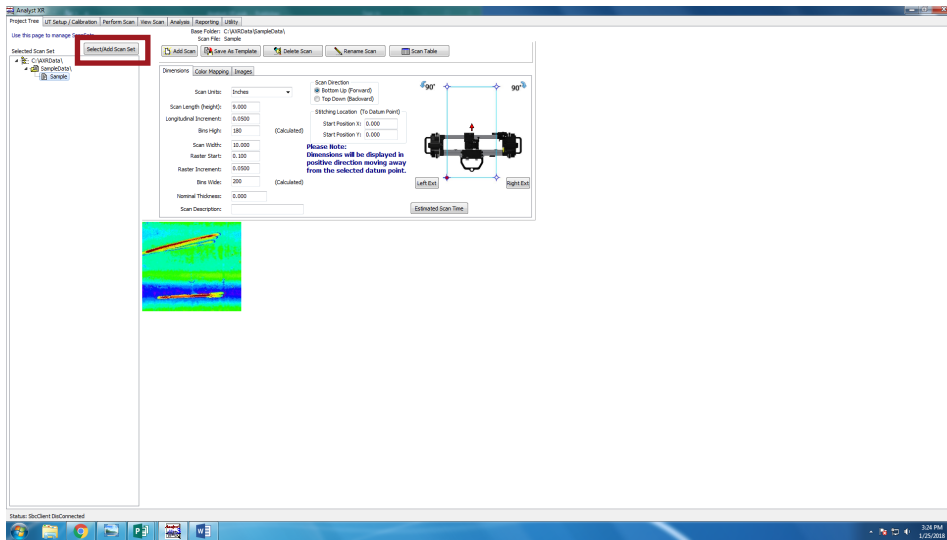
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Or visit us on the web:
www.scanndt.com

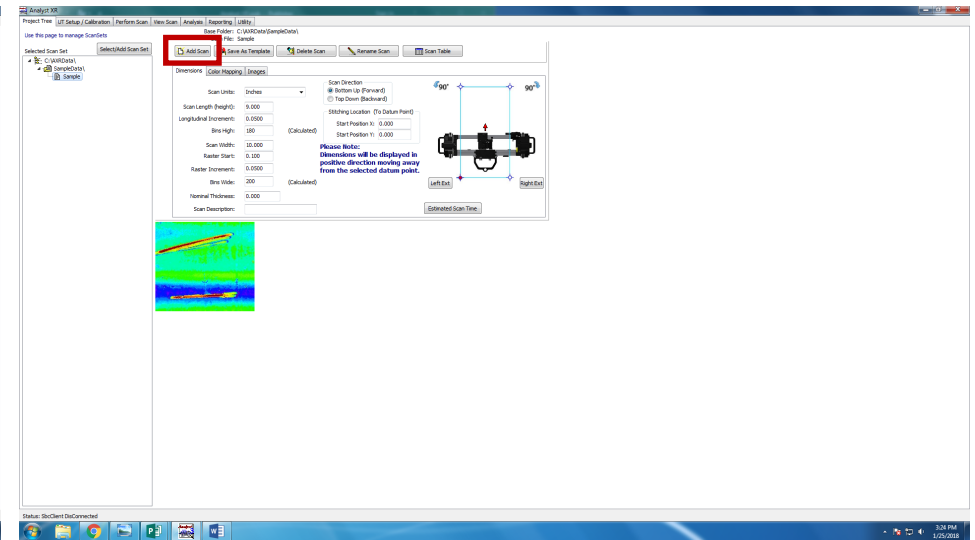Should you have any questions or concerns, please do not hesitate to contact us!

Analyst XR ™

Quick Start Guide for *Analyst* XR™ Software

1 Begin by selecting where you would like to store your scan data. To do this, click "Select/Add Scan Data".

2 Next, click "add scan" to create a new scan. It will give you the option to select a previous scan, template, or blank scan. If you have a previous scan that required the same dimensions and specifications, you can select this to automatically fill in the dimensions for you (just be sure to update the x and y positions if necessary).
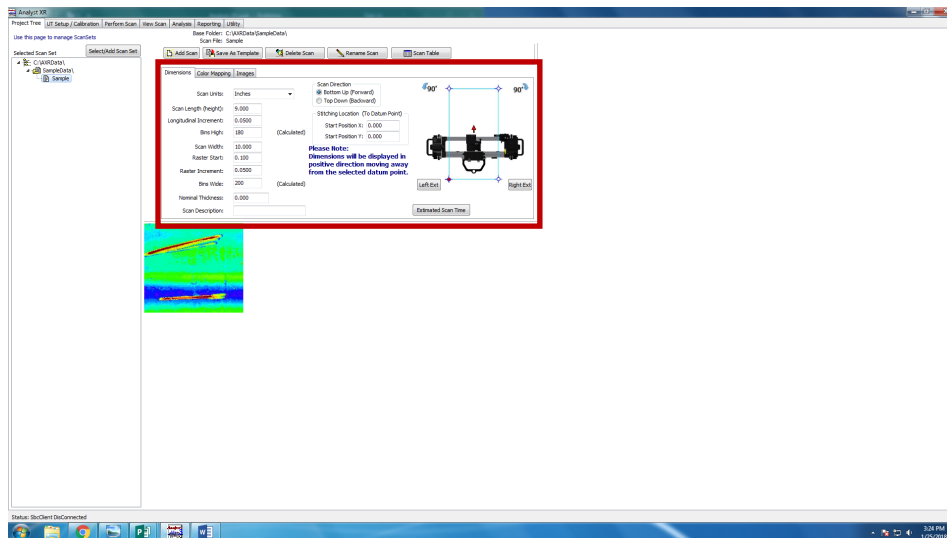
3 Fill in the specifications for the scan.
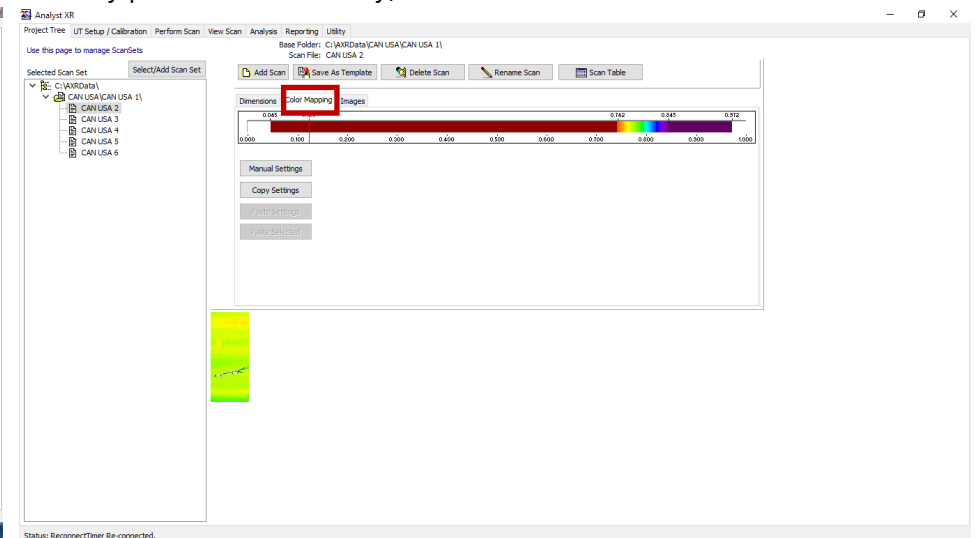
4 Optional: You have the option to edit the color mapping settings based on the thickness of the scan. To do this, click the "color mapping" tab and move the color slider to the desired location. You can also enter the values in manually using the "manual settings"
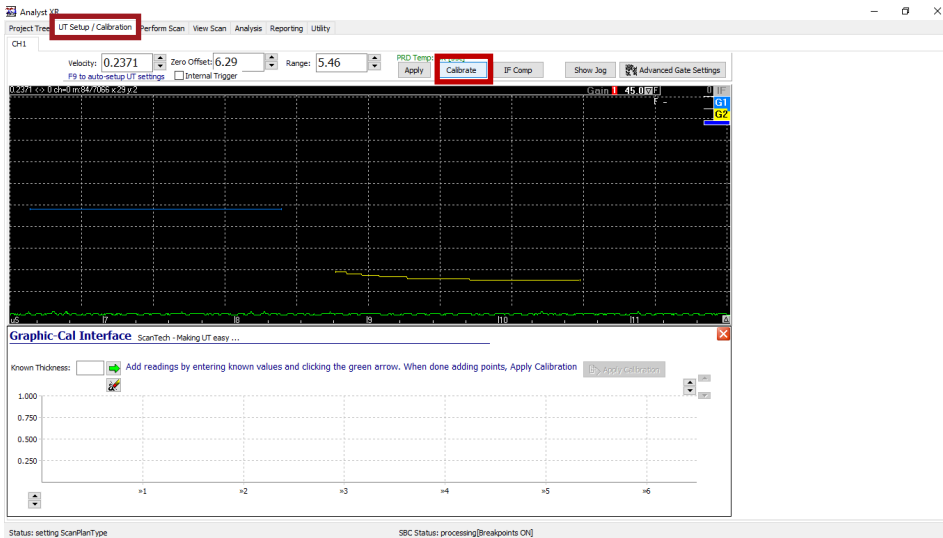
5 Move to the "UT Setup/Calibration" tab and click "Calibrate".

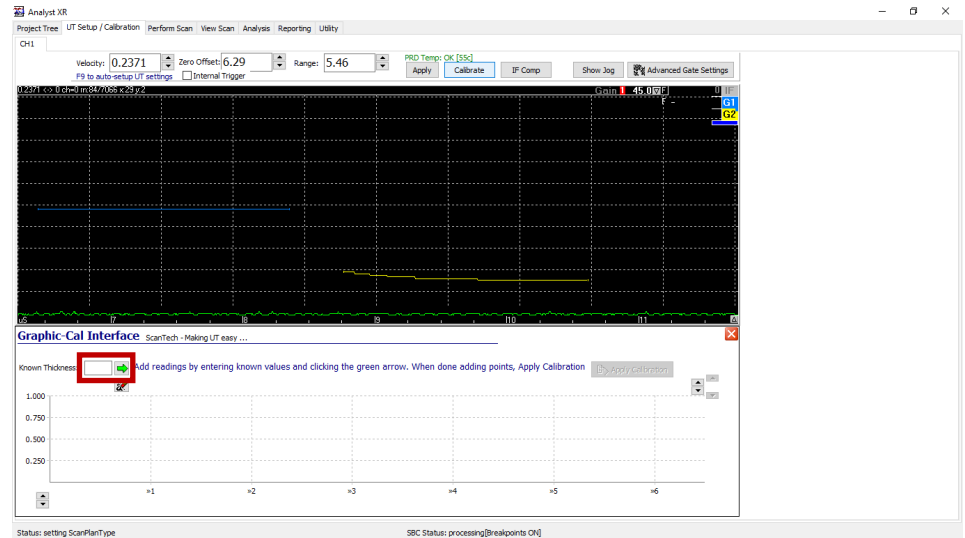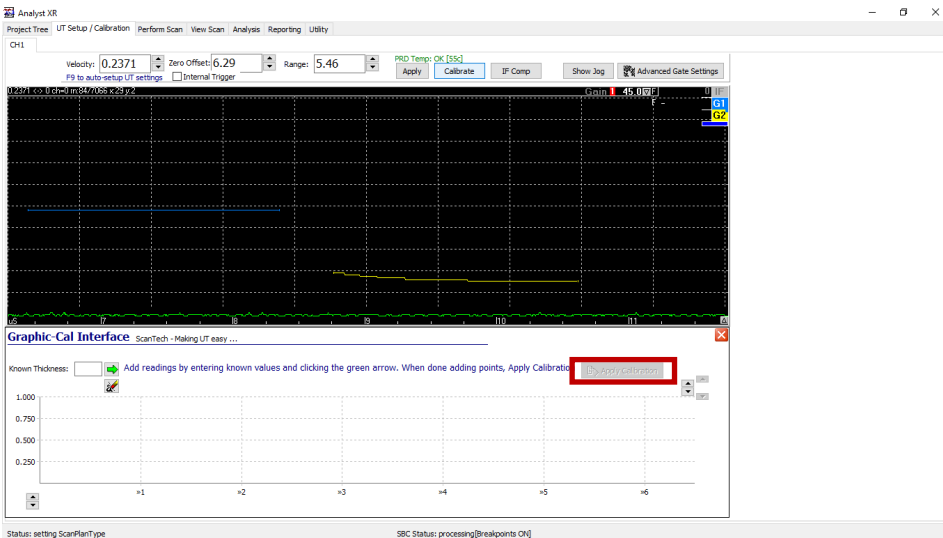**6** To calibrate, slide the UT instrument over the calibration block and enter the thickness of the block in the box labeled "Known Thickness:" and click the green arrow. Repeat this at a different thickness on the calibration block. If you need to remove data points, click the eraser button beneath the green arrow.

7 Once you have entered the two data points, click "apply calibration".
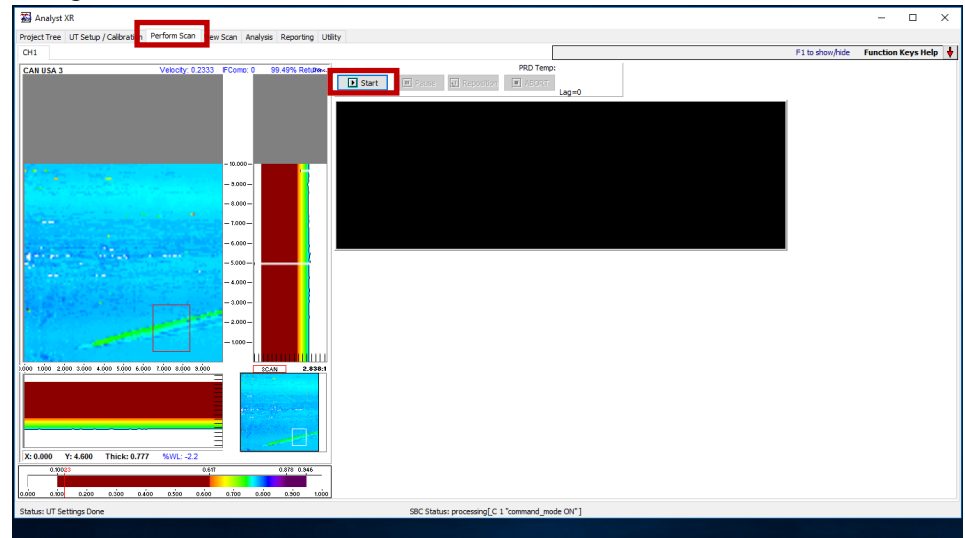
8 Next move to the "Perform Scan" tab. Once you have positioned your scanner, click "Start". Should you need to pause or stop the scan click "Pause" or "Abort". There is also an option to reposition the scan should there be an obstruction on the vessel. To do this, click "Reposition".
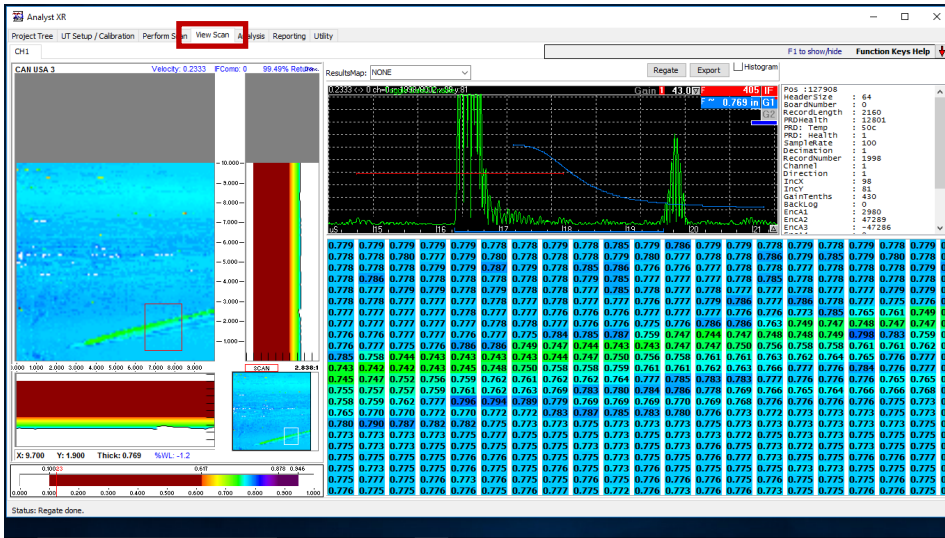
9 When the scan is complete, move to the "View Scan" Tab. At this point, you have the option to re-gate your data, create a histogram, export your data, or change the color mapping.
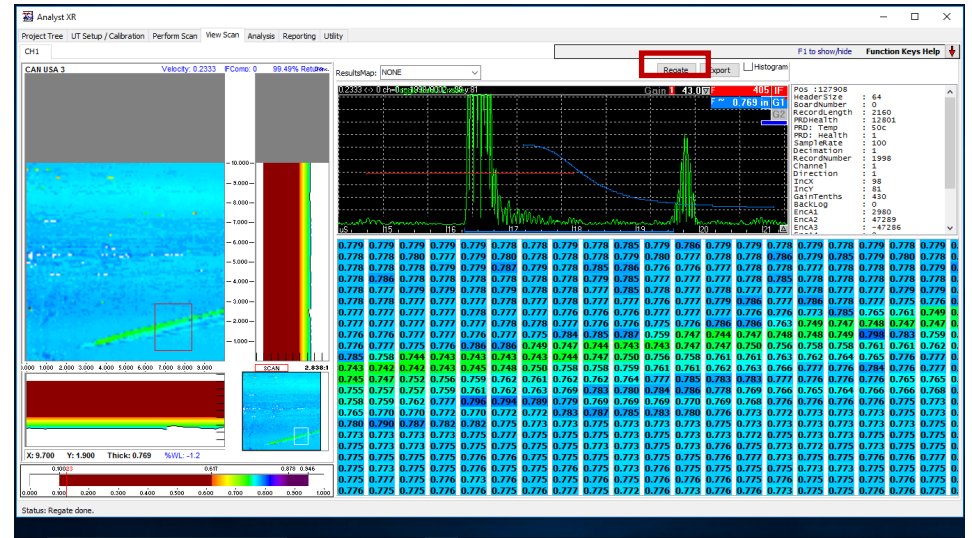
10 Optional: To re-gate your data, click "Regate". A pop-up should come up in the top right-hand corner.
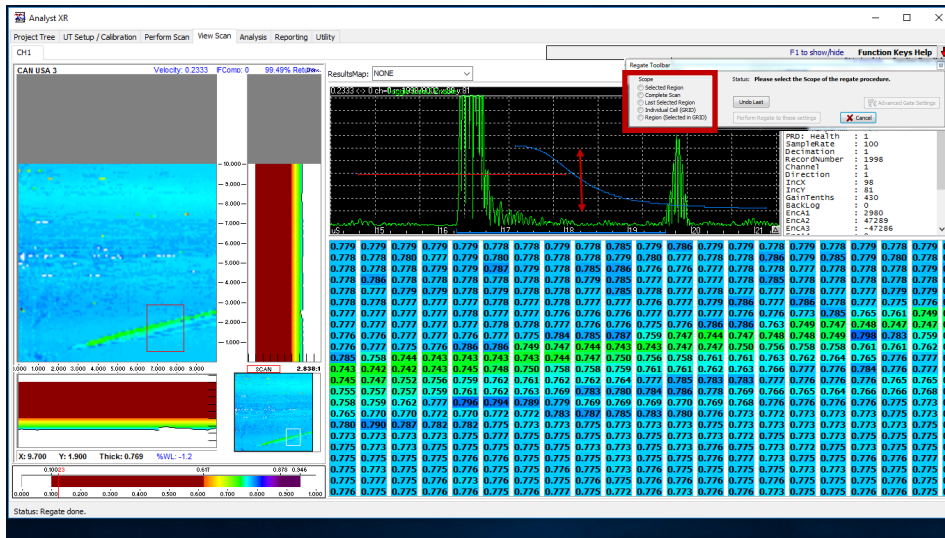
11 Optional: From this box select how many points you would like to re-gate: a single point, a selected region, or the entire scan. Select the points you are re-gating, and click and drag the gates on the A-scan to a new position.
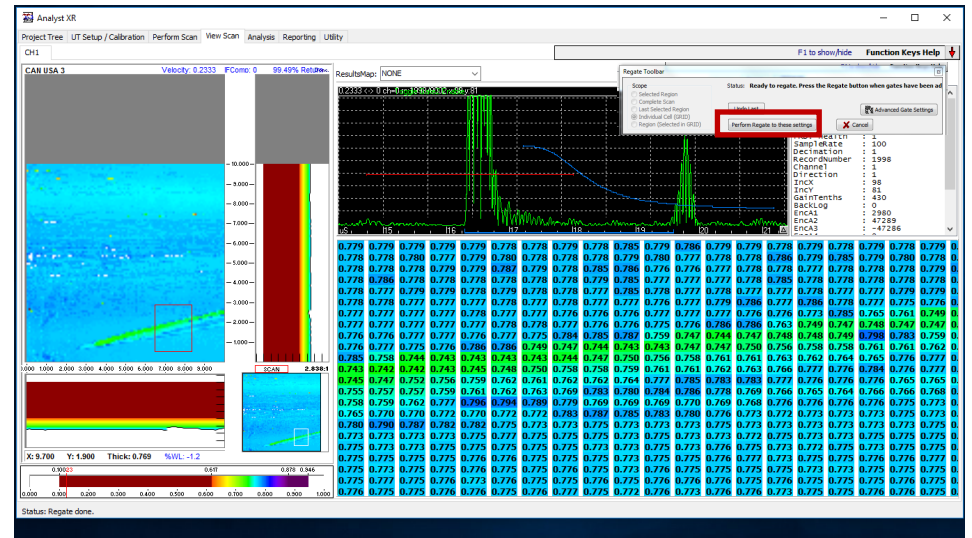
12 Optional: Once you have moved the gates, click "Perform Regate to these settings".

13 Optional: You can view a histogram of all of the data by click a checkbox in the upper right-hand corner. You can view a histogram of a selected region by clicking and dragging a box on your sample C-scan data.

14 Optional: To change your view of the grid data, click and drag the red box on the C-scan data to the desired position.

15 Optional: To locate the min area, select F12, and to find a min point, select F4. To see what all of the hotkeys are, click F1 or select the down arrow in the top right corner.

16 Next, move to the "Analysis tab". From this tab you have the option to stitch together multiple scans, perform ASME B31G analysis, generate a 3D model, and export data.

Optional: To export the scan data, click either the "Export ScanMap to CSV" or "Export ScanMap Table to Excel"

**17** Optional: If you have multiple scans to stitch together, you can move to the "scan map interactive adjustment" tab and line them up in succession with one another by clicking and dragging. You can also stitch them together by editing the start position of each scan by clicking the "Scan Map Settings".
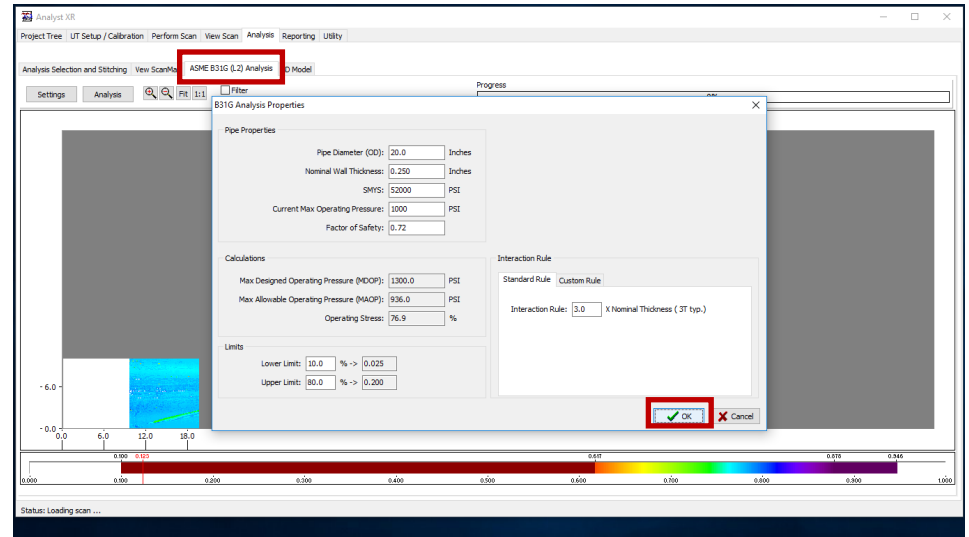

18 Optional: To perform ASME B31G analysis, click the tab and enter the properties of the pipe/vessel. Click "ok" to run the analysis.


19 Optional: You can also generate a 3D model of the scan data by moving to the "3D model" tab. Within that tab, you can save the image or export it to an external viewer.
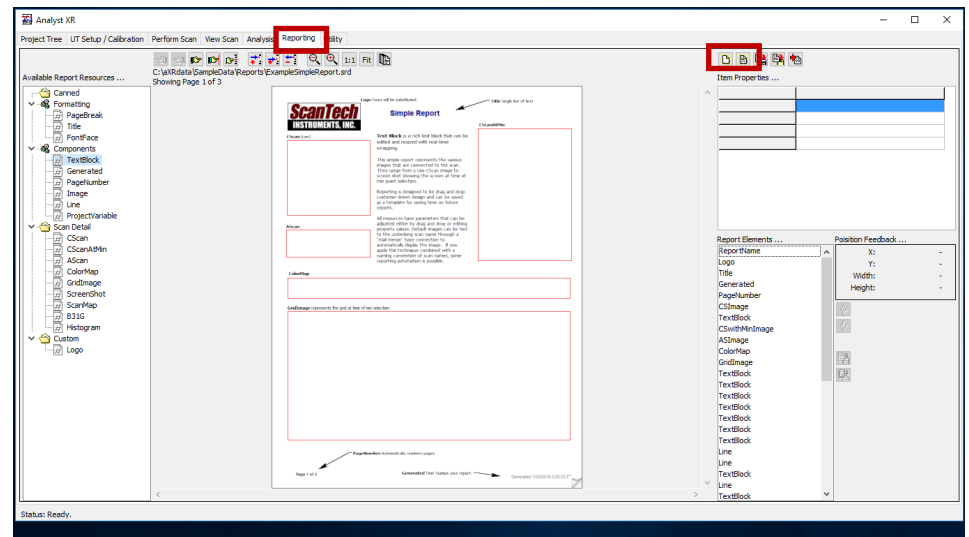

20 Once you are finished with analysis, move to the "reporting tab". You can select a blank report, or a template to work from. Above, a template has been selected.
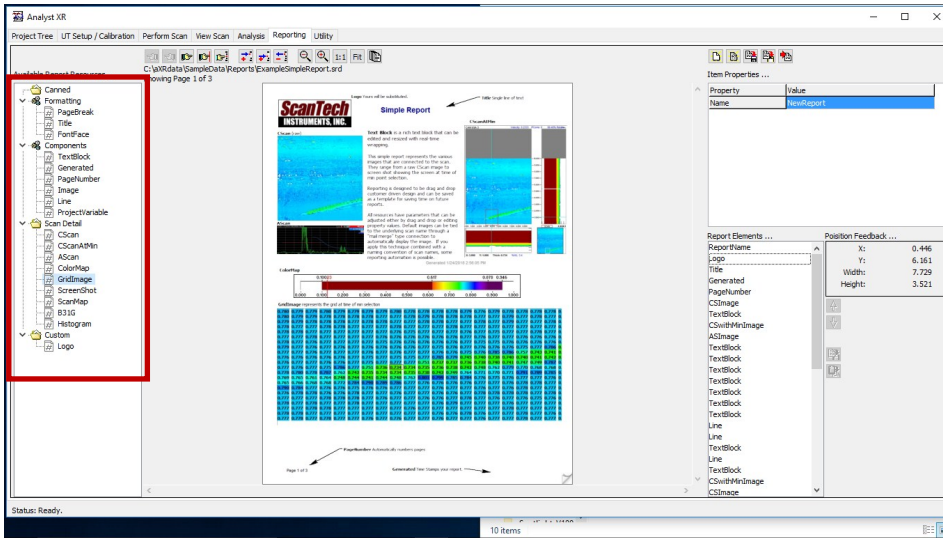
21 To add elements to the report, drag and drop a box from the bar on the left side. Then, click the element you would like to fill the box with. You can move or resize the box by clicking and dragging.
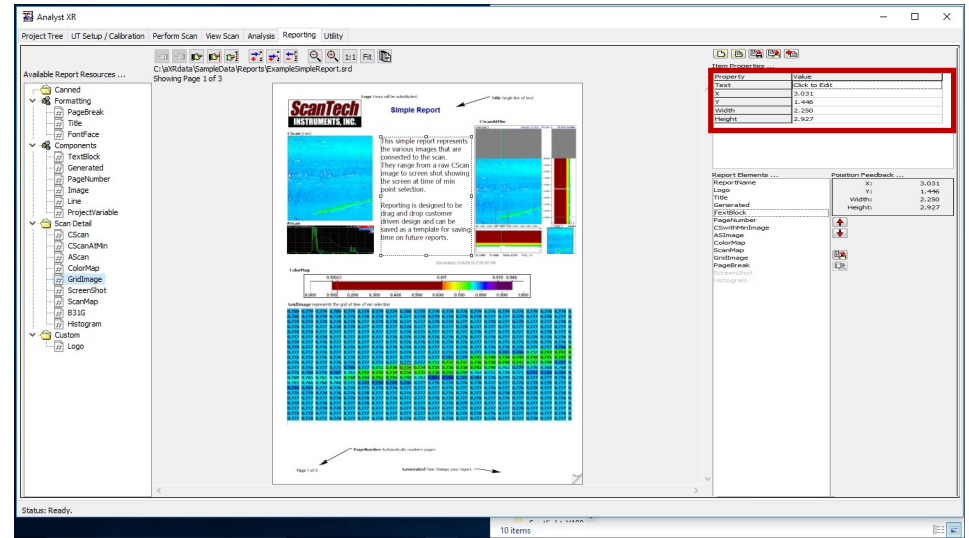
22 You can also edit the size and position of an object using the properties table, which will automatically pop-up when you click on an object.
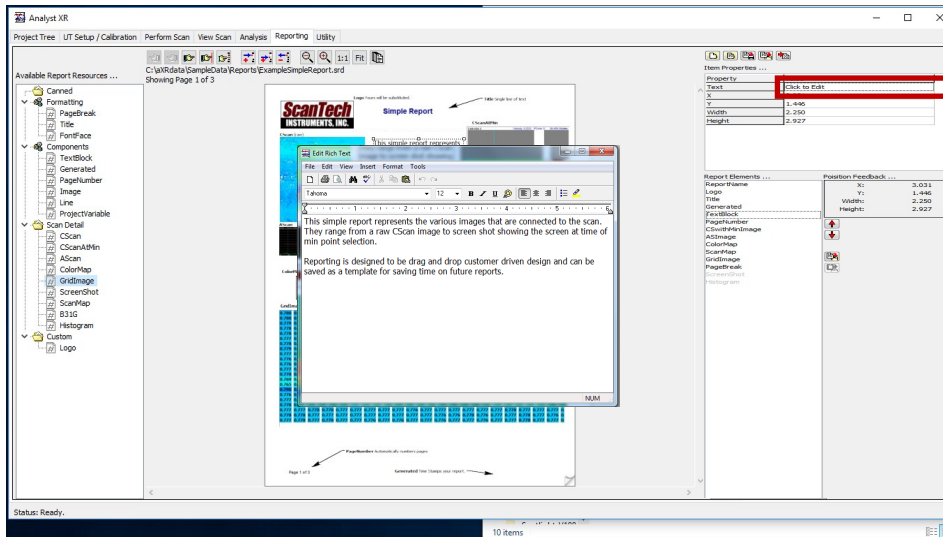
23 To edit text, select your textbox and click the cell that says "click to edit" in the properties table. A pop-up will come up allowing you to edit your text, font, color, size, etc. When you are done making edits, close out of the box, and a pop-up will ask you if you want to save your changes.
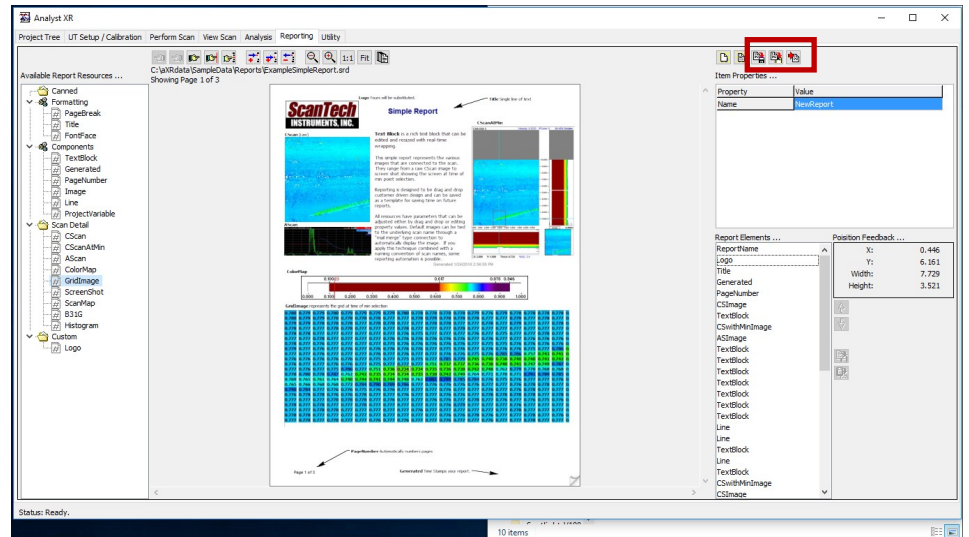
24 Once you are finished with your report, click "compile report". You also have the option to save the layout to be used in future reports.

Data Acquisition: Function keys

Key	Function
F1	Show/hide listing of function keys
F2	Re-gate data
F3	Save custom (named) image
F4	Find next min. point
Ctrl F4	Back through min. points
F5	Toggle C-scan full width
F6	Toggle AmpBS/Grid
Ctrl F6	Toggle ABS/ADS
F7	Use gate settings for UT setup
F8	Move to position
F9	Set min and save images
F10	Crosshair to min position
F11	Toggle play/stop
F12	Locate min area

Key	Function
End	Fits C-Scan to window
Ctrl End	Fits C-Scan to width
Home	Scale of C-Scan 1:1
Ctrl Home	Zoom C-Scan to fit grid dimension
Page Up	Zoom in
Page Down	Zoom out
Arrow Keys	Move cross-hairs on C-Scan image
Ctrl Arrow Keys	Scroll window when zoomed in
Alt Arrow Keys	Scroll grid (red) box