

Digital Estimating

GraphiTech's Digital Estimator

File Edit Actions Reports Maintenance Help

Digital Estimating

(c) 2011 by S. Thatcher of GraphiTech Computer Systems

Basic Information
Customer & Phone: 624-2215
Job Description Estimated By: sdt
 GraphiTech Computer Systems
 14 Signatures and partial full color w some B&W. 3-hole drill, stitch and collate plus cut Inventory sheet to size. Customer requests on blank sheet collated at back.

Run Options **Job Type**
 Sheetwise Flat Sheet
 M&T Booklet

Mode Selections **Press in Use**
 New Quote Retrieve Quote Use Press #1
 New Job Retrieve Job Use Press #2

Speed: 7000 Res Color Notes
 MU BW Saved TimeOnEst 00:01:02

Press #1 Information **Stock, Sizes and Pricing** **Bindery #1** **Setups**
 Digital One 5. Full Color 9x12 (Color) 0003-20# Bond White Mountie, 11x17
 # of Orig B&W Color Col & B&W
 Parts 1/0 2 4/0 4 4/1 1
 1 1/1 2 4/2+ 4 0/0 1
 Size of Stock 11x17 Caliper 0.004
 Finished 8.5x11 Press 8.5x11
 1 Ctn 13.95 2 Ctn 13.95 3 Ctn 13.95
 Quantities: # Out 2 # Up 1 # On 1 Sides 2
 Select: 100 200 300

Cell Descriptions **Click Here to Add Notes**
 When selecting the Finished Sheet Size, remember that this is the size of the sheet or booklet delivered to the customer. Always try to use shorter dimension first. Certain bindery operations, such as folding (uses the length) or padding (uses the width) in

Verification Count 1st Quantity
 Press Clicks 2000
 Press Stk Count 1400
 Inventory Count 700
Total Runs & Sheets
 Runs 20 Sheets 14

Imaging
 PreFlight \$ 10 Rip \$ 0
 Imaging \$ 0 Add'l \$ 5
 Design \$ 0 MarkUp 30
 Margin Percent

Quote Number: 00000004 Job Number: Current Date: 02/12/12 Due Date: 02/24/12

By GraphiTech Computer Systems

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Installation

Loading Digital Estimating

Once you have installed GraphiTech's Digital Print Estimating software, you will almost be ready to run the program and start estimating.

But before you start, there are just a few things we need to consider before actually starting to perform estimates.

1. First, we'll just **load/install** the program.
2. Then we'll look at what **changes** may need to be made with the file structure.
3. Next we will **start** the program for the first time.
4. Next, we'll look at the **fundamentals** of using the program.
5. Finally we will review several estimates and their reports.

Load/Install from Download or Installation Media

1. Double-Click Setup.exe (be certain you have all files, including the one sent from GraphiTech via eMail).
2. Select all the Defaults
3. Reboot after installation

Possible Changes to File Structure

The GraphiTech Digital Estimator may be run as a stand-alone program or one that integrates to the database created for your Millennium OE/Estimating program. Both of these methods rely on the use of the Access Database called GTDATA.MDB.

Stand-Alone

The Stand-Alone version may be used as soon as it is installed but changes to the basic file structure of Customers and Bindery will need to be done through the use of a Microsoft Access Database. If you haven't worked yet with Access, be certain to make a copy of GTDATA.MDB found in the \Program Files\GraphiTech Digital

Estimator before you attempt to make any modifications. Please note that Vista/Windows7 users need to go to /Program Files(86) above.

Integrated File Structure

If this method is used, you will need to copy the GTDIGITAL.MDB from the \Program Files\GraphiTech Digital Estimator to your \Millennium\Data folder. Then, when starting up the Digital Estimator program for the first time, be sure to set the Path (Found under the Files Menu) to be directed to your Millennium\Data folder.

Before finishing this discussion, please note that you will need to set the path of your program prior to actually running real data. See below on "Setting Path".

First Start

When you double-click the Icon or select the program called "GraphiTech Digital Estimating" from your "Program" list, the first screen that appears is show in Figure 1 below.



Figure 1

The Splash Screen shown above can be eliminated from subsequent startups by selecting the drop down menu called "File" on the main estimating page and clicking on the "Hide" portion of the "Show Splash Screen" listing. See Figure 2 below.

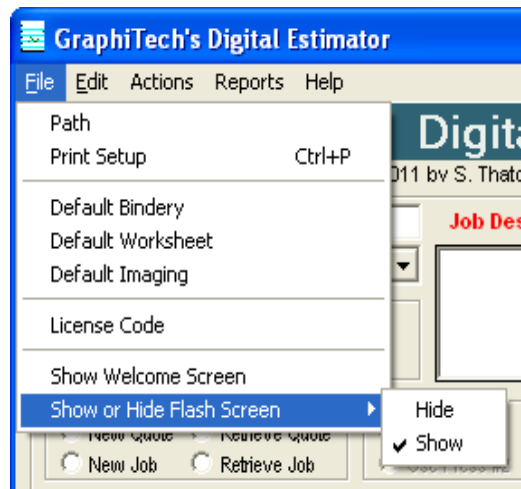


Figure 2

Note that you may also show the "Welcome" screen again should you need to look up some additional information or should you want it to appear again after you have clicked the box indicating that you don't want to have it appear on startup. See Figure 3 and note the box on the bottom left.

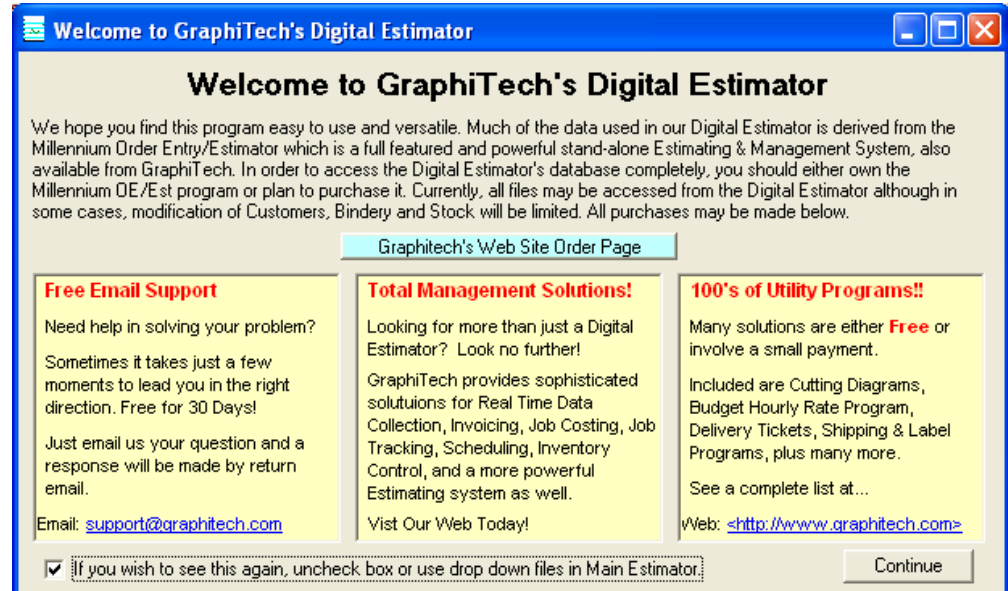


Figure 3

Note that, in Figure 2, we may also specify a new path, set up our printer, establish default data for the "Worksheet" and get your License Code.

Setting Path

Assuming you have copied the GTDIGITAL.MDB to your \Millennium\Data folder, we now need to change the path to the \Millennium\Data folder by clicking on the "Path" shown in Figure 2.

Default Bindery when Changing Database: The result of changing the database above will also require you to re-examine your Default Bindery data. Since you are changing from the stand-alone database to your Millennium database, the default bindery information may be different and may need to be changed.

Fundamentals

The Worksheet

Now let's take a look at the Worksheet itself which is where all your estimating will be done. Although it may look slightly intimidating at first, you will find that having all the information about a job immediately in front of you makes estimating and job creation a snap. Let's get started.

Main Estimating Screen is Called the Worksheet

The main estimating screen shown below (Figure 4) provides an incredible amount of information as well as versatility in estimating. Later on we will examine where the data for the estimate is coming from but for now, let's look only at various portions of the Worksheet as well as producing that first estimate.

Customer Selection

We need to identify the customer. This can be done using the drop down list of customers or we can simply type in the name of the customer and phone if they are new.

Sheetwise or W&T

We stated above that we are running Sheetwise but what does that mean exactly. Well, it just means that each sheet passing through the document machine is printed only one time.

A W&T means that it passes through the press one time, is turned or rotated and run through again. On Offset or other presses, this saved plates, makeready and negatives while allowing for the running of 2 up. With most Document type presses, you will seldom, if ever, need to select a W&T.

Sheet or Book Mode

Note that the difference between running book or sheet is significant, especially if your press sheet is say 11x17 and the delivered finished sheet is 8.5x11. But more on that later. For now, we plan to use the sheet mode.

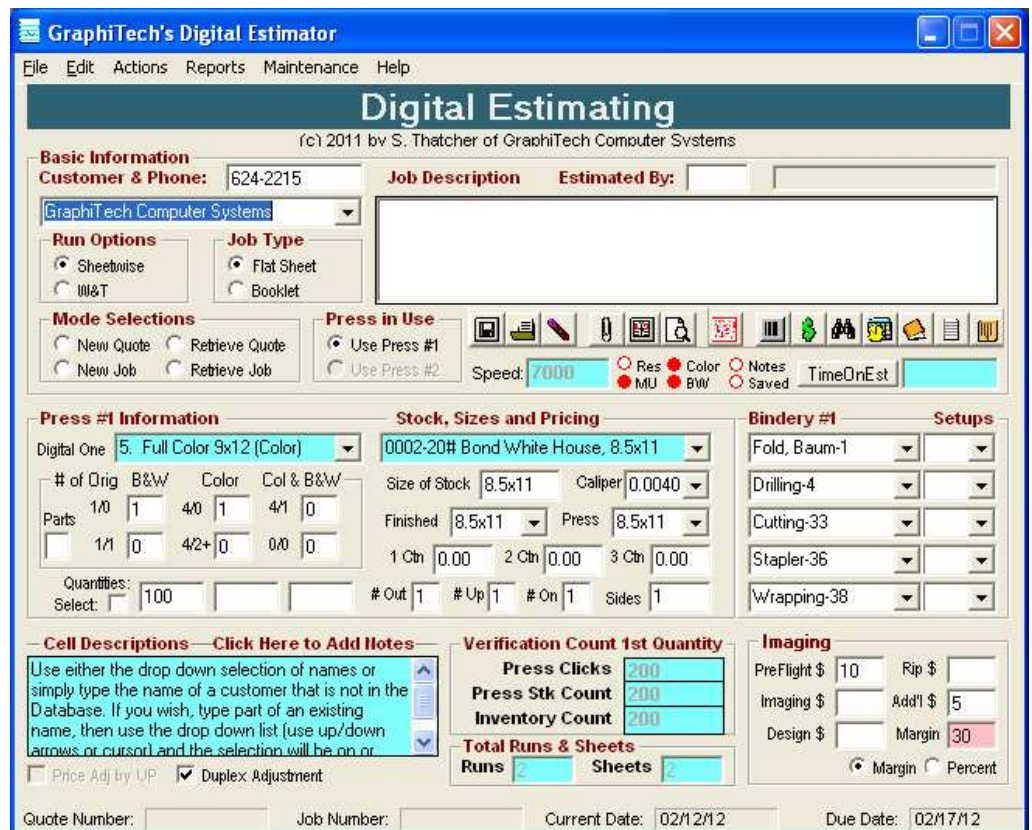


Figure 4

Estimated By

If desired, you may enter your initials to indicate that you are the estimator for this quote or job. It basically provides an audit trail for all entries between the quote and the final job. Multiple initials may be entered.

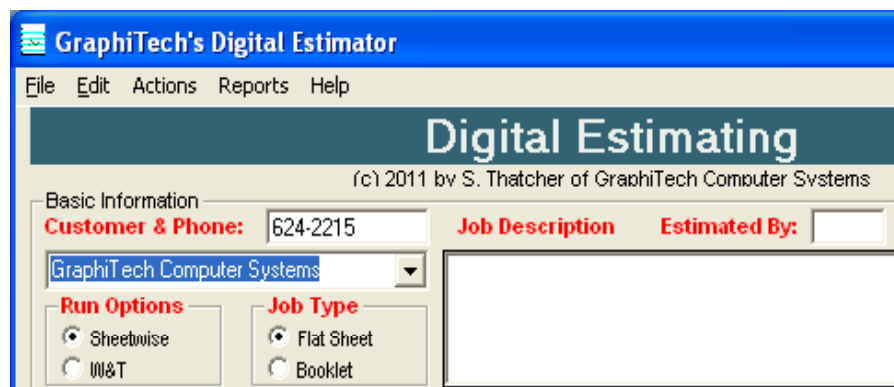


Figure 5

Job Description

The Job Description allows for up to 255 characters that will appear on all printed forms including Work Order, Quotation Sheet, Delivery Ticket, etc.

Mode Selections

In Figure 6, you just need to indicate if this will be a New Quote or Job or a Retrieved Quote or Job.

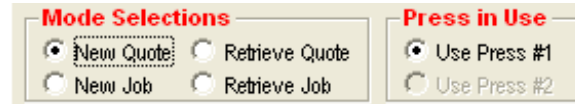


Figure 6

Press in Use


This selection is not necessary at this time.


Icon Selections


Note in Figure 7 a series of Icons from which you may choose. The far right side contains many of the printed reports available while the left side has to do with the job or quote.





Figure 7


 Save Quote or Job. This Icon allows the user to save the Worksheet. You must have a Quote or Job Number assigned, a Customer and a Description before you can save the Worksheet. When you produce a quote with pricing, the Worksheet will automatically be saved. Note in Figure 7 the red dot labeled **Saved**. This will illuminate when the job has been saved.


 Retrieve Quote or Job. When pressed, a window appears that allows you to select either a quote or job to retrieve, along with a drop down list of the type retrieved and load command and exit command. Once the quote or job is found and selected from the drop down list, simply click load to have it completely fill out the worksheet.

 Erase. By pressing this Icon, you erase the contents of the Worksheet. If the job has been saved, it remains saved. An erased worksheet will cause the Default worksheet to be loaded. The Default worksheet can be found under the "File" menu.

 Reload Digital Presses. This Icon will re-load the Digital Presses. This must be done if you have added presses at the Digital Matrix Icon shown below.

 Due Date. Here you can reset the due date. Normally this is set in the Millennium OE/Est portion of the program.

 Production Notes. By clicking this Icon, you can add "Production Notes" to the Quote or Job. This information is invaluable in helping to explain more complex operations than by simply saying it will run on this press or have that bindery operation.

 Quote Button. This is the most used Icon of them all. This will immediately display all of the pricing and production data for the job. Many of the reports require that the quote or job be priced out before they can display the relevant information.



Print Work Order. This button produces a Work Order and Pick Slip along with associated bar codes in the event you also have our Job Tracking and/or Job Costing modules. The appropriate quantity to be printed must be specified prior to obtaining this report. See Selecting the Quantity below.



Print Delivery Ticket. The appropriate quantity to be delivered must be specified prior to printing this report. See Selecting the Quantity below.



Show and Print Layouts. By clicking this Icon, a complete layout of the job is shown, both on the Press Sheet as well as on the Parent (or Inventory) sheet.



Print a Detailed Time and Cost Summary along with Retail Pricing. This report is invaluable for troubleshooting any areas where you feel there might be a problem in the estimate. Sometimes an erroneous entry is spotted during the estimate and appears here. It can then be immediately revised and re-quoted.



Print Quotation. The Quote must be estimated using the Icon above. A Quotation is then printed that may be sent to a Printer or to a PDF. If a PDF is created, then it may be attached to an email and sent to the customer for their signature and faxed or emailed back (with an electronic signature).



Print Worksheet. This simply keeps a record of the worksheet although a saved copy is almost always created anyway.



Digital Matrix. This Icon will provide you with GraphiTech's Digital WorkPlace where a complete table may be created identifying the "Click Rate" for each of your Digital Presses. See Digital Matrix WorkPlace below.



Status Buttons. These buttons are not accessible but are for information only. Res is reserved for later use. Color indicates that a color quote is underway. BW indicates that the quote contains B&W production. MU indicates that a Markup has been entered. Notes indicates that you have entered Hidden Production Notes. This button description may be pressed to actually enter the notes. The note may also be entered by clicking a drop down menu or by clicking the label above the "Cell Descriptions".



Speed. This simply shows the speed of the equipment. It is strictly for information and plays no part in the estimate itself.



Time on the Estimate. Should you need to record the amount of time you spend on an estimate, simply click this button and while you are estimating or doing anything else, the timer will keep track of the time you spent on the job.

Press #1 Information					Stock, Sizes and Pricing				
Digital One: 5. Full Color 9x12 (Color)					0002-20# Bond White House, 8.5x				
# of Orig	B&W	Color	Col & B&W		Size of Stock	Caliper			
Parts 1/0	1	4/0	1	4/1	8.5x11	0.0040			
	1/1	0	4/2+	0/0	Finished	Press			
			0	0	8.5x11	8.5x11			
Quantities:					1 Ctn	2 Ctn	3 Ctn		
Select:	100				# Out	# Up	# On	Sides	
					1	1	1	1	

Figure 8

The next grouping we need to look at is the actual Job as it is entered into the Digital Estimator.

Select the Press

This is simply a matter of selecting which of the different Digital presses you have available. There are two different presses loaded as Default Presses. One is a Full Color 9x12 press and the other is a B&W 8.5x11 press. It is significant that we identify presses as either B&W or Color because a B&W press will allow you to print a back side at any percentage of the cost of the front side. In other words, you may want to charge as much for the back as you do the front in which case, you will have a percentage of 100 loaded for efficiency. See figure 8a below which has been taken from the Digital Matrix Press Selection area.

Digital Equipment Information				
				<input checked="" type="radio"/> B&W <input type="radio"/> Color
Enter \$/Hour:	150	Sales Code:	100	% Eff 2nd Side:
Press Speed:	7000	Press Name:	Full Service 8.5x11	
				OK Close

Figure 8a

Note that in this case, we have specified that the back side is to be printed at 90% of the front. Thus if we have selected signatures in the quote that are to be B&W complete (No Color), then we would choose a B&W Digital Press and the costs or prices would be reflected based on that Digital Matrix.

However, if we had a Color Press (see Figure 8b), note how we resolve the costs of a second side in B&W as well as the costs of printing a second side in Color.

Digital Equipment Information				
				<input type="radio"/> B&W <input checked="" type="radio"/> Color
Enter \$/Hour:	250	Sales Code:	100	% Eff 2nd Side:
Press Speed:	7000	Press Name:	Full Color 9x12	% Eff B&W:
				10
				OK Close

Figure 8b

When you select a Color Press, you may price out both B&W as well as Color since a Full Color Digital press can easily handle both. But since there is much less toner used, you may be able to price it fairly accurately as a B&W press for those areas where you would normally print it on a B&W press. Remember that this is an estimating tool however. It does not reflect how you actually will print the job, only how much the job will cost. This is said because many times you are charged on a per click basis for any paper that passes through the press, thus in reality, you could not actually print the job on the same press.

Selecting the Number of Signatures (Originals)

Here you are able to select exactly the number and type of originals that you will be printing. For example, if you are handed one sheet printed 4 color and a second sheet printed black, then you would place a 1 in the 1/0 box and a 1 in the 4/0 box as is shown in Figure 8.

If the customer also asks you for unprinted blank sheets to go with the job, simply place a 1 in the box identified as 0/0. Anything in that box will not be printed but will have any bindery operations applied to it.

Now, let's say that the customer really wanted 4 sheets printed with color. Then simply place a 4 in the 4/0 box. If they wanted another sheet printed color on both sides then place a 1 in the box labeled as 4/2+ (meaning that any combination beyond black for the second side is considered as color).

Number of Parts

If you have selected a stock that is 2 part or 3 part, etc, then the number of parts box will show up with the correct number of parts. If you enter the number of parts while having a stock selected that is not carbonless, you will be given a warning.

Quantities

There are up to three quantities available and they always represent the quantity delivered to the customer and in sets as well. For example if you were asked to print 1000 sets of 3-part carbonless, you would simply enter 1000 in the quantity area. The same is true for 1000 of multiple signatures. You would still enter only 1000. The Time/Cost summary screen will display both on screen and in printed form all of the details of these different quantities, including the number of finished and press sheets required.

Selecting Quantities

When you elect to click on the Select button next to the Quantities Label, you will be able to select which of the three quantities will be used for the WorkOrder, Delivery Ticket, etc.

Stock Selection & File Maintenance

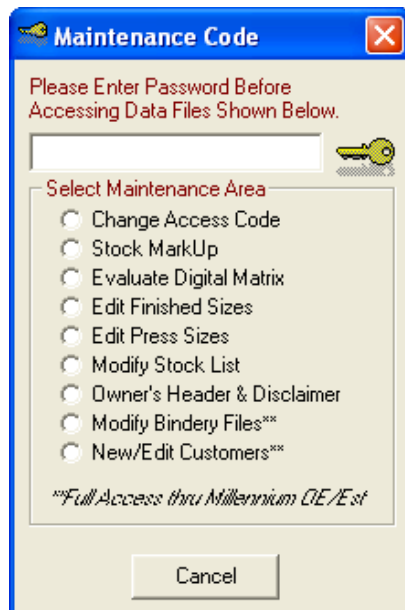


Figure 9

Up to 99 stocks are provided in the sample database. These may be modified as desired by clicking on the Modify Stock List (Figure 9) after entering the Password code shown. In addition, you may select one of the stocks shown in the worksheet and modify the price by simply clicking on the pricing box that shows "1 Ctn." (see Figure 4) and entering a new price. If you tab out of that box, all three of the price categories will automatically change to your new price and will be shown in red to indicate a user modification that is different than the file. To change the other carton pricing levels, just place your cursor in the second box and change that price followed by changing the third box of the Worksheet.

Once you've selected the stock, the Caliper and Size of stock will fill out and a calculation of the number Up and Out will occur.

Up, Out and On

Up refers to the number of Finished Sheets that can be cut from the Press Sheet. If the customer is requesting 1000 8.5x11 pieces, and we elect to print them using a press sheet of 11x17, then Up will automatically be 2 unless we change it, either through the Layout Program identified above or by simply entering the desired number Up.

Out refers to the number of Press Sheets that can be cut from the Parent or Inventory Sheet. If the Inventory Sheet is 17x22 and the Press Sheet is 11x17, then we will be able to cut 2 out of the Inventory sheet, thus Out would equal 2. Both of these calculations are automatic.

On represents the number of items on a press sheet that are Different. For example, in the Up example, we have 2-8.5x11's that can be placed on the 11x17 press sheet. Usually, these 2 finished pieces are identical, thus we only need to print 500 press sheets to obtain 1000 finished sheets. If however, the customer gave us two different 8.5x11 forms and we elect to run then 2 up, then On will be equal to 2 as well, since we will now have 2 Different Forms On the Press Sheet.

Sides or Pages

The number of sides will generally be automatically determined as you enter the number of signatures and Sides will be displayed when we are running this job in Flat Sheet production.

If we are running the job as a Booklet, then Sides will be displayed as Pages. Pages are calculated based on the number of signatures and the number of Finished Forms on a Press Sheet. When in Booklet Mode, Up will be 1 and On will be 1 and the same quantity of Press Sheets are required as Quantity displayed.

Bindery

Bindery consists of 5 items with each of these five selectable from a list of your existing bindery functions. Normally, a default set of five are set as the beginning point for every new estimate but with a drop down selection additional bindery operations, each quote can be, literally, unique when it comes to bindery.

Figure 9a and 9b show the selection process and the quoted result of the bindery area.

Bindery #1	Setups
Fold, Baum-1	1
Stapler-36	2
Padding-3	
Drilling-4	3
Cutting-33	1

Figure 9a

Bindery #1	Qty1 Cost
Fold, Baum-1	\$7.71
Stapler-36	\$10.88
Padding-3	
Drilling-4	\$5.22
Cutting-33	\$3.94

Figure 9b

If you own the Millennium Order Entry/Estimator, you are able to modify these bindery operations to exactly fit the type of equipment and environment in which you are working.

For example, most of these bindery operations contain provisions for creating setup time, setup waste, running waste, additional setup, variable speed and spoilage factors plus much more. For our purposes however, it is easier to set some of these bindery operations equivalent to in-line or table-top equipment with no setups and no spoilages (not realistic but it is consistent with how much of today's estimates are calculated).

Cell Descriptions and Production Notes

Cell Descriptions: Each time you arrive at a specific spot on the Worksheet (in this example we are looking at the Press Sheet Size), the Cell Description changes so that you have a full and complete description of what an entry in that area should consist of (see Figure 10). Many times, as in this example, it is important how you enter the data.

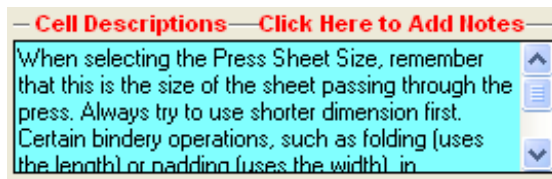


Figure 10

Production Notes: By clicking on the heading above the Cell Descriptions called "Click Here to Add Notes", you will be able to provide a variety of comments aimed primarily at the production of the job. The only people who will see this information is you and your production staff when they read the Work Order.

Verification Count

In order to determine if you have entered the correct number of signatures and quantities, the Verification Count provides exact counts for the first quantity of items you probably already know. See Figure 11



Figure 11

In our example of the Worksheet (Figure 4), there is to be a quantity of 100 with 1-1/0 and 1 4/0 printed. Since we know only one side is printed on each and that there are two sheets, we know there will be 200 press clicks and 200 sheets of stock used.

The Verification Window simply confirms what we know to be true. If it's different than what we expect, then there may be an error in how the job was entered or perhaps you might have been mistaken regarding the quantities.

The Runs and Sheets describe just that. In our example we do have 2 sheets and 2 runs and this window confirms that fact.

Imaging

Pre-Press Costs: The Imaging area as shown in Figure 4 and Figure 12 contains 5 additional dollar amounts, each of which can be incorporated as a default value.



The screenshot shows a dialog box titled "Imaging" with the following fields and controls:

PreFlight \$	10	Rip \$	
Imaging \$		Add'l \$	5
Design \$		Margin	30

At the bottom, there are two radio buttons: Margin and Percent.

Figure 12

You might, for example, always charge \$5 (in the Additional \$ Box) for any job to cover administrative costs.

Margin or Mark-Up: In this box, you can specify either a Mark-Up or the Margin you wish to achieve for the final price. You do need to check one of the radio buttons below the Margin to have the amount shown be a Mark-Up or a Margin. In the example shown, the amount in the box appears as a Margin.

The difference between a mark-up percent and a margin is as follows:

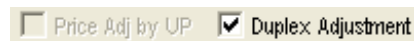
A Mark-Up Percent is applied to the final cost by multiplying the final cost times One plus the Mark-Up percent divided by 100 (to obtain a fraction).

A Margin is applied to the final price (note the subtle difference). It is determined by taking the Mark-Up and Dividing it by the Total Selling Price.

Let's say you wish to make \$30 on a \$100 transaction. In terms of a Percent Mark-Up this would amount to 30%. The Margin would be, however, only 23% because the Margin is calculated based on the Price, i.e., $30/(100+30) * 100 = 23$.

Duplex Adjustment

If you have the Duplex Adjustment Box checked, then your pricing for any Duplexed job will be based on how you have setup the Press in the Digital Matrix.



The screenshot shows two checkboxes: Price Adj by UP and Duplex Adjustment.

Figure 13

For example, let's assume you have the box checked. What will happen when you actually price out a duplexed (2-sided) job? The program will look to see what the user has identified as the percentage for a second side and apply it to the price.

Now what if you have left it un-checked? The program will then assume that all signatures, whether duplexed or simplex are to be run as though they were simple one-sided jobs (Simplex). The second side is not costing anything.

Now let's look at how you create the Digital Matrix.

Creating a Digital Press

The Digital Press Icon shown under Figure 7 will display the following.

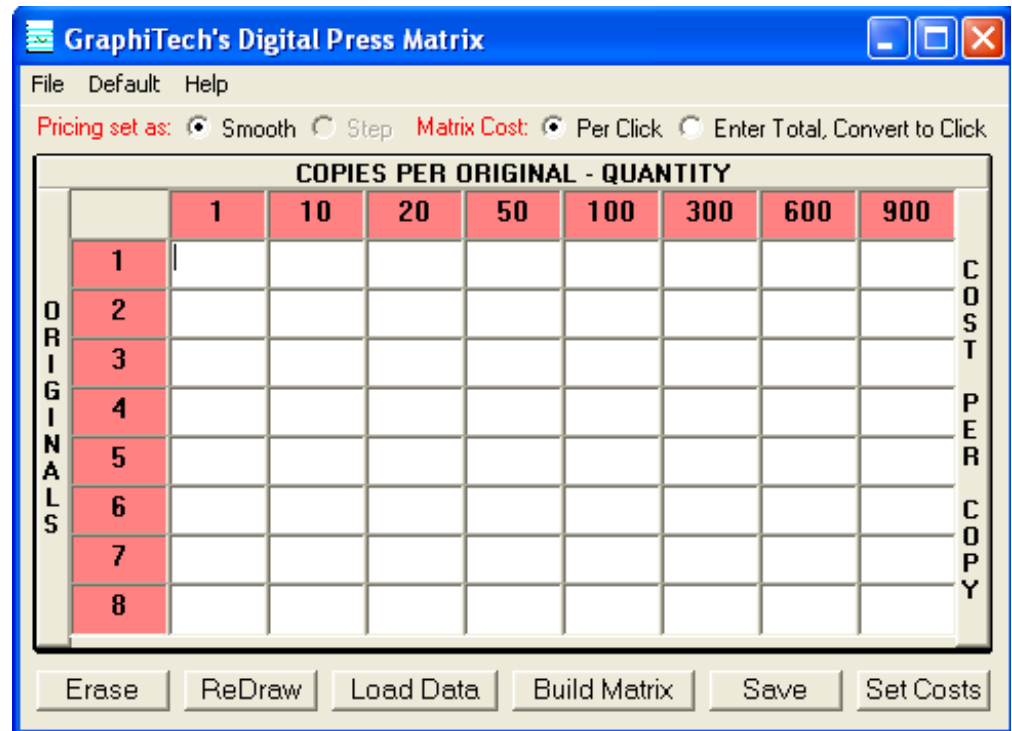


Figure 14

Setting up a Digital Press is often difficult because it's hard to determine what your costs are.

GraphiTech does have a stand-alone BHR program that can help in determining costs but in general, a Digital Press requires pricing that enables you to be competitive within your geographic area.

Competition sets the price: Let's say that you have examined the area and determined that the pricing for color copies ranges from \$1.25 per copy to \$.38 per copy. Quite a spread and that's for just a single copy.

As long as you are not below your click costs and can expect a reasonable profit, you have a great deal of latitude in how you price your product.

Eliminate Walk-In Traffic: You can elect to start your pricing high and eliminate all walk-in traffic yet retain your volumn customers by pricing higher volumns at lower per click prices. This way you have priced yourself in line with all the other shops except that you have now maintained your high volumn prices at a reasonable rate.

Bring in Walk-Ins: By starting your pricing at a low rate, you will assure yourself of getting as much walk-in traffic as possible and if you also keep the rate even lower for high volumn customers, you're assured of keeping these as well.

Franklin Catalog Pricing: Should you subscribe to the Franklin Catalog pricing guide, it is very easy to enter the values you find there for your Digital Press. But be warned that these price guidelines may not fit your geographic area and may need to be adjusted.

Setting Up your Digital Press

The entire matrix of Figure 14 may be modified including the Quantities and the Originals.

Per Click Data Entry: Let's start by entering some values into the first few cells of the grid. Figure 15 shows how they appear when the check box next to "Matrix Cost" is checked called "Click Cost"

Pricing set as: Smooth Step Matrix Cost: Per Click Enter Total, Convert to Click

COPIES PER ORIGINAL - QUANTITY								
	1	10	20	50	100	300	600	900
1	1.44	.745	.7065	.5828				

Figure 15

Total Cost Converted to Per Click: Figure 16 shows how you enter a total cost into each cell and what the result looks like as you move to the next cell. Note that the button called "Enter Total, Convert to Click" has been checked.

Pricing set as: Smooth Step Matrix Cost: Per Click Enter Total, Convert to Click

COPIES PER ORIGINAL - QUANTITY								
	1	10	20	50	100	300	600	900
1	1.44	.745	.7065	29.14				

Figure 16

Using the Build Matrix for Auto Pricing: Use of the Build Matrix Button will enable Auto-Price as shown in Figure 17.

Pricing set as: Smooth Step Matrix Cost: Per Click Enter Total, Convert to Click

COPIES PER ORIGINAL - QUANTITY								
	1	10	20	50	100	300	600	900
1	.5828	.5821	.5813	.579	.5751	.5595	.5362	.5128
2	.5818	.5811	.5803	.578	.5742	.5588	.5358	.5127
3	.5809	.5802	.5795	.5772	.5734	.5582	.5355	.5127
4	.5799	.5792	.5785	.5762	.5725	.5575	.5351	.5126
5	.579	.5783	.5776	.5754	.5717	.5569	.5348	.5126
6	.578	.5773	.5766	.5744	.5708	.5562	.5344	.5125
7	.577	.5764	.5756	.5735	.5699	.5555	.534	.5124
8	.5761	.5755	.5748	.5726	.5691	.5549	.5337	.5124

Erase ReDraw Load Data Build Matrix Save Set Costs

Build Matrix from Four Corner Entries
Place a per copy price in each corner of Matrix, then click Calculate to obtain full Matrix Cost per Copy.

Figure 17

Tab Between Corners: Each corner is highlighted and will allow you to only tab between each of them individually. You will not be entering any other cells as you tab through this special area. Simply tab between each of the four corners until your focus is on the Calculate Button, then click it to obtain the full pricing that is show in Figure 17.

Changing the Initial Pricing: Suppose you want to change the initial pricing to reflect a slightly higher initial price. Simply save the grid and fill out the remainder of the Digital Press information, retrieve it and make the changes similar to that shown in Figure 18

Pricing set as: Smooth Step Matrix Cost: Per Click

		COPIES PER ORIGINAL - QUAN				
		1	10	20	50	100
O R I G I N A L S	1	1.44	.5821	.5813	.579	.5751
	2	1.245	.5811	.5803	.578	.5742
	3	1.1833	.5802	.5795	.5772	.5734
	4	1.15	.5792	.5785	.5762	.5725
	5	1.13	.5783	.5776	.5754	.5717
	6	1.1108	.5773	.5766	.5744	.5708
	7	1.109	.5764	.5756	.5735	.5699
	8	1.1025	.5755	.5748	.5726	.5691

Erase ReDraw Load Data Build Matrix

Figure 18

If we had started with the higher prices to begin with, then the Matrix would have had fairly high prices until we reached the 900 quantity. In the example shown in Figure 18, we can now start out high and come down rapidly as we approach 10 copies.

Figure 19 below shows how a Color Press has been entered using a Franklin Catalog pricing guide. Each cell was entered manually and when the "Save Button" was pressed, the remainder of the information was requested.

Cost per Hour: This simply reflects the cost per hour of the equipment but does not in any way reflect how prices are determined. It may, however, reflect actual press time in one of the printouts.

Press Speed: Another area in which the actual price is not effected but the time for performing the operation will be.

Default Sales Code: This is used to determine how an invoice is distributed but the invoice sales code may be modified, as desired, without changing the Default Sales Code.

Press Name: Use as short a name as possible since many of the print outs may need to truncate the name if it is too long

% Eff 2nd Side: This simply means that the second side of a Duplexed sheet will be charged a percentage of the first side. This also may be negated depending on the checked value of the Worksheet (See Figure 13).

% Eff B&W: If you will be printing color on one side and B&W on the back side, then the two efficiencies will be multiplied together to determine the price. If the B&W is a Simplex, then it will be charged at the percentage shown.

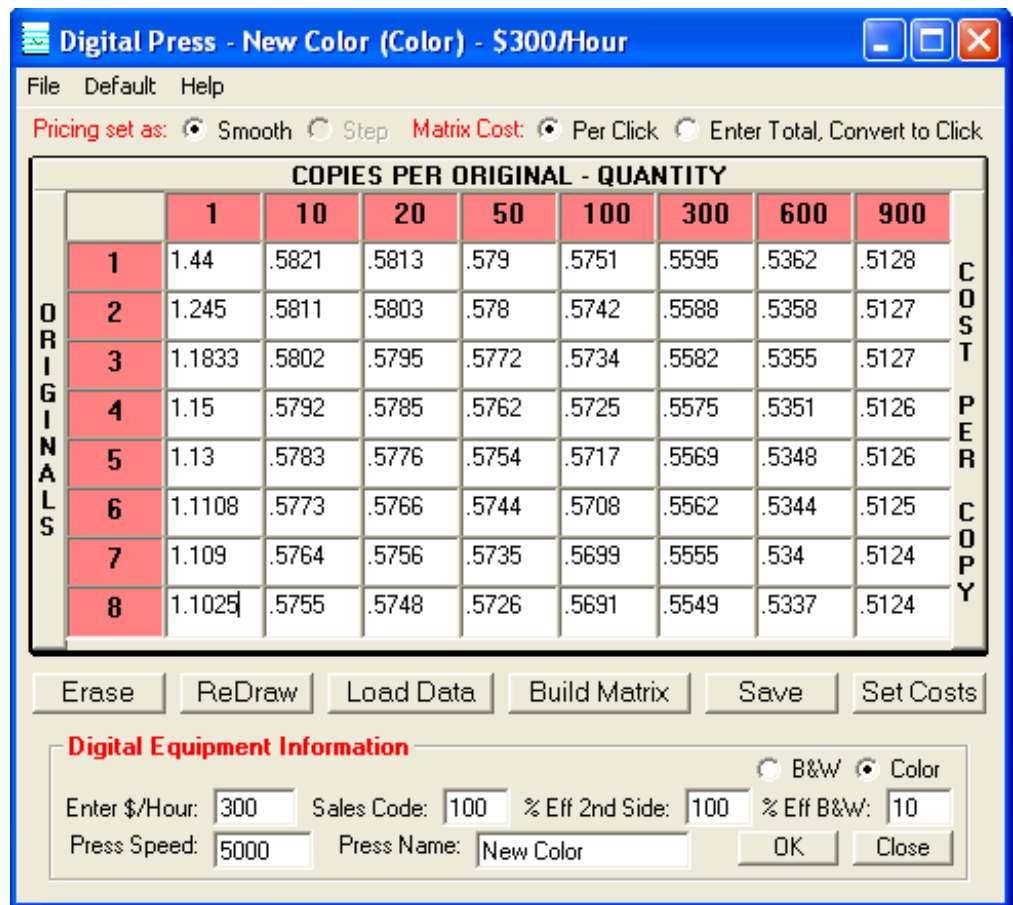


Figure 19

Setting Default Values

In general, there are several areas where we need to have the Default values set prior to actually performing an estimate.

Default Bindery

Sample Database

If you want to perform some estimates using the sample database values that are included with the GraphiTech Digital Estimator, then the current Defaults are satisfactory and you may skip this section for now.

Use Existing Database

If you wish to immediately switch to your existing Millennium OE/Est database values, then the defaults will be the next item that you will need to complete.

The reason for going through this procedure is that your database may not contain the Default values that are shipped with this program. And if you were to use the Default values shown and they don't exist in your Database, an error will result.

Copy GTDIGITAL.MDB to Existing Folder: As you recall, you must have already copied the GTDIGITAL.MDB from \Program Files\Graphitech Digital Estimator to \Millennium\Data. Note that the Digital Estimator may be found under Program Files(86) as shown in the path above.

Select "Default Bindery": Under the Menu Item identified as File, select "Default Bindery". You will see a similar screen to that of Figure 20.

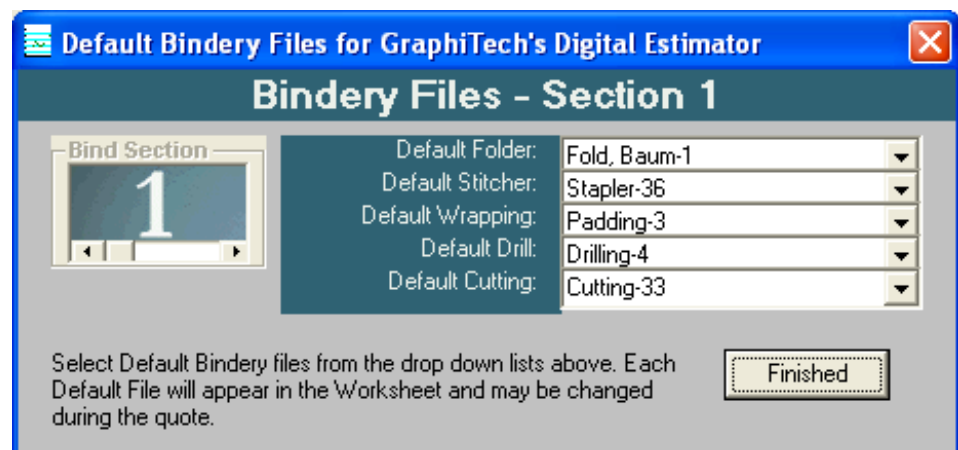


Figure 20

Note in the blue shading that five default items are shown as suggestions and are followed through with an appropriate selection for those suggestions.

The actual selection of the default items is completely up to you however, and does not need to follow the suggestions shown.

When finished, click on the button called Finished and a file will be created in the database to reflect your selections.

Default Worksheet

Here you only need to fill out the worksheet with the information you want to have come up when you either start the program or when you erase existing worksheet.

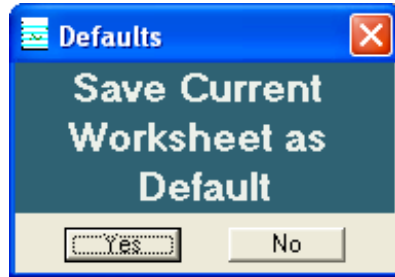


Figure 21

In our sample Worksheet we have the name of GraphiTech appear. You can leave this blank or you can put in a name of your choosing when saving the Worksheet.

Figure 21 will appear when you click on the phrase "Default Worksheet" under the File Menu.

Caution: Do Not Have A Quote or Job Number Showing when you save the Default Worksheet.

Default Imaging

The Default Imaging data area will appear as shown in Figure 22. This will cover up the existing icons so be sure to fill it out and click on the "Save" button.

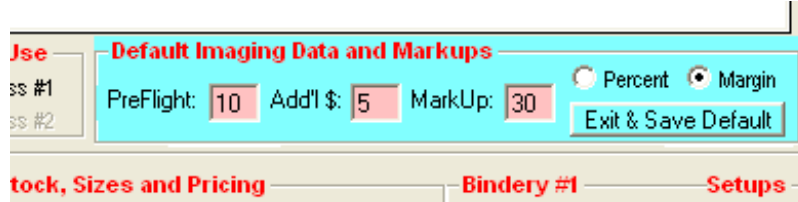


Figure 22

Pre-Flight: Many companies will charge a flat rate on all jobs to accommodate any pre-flight activity that may be encountered.

Add'l \$: This area refers to Additional Dollars that are needed for any job that passes through. This may be for consulting, delivery costs, etc.

MarkUp: Note that you will need to supply a MarkUp here as well as identifying whether this is a Percent Markup or a Percent Margin.

Software License

Each Digital Estimator that is installed requires a License to function. The License must be obtained within the 30 day evaluation period.



Figure 23

When you click on "Get Key Code", a number will appear on the left in the "KeyCode" box. Call or Email GraphiTech to obtain the correct password.

When you purchase the Digital Estimator, it can be a Single-User Version or a Multi-User Version. You can easily upgrade to the Multi-User by paying an additional fee. See pricing schedule at www.graphitech.com.

First Estimate

For this exercise, we will be using the Default values found during the initial installation as well as one of the existing quotes. All of the Default values within the GTDATA.MDB and GTDIGITAL.MDB are found in the Application Folder (usually in the Program Files Folder under the title "GraphiTech Digital Estimator").

Retrieving a Quote

As shown in Figure 24, we are going to click on the Retrieve Quote Icon (the folder) which brings up the Retrieve Quote Selection box shown in Figure 25.

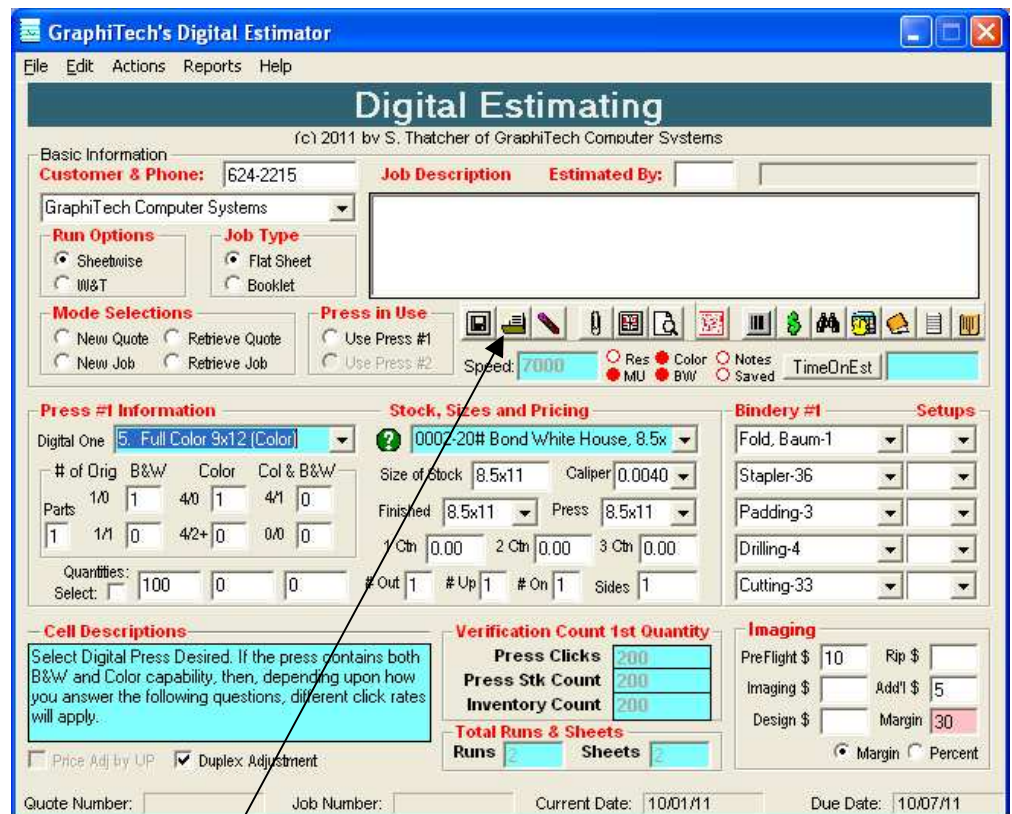


Figure 24 – Retrieve Folder

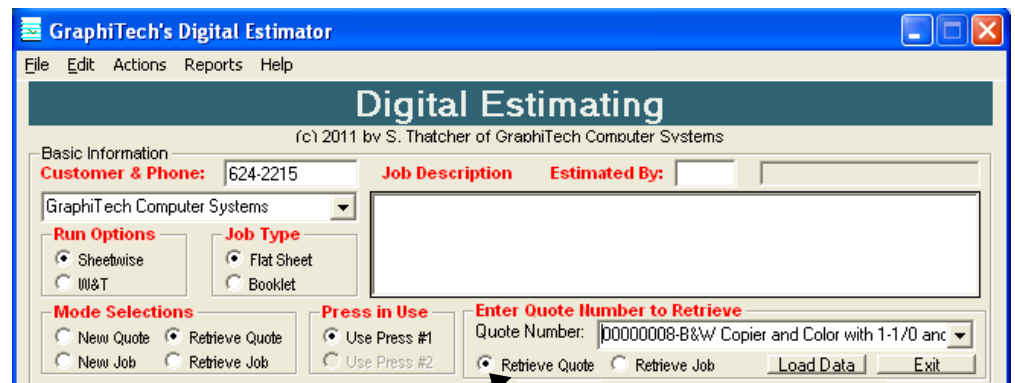


Figure 25 – Quote Selection Box

After clicking on the radio button identified as Retrieve Quote (Figure 25), we are able to view a complete selection of all quotes, with the most recent ones at the top of the list.

Figure 26 illustrates how the drop down list appears. Once the quote is found, just click to select it and then click the "Load Data" command shown in Figure 25.

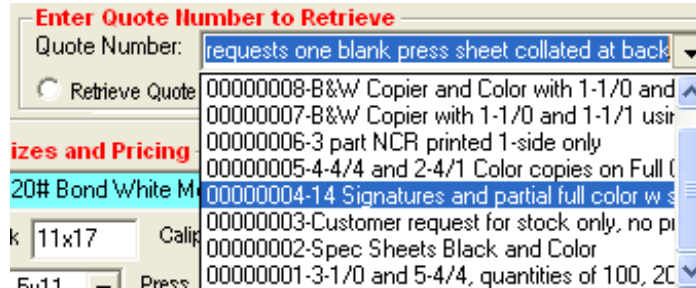


Figure 26 – Quote Drop-Down List

Now that the quote has been selected and the "Load Data" command was made, the Worksheet will re-populate with the data appropriate to the quote desired as shown in Figure 27. Should changes to the quote be necessary, it is a simple procedure to change whatever is required.

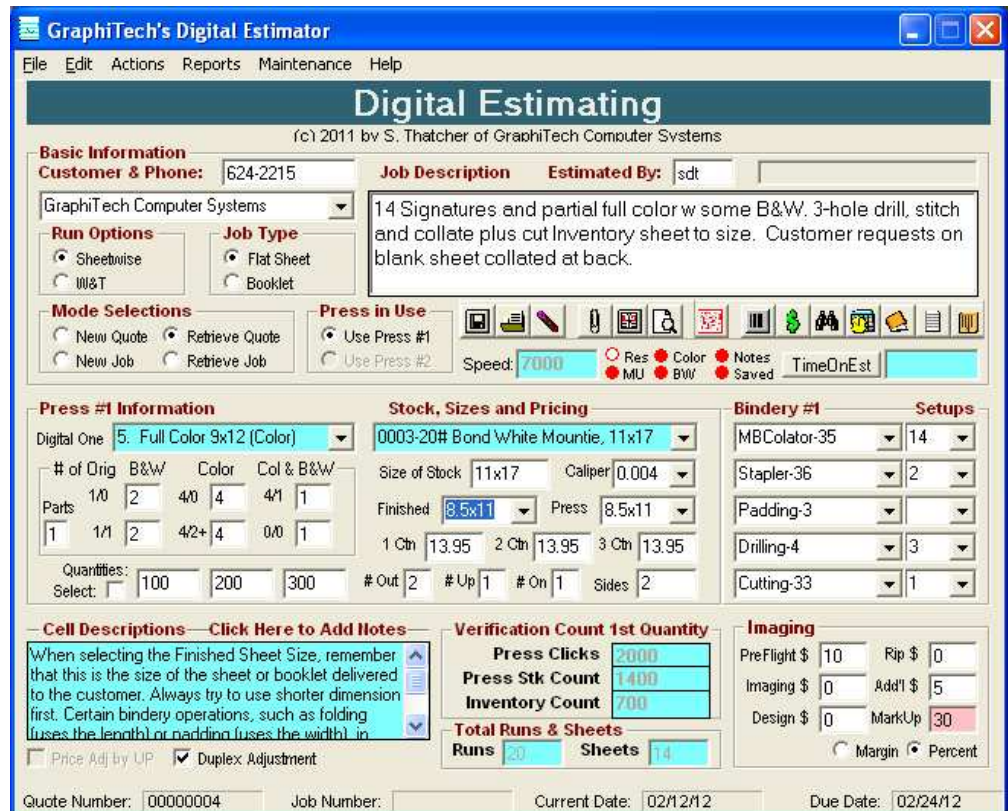


Figure 27 – the Retrieved Quote

If no other changes are required and we wish to obtain pricing for this quote, simply press the quote button shown in Figure 28.



Figure 28 – Quote Button

The result is the Worksheet shown in Figure 29.

GraphiTech's Digital Estimator
 File Edit Actions Reports Maintenance Help

Digital Estimating
 (c) 2011 by S. Thatcher of GraphiTech Computer Systems

Basic Information
 Customer & Phone: 624-2215 Job Description Estimated By: sdt
 GraphiTech Computer Systems
 14 Signatures and partial full color w some B&W, 3-hole drill, stitch and collate plus cut Inventory sheet to size. Customer requests on blank sheet collated at back.

Run Options Job Type
 Sheetwise Flat Sheet
 IW&T Booklet

Mode Selections Press in Use
 New Quote Retrieve Quote Use Press #1
 New Job Retrieve Job Use Press #2

Speed: 7000 Res Color Notes MU BW Saved TimeOnEst

Press #1 Information Stock, Sizes and Pricing Bindery #1 Qty1 Cost
 Digital One: 5. Full Color 9x12 (Color) 0003-20# Bond White Mountie, 11x17
 # of Orig B&W Color Col & B&W Size of Stock 11x17 Caliper 0.004
 Parts 1/0 2 4/0 4 4/1 1 Finished 8.5x11 Press 8.5x11
 1 1/1 2 4/2+ 4 0/0 1 1 Ctn 13.95 2 Ctn 13.95 3 Ctn 13.95
 Quantities: # Out 2 # Up 1 # On 1 Sides 2
 Select: 100 200 300

Item Description	100	200	300
Retail Selling Price:	\$1039.77	\$2061.73	\$3199.20
Cost of Job:	\$799.83	\$1585.94	\$2460.92
Cost for Simplex Color:	\$200.36	\$427.12	\$680.16
Cost for Duplexed Color:	\$392.71	\$837.16	\$1333.11
Cost for Simplex B&W:	\$10.02	\$21.36	\$34.01

Bindery #1
 MBColator-35 \$74.67
 Stapler-36 \$10.88
 Padding-3
 Drilling-4 \$7.16
 Cutting-33 \$4.53

Imaging
 PreFlight \$ 10 Rip \$ 0
 Imaging \$ 0 Add'l \$ 5
 Design \$ 0 MarkUp 30
 Margin Percent

Quote Number: 00000004 Job Number: Current Date: 02/12/12 Due Date: 02/24/12

Figure 29 – Quoted Worksheet

Note that the bottom left contains a scrollable listing of all the price information, as well as details regarding the costs for every signature, including total costs for bindery.

Also note on the far right side, the bindery costs are shown for the first quantity only. These costs allow you to quickly determine if there is any potential problem with the quote.

Reports

The GraphiTech Digital Estimator provides for various reporting functions. These are:

- Printed Worksheet
- Printed WorkOrder**
- Printed Job Ticket**
- Printed Time/Cost Summary
- Printed Bid (Quote)
- On-Screen and Printed Cutting Diagrams
- Printed Delivery Ticket**

**These reports require that the user have a Job Number applied and a specific quantity selected prior to printing the report.

On-Screen Help

If you need to have a sample First Quote or Retrieved Quote on hand while working on your first estimate, use the "Help Menu" to select "Help with First Estimate" as shown below.

The screenshot displays the 'Form1' window titled 'How To Estimate First Quote or Job'. It is divided into two columns of instructions:

- First Quote:**
 1. First, Select your Customer and fill in the Job Description.
 2. Under Mode Selections, click on New Quote or Job.
 3. Under Press, leave the Full Color Selection.
 4. Let's assume you need to quote 2-4/0's and 1-4/4.
 - a. Place a 2 in the 4/0 box and a 1 in the 4/2+ box.
 - b. Zero out any selections that may be part of default worksheet.
 5. Enter appropriate quantities desired.
 6. Accept remainder of quote as correct (Stock and Finished Size)
 7. Click the Red Circuit Diagram (7th Icon from left)
 8. Under Reports Menu, print any report desired.
- Retrieve Quote:**
 1. Select Retrieve Quote from Actions drop down menu or
 2. Click on Folder Icon and select Retrieve Quote.
 3. Click on the Down Arrow of the List Box to see Quotes.
 4. After selecting Quote, click on Load Data to populate screen.
 5. Modify Customer Name, Description or Content as desired. Note that changes will alter existing quote.
 6. If New Quote desired, click New Quote under Mode Selections.
 7. To Price Out Selection, Click the Red Circuit Diagram (7th Icon from left)
 8. Under Reports Menu, print any report desired.

Below the instructions is the main software interface for 'GraphiTech's Digital Estimator'. The interface includes a menu bar (File, Edit, Actions, Reports, Maintenance, Help), a title bar, and a main workspace with the following sections:

- Basic Information:** Customer & Phone: 624-2215, Job Description, Estimated By: sdt.
- Run Options:** Sheetwise (selected), W&T.
- Job Type:** Flat Sheet (selected), Booklet.
- Mode Selections:** New Quote, Retrieve Quote, New Job, Retrieve Job.
- Press in Use:** Use Press #1 (selected), Use Press #2.
- Speed:** 7000.
- Res Color Notes:** Res (selected), MU, Color, B&W, Notes, Saved.
- TimeOnEst:** 00:00:58.
- Press #1 Information:** Digital One: 5. Full Color 9x12 (Color).
- Stock, Sizes and Pricing:** 0002-20# Bond White House, 8.5x11. Size of Stock: 8.5x11, Caliper: 0.0040. Finished: 8.5x11, Press: 8.5x11. 1 Ctn: 0.00, 2 Ctn: 0.00, 3 Ctn: 0.00. Quantities: 100, 300, 500. # Out: 1, # Up: 1, # On: 1, Sides: 2.
- Bindery #1:** Fold, Baum-1, Stapler-36, Padding-3, Drilling-4, Cutting-33.
- Cell Descriptions:** Select Digital Press Desired. If the press contains both B&W and Color capability, then, depending upon how you answer the following questions, different click rates will apply. Price Adj by UP: Duplex Adjustment:
- Verification Count 1st Quantity:** Press Clicks: 400, Press Stk Count: 300, Inventory Count: 300.
- Imaging:** PreFlight \$: 10, Rip \$: Add'l \$: 5, Design \$: Margin: 30 (Margin selected).
- Total Runs & Sheets:** Runs: 4, Sheets: 3.
- Footer:** Quote Number: Job Number: Current Date: 01/29/12 Due Date: 02/03/12

If you would like to go to GraphiTech's Web Page, simply click on the Help Menu and select "GraphiTech's Web Order Page". You will be taken to our Digital Web Page which is a special low cost area for obtaining software from GraphiTech. Although the Digital area offers some of the most powerful estimating programs available, there are some utility functions and support that are not included in order to keep costs down.

Should you desire full Maintenance support, these items may be purchased separately by selecting Pricing area on the left side of web page.

Printed Reports

The following reports are a sample of what you will see when you create any of these reports. Headings for Bids plus modification of disclaimers may be made through the Maintenance Section of this program.

Quotation Form

<u>GraphiTech Computer Systems</u>		Quotation	
4174 Larch Avenue Suite 100 Palm Beach Gardens, FL 33418 Phone: 800-634-8324 Fax: 561-624-2215 Email: scott1@graphitech.com Web: http://www.graphitech.com			
Date: 10/03/2011			
Quotation No: 00000004			
Jackie's Designs 111 Main Street Boynton Beach, FL 33437		Phone No: 555-555-5555	
Job Description:	100	200	1000
14 Signatures and partial full color w some B&W. 3-hole drill, stitch and collate plus cut Inventory sheet to size. Customer requests one blank press sheet collated at back.	\$1041.33	\$2064.85	\$9407.34
This estimate includes all operations and materials to complete the work as specified above, based on our understanding of the specifications provided to our estimating department. Please note that all sales are subject to the "Standard Terms of Sale" set forth on the reverse side of this form.			
All orders require a minimum 50% down payment, with the remaining balance due upon partial or full delivery of the product unless credit arrangements have previously been agreed upon.			
We appreciate this opportunity to provide this product to you.			
Accepted by Jackie's Designs: _____			
Date: _____			

Figure 30

Layout/Cutting Reports

GraphiTech has integrated their stand-alone cutting and layout program with the Digital Estimator. It has a slightly different appearance but functions similarly.

Figure 31 shows how the cutting diagram appears on your Worksheet.

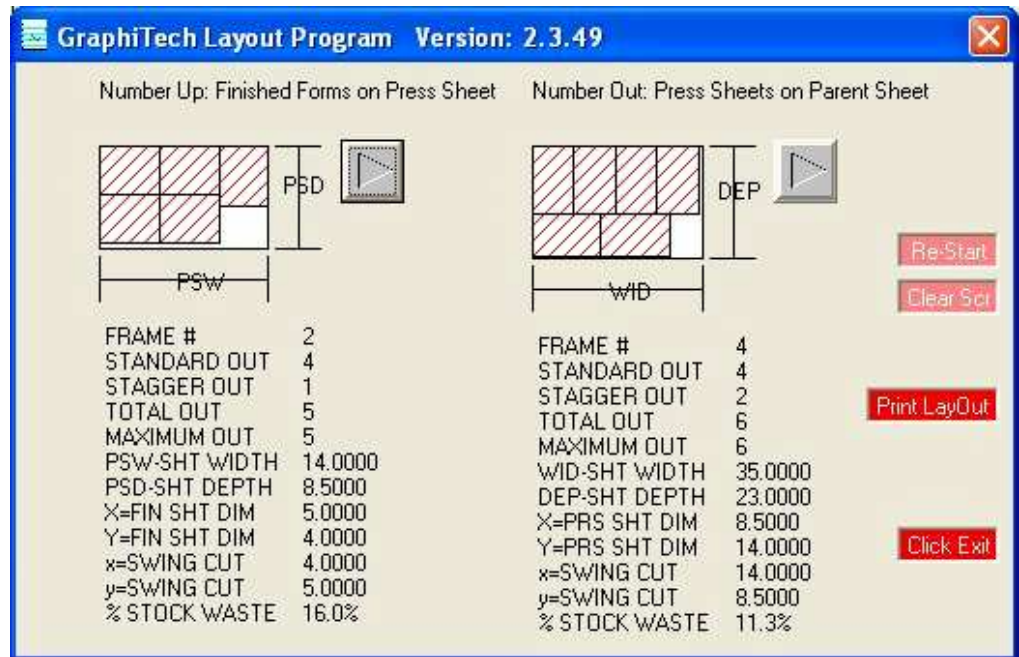


Figure 31

Each of the buttons shown above can be pressed to show various cutting options. A full description of the waste factors, quantity out of a certain sheet and more is readily available.

To print the form just click on the "Print Layout" button and the report can then be included with your Work Order/Pick Slip.

Time & Cost Summary

The Time/Cost Summary is an excellent means for checking all the details of your estimate. If a problem exists, you will more than likely see what it is in this report.

Although there appears to be a lot of data to sift through, the actual time required is fairly short. And eventually you will be able to pick and choose what data you wish to review.

Digital Print Operations Time/Cost Summary			
Quote No:	00000004	Job No:	N/A
Acct Name:	Jackie's Designs	Date:	10/01/11
Phone:	555-555-5555	Due:	10/11/11
Stock:	0003-20# Bond White Mountie, 11x17	Colors:	B&W and Color
Desc:	14 Signatures and partial full color w some B&W. 3-hole drill, stitch and c	Press:	Full Color 9x12 (Color
		Side/Up/On:	2 / 1 / 1
		Production:	Sheet Mode
		PSS/FSS:	8.5x11 / 8.5x11
		Caliper:	0.004
Pre-Press Summary		Bindery Summary (Qty=100)	
Item:	Cost	Item:	SetUp Time Cost
Pre-Flight Cost:	\$10.00	MBColator-35:	14 \$74.67
Ripping Cost:	\$0.00	Stapler-38:	2 \$10.88
Imaging Cost:	\$0.00	Wrapping-38:	1 \$1.20
Design Cost:	\$0.00	Drilling-4:	3 \$7.16
Additional Dollar Cost:	\$5.00	Cutting-33:	1 \$4.53
Press Summary			
Item:	100	200	1000
Retail Selling Price of Job:	\$1,041.33	\$2,064.85	\$9,407.34
Total Cost of Job:	\$801.03	\$1,588.34	\$7,236.41
Press Cost for Simplex Color:	\$200.36	\$427.12	\$2,049.60
Press Cost for Duplex Color:	\$392.71	\$837.16	\$4,017.22
Press Cost for Simplex B&W:	\$10.02	\$21.38	\$102.48
Press Cost for Duplex B&W:	\$19.64	\$41.86	\$200.86
Press Cost for Color/BW Combo:	\$55.10	\$117.46	\$563.64
Cost of Full Bindery:	\$98.44	\$108.87	\$189.97
Cost for Stock:	\$9.77	\$19.53	\$97.65
Cost for Pre-Flight:	\$10.00	\$10.00	\$10.00
Cost for Imaging:	\$0.00	\$0.00	\$0.00
Cost for Design:	\$0.00	\$0.00	\$0.00
Cost for Ripping:	\$0.00	\$0.00	\$0.00
Cost for Additional Items:	\$5.00	\$5.00	\$5.00
Total Press Time:	000:11	000:22	001:51
Total Bindery Time:	002:27	002:48	005:37
Additional Thousand Retail:	---	---	\$9,392.34
Additional Thousand Cost:	---	---	\$7,221.41
Click Cost per Side:	\$0.40	\$0.40	\$0.36
Number of Sides:	20	20	20
Overall % Markup:	30	30	30
Overall % Gross Margin:	23	23	23
Effective Impressions/Hr:	7000	7000	7000
Finished Sheets Delivered:	1400	2800	14000
Press Sheets Delivered (uncut):	1400	2800	14000
Inventory Sheets to Order:	700	1400	7000
Printed Press Sheets (Color):	900	1800	9000
Printed Press Sides (Color):	1300	2600	13000
Printed Press Sheets (B&W):	400	800	4000
Printed Press Sides (B&W):	700	1400	7000
Press Sheet Clicks:	1300	2600	13000
Press Side Clicks:	2000	4000	20000

Figure 32

Work Order / Pick Slip


The Work Order/Pick Slip provides a dual function in that it may be used to identify stock that is needed for the job and thus be placed on the skid or carton for future use or as a short form Job Ticket (Work Order).

In many cases, identifying stock prior to running the job assures you that the stock won't be used for something else.

In addition, the Bar Codes presented identify not only the Job, but the quantity of stock required along with the Stock Number. In this way, should you have GraphiTech's Job Tracking or Job Costing program, data may be entered using the Bluetooth Bar Code Readers or the Industrial Multi-Drop network of KeySys.

Figure 33 shows what the Work Order looks like.

Short Form Work Order / Pick Slip


Monday, October 03, 2011

00001003

Quote No:	N/A	Job No:	00001003	Date:	10/01/11	Press:	Full Color 9x12 (Color
Acct Name:	Jackie's Designs			Due:	10/11/11	Sides/Up/On:	2 / 1 / 1
Phone:	555-555-5555	Colors:	B&W and Color			Production:	Sheet Mode
Stock:	0003-20# Bond White Mountie, 11x17					PSS/FSS:	8.5x11 / 8.5x11
Notes:						Caliper:	0.004


Job Description:

14 Signatures and partial full color w some B&W. 3-hole drill, stitch and collate plus cut inventory sheet to size. Customer requests one blank press sheet collated at back.


Production Notes:

Customer requests that we call them prior to shipment... they need to have 25 copies / loose without stitching. Watch the click rate carefully Bill. Their files will be uploaded soon.

Item:	Quantity:	Description:	Sheet Size:
Order:	200	Sets, Finished and Trimmed; Delivered to Customer	8.5x11
Sheets:	2800	Total Sheet Count; Finished and Trimmed	8.5x11
Run:	2800	Press Sheets, cut 2 Out of Parent, 1 Up.	8.5x11
Pull	1400	0003-20# Bond White Mountie, 11x17, Parent Sheets	11x17




0003
Inventory
Number




1400
Pull Qty


*** FOLD OR CUT HERE AND ATTACH TO SKID TO RESERVE FOR THIS JOB ***



0003
Inventory



00001003
Job Number



1400
Pull Qty




00001003

Figure 33

Job Ticket

The Job Ticket is used by Production Personnel to correctly identify all aspects of the printed job, from Pre-Press, Press and Bindery to Finishing.

If you printed this report without a Job Number, you would have received an "Office Copy" Job Ticket that would not contain any bar codes.

PRODUCTION JOB TICKET													
 0003 Inventory			 00001003 Job Number				 1400 Pull Qty						
Quote No: N/A		Job No: 00001003		Date: 02/12/12		Press: Full Color 9x12 (Color)							
Acct Name: GraphiTech Computer Systems				Due: 02/24/12		Up/On/Out: 1 / 1 / 2							
Phone: 624-2215		Colors: B&W and Color				Production: Sheet Mode							
Stock: 0003-20# Bond White Mountie, 11x17		Sides: 2		Job Type: Sheetwise		Finish Sht: 8.5x11							
Calper: 0.004						Press Sht: 8.5x11							
Job Description: 14 Signatures and partial full color w some B&W. 3-hole drill, stitch and collate plus out Inventory sheet to size. Customer requests on blank sheet collated at back.					Production Notes: Customer requests that we call them prior to shipment... they need to have 25 copies loose without stitching. Watch the click rate carefully Bill. Their files will be uploaded soon.								
Production Quantities													
Item:	Quantity:	Description:							Sheet Size:				
Order:	200	Sets, Finished and Trimmed; Delivered to Customer							8.5x11				
Sheets:	2800	Total Sheet Count; Finished and Trimmed							8.5x11				
Run:	2800	Press Sheets, cut 2 Out of Parent, 1 Up.							8.5x11				
Pull:	1400	0003-20# Bond White Mountie, 11x17, Parent Sheets							11x17				
Pre-Press													
Pre-Flight:	Ripping:	Imaging:	Design:	Add'l Cost:									
X				X									
Stock Required													
Stock #:	Description:	Stock Size:	Weight/M:	Calper:	Parts:	Color:							
0003	20# Bond White Mountie	11x17	10	0.004	1	WHITE							
Press Information													
Press:	Order:	Runs:	Sigs:	1/0:	1/1:	4/0:	4/4:	4/1:	0/0:	Up:	On:	Out:	Sides:
Full Color 9x12 (Col	200	20	14	2	2	4	4	1	1	1	1	2	2
Bindery Operations													
Bindery Name:	Percent:	Quantity:	Setups:	Passes:	Rate:	Size:							
MBColator-35	100	2800	14	1	2000	8.5x11							
Stapler-36	100	2800	2	1	1200	8.5x11							
Drilling-4	100	2800	3	1	18000	8.5x11							
Cutting-33	100	2800	1	1	60000	8.5x11							
00001003													

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