

## Basic Use of the SPC Feature on the Touch1 Tester

SPC Data Collection allows the tester to store test results data in a file for archive purposes and/or analysis. If SPC Data is enabled on a test program, the stored data always includes:

- Run Number
- Analyzer Serial Number
- Cable Description (if defined)
- Cable File Name
- Operator Name (if defined)
- Date and Time of Test

In addition to the default data, the “Summary” data includes:

- Total Number of Product Tested
- Total Good Product Tested
- Total Bad Product Tested
- Error Type Summary

In addition to the default data, also included if “Values” is turned on as part of SPC Data:

- Net or Instruction Label
- Net or Instruction Measurement

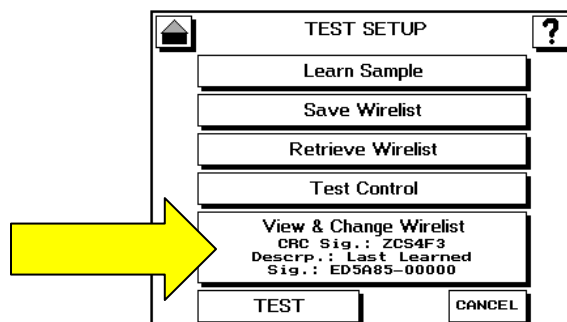
In addition to the default data, also stored if “Error Text” is turned on as part of SPC Data:

- Error Number
- Error Code
- Error Type
- Error Text

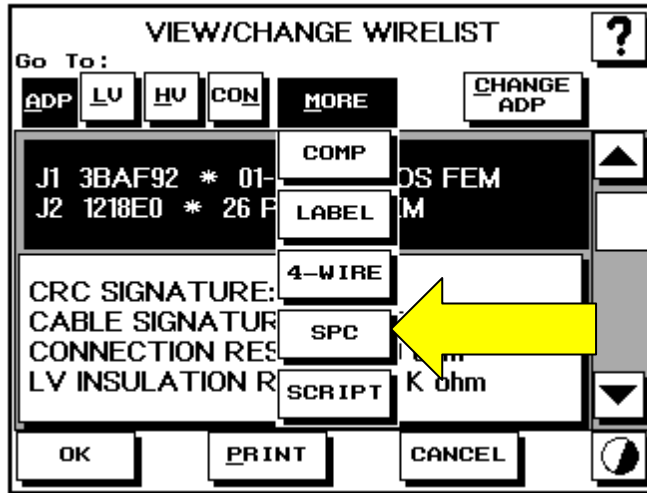
Additional data, such as the product serial number, can be stored using capabilities of the Scripting option in combination with SPC Data Collection.

### Using the SPC Feature

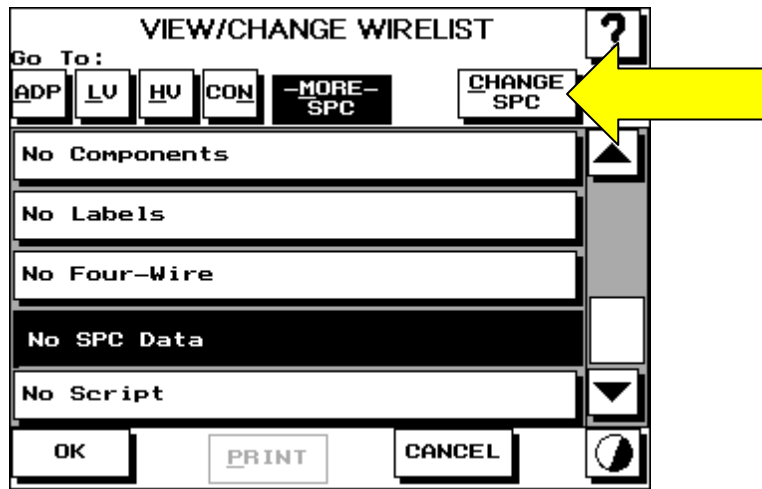
1. First, make certain that the software running on the Touch1 is version 5.2a or later and that the SPC Link software is version 2011.1 or later. If necessary, updates can be downloaded at [www.cirris.com](http://www.cirris.com).
2. SPC data is written to the tester’s floppy drive by default. This location can only be changed if the tester is networked in which case the data can be written to a network drive. If your tester is networked, select “SPC Maintenance” under the “System Setup” menu to change the default setting.
3. Install the SPC Link software on a PC running the Microsoft Windows XP (Home or Professional), Vista (Business or Ultimate) or Windows 7 (Professional or Ultimate) operating system.
4. Add SPC data collection to the test program:
  - Select “View & Change Wirelist” from the “Test Setup” menu.



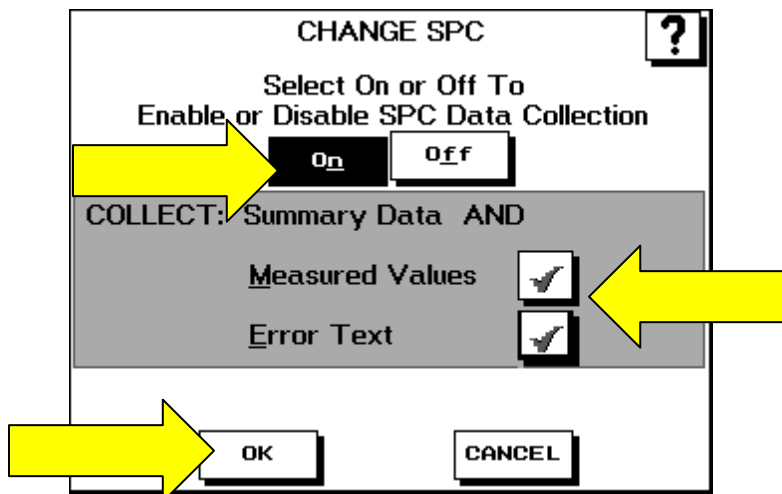
- Select “More” then “SPC” from the drop down list.



- Select “Change “SPC.”



- Enable SPC Data Collection, select “Measured Values” and/or “Error Text” if desired and select “OK to back out of the Change Wirelist Menu.

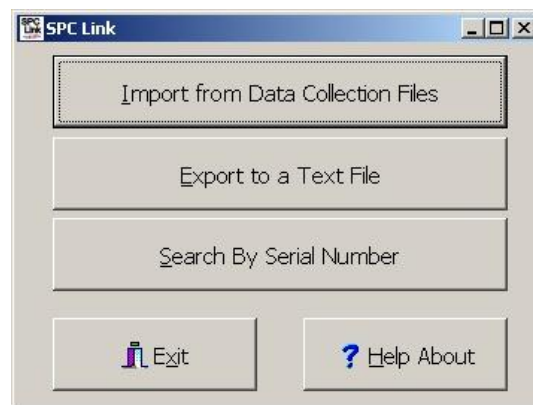


## Collecting Data

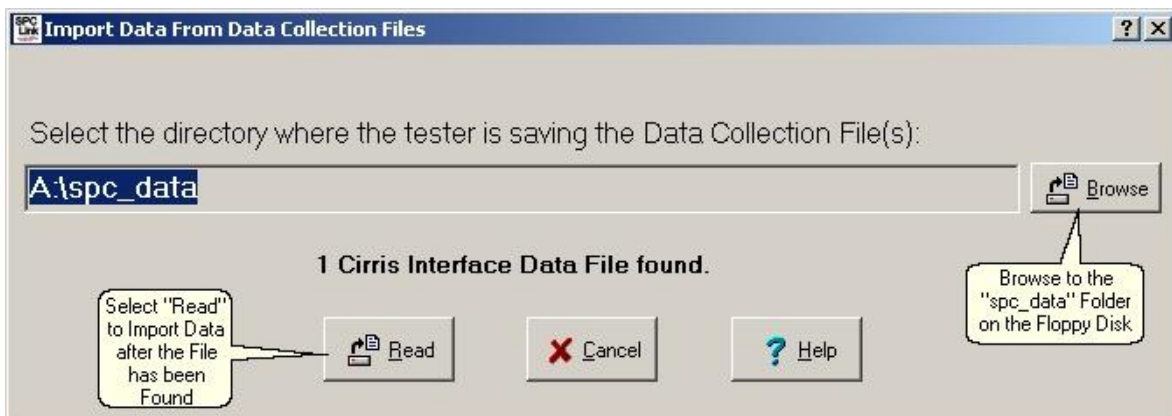
When SPC Data Collection is enabled on a test program, during the test run results data is saved to a temporary file on the tester. When the test run is completed and the tester is returned to the Main Menu, test results are saved to a folder named “SPCDATA” on the floppy disk or network drive. The file containing the data is named with the serial number of the tester and the extension “C\_D.” This file is appended with new results until the data in the file is transferred from the floppy disk to a PC using the SPC Link software. After the data is transferred using the SPC Link software, the \*.C\_D file will automatically be deleted from the floppy drive in order to avoid duplication.

## Transferring Data from the Floppy Disk or Network Drive

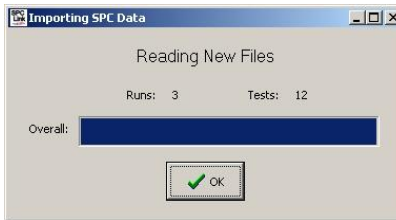
To transfer SPC data from the floppy disk or network drive, open the SPC Link software and select “Import from Data Collection Files.”



On the Import window, use the “Browse” button to navigate to the location of the floppy drive or network drive and select the “spc\_data” folder. Once the software finds the data file, select the “Read” button to import the data.



The status bar will progress until all the data has been imported. After the process is complete, select “OK.”

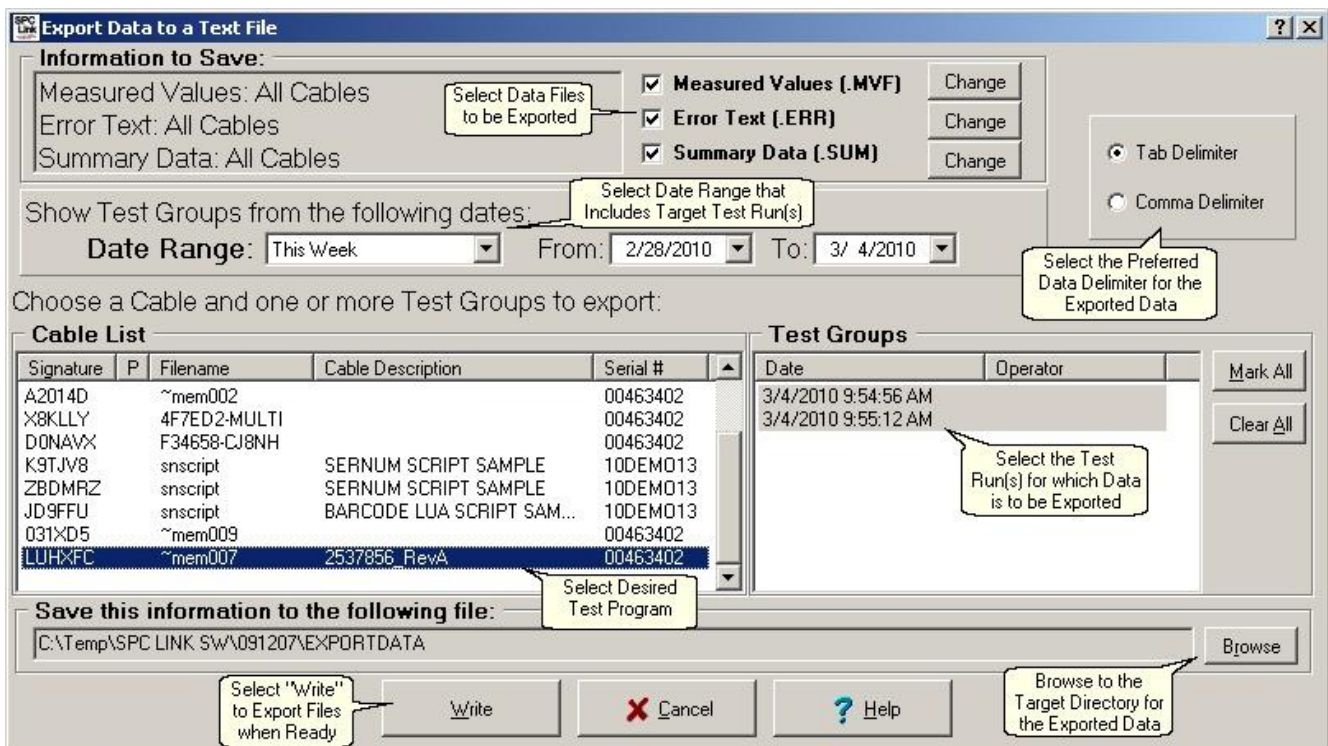


## Exporting Data to a Text File

After the data has been imported, it can then be exported to a text file so that it can then be viewed or imported into another application such as Microsoft Excel™. From the SPC Link Main Menu, select “Export to a Text File.”

On the “Export Data” window:

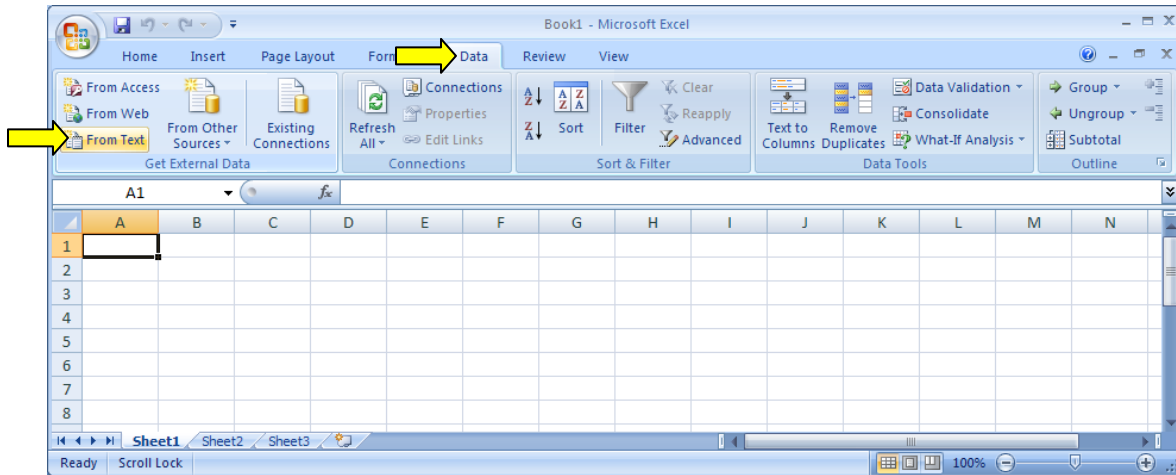
- Select the data files to be exported. Choices are Measured Values, Error Text and Summary Data. Measured Values and Error Text data are only available if these options were selected when enabling SPC data collection in the test program. Any of the file types or all three file types can be selected.
- Select whether to have the data exported in a tab delimited or comma delimited format. Both file types can be imported into Excel.
- Select the appropriate date range of the test runs for which data is to be exported.
- Select the target test program from the “Cable List.”
- Select the target test run(s) from the “Test Groups” list.
- Use the “Browse” button to select the directory to which the exported data file(s) will be written.
- Select the “Write” button to export the data.



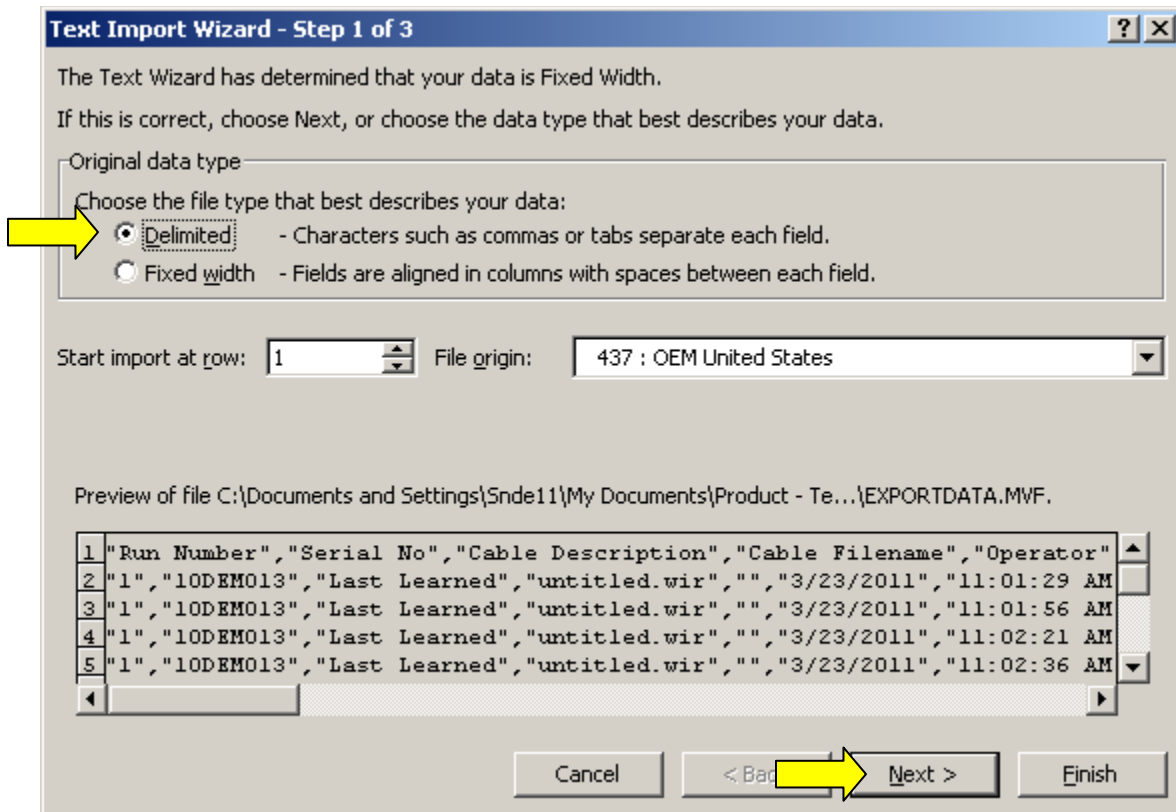
**Example - Importing Data into Microsoft Excel™**

*Note: The following steps may vary slightly depending on the version of Excel being used, but the object is to import comma or tab delimited data from an external text file.*

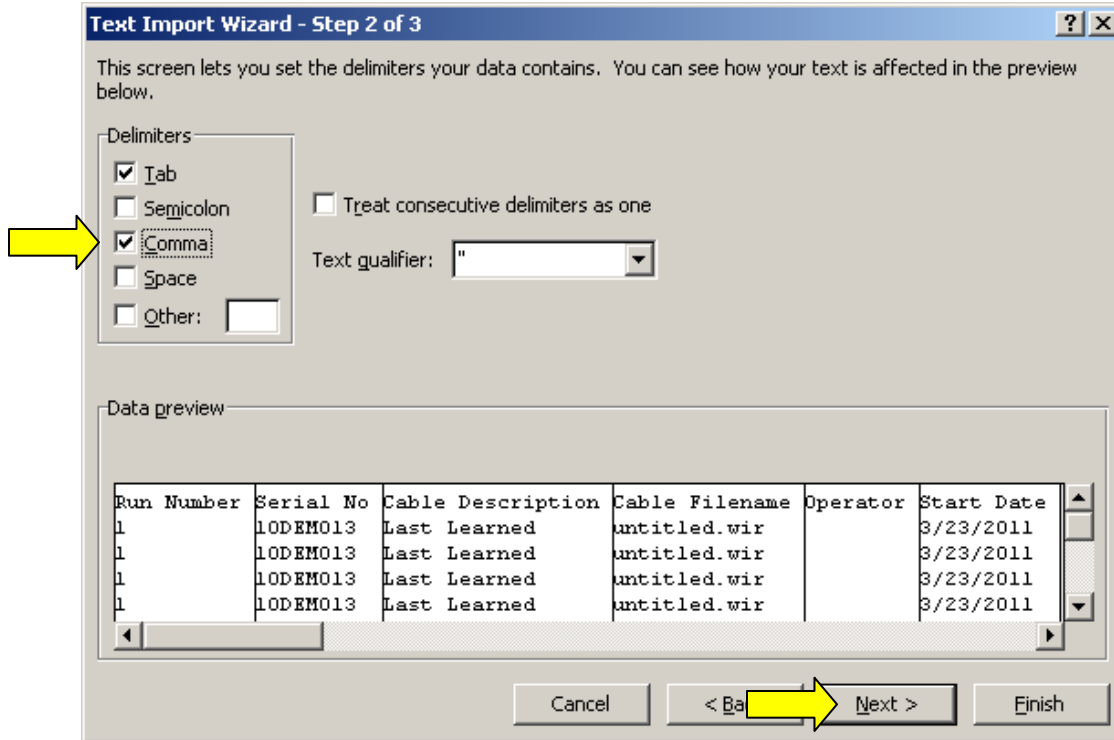
In a blank worksheet, select “Data” from the Menu Bar, then select “From Text.” In the window that opens, select the file from which to import data. The Summary data file will have a “.SUM” extension, the Error Text data file will have a “.ERR” extension and the Measured Values data file will have a “.MVF” extension.



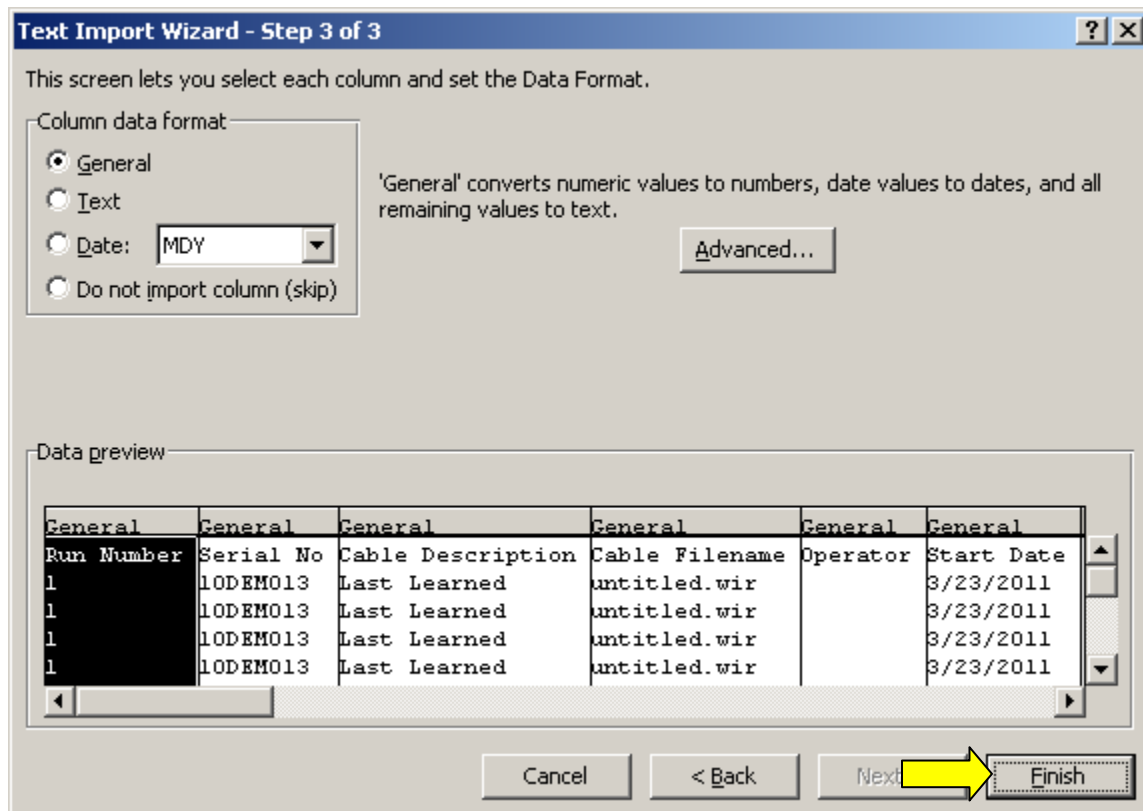
In the “Text Import Wizard – Step 1 of 3” window that opens after the import file is chosen, select “Delimited” and then “Next.”



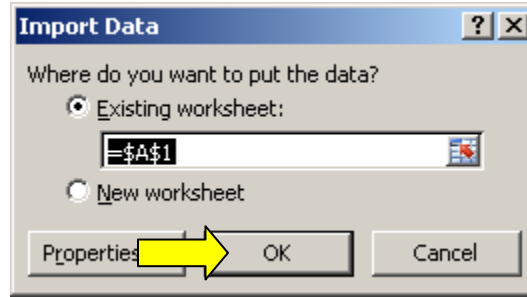
In “Step 2 of 3” select “Comma” and/or “Tab” depending on whether the data was exported from the SPC Link software into Tab or Comma delimited file(s). Then select “Next.”



In “Step 3 of 3” select “Finish.”



In the “Import Data” window that opens, select “OK” to import the data into the open worksheet starting in cell A1.



The data in the selected file will be imported and populate the rows and columns of the open spreadsheet. The following images are examples of the three file types, Measured Values, Error Text and Summary Data, that can be exported from the SPC Link software. In the examples shown, the data has been imported into Microsoft Excel.

### Measured Values Data

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Run Number	Serial No	Cable Description	Cable Filename	Operator	Start Date	Start Time	Cable Number	Cable Serial Number	Final Status	WIRES J1-001 J1-013 < 5 OHM	WIRES J1-018 J1-006 < 5 OHM	WIRES J1-020 J1-008 < 5 OHM	WIRES J1-025 J2-
2	1	463402	2537856_RevA	~mem007.wir		3/4/2010	9:54:56 AM	1		Passed	0.001	0.001		0.001
3	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:55:12 AM	1		Passed	0.01242	0.001		0.007826
4	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:55:46 AM	2		Passed	0.001	0.001		0.007142
5	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:56:02 AM	3		Passed	0.001	0.001		0.001
6	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:56:14 AM	4		Failed				
7	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:56:44 AM	5		Failed				
8	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:57:14 AM	6		Passed	0.001	0.001		0.004415
9	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:57:44 AM	7		Failed				
10	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:58:12 AM	8		Failed				
11	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:58:32 AM	9		Failed				
12	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:58:52 AM	10		Passed	0.001	0.001		0.001

### Error Test Data

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Run Number	Serial No	Cable Description	Cable Filename	Operator	Start Date	Start Time	Cable Number	Cable Serial Number	Final Status	Error Number	Error Code	Error Type	Error Text
2	1	463402	2537856_RevA	~mem007.wir		3/4/2010	9:54:56 AM	1		Passed				
3	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:55:12 AM	1		Passed				
4	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:55:46 AM	2		Passed				
5	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:56:02 AM	3		Passed				
6	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:56:14 AM	4		Failed	1	3	Short	Net 4: SHORTIn J1-025 J2-014 to J2-010
7	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:56:44 AM	5		Failed	1	3	Short	Net NC: SHORTIn J2-003 to J2-024
8	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:57:14 AM	6		Passed				
9	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:57:44 AM	7		Failed	1	3	Short	Net NC: SHORTIn J1-003 to J1-025
10	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:57:44 AM	7		Failed	2	71	T1 Open Error	Net 4: OPENIn J1-025 to J2-014
11	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:58:12 AM	8		Failed	1	71	T1 Open Error	Net 4: OPENIn J1-025 to J2-014
12	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:58:32 AM	9		Failed	1	71	T1 Open Error	Net 4: OPENIn J1-025 to J2-014
13	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:58:52 AM	10		Passed				

### Summary Data

	A	B	C	D	E	F	G	H	I	J	K	L
1	Run Number	Serial No	Cable Description	Cable Filename	Operator	Start Date	Start Time	Cables Tested	Number Good	Number Bad	Short	T1 Open Error
2	1	463402	2537856_RevA	~mem007.wir		3/4/2010	9:54:56 AM	1	1	0	0	0
3	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:55:12 AM	10	5	5	3	3

### FAQ's / Troubleshooting

**Q:** What do I do if the test run(s) I want to export from SPC Link aren't listed under "Test Groups" after I've selected the proper test program from the "Cable List?"

**A:** First, make sure you've selected an appropriate date range in the SPC Link Export window. If you've selected an appropriate date range and the test run(s) still aren't listed, check the current date on your tester to see if it's accurate. If the tester's current date is not accurate, it will be recording the wrong test date in the SPC data. In that case, the test run(s) you're looking for may not be dated within the date range you expect.



**Q:** When I tried to import test data into the SPC Link software, I received error messages that prevented me from completing the import. When I tried again, I found that the file had been deleted from my floppy disk. Has the file been permanently deleted?

**A:** The file was moved to the hard drive of the PC to C:\Documents and Settings\All Users\Shared Documents\Cirris\SPCLink\working directory. Email this file to [info@cirris.com](mailto:info@cirris.com) or to your sales associate to have it analyzed by our engineering support personnel.

**Q:** Can SPC data collection be used with a parent/child test?

**A:** No, SPC data collection is not supported for parent/child testing.

**Q:** Once the information in my original data file has been successfully imported into the SPC Link software, is the file deleted?

**A:** No, the file is renamed and sent to the directory C:\Documents and Settings\All Users\Shared Documents\Cirris\SPCLink\archive. If the data needs to be imported again for some reason, change the file name extension back to the “.C\_D.”