

Printing Tags from an Excel Spreadsheet - A Comprehensive Guide Part 1

Part 1

Introduction

In a previous blog entry I described the process of preparing an Excel spreadsheet so it is compatible with Labelase® Producer. While that article was useful in itself, it didn't provide a description of the entire process of creating the spreadsheet, building the layout and importing data at print time. This post should help you with the entire process.

Labelase® Producer makes it easy to manually enter data into your tag layout when it's time to print tags, but oftentimes you want to print many tags from data you have saved in an Excel® spreadsheet. While it has always been possible to import and print from Excel in older versions of Producer using the XLTags feature, this method was a bit cumbersome and was often confusing. Now, with version 2, Producer can directly read the contents of your Excel spreadsheet and add your rows and columns of data directly to the print queue.

With Producer 2 you can now read the newer .XLSX spreadsheet file format, and you don't have to have Excel installed on the computer that's running Producer.

This article will walk you through the process of creating your spreadsheet so it is compatible with Labelase® Producer.

Tag Layout

The first step in creating your Excel data file is to identify the fields on your tag that will be receiving the data. Not all fields on a tag layout have to be included in the data file. Some fields (like your company name, for instance) never change and are considered "constant" or "fixed". Other fields have to have different data on each tag and must therefore get the data from your data file.



This is a sample tag layout created for our Labelase® Designer tag layout tutorial showing a tag with many data fields. Note that some of these fields such as the words "SIZE:" and "LENGTH:" are fixed fields that never change from tag to tag. Others, like "#43 METRIC (#14 BAR)" and "64FT 6.00IN" are different (or can be) on each individual tag. These variable fields are the ones you need to include in your Excel spreadsheet. We will add the other, fixed, fields to your layout so that they don't change.

Note that we will create the barcode fields by linking to the other text fields on your layout and in your data file. If the data to be encoded in the barcode does not come from the other text fields, and it cannot be derived from those fields, then you will need to add an additional column to your spreadsheet specifically for the barcode. If you are unsure, please contact your InfoSight sales representative or the factory for assistance.

Operator Data Entry Table

When you use an Excel spreadsheet to print tags, Producer needs to know how to apply the data in the spreadsheet to the fields on the tag. It does this using a table called the Operator Data Entry table.

The Operator Data Entry table is accessed via Labelase Designer. On the right side of the Designer screen above the list of layout fields is an icon for the Operator Data Entry table.



Click the Operator Data Entry button, which will open the Operator Data Entry Setup window. The blank Operator Data Entry window is shown in the image below:

	Prompt	Verify	Choices	Sample Data
1				

Optional Choices are entered as a list separated by commas.

Enable Serial Number
Serial Number:

Enable Upper Limit
Upper Limit:

Enable Lower Limit
Lower Limit:

Enable S/N Increment
Change Serial Number By:

Enable Quantity Required
Quantity Required:

Enable Copy Count
Copies:

Erase Operator Fields After Print

Buttons: Add, Delete, Insert, Clear, Excel File, Help, Ok, Cancel

At the top of this window is a grid that allows you to add as many fields as you need. There is no limit placed on the number of fields you can add. Buttons next to the grid allow you to Add, Delete and Insert fields and also to Clear the entire list.

In our layout, we have seven fields that will either be entered by the operator or downloaded from another computer. Lets add the first field.

You can begin entering a new field in the empty row at the end of the list. If the list doesn't have an empty row, click the Add button and one will be added. For the first field, we enter "SIZE:" for the Prompt, leave the verify empty, and "#43 METRIC (#14 BAR)" for the Sample Data. Note that the quotation marks are

shown here for clarity and are not actually entered. Continue entering fields until we have entered all seven Operator Data Entry fields.

	Prompt	Verify	Choices	Sample Data
1	SIZE:			#43 METRIC (#14 BAR)
2	LENGTH:			64 FT 6.00 IN
3	GRADE:			420 (60)
4	PIECES:			14
5	DATE:			03-21-06
6	SHIFT:			1-MR
7	HEAT#:			12956

Below the grid of data entry fields are additional fields that allow us to customize the operator interface. Each field has a checkbox that will enable the display of the field on the main Producer window. Along with the enable checkbox is a field that allows you to customize the prompt that the operator will see. For our application, we are only going to enable the Quantity Required field. The default prompts are ok, so we will keep them. Click OK to save these settings.

Once your table is complete, you need to link the table entries to the actual text fields on the layout. We do this using special flags in the fields that link back to specific rows in the table. The flags begin with a percent sign, followed by the row number in the table and then the letter 'V' for "variable". For example, the text field that we want to contain the SIZE data "#43 METRIC (#14 BAR)" will come from the first row of the Operator Data Entry table. We link to this by entering %1V into the text field itself. The text field now points to the first entry of the table, and that is where the data to be printed in that field will come from. In the same way we will link the LENGTH field to the second table entry using %2V. All of the variable fields on the tag layout will link to corresponding entries in the table in the same way.

A very [detailed tutorial](#) is available online in the Designer reference manual. It describes the process of creating the layout we are using here.

Conclusion

This concludes the first part of our tutorial on printing tags from an Excel spreadsheet using Labelase® Producer. This series [continues in part 2](#).

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Printing Tags from an Excel Spreadsheet - A Comprehensive Guide Part 2

Part 2

Introduction

In part 1 of this series we created the tag layout using Labelase® Designer, including the Operator Data Entry table that will accept information from our spreadsheet and link it to the fields in our layout. In part 2 we continue the process by preparing our spreadsheet. For a recap, see [Part 1](#)

Rows and Columns

Once you have identified the fields that will be required to receive data from the data file, and you have created your corresponding tag layout, you can begin to build your Excel spreadsheet.

Columns - Each variable field in your tag layout requires a column in the spreadsheet. You must create your columns to exactly match the rows in the Operator Data Entry table we just created. If you look at the image below of a spreadsheet you will see that the fields (SIZE, LENGTH, GRADE, etc.) are in the exact same order as the entries in the table. This is very important, since Producer simply copies the spreadsheet columns left-to-right into the Operator Data Entry table top-to-bottom. In the example spreadsheet shown below you will notice that there is a ninth field called COUNT that follows the BUNDLE field, but there is not an entry in the table for COUNT. This is because the count value is not actually printed on the tag, but it will be used to control the number of tags that Producer will print for each row of the spreadsheet. If you are going to have your spreadsheet control the tag count, and you don't have to if you don't want since it is an optional feature, make sure the count field is after (to the right of) all your other fields.

We recommend that the first row in the spreadsheet contain the name of each field in its respective column. This will help match your spreadsheet format to the tag layout that that will receive the data. Although you aren't required to have the field names in the first row, it can help to reduce the chance for errors when you print your tags. When you import the file into Producer, you can tell it so skip the first row so your column headings won't be printed.

Rows - Each tag that you want to print requires a row in the spreadsheet. As Producer processes your spreadsheet, it will take each row of the file one at a time and directly substitute the contents of each column with the associated field in your tag layout. Thus, each row in the spreadsheet corresponds to one tag job. If you wish to print more than one copy of the tag, see the next section.

	A	B	C	D	E	F	G	H	I
1	SIZE	LENGTH	GRADE	PIECES	DATE	SHIFT	HEAT	BUNDLE	COUNT
2	#43 METRIC (#14 BAR)	64FT 6.00IN	420 (60)	14	03-21-06	1-MR	12956 001		1
3	#43 METRIC (#14 BAR)	62FT 5.00IN	420 (60)	10	03-21-06	1-MR	12956 002		2
4	#43 METRIC (#14 BAR)	61FT 4.00IN	420 (60)	5	03-21-06	1-MR	12956 003		5
5	#43 METRIC (#14 BAR)	63FT 6.00IN	420 (60)	8	03-21-06	1-MR	12956 004		1
6	#43 METRIC (#14 BAR)	65FT 4.50IN	420 (60)	3	03-21-06	1-MR	12956 005		1
7									

In the example shown above, the Excel spreadsheet contains 6 rows of data. The first row simply has the name of each field to help match the data in the file to the fields in your layout as shown below.

	A	B	C	D	E	F	G	H	I
1	SIZE	LENGTH	GRADE	PIECES	DATE	SHIFT	HEAT	BUNDLE	COUNT
2	#43 METRIC (#14 BAR)	64FT 6.00IN	420 (60)	14	03-21-06	1-MR	12956	001	1
3	#43 METRIC (#14 BAR)	62FT 5.00IN	420 (60)	10	03-21-06	1-MR	12956	002	2
4	#43 METRIC (#14 BAR)	61FT 4.00IN	420 (60)	5	03-21-06	1-MR	12956	003	5
5	#43 METRIC (#14 BAR)	63FT 6.00IN	420 (60)	8	03-21-06	1-MR	12956	004	1
6	#43 METRIC (#14 BAR)	65FT 4.50IN	420 (60)	3	03-21-06	1-MR	12956	005	1

XYZ STEEL CO.

SIZE: #43 METRIC (#14 BAR)
 LENGTH: 64 FT 6.00 IN
 GRADE: 420 (60) PIECES: 14
 DATE: 03-21-06 SHIFT: 1-MR
 HEAT#: 12956 BUNDLE#: 001




Note that column 'I' is labeled 'COUNT' and contains a number that does not correspond to any fields on the tag layout. This is an extra field used to control the number of tags that can be printed for each row of data in the file. A count field is optional and if you omit it then each row from the spreadsheet will only print one tag. This is explained in more detail in the next section.

Printing Multiple Copies of Each Tag

Normally, each row of your spreadsheet corresponds to one printed tag. If you want more than one copy of the same tag, it seems logical that you can just repeat the same row as many times as you need. You can do it this way if you wish, but that can result in a lot of duplicated data and large file sizes. Fortunately, there is another, better, way of printing multiple copies of each tag.

Once you have created a column in your spreadsheet for each field in your tag layout, add an additional column to the right of the last data column. This column is the "count" column, and you can label it such in the first row of your file, if you wish. You simply put into this column the number of tags that you want to print using that row's data. You can even have a different count for each row if you want, it's completely up to you. When you import the file into Producer, just indicate which column contains the count and Producer will use that to create the number of tags you need.

Tips and Tricks

Here are some tips that will make it easier for you to create your spreadsheet.

- If you are going to use a 'count' field, make sure it is the last column in the spreadsheet.
- Remove any comma (",") characters that may be in your data.
- Do not use hidden rows or columns in the spreadsheet. Hidden rows will result in extra tags that you may not want.

- Do not use multiple pages or workbooks in the spreadsheet. Make sure all your data is on the first page.
- Do not include formulas, functions or any other non-text data.

Conclusion

This concludes part 2 of our series on printing tags from an Excel spreadsheet using LabelLase® Producer. In [part 3](#) we conclude the series by showing how to open your spreadsheet in Producer and create print jobs from the spreadsheet's contents.

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Printing Tags from an Excel Spreadsheet - A Comprehensive Guide Part 3

Part 3

Introduction

In part 1 of this series we created the tag layout using Labelase® Designer, including the Operator Data Entry table that will accept information from our spreadsheet and link it to the fields in our layout. In part 2 we continued the process by preparing our spreadsheet. In this, our final part, we conclude by showing the process of importing the spreadsheet into Producer to print our tags.

Opening the Layout

Before we import our spreadsheet data we need to open the layout that is going to accept the data. In part 1 of this series we described the process of creating a layout, so that's the file we are going to use for printing. From the main Producer window, pull down the File menu and select Open. A dialog will appear allowing you to locate and select the layout file we previously created. Be sure to set the "Files of type" pull down to "All Layout Files".

After you open the file, an image of the layout will appear in the upper left corner of the Producer window. Just below that image will be the Operator Data Entry table that we created in part 1. Remember that the columns from our spreadsheet will be applied to the rows of the Operator Data Entry table on a one-for-one basis.

Make sure that the Job Queue is empty before we proceed with opening the spreadsheet. You may have to click the Clear Jobs button just above the list of jobs in the queue. Starting with an empty queue will ensure that we print exactly what we are expecting.

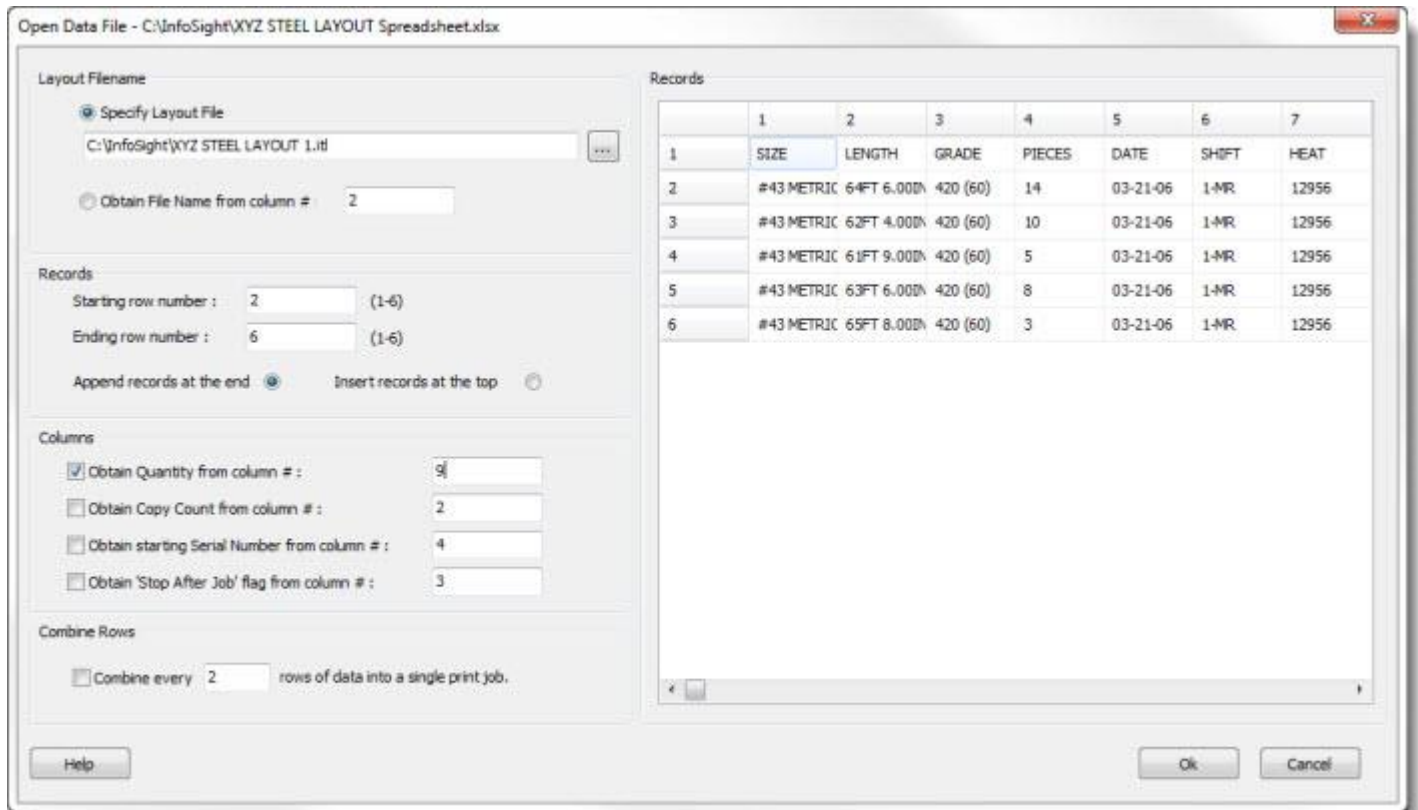
Opening the Spreadsheet

Now it's time to import our spreadsheet data. We do this by loading the spreadsheet data file and using its contents to create jobs in the job queue.

From Producer, once again pull down the File menu and select Open. The same dialog will appear as when we opened the layout file, but this time we want to find and open our spreadsheet. To do this, change the "Files of type" pull down to Excel Spreadsheet (*.xls, *.xlsx) instead of layout files. Now navigate as needed to the folder where your spreadsheet is located, click the spreadsheet file name and then OK.

Note that in version 2 of Producer it isn't necessary to have Excel installed on the same computer as Producer. The older version 1.x Producer had this requirement, but new Producer can directly read Excel spreadsheet files of both the classic format xls and the newer XML formatted XLSX files.

After selecting your spreadsheet file, Producer will show you the Open Data File dialog with your spreadsheet already loaded.



Layout Filename

You can specify the name of the layout file to use to print the records in the spreadsheet or indicate that the layout file name is contained in one of the columns of the spreadsheet. In our example, we are going to use the layout that we already loaded, which is selected for you by default.

Records

You must tell Producer which records from the spreadsheet you want to print. You do this by specifying a range of rows, beginning with a starting row number and finishing with an ending row number. All of the rows in the spreadsheet between these row number, inclusive, will be printed. In our example, the first row is actually used a for column headers, and we don't want to print any tags with that. So we specify that the starting row number will be row 2, which is the first row with actual data. We leave the ending row number at 6, which Producer helpfully filled in as the last row in the spreadsheet that contained data.

Finally, you must indicate how you want these new records added to the job queue. Normally, you would just add all of these new records to the end of the job queue, so you would select the Append option. Any records already in the job queue will print first, followed by these new ones. However, you do have the option to print the new records before anything else by selecting the "Insert at the top" option. This allows you to prioritize your workflow if necessary.

Columns

Several options are provided that allow you to use certain columns for special cases. For example, in our spreadsheet the last column, number 9, is not text to be printed but is actually a tag count. By checking the box "Obtain Quantity from column #" and entering 9 in the data field, we are telling Producer that it should use the ninth column to specify the number of tags to print for each row in the spreadsheet.

Since our spreadsheet only contains one special column for the quantity, we will leave the other check boxes unchecked. If you need to specify things like Copy Count, Serial Number, etc. then include the appropriate columns in the spreadsheet (to the right of your last data column) and then check the appropriate boxes and enter the column numbers.

Combine Rows

With some specific Labelase® printer models, such as the JM410, you can actually print more than one tag in a single print operation. In these cases, you may want to combine multiple rows of spreadsheet data, where each row represents one tag in the print batch, into a single print operation. To do this, just click the box to combine rows and enter the number of rows to be combined. We don't need this feature for our example, so we leave that box unchecked.

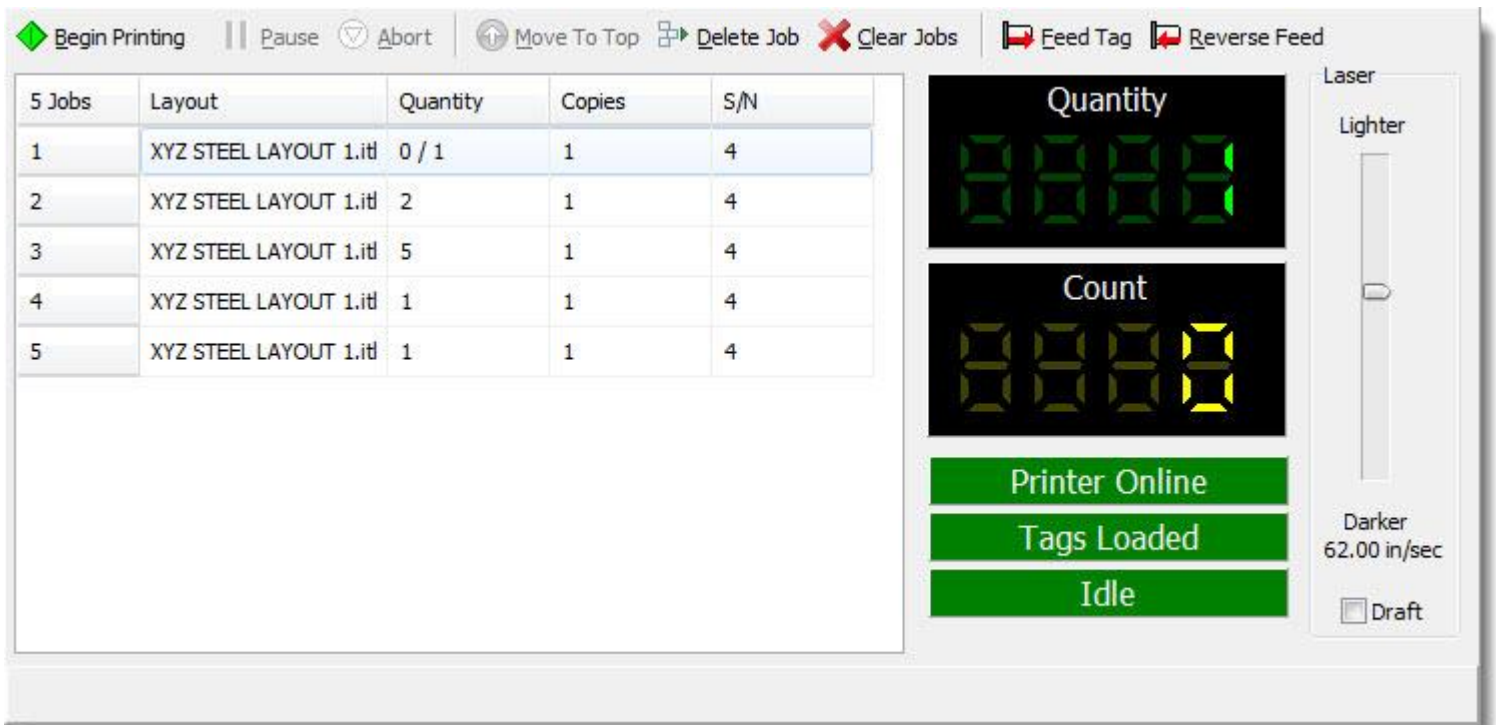
Records

This section of the dialog is a grid showing you all of the data that was extracted from the Excel spreadsheet. The data is shown here for two reasons: 1) It allows you to confirm that the file you opened was the correct one by visually inspecting the contents, and 2) you can manually change the data in each cell if you need to, just in case you need to make any last minute changes.

Once you are satisfied that your settings and data are correct, click the OK button. This will close the dialog and add new records to the Job Queue.

Job Queue

On Producer's main window, you should now see all of the records you selected entered as jobs in the Job Queue. Each job corresponds to one record from the spreadsheet.



As you can see in the image above, we now have all five records from our spreadsheet entered as jobs in the queue. Each job obtained its count from the COUNT column of the spreadsheet. The data to be printed is contained within each job, which you can confirm by double clicking the job entry. Now, it's

simply a matter of ensuring that the printer has enough tags loaded to handle all the jobs and clicking the Begin Printing button.

Conclusion

This concludes the third and final installment of our series on printing tags from an Excel spreadsheet with Labelase® Producer. If you have any questions or need help printing tags from a spreadsheet, please [Contact Us](#).

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