Guide to Using

Millennium Order Entry & Basic Estimating

By GraphiTech Computer Systems

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Overview

What's Inside

General

The Millennium Order Entry program has been designed to provide an informative and easy to use system for the efficient production of Work Orders (Job Tickets), Sophisticated Estimates, a user created Bid (with both Email and Fax-on-demand capability) and the reporting of detailed time and cost summaries related to the estimate. The file structure for Millennium Order Entry & Estimating includes Inventory, Customer/Contact and Ship To Data Base, enhanced press and bindery files plus extensive Pre-Press and Vendor activity.

In addition, several options are available for expanding the system that provide for;

1. Interfaces to Basic A/R, Infinity Power Accounting and Quick Books Accounting.
2. Expanded Estimating including Layouts, Price List generator, Multi-part estimates, Budgeted Hourly Rates analysis, plus numerous expansion flags, warnings and reports.
3. An easy to use Multiple Bid package with Fax-On-Demand and Email capability.
4. Invoicing with Data-Link to Historical Ledger, Multiple Ship To's and Multiple Contacts.
5. Electronic Job Tickets that provide the shop floor with instantaneous information on the status of the order.
6. Complete Inventory reporting with Sheet, Roll, Imaging and Other materials with reports providing usage history, inventory alerts and additional impact on Estimating, Order Entry and Job Costing.
7. Job Costing module that combines the power of the Database with our exclusive Drill Down reporting system called "Pivot". Other features include Payroll reporting, Job Cost, Employee and Machine productivity plus much more.
8. Shop Floor Data Collection systems including KeySys, the only Keypad shop system available for Windows based systems plus TermSys, a full featured terminal based data collection system.

Up to 4 quantities may be entered during an estimate (Quote). When quoting a job, a complete time/cost report is available for Bindery, Pre-Press, Departmental and Over-all. In addition, the users may create their own bid using an existing logo or using simple text input for the header. Disclaimers and other data are fully editable. When converting a Quote to an Order, only one quantity may be entered. Also, a Work Order may be printed only when an order is present.

Work Order Production

By selecting the menu item identified as Orders/Quotes, you are provided with six options in order to produce a Work Order or to generate a Quote.

The first option (Create New) represents the usual method of entering a new Job or Quote. The second icon (Create from Existing) is used to copy a previous Job or Quote to a New Job or Quote, thus eliminating the need to re-key much of the data. The third icon (Retrieve) is used to modify an existing order, using the same job number, and to save it in the same location as it was retrieved. The fourth icon (Retrieve and Assign New Number) permits the user to retrieve a Job or Quote and to assign a new Job Number or Quote Number to that item. The fifth icon (Create Order from Quote/Job) allows the user to select a quote or job previously stored and assign a new Job Number to it. In this case, the procedure varies so that the user is taken to the Summary Screen after selecting the quantity desired for the Order. The last icon (Search) is used to search the Database for jobs or quotes by customer, product code, purchase order, date range, plus numerous other methods.

Note that if you have the Estimating Option, you are asked if you wish to assign a quote number or a job number to any new or retrieved items.

Data Files

If you have a previous version of the "Professional Estimator" from GraphiTech, all data files except for pre-press, may be imported. If you do not have this program, then use the sample data that may be loaded during the install. Use of the sample data will provide you with an instantly usable program, complete with press, bindery, inks, stock and more.

After importing data, it is suggested that you select the "Press" Icon from the Order/Quotes menu and then enter various sizes into the Finished Size cell. All data entered in this manner will also transfer to the Bleed Size and the Press Size, thus only requiring a single entry. You will receive a warning but simply hit enter to bypass.

Register Features

If you are installing the program for the first time, you will see a message that states you have a trial license with 1-90 days remaining as shown in Figure 1.

Figure 1 – Trial License

You may obtain the unlocking code for Order Entry and Estimating, as well as options by simply checking the boxes associated with the options you desire. If option not available, then the item will not be displayed in the summary screen or will be gray. If option is not displayed, it is because the option is not yet available for this module.

General Input Screens

There are eight separate screens in Order Entry with seven that are used for input. One screen is used for output summary. They are defined as follows:

1. **General Input:** Consists of Account info as well as due dates, mailing criteria, phones and fax data, and other general information.
2. **Pre-Press:** Provides for input of all pre-press activity from Imaging to Stripping to File names used to provide I/O as well as media types.
3. **Stock:** This screen provides the Estimator or Order Entry person with the ability to enter stock pricing either in CWT or $/M based on multiple carton rates.
4. **Press Information:** In addition to the type of press, also includes graphical representation of spoilage/speed curves, plus full description of press specifics such as signatures, pages, press runs, etc.
5. **Ink Selection screen:** Easily identify process, PMS or other ink colors along with coverage.
6. **Bindery Selections:** Identify all bindery operations and view graphical speed/spoilage curves for all selections.
7. **Outside Services:** Identify any outside purchase or service along with associated cost.
8. **Summary Screen:** A breakdown screen for all costs, bindery items, and Job Specifications. Contains handy checklist of sections completed. Also provides Icons for selection of Estimating, Time/Cost Summary, Job Ticket production, Invoices, Bids and more.

WorkStation

The PC required for use with Millennium Order Entry may be minimally configured as follows:

- 133 MHz Pentium – 200 MHz desired
- 16 MB of Ram -- 64 Meg desired
- 1-3 GB Hard Drive

This workstation may be used with other applications as well. It is also recommended that all workstations be provided with sound capability.

Network

Various networks may be used with ***Order Entry***. These include Novell, NT, and others, all of which must support Win95/98/NT or Windows2000.

Data Modes

The Order Entry & Estimating module is only available in Database Mode as opposed to the combined mode for Job Costing and Shop Floor systems. The exception to this is when the user is running other programs in Compatible Mode (Dos and Database), then Order Entry/Estimating will store all entered Jobs into the "Job.Log" file in Job Costing. Other Millennium products such as Job Costing, KeySys and TermSys are available in both Database and Compatible Mode (Dos). The advantage of having only Database Mode is greater speed. Please call GraphiTech Technical Support at **800-634-TECH** for further assistance on transferring your existing data when using the Millennium Order Entry.

Splash Screen

The screen shown below is the first to appear when you start to load Order Entry.

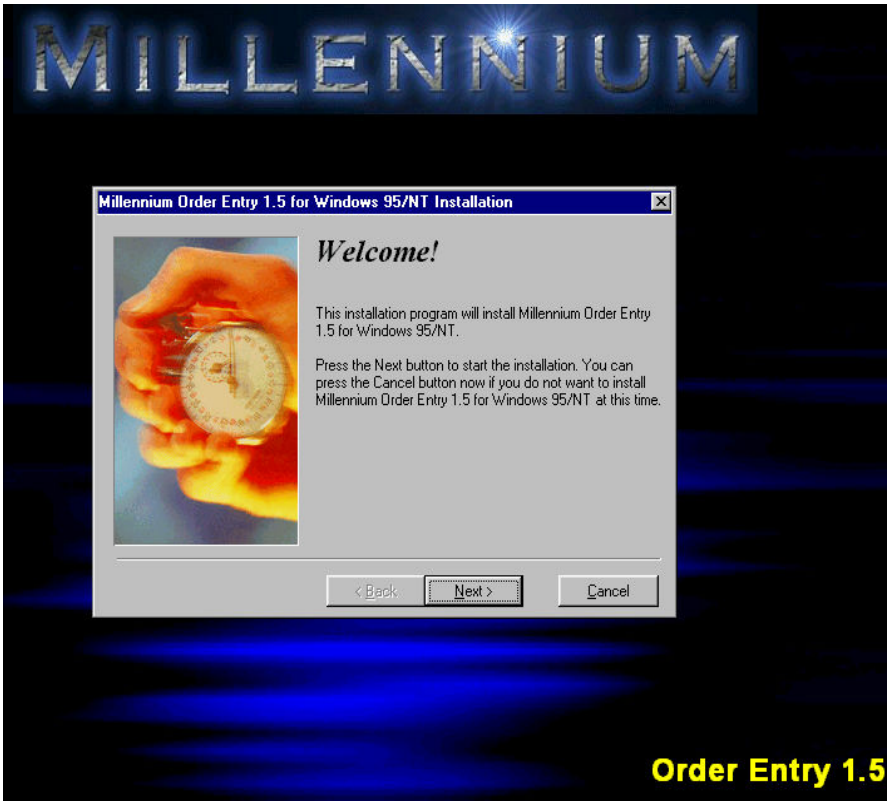


Figure 2 – Splash Screen

Installing Millennium Order Entry

To load *Millennium Order Entry*, insert the CD into your drive and close the door. If the CD includes other programs from GraphiTech, you will be presented with a menu of items from which to select your choice. If the CD contains only one application, it will start the loading process automatically. If it does not load

however, double click the folder you wish to install, and then double click the word SETUP. If you have a sound card, then a short melody will be heard prior to the start up screen. After reading the short Welcome, click *Next*.

Note: You can also click on the *Back* button to step back to the previous screen. Also at any time you can click the *Cancel* button to terminate the installation.

The following should clarify the screens you will encounter during the installation process. Please follow these steps.

License Agreement

After clicking the next button you will be shown the License Agreement. Click ***I Agree***. This is a standard license agreement except that it provides a broader definition of where and how you may use the software. Click Next.

About Your Company

If the box shown is empty, please enter your company name. Please be certain that you spell the Company Name the same way each time you install this program on different computers. In that way, you will only need one Key Code for the program, rather than separate Key Codes for every computer. Click on the ***Next*** button to proceed.

Destination Folder

Here you will want to provide the location of the ***Millennium*** Folder, which is almost always the drive letter C (Program Locations). It is assumed that you are operating under Windows 95/98/NT or 2000, thus long filenames are used for default entries. In fact, the computer you are installing this program into must have a Windows operating system. The destination folder may however, be limited to 8 characters if necessary or if you desire. One such name would be ***Millenia*** in the case of using a non-NT server.

This screen also identifies the amount of free space available and the amount of space after installation. If this number is small or negative, you should not install until after freeing up additional space. Click ***Next*** to continue.

Data Folder

If you are using a stand-alone computer, then the data folder will remain on your C: drive as shown in the text box. If you are operating on a network, then you must identify the drive of your network. If desired, you may click the ***browse*** button in order to select the network drive. In either case, the Destination folder must be identified the same as you created above (i.e., Millennium, Millenia, etc). Click ***Next*** to continue.

Back Up Replaced Files

Accept the default answer of Yes.

Back Up Directory

Select the default directory (usually on the C drive) as specified.

Program Folder

This will specify the program folder name where you want the application icons to reside when you click the Windows Start button on the Windows taskbar. This is normally your Station's Hard Drive, and *NOT* the Network Drive.

The default name for the Program Folder will appear at the top of the list box (***GraphiTech MILLENNIUM***). It is recommended that you have the box checked which allows an icon to be created also on the desktop. Click ***Next*** to proceed.

Ready to Install

Simply click the ***Start*** button and Millennium Order Entry will install itself.

Installation Complete

Once all data has been loaded, click ***Finish*** to view the Readme File. Once this is complete, you will need to re-boot the computer, even if the program forgets to tell you to do so. Also, if you experience problems after the installation of additional products, you should shut down Windows and re-boot to allow the configuration files to be set.

Technical Support

If you need further assistance, please call our technical support hotline at **800-634-TECH**. Send written documentation of problems to support@graphitech.com and both Scott Thatcher and Nelson Wiscovitch will receive the document. Or visit our web site at www.graphitech.com for the latest news, updates, questions and answers.

Running Millennium Order Entry

Start-Up

The Icon.

After installation, an icon is placed on the desktop. To run the program, double click the icon.

Splash Screen

The first window that appears when running the program initially is the Splash Screen. See Figure 1.

Converting Data

NOTE: You must load the Y2K version of the Professional Estimator prior to transferring data to this Database (if you own the Dos version of the Estimator). The Stock Inventory program now contains several routines that will correct problems that have been found to exist in the STOCK.DAT file. Once in the DOS Inventory Program - from Master Menu hit the letter 1 followed by 5 for File Maintenance followed by 1 for Stock Inventory - hit 1 to access the File Maintenance area followed by the number 9 followed by entry of a 1 and the number 2000. Then specify that you wish to zero out the History and the Quantity. Next run item 3, which is a means of looking for incorrect dimensions and is also a means of correcting corrupted records within the stock file. If you have run the DOS Data Collection program for some time, then you will need to run a program called MODAWIPE.EXE that is found on the CD. Copy the MODAWIPE.EXE to the EST directory and run it. It will clean up the MODA files automatically.

Note also that Order Entry, unlike Job Costing, KeySys and TermSys, is available only in Access Database Format. It cannot be run in the Compatible Mode (except as regards Job.Log), meaning that it creates and updates only Access Database information.

In order to import your existing data (assuming you used the previous GraphiTech Dos Program) you will need to get to the Data Files section of the Millennium program by either using your existing password which is used to access Estimating or by using the word “password” or “11111”. You will need to convert two sections of data, one includes inventory, press and bindery data and the second consists of your customers, Employees and Sales People (CSR’s).

Data Files

Once you have converted the data, you will need to access various sections of your Data Files in order to complete the data entry portion. Remember that when transferring data from an existing Dos program, you will be transferring only a small amount of the necessary information. The balance of the data required is up to you to enter.

If you are planning to use the Estimating portion of Order Entry, you will need to provide detailed data files in this section.

There are many methods available to the Estimator or Plant Manager for obtaining basic hourly rates for various pieces of equipment. You may contact NAPL or your local PIA affiliate for information on Machine rates. Some states, such as California, have books available that identify the hourly rates of many presses and bindery functions used within the printing industry.

Of course, you may also evaluate your own equipment based upon your own overhead and costs. This is also known as Budgeted Hourly Rate Analysis or BHR. If you have a copy of GraphiTech’s BHR program, simply run out the values based on the value and usage of each machine.

Importing Dos Files

The following screen is what appears when you wish to import data from the DOS.

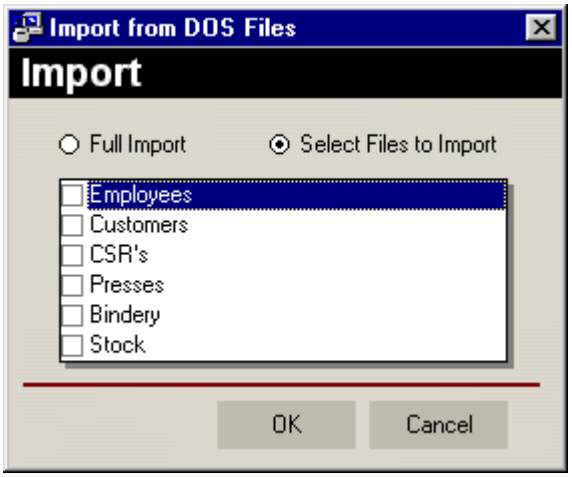


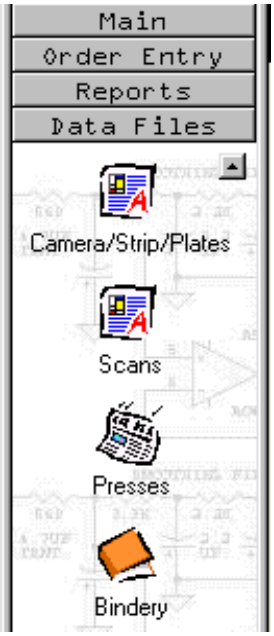
Figure 3 – Importing Files

Order Entry and Estimating require only those files specified above. Simply click on the desired import box, followed by OK. Note: If you do not have Job Costing, then try the import of STOCK first. This is a good test to determine if you have run the preceding DOS programs correctly. If the import goes well, then click all the

remaining boxes and import them, as well. **Note**: If you do not own the previous Dos estimating program, then do not even try to import any data, simply use the existing program data as shown in the Data Files section. Now let's look at the Data File section.

The Data File Menu

The Data Files portion of Order Entry/Estimating consists of numerous icons.



Each icon in the Data File menu contains an input screen. As seen in Figure 5 and Figure 7, the Input Screen may be a simple matter of entering a small amount of data, or it may be a significant amount of data as seem from the Customer Input Screen of Figure 10.

Figure 4 is a partial list of the Data Files required for Order Entry. As mentioned previously, extensive data is required for the Estimating portion of the program, but only a small fraction of that data is needed for the Order Entry portion.

Left click the "Set Defaults" icon, which is above Camera/Stripping by clicking on the small arrow to move through the list of icons.

We will need to enter all known information at this time. Items such as Job and Quote numbers, Finished and Press Sizes (we recommend leaving Bleed as Blank), runs, signatures and stock selection are to be completed.

Figure 4 – Partial Data Files

In addition, we need to specify the default number of days to use for scheduling various functions such as Proof, Press, Bindery and Due Dates.

Scans & Camera/Stripping

All data used in the Scans and in Camera/Stripping/Plates is new. There is no transfer of data from Dos to Access involved here so be sure to fill out all areas.

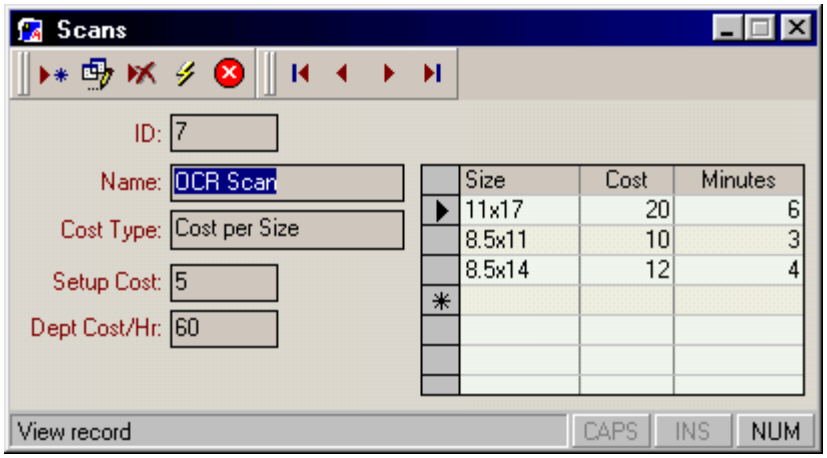


Figure 5 – Scan Input

The screen in Figure 5 identifies a typical Scan Component. Note that the type of information required in this section varies depending upon how you wish that operation to calculate costs.

The name of the operation or material is identified followed by the Cost Type. In the example above, we have chosen Cost per Size. In addition, a setup cost is identified as well as a Cost per Hour. On the right side we identify the various sizes, the cost of that production and the number of minutes required to produce the desired item. Although, as previously mentioned, detailed information is not required when simply identifying a Job Ticket or Work Order, it is required when performing an estimate.

Other information that may appear would be the Hourly Cost for the specific center you are working with as well as a Run Time component (in minutes) for each size specified. These items may or may not appear on the screen depending on your version of Order Entry.

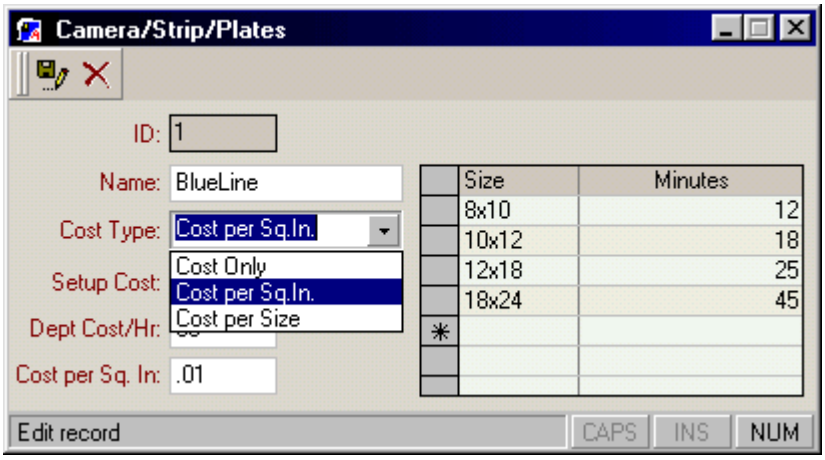


Figure 6 - Camera/Stripping/Plate Input Using Different Cost Types

As seen in Figure 6, the Cost Types may be specified as three types. Cost Only (which will result in a single cost applied to each size). Cost per Size as mentioned previously, and a Cost per Square Inch (which will result in the grid being identified with a size and time column plus a Cost/Square Inch cell as well as a Department Cost cell. In all three types, there may be a setup cost associated with the operation or item.

By placing your cursor over the icons at the top of the page, you will be provided with hints regarding their function. For example, Figure 4 icons represent from left to right, Insert, Edit, Delete, Refresh and Close. Figure 5 icons represent Save and Cancel because the screen is in the edit record mode.

Once you have entered all of the different types of scans, imaging, special plates, stripping and camera functions, you will then need to go into the Press & Plate File.

Press & Plate File

All press information that is available in your DOS files will be transferred to the Access database of the Millennium Order Entry (if you had the Dos version). In addition to the many features that were available in the DOS version of the estimator, you will be able to add even more data fields to the Millennium version.

As shown in Figure 7, this File is already filled out with various information, almost all of which has been transferred from the previous DOS version of the program.

The top bar provides the same editing features as discussed earlier.

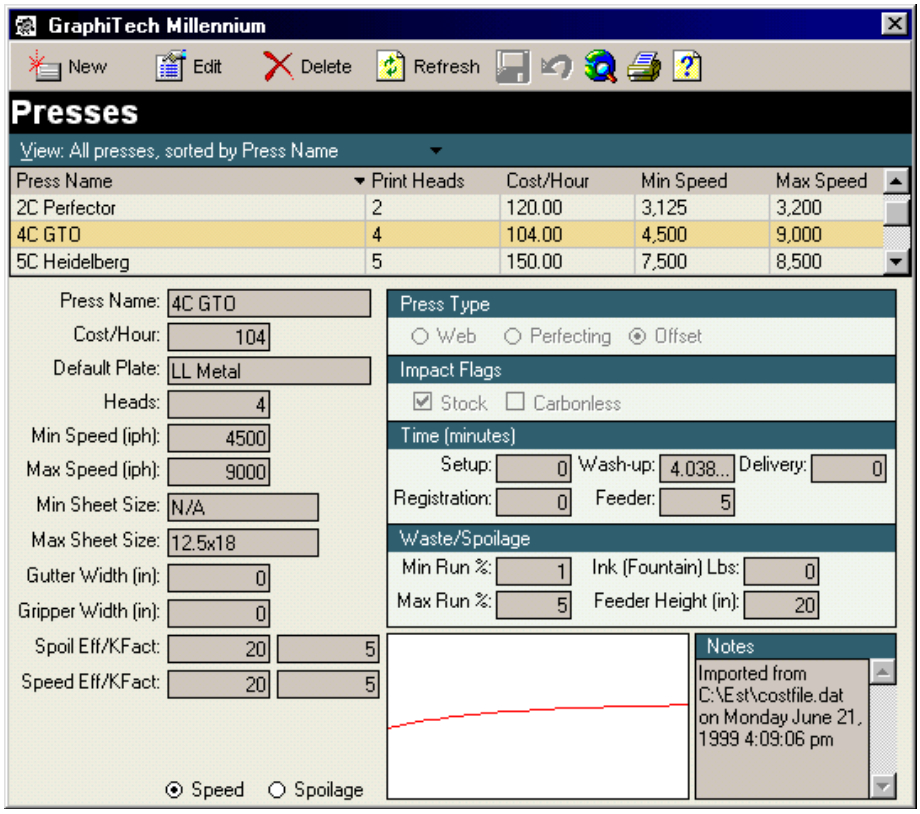


Figure 7 – Press Files

The top section provides a list of the presses contained within the imported database. Items such as Number of Print Heads, Cost per Hour, etc are provided when importing the DOS files.

The section below the press list may be displayed by clicking once on the press list desired. In the above example, we have decided to look at the 4 color GTO described in the list. Much of the information is similar if you are familiar with the DOS version of the Estimator. However there are some differences.

Plate File: The default plate is the metal plate that was a part of the DOS program. The File or Paper plate has been added to a plate file as shown in Figure 8, and which is available by clicking on the edit icon (top bar), and then clicking on the box portion of the plate field. This brings up a completely new section for handling many different plates within the estimate.

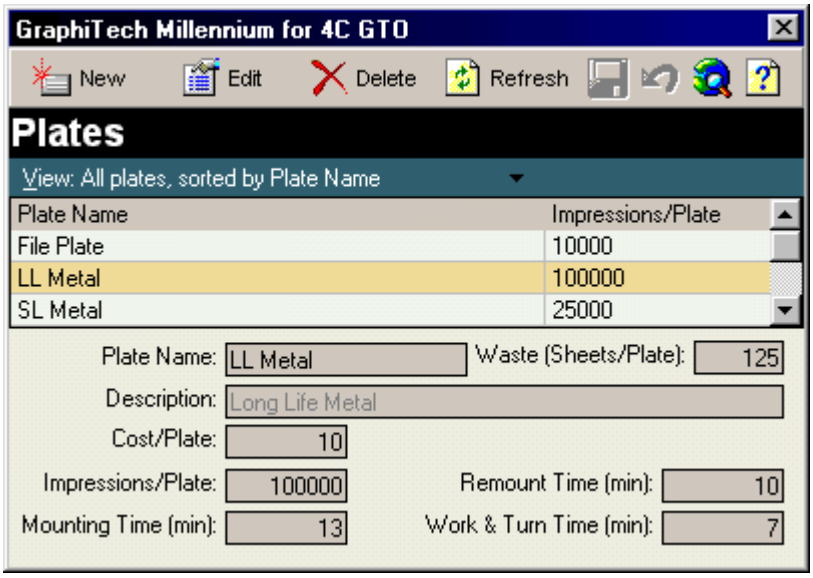


Figure 8 – Plate File

Note that for each plate, there is now a separate sheet waste factor, separate mounting time as well as cost and life of the plate. In addition, there is now a Remount time (when plates wear out the remount time is used instead of the mount time). The W&T mounting time is used when W&T is specified so that even though a single plate is used, the additional time for W&T adjustments may be incorporated into the estimate.

The Plate File may be edited the same as previously described.

Sheet Size: Another new feature of the Press File is the Minimum Sheet Size. The Maximum has always been a part of the program, but with the Millennium version, you may now specify a minimum size.

Gutter & Gripper: These two dimensions are utilized when the job involves a bleed or multi-up bleeds. If the bleed size is specified when the job is being entered, then a gripper amount is deducted from the press sheet prior to determining the number OUT. If the job is being run multi-up, then the gutter is added to the bleed size to determine the total number of sheets which can fit on the press sheet.

Spoilage Efficiency & K-Factor: Previous versions provided this information in the Miscellaneous file and only one entry covered all press and bindery files. Now, with Millennium, you may specify this information for each press and each bindery file.

Speed Efficiency & K-Factor: The same type of data is used here as was previously used in the DOS version.

Speed & Spoilage Curves: A graphical display showing relative speed and spoilage activity is displayed within the Press File. But to actually see the real speed and spoilage graphs, you need to be in the Order Entry portion of the program. By clicking on speed or spoilage and then clicking on details, a graph will appear which permits you to modify various efficiencies and k-factors until you obtain just the exact speed or spoilage you desire. Once you obtain the correct numbers, then place the values of efficiency and k-factors into the press file. Remember not to make adjustments to the difficulty factor as this is a part of the Order Entry process and not a part of the press data file.

Press Type: This area is used to identify the type of press.

Impact Flags: You may select any, all or none of the impact flags. The meaning of each flag is as described below.

1. **Stock:** When marked, this flag allows the stock to impose a % speed reduction onto the press. This reduction (or increase) is based on the value of the press efficiency factor in the stock file. If there is no entry in the stock file, then the value is not modified. A value of 85 in the press Efficiency line of the stock file would result in the speed of the press being reduced by a factor of 0.85, or 85% of the value it had previously.
2. **Carbonless:** The carbonless flag produces a larger spoilage rate when the press is running carbonless forms. If the normal spoilage rate was 5% running waste and the press was running a 3 part carbonless form, the total waste would be 15% if this flag were set. The concept results in the fact that if a single sheet is wasted, then the entire set is wasted, thus the reason for the higher waste factor.

Time Impact: The DOS version contains only Feeder and Wash Up times, whereas the Millennium version consists of these plus Registration, Plate, General, Set Up, and Delivery Set-Up Times.

Waste & Spoilage: The Minimum and Maximum running waste percentages are entered here. These are modified by the Efficiency and K-Factor values previously discussed. A typical example might be 1 and 6 respectively. In addition, the feeder Height is required to be entered and this value is in inches. Also the pounds of ink that are wasted per unit during a wash up are entered in this section also.

Notes: The notes section is for personal use only. When importing values, the date, time and location of the import are noted for your reference.

Bindery Files

All bindery information that is available in your DOS files will be transferred to the Access database of the Millennium Order Entry. As shown in Figure 9, much of the same information is incorporated into the Millennium File structure. One of the major differences however is the expansion of the Impact Flags.

The editing features and the method of listing the files is the same as was described for the press. The cells, which make up the bindery file, are discussed below.

Bindery Name: This is assigned by the user. Any name is suitable.

Bindery Type: When editing this file, a list of available bindery types is displayed. By selecting various bindery types you are basically telling the computer how to calculate the speed, spoilage, waste and setup times for the equipment. In addition, see the Bindery Flags below for additional algorithms concerning how the file functions in real-life situations.

Cost per Hour: This is the Budgeted Hourly Rate for this piece of equipment. It may also be the retail price if you do not plan to use mark ups to adjust cost to retail.

Minimum and Maximum Speed: This is the rate range (units per hour) in which this piece of equipment is able to function. Do not exceed the manufacturers specifications regarding both minimum and maximum speeds. You have numerous speed and spoilage controls available to you to control how these parameters vary with respect to quantity.

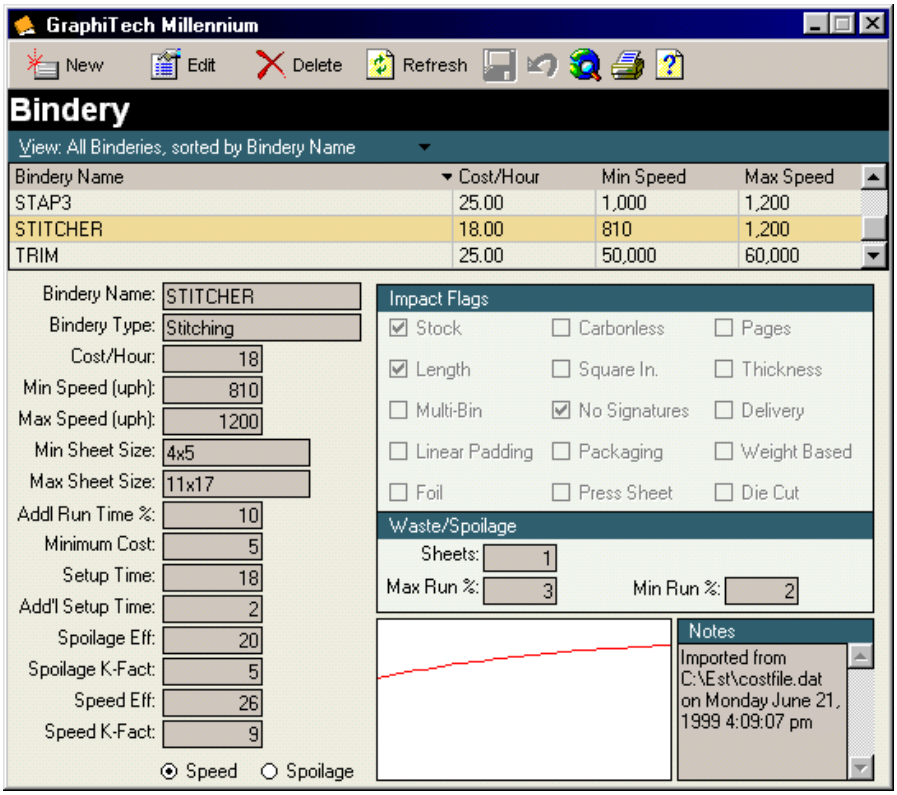


Figure 9 – Bindery Files

Additional Run Time %: This parameter identifies the penalty or added cost when an additional set up is encountered. For example, a single head drill requires three setups for the standard 3-hole punch. A certain amount of time is required to place the lift onto the drill and then to drill one hole. A small percentage of additional time is then required to move the lift slightly in order to make the second drill. This small amount of time may only amount to 5 or 10%, however when the third hole is made, that same amount of time is again added to the overall time to run the job. Thus if we used a value of 10% in this cell, and further specified in the bindery production area that we had three set ups, then the run time would amount to 120% of the cost of a single drill. This type of value is found on many pieces of bindery equipment such as cutting, some right angle folders, and any other piece of equipment in which the time to complete the job increases with the number of setups. For example, perfing does not usually have an increase simply due to more setups. The perfing machine operates at the same speed regardless of setups.

Minimum Cost: This value is simply the minimum cost you wish to obtain from this piece of equipment. For example, if the setup would be less than your minimum cost, then you would enter a value here. This cost is not added to the job. It is a comparison that determines if the minimum cost has been achieved from the operation of the equipment and if not, to make the cost equal to the value in this cell.

Setup Time: During the creation of the Order, you will specify the number of setups for each bindery operation. Lets again look at the drill operation in which a 3 hole drill is required using a single head spindle. If we specify three (3) setups, then the value assigned to this cell is applied one time to the cost of this project. It is not multiplied times the value of all setups, but rather applies only to the first setup. In the next example, you will see how the remaining 2 setups are handled.

Additional Setup Time: It is in this cell that the additional two setups from the previous example are multiplied times this cell's value. If the Setup Time is 15

minutes and the Additional Setup Time is 3 minutes, then for a three hole drill involving three setups, the setup time would be (1 x 15) + (2 x 3) = 21 Minutes.

Spoilage Efficiency & K-Factor: Efficiency values of 1 to 99 may be used along with K-Factors of 1-9. These two values produce over 1000 combinations of spoilage curves that produce extremely smooth graduations of reduced spoilage.

Speed Efficiency & K-Factor: The same number of curves may be generated here and the same restrictions apply as specified above. The speed however increases as a function of quantity, rather than decreasing as in above example.

Speed & Spoilage Curves: A graphical display showing relative speed and spoilage activity is displayed within the Bindery File. But to actually see the real speed and spoilage graphs, you need to be in the Order Entry portion of the program. Select Bindery and double click on speed or spoilage. A graph will then appear which permits you to modify various efficiencies and k-factors until you obtain just the exact speed or spoilage you desire. Once you obtain the correct numbers, then place the values of efficiency and k-factors into the specific bindery file. Remember not to make adjustments to the difficulty factor, as this is part of the bindery input and not a part of the bindery file.

Impact Flags: You may select any, all or none of the impact flags. The meaning of each flag is as described below.

1. **Stock:** When marked, this flag allows the stock to impose a % speed reduction onto the bindery equipment. This reduction (or increase) is based on the value of the bindery efficiency factor in the stock file. If there is no entry in the stock file, then the value is not modified. A value of 85 in the bindery Efficiency line of the stock file would result in the speed of the bindery item being reduced by a factor of 0.85, or 85% of the value it had previously.
2. **Carbonless:** The carbonless flag produces a larger spoilage rate when the bindery item is running carbonless forms. If the normal spoilage rate was 5% running waste and the bindery item was running a 3 part carbonless form, the total waste would be 15% if this flag were set. The concept results in the fact that if a single sheet is wasted, then the entire set is wasted, thus the reason for the higher waste factor.
3. **Pages:** If marked, the speed of the equipment is modified directly by the number of pages. For example, cutting, drilling, packaging, wrapping and others are directly affected by the number of pages in a book. If you wish to package or wrap a job that consists of 8 pages, then only one fourth of the quantity you specify will be wrapped. If you specify in the packaging file that you wish 200 sheets in each package, then the program will automatically reduce that amount by 4 resulting in 50 books per package. If you specify an exact count (say 100) in the setups portion of Order Entry, then all flags are removed from that one quote and 100 then becomes the exact quantity per package.
4. **Length:** The length flag is used in bindery items such as cutting, folding, sometimes drilling and others. It represents a means for determining the impact of using larger sheet sizes in certain bindery operations. For example, many folders are based on the number of linear inches per hour that may be run. An 11-inch sheet therefore takes less time than a 22-inch sheet. The difference in fact is by a factor of 2, or 22/11. There is also a small factor of the spacing between sheets, which we will neglect in this analysis. Thus the Length Flag will alter the speed of the equipment by the Length / 11, where 11 is the standard for entering the rate. In other words, enter the number of inches per

hour times 11 to obtain the correct speed or rate for the folder. The cutter it turns out also may contain the length factor. In tests, approximately 1.5 minutes were required to lift a 23x35 ream of bond into a cutter and make a single cut, while only 30-45 seconds were required to place a ream of 11x17 bond into the cutter and make a single cut. If the cutter operator can produce 120 lifts of 500 sheets per lift of 8.5x11 paper (representing 60,000 sheets per hour), then a 23x35 inch sheet would be at an equivalent rate of 60,000 x 11 / 35 = 18,860 Sheets/Hour. Since we are talking about the same 500 sheets per lift, then the number of lifts will need to change. Lifts = 18860/500 = 37 or approximately 1 lift every 1.6 minutes (almost exactly the tested range of 1.5). Many companies have the mistaken belief that the ratio of lifting paper is actually weight based, but in our experience, it is not weight based but closer to Length based.

5. **Square Inches:** This algorithm is an enhancement option for later release.
6. **Thickness:** The use of this flag provides for a direct modification of the speed based on the thickness of the paper used in the job. For example, if the speed were 10000 units per hour, and the thickness flag were present along with a caliper of 0.008, then the modified speed would be equal to 10000 times 0.004 divided by 0.008 or 5000. The speed curve and subsequent modification of it is based on a standard bell shaped curve, where the divisor is always the larger number.
7. **No Signatures:** When this flag is marked, it means that the operation is performed on a book or flat sheet manual that is based on the total of the books or manuals, but not on the total sheets used in the job. For example, if we were printing a flat sheet manual 1/1 in which we used 10 8.5x11 flat sheets, and the customer required 10,000 final flat sheet manuals, then the total quantity that would be used in determining the cost (if this flag were set) would be 10,000. Neither the signatures nor the sheets of the manual apply to the cost of this bindery operation. This particular flag is useful in areas such as stitching, some multi-binders and other specialized equipment that operates on the book only, not the total number of sheets.
8. **Delivery File:** This algorithm is an enhancement option for later release.
9. **Linear Padding File:** Use of this flag triggers the use of a linear padding machine in which the rate represents the number of linear inches per hour.
10. **Packaging:** Use of this flag allows the user to specify number of sheets per package within the file, and to further specify within the Order, the number of sheets actually desired.
11. **Weight Based File:** This flag is useful only when using the stock file or when you have specified the actual M weight of the paper. The delivered weight of the order is calculated, and then the number of pounds specified in the description is loaded to each container along with a cost per container. The desired weight is taken from the description of the file. For example, if you wish to have a 40# carton, then the description must contain the weight followed by a # sign for this file to be active. The cost per carton is placed into the minimum cost line.

12. **Foil Stamping:** Use this flag along with the Bindery Type called Foil to incorporate Foil Stamping into your calculations. Fill out the cost per square inch of the foil and place in the line that requests it. The speed represents the number of stampings per hour. When entering data into the actual estimate you will be asked for the percentage of the run. This value represents the actual percentage of the throw, or foil that is moved per impression. For example, if the full throw is 10 inches and the width of the Finished Sheet is 17 inches, then a value of 100 or 0 in the percentage line will provide for a full 10x17 or 170 sq. in. of foil per sheet. The cost of the foil is then multiplied times the quantity times the 170 sq. in. to determine material cost. If we set the percentage to 50%, then only half the sq. in. will be involved, or 85 sq. in. per sheet of paper. The throw remains the same at 10 inches but the width is reduced to 8 to 9 inches.
13. **Press Sheet:** This flag is used to provide information to the calculation module that the operation is to be performed on the Press Sheet only when operating in Book Mode. In other words, if a folder is used and we are running in Book Mode, the sheet that will be operated on will be the press sheet regardless of the size specified during input. In addition, if the book signature contains a 2 or 4 up (i.e. a 2 or 4 up signature), then the sheet will be AutoCut first to the resulting size and then be run through the folder at that size and quantity. Note: If the Length Flag is not set, then no speed changes will occur as a result of the length of the sheet.
14. **Die Cut:** This algorithm is an enhancement option for later release.

Customer Files

The customer file used with the Millennium Order Entry and all other Millennium products is identified as shown in Figure 10.

Data is imported by first placing all customer data into the basic GraphiTech Customer file called GRAFTECH.CLI. It is then reindexed and the interface is switched from KIS, Digital, DataPro, Infinity, QuickBooks or Power Accounting to the Basic AR module. Once this has been done, the data for the customers is imported into the Millennium Order Entry Database.

Within the Customer File, there are provisions for the basic Account Name, as well as for Multiple Contacts, Multiple “Ship-To’s”, and Notes.

If importing data from KIS, you must first transfer the KIS Accounts to the Basic AR module using a program called KISCUST.EXE, which is executed within the EST directory.

If importing data from Power, Stage, Infinity or DataPro, you must first transfer these Accounts to the Basic A/R module using a program called DATACUST.EXE, which is executed within the EST directory.

All other modules must be transferred manually through data entry in the Millennium program.

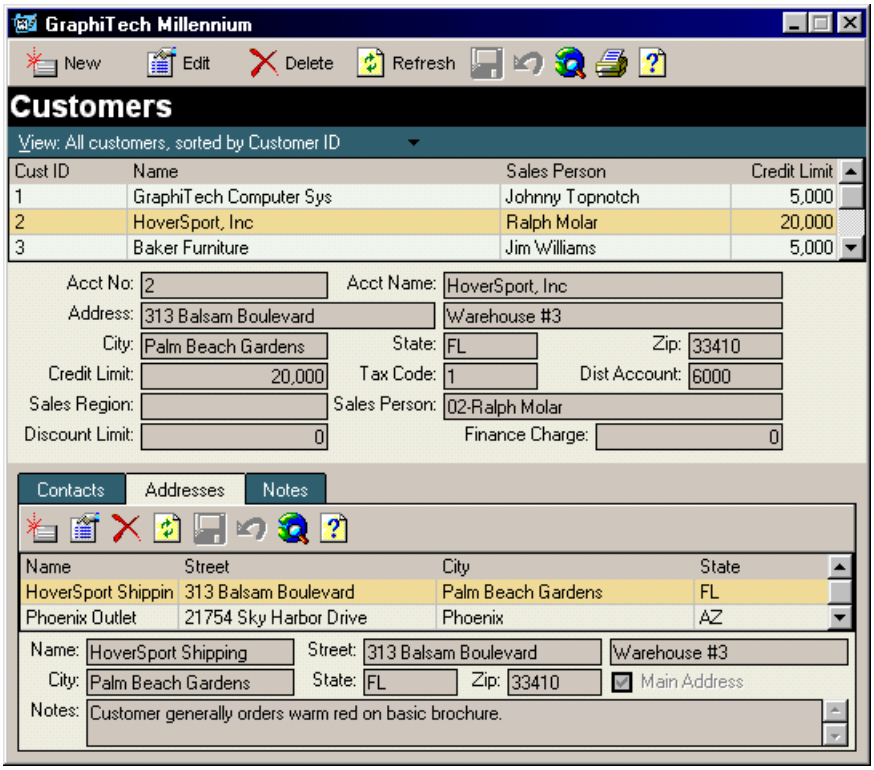


Figure 10 – Customer File

Stock Files

In order to provide accurate estimates of stock cost, the Millennium Estimator utilizes a three-carton bracket for each price. In addition, caliper is specified so that bindery items such as cutters will know automatically how much paper is available in each lift.

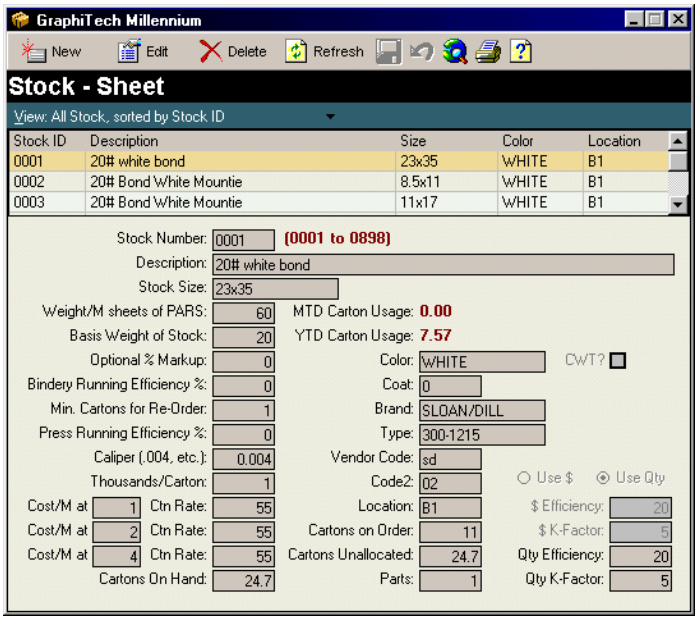


Figure 11 – Stock File

In addition, there are Bindery and Press running efficiencies, which allow the program to speed up or slow down various bindery and/or presswork. The optional % Markup may be used to change the maximum markup from what is generally available within the default markup file. For example, if the minimum markup is 15% and the maximum markup is 50%, then an entry of 100% into the optional markup portion of Stock will cause the two markups to change to 100% Maximum and 30% Minimum. The Efficiency and K-Factor values shown work exactly the same way as the Spoilage efficiency and K-Factors work in Press or Bindery. The Stock file however also has the ability to mark up based on dollar amounts, as shown The Efficiency and K-Factor values work then, not on the quantity of stock, but rather on the cost of the stock.

Ink Files

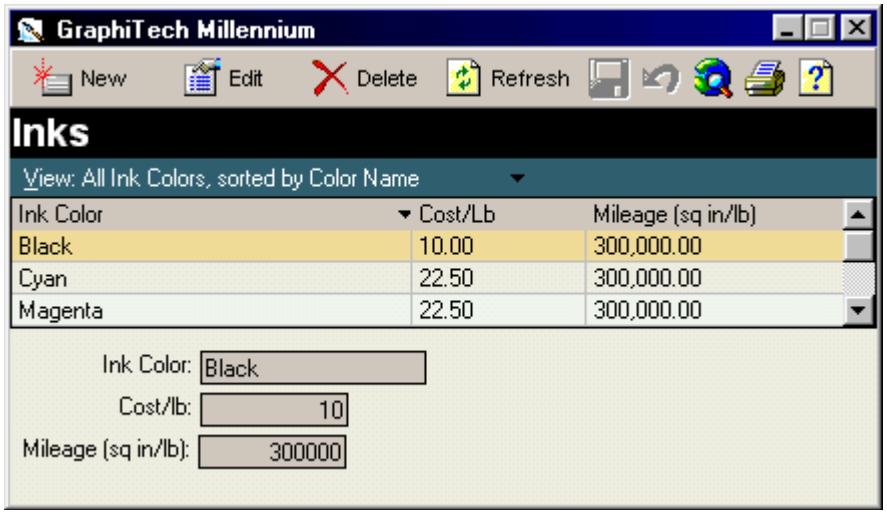


Figure 12 – Ink Files

The information that is needed within the Ink File consists primarily of the Cost per Pound and the Mileage (Square Inches per Pound). These values may be found in your ink catalog.

Departmental Markups

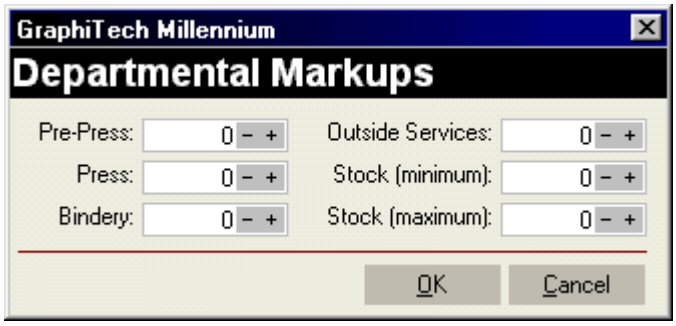


Figure 13 – Departmental Markups

Identify markups that are used for each department. Stock will involve two markups, a maximum and a minimum that will vary as a function of the Efficiency and K-Factor curves located within the stock file itself.

Outside Services

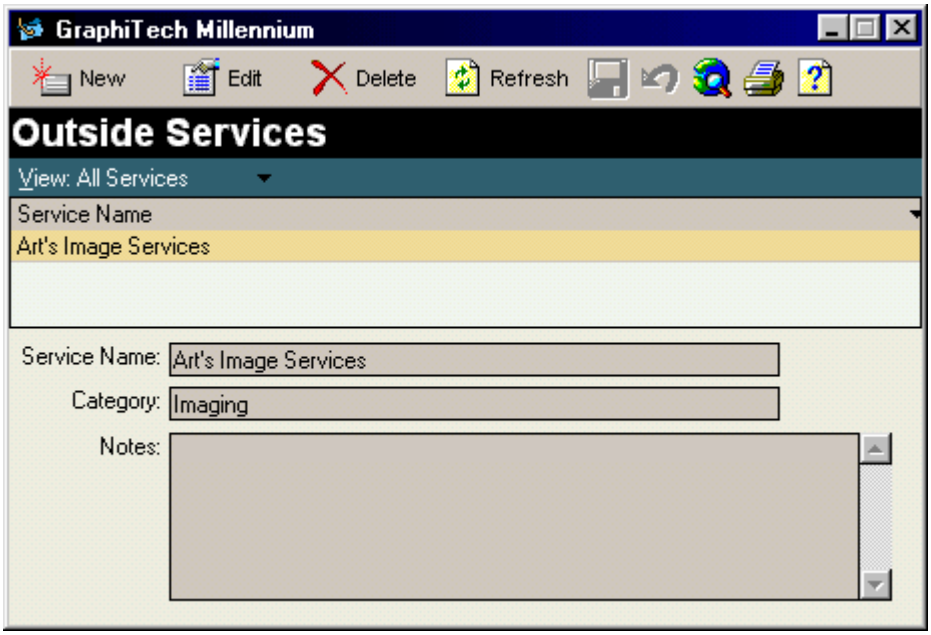


Figure 14 – Outside Services

Outside Services refers to those items which are either purchased outside of your own plant, or which contain prices that are not easily obtainable through other portions of the estimating program.

These costs are added to the total cost of the job but are examined as to their linearity with regards to Additional Thousand pricing contributions. For example, a cost that is essentially the same for 4 different quantities will contribute nothing to the additional thousand price of the job.

Product Codes

These are codes that are attached to the invoice portion of the job as well as to the Order. They are used to provide a means of distinguishing different types of jobs.

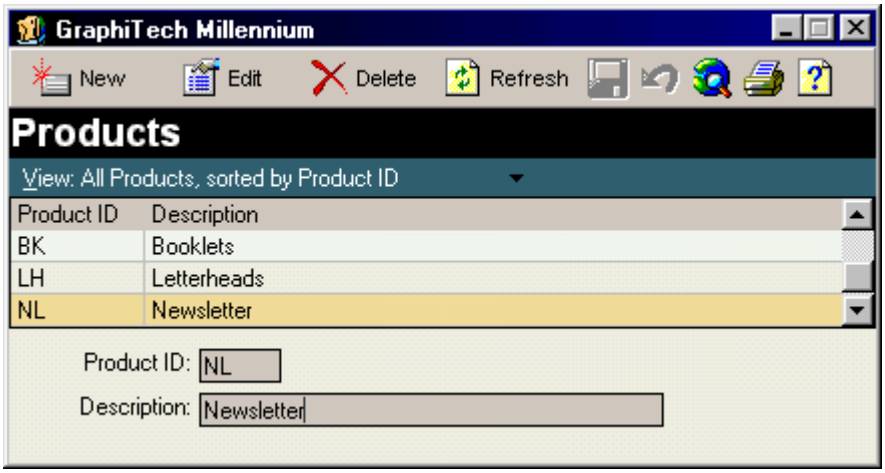


Figure 15 – Product Codes

Main Menu

Figure 1 on the cover identifies the Main Menu. The menu works in an intuitive manner through the use of icons and drop down menus. In Figure 16 to the left, the 5 functions available are identified. They are;

Figure 16 – Main Menu Icons

1) *About Millennium Order Entry*. Here you may obtain the current version number in the event you need to contact GraphiTech for Technical Support.

2) The second icon is called *System Information* and is used by GraphiTech Technical support to isolate and identify any problems which might have occurred.

3) Should you have a need to access GraphiTech's web site at www.graphitech.com, simply click *on GraphiTech Web Site*. You will be given complete instructions on how to proceed.

4) *System Passwords* may be modified at this icon. The default passwords are set to be 11111 if you have not used a previous version of Dos.

5) *Register Features* is a means for entering the license code for the program. You may select various items within the Registration Process by clicking on the boxes to either add or remove additional capability. Obviously, additional capability will increase your cost to own the program, however you will also gain significant functionality. Also, you may add features at a later date, if desired. Simply click on the additional features desired, for the upgrade cost and the appropriate unlocking code will be Emailed back to you within a few days.

Orders/Quotes

This area is used for all activity in which either a quotation is needed or a job ticket is desired. In either case, you have sufficient screens and input capability to completely describe even the most complex jobs.

The following describes the procedure to use when either quoting a job, or when entering an order.

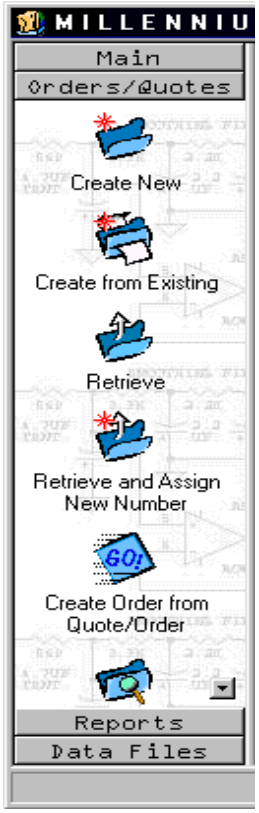


Figure 17 - Quotes

Selecting the Icon

There are six icons from which you select in order to enter an order or a quote.

- ***Create New:*** As its name implies, you create all new orders or quotes at this point.
- ***Create from Existing:*** Whether you wish to retrieve a quote and turn it into a different quote or retrieve an old job and turn it into a new job, this is the location you choose for that type of selection.
- ***Retrieve:*** In this selection, you will be retrieving an item in order to make changes to that item. It will remain in the same location and will not create a new record. It will also retain its old job or quote number.
- ***Retrieve and Assign New Number:*** In this selection, the quote or order that is retrieved will have its internal number changed to the new value and will be stored in the same location as it was retrieved from. This is slightly different from the "Create from Existing" method described above.
- ***Create Order from Quote/Order:*** This selection allows you to retrieve a quote that was prepared days, weeks or months earlier and convert it to an order. This procedure is semi automatic as it will ask you for the quantity of the order and then display the summary screen immediately. You may, of course, select various departments from the summary screen and modify them as desired. The original quote is not affected by this procedure. The new job is stored in a separate location.
- ***Search:*** The last icon provides you with the ability to search for a quote or job based on numerous search criteria. The search can be general or specific. It can be advanced or simple. Once the search provides the list of acceptable hits, you simply double click the desired item. If you are searching for a quote, then you will be asked to select 1. Create New; 2. Retrieve; or 3. Produce Order. If you had selected a Job to retrieve, then your selections would be 1. Create New; 2. Retrieve and 3, Assign new Number.

Orders

The difference between an Order and a Quote is one of degree. In general, a quote only requires enough information to produce a price. It does not need, for example, the name of the vendor supplying the die cut, nor does it need to have full descriptions in various departments for clarification. None of these factors will influence the price. But by answering as many questions as you can with regard to the quote, you will make it easier to understand what was quoted when re-reading the quote next week or next month.

The Order on the other hand, necessitates all the detail you can possibly input. In fact, the more information, the better.

You may also use the Quote portion of this module as a Request for Estimate. Since it will accept any information about the job (there are some minor limitations), even front desk personnel may use the program to enter phone orders, over-the-counter orders, etc. Later, should the customer ask for a formal quote, simply ask the estimator to retrieve that RFE and fill out the remainder of the quote.

If the customer has stated that this is an order but they wish to see the price before proceeding, then use the program again by entering it as an order and click the Estimate Key at the Summary Screen to obtain the price.

Now let's look at how a quote is entered.

Quotes

If you wish to learn more about the Millennium Estimator and how it works, see the section entitled "How to Estimate with the Millennium Estimator."

Select "Create New." After selecting the icon, you are asked if this is a Quote or an Order. If selecting a quote, you will be asked to enter upwards of four quantities as shown in Figure 18. The Auto command at the bottom will allow you to specify the quantity you want to have incremented. By clicking on the check mark, the remaining three quantities will be incremented by the amount shown starting with the first quantity desired. You may of course enter all quantities manually.

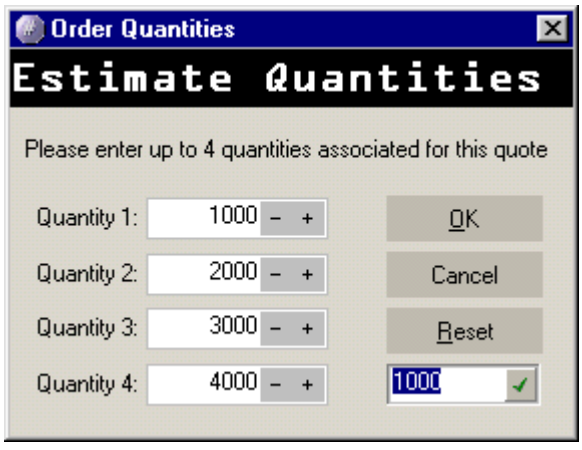


Figure 18 – Entering Quantities

After you click OK, Figure 19 will appear. It is this General Information screen that permits entry of job description, account info, contact name, CSR's, Ship to's, mailing requirements, etc.

General Information

As mentioned before, the Quote or Estimate will only require the description of the job and the account name.

The balance of the information may be needed however, if this becomes a job. Also, if Counter Help, CSR's or others are taking orders, then they should fill out as much of the order as possible at this point, including notes that describe the customer's personal requests regarding delivery, scans, etc.

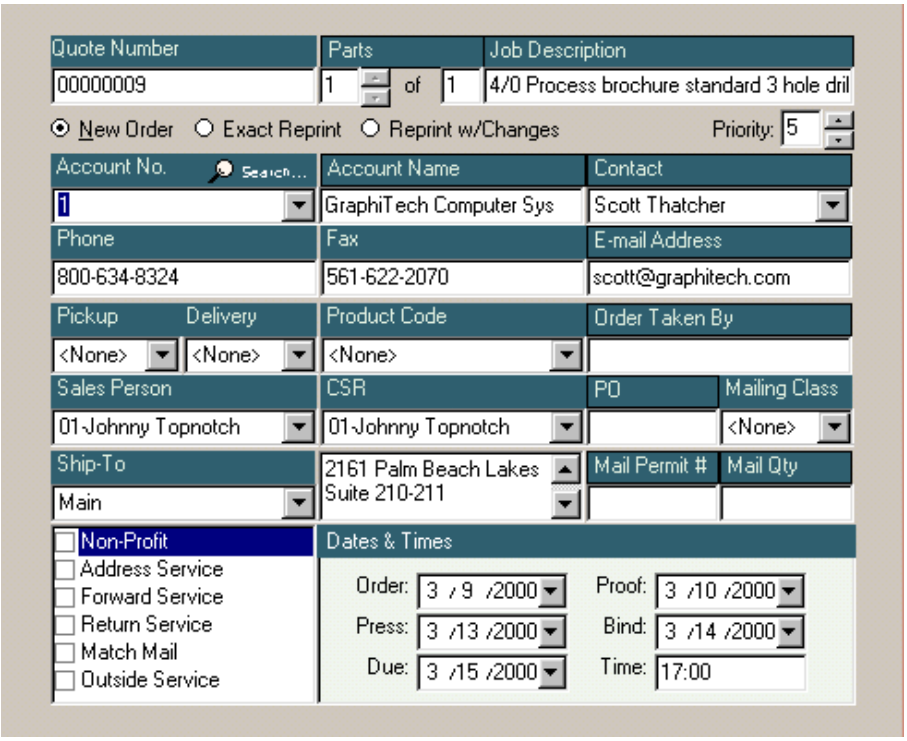


Figure 19 - General Information Screen

Now let's review exactly what can be done while in this screen.

1. Down Arrow: Whenever you see a down arrow next to a cell, this means that there is a drop down list of items from which you may select. Often, the list includes the word <None> or <Add New>.
2. <None>: For example, you may wish to add the customer to the quote or order on the fly, without having entered them as a customer. In this case, you would specify None, and then enter the name of the customer in the field where it is requested.
3. <Add New>: If, in the example of pickup or delivery, you wish to add a new item to the list, simply click the Add New item.
4. Type of Order: Here you click on the button that identifies whether this is a "New Order", "Exact Reprint", or "Reprint with Changes". To the right of that input is the Priority of the job. Here you may specify a number from 1 to 9 for your internal use.
5. Account Number: Assuming you have entered your accounts, imported them or transferred them from previous versions, you then may select the appropriate account number from the list shown. If you do not know what the account number is, then click the "Search" button to the right of the Account Name in order to utilize extensive search criteria

as shown below. Also, you may simply type in the name of the customer under Account Name.

Figure 20 – Search Window for Customers

6. Contact Name: Each customer may have multiple contact names. Simply click on the drop down list provided. Once selected, the email address, phone and fax number of the desired recipient is displayed.
7. Pickup and/or Delivery: These drop down lists provide information about what to do with the job both prior to and after the job is complete. The lists may be modified as desired.
8. Product Code: A quick method of identifying the type of job.
9. Order Taken By: Currently this area must be entered manually. Some companies only want to know the name of the estimator while others want to know, by means of initials, the names of everyone who has contact with the job, from the person performing Order Entry to the estimator.
10. Salesperson and CSR: These fields may be selected from a drop down list. The names are currently imported from previous version of program but later versions of Millennium will have the data entry portion available in the Data Files area.
11. Mailing Information: This area permits the entry of shipping and mailing data used with a job. It may be a part of the order or it may be a method to be used for shipping.

Pre Press

Much of the information entered on this portion of the order is descriptive. However, the Quick Input screen at top of form as well as the drop down items under the headings of “Scans” and “Camera/Strip/Plates” provide time and cost components in the event of an estimate.

Quick Input: The Quick Input portion of Pre-Press (Figure 21 - located at the top of the form) permits the user to enter job specific information without detail. Included are ***Pre-Flight, Design, Typeset, Paste-Up, and Imaging.*** In order to enter information into these areas, you must click on the selection box to the left of the item, and then click on the detail icon to the right of the item.

Additional input description includes the Platform used for the input and colors of either the input media or the output (as specified in your notes section). By having an easy to access method for describing the Application, the Customer File (if known),

how the data is to be Retrieved and other basic input information, less time is required in adding this data in the notes area.

Output Specifications: Identify the media, Lines per Inch, Emulsion, Media and File Name.

Notes: The Notes area may be used to add additional description to further identify what needs to be done with the job

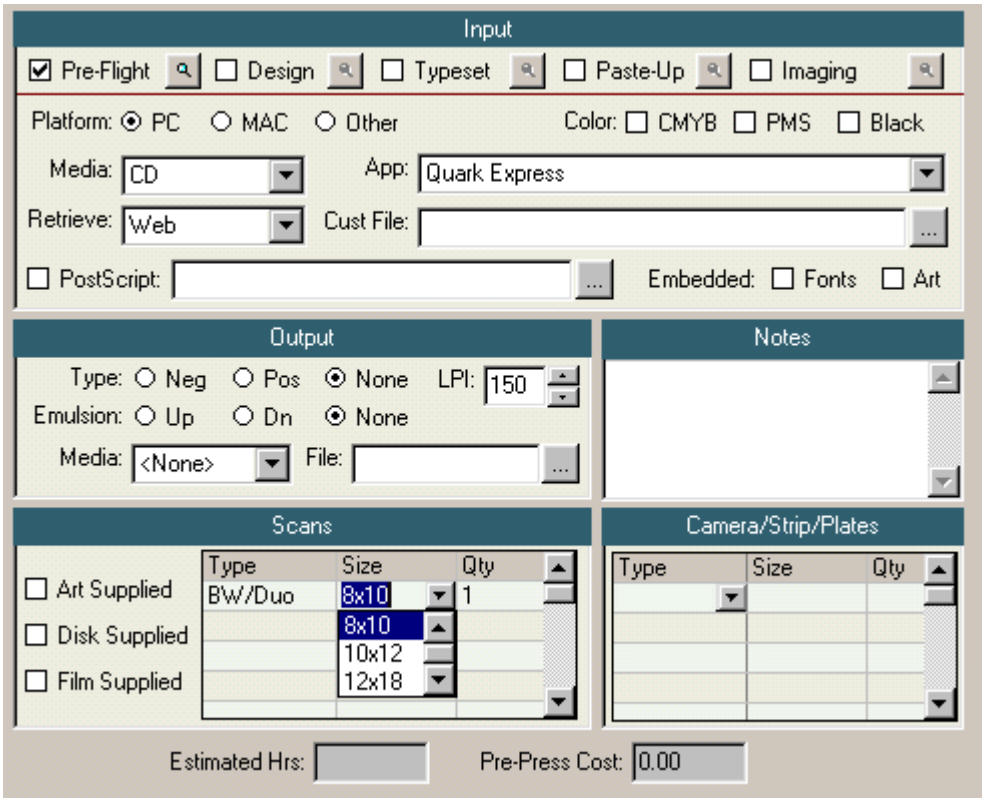


Figure 21 – Pre Press Input

Scans & Camera/Stripping/Plates: Each of these two sections permits the user to specify a material or operation ***Type***, a ***Size***, and an associated ***Quantity***. The Type and Size columns have drop down lists from which to choose. Labor costs and retail prices are produced in this area.

Additional items may be checked on the left of the form that provides additional information regarding the job.

Remember that the notes section in this area may also be used by production personnel for the recording of any Author's Alterations (AA's), problems in production, calls from the customer and more. Although only a limited amount will actually print on the Work Order, you may store hundreds of characters.

Stock

The stock file used in the Millennium Order Entry, as well as all other modules, provides thorough information as to weight/thousand, basis weight, caliper, cost/thousand and more.

As seen in Figure 22, you may select the stock to be used for the job, or you may search the file for a specific type of stock.

Note that although the prices for this selected stock are the same for each carton bracket, there may be times when the stock purchased is significantly different at each carton bracket. In those situations, the customer then is able to realize additional savings when they purchase higher quantities for any given job.

Parent Size: Whenever we refer to a stock size, it is called the Parent Size.

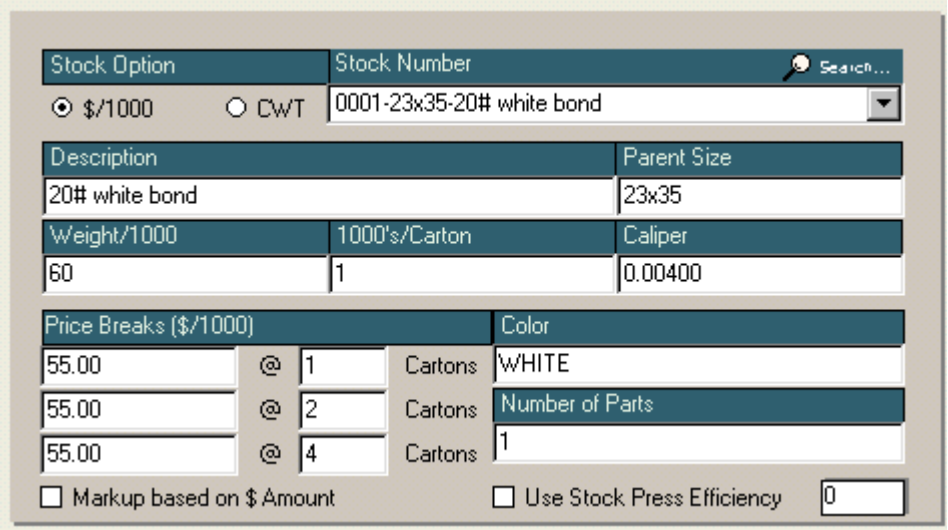


Figure 22 – Stock Selection Screen

In general, do not click on the box labeled as "Markup based on $ Amount" or the box identified as "Use Stock Press Efficiency" as these are advanced functions not fully implemented as yet.

Presses

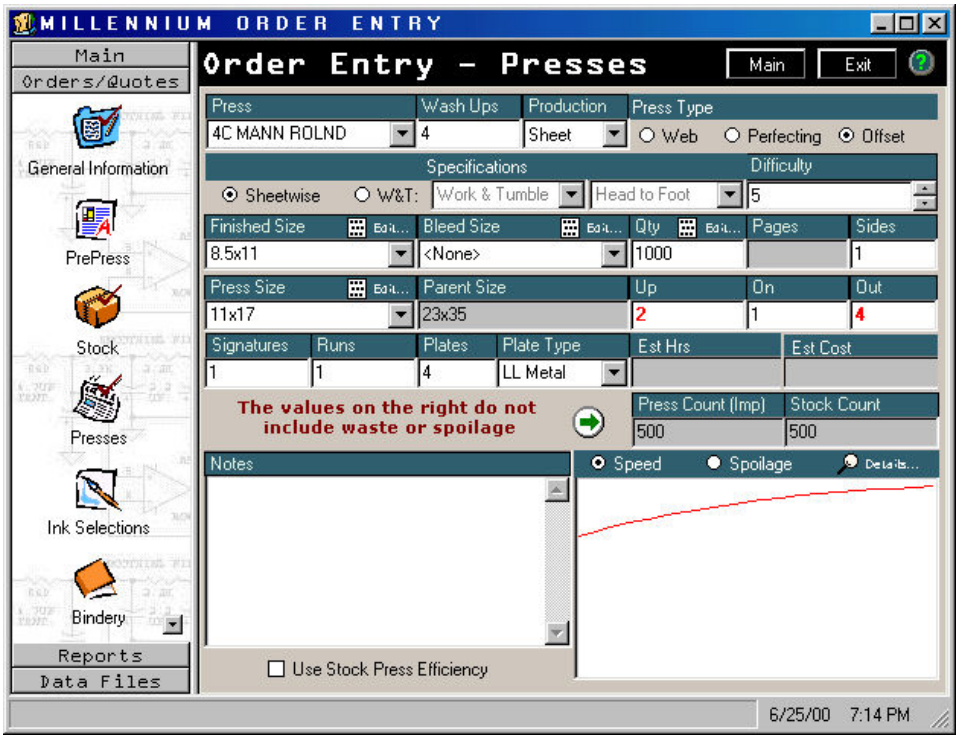


Figure 23 – Press Input Screen

The press screen permits the user to identify even the most complex estimate. The Millennium Estimator (and its larger program called Millennium Professional Estimator), utilize a complex set of algorithms that allow the estimator to fully define any type of jobs.

All that is required to identify any estimate of press work, is a knowledge of three basic estimating principles.

Stock Usage (Press Sheets): Signatures control the amount of paper that is used during an estimate (not including waste). The equations (in simplified format) are ***Signatures*** *times* ***Quantity*** *times* ***On*** *divided by* ***Up.*** If you know intuitively how much paper is to be used for a job, then by using this equation you can check yourself to be certain of the results.

Impressions: Press Runs control the number of impressions per pass through the press (not impressions per unit). If you know the number of impressions you should have (again excluding waste factors), then the following equations will provide you with verification of that number. ***Press Runs*** *times* ***Quantity*** *times* ***On*** *divided by* ***Up.***

Make-ready: Plates control the amount of make-ready. If you are running a 4/0 job then 4 plates are used and consequently the make-ready will be 4 times the setup time associated with the plate. This does not include items such as work & turn, re-mounting of plates, etc.

By using totally independent variables for determining production costs, the estimator is given much greater flexibility in how the estimate is created. In other words, they are not hampered by pre-conceived notions as to the relationship between Stock, Impressions and Make-ready.

A company that requires an estimate for 2 sixteen page signatures of 1-4/4 and 1-4/2 running on a 4 color press will only need to make a single estimate of 14 Plates, 4 Runs and 2 Signatures. By checking the results on the Press Screen where both Stock Count and Impressions are located, the estimator will know at a glance whether the estimate is correct.

A fact of estimating is that *If the estimates contains the correct amount of stock, the correct number of impressions and the correct number of plates for the total job, then you will have (within a small variance) the correct cost for the job.*

Now we will define the remaining terms used within the Press Screen.

Finished Size: The Finished Size represents the size delivered to the customer. Whether this represents the folded piece or a flat piece is not important. If this is a 96 page 6x9 book, then the Finished Size is 6x9. If the job is a 3.66x8.5 letter fold then the finished size would be 3.66x8.5. Note that we do not round up the value to 3.67 since this would cause the number of pages to be reduced from the 6 panels that would normally be displayed. Note: Even though the Finished Size is defined as that size delivered to the customer, some companies prefer to enter the finished size as 8.5x11 and then simply state in the description that the 8.5x11 will be folded to letter size.

Bleed Size: The size that identifies any excess width and depth of the finished sheet as a result of bleeds.

Press Size: The Press Size is simply the size of the sheet passing through the press. It may be the size of the Bleed Size or Finished Size (if bleed is specified as none) but will *Never* be smaller. It is not to be confused with the maximum sheet size allowable.

Parent Size: This is the size of the Stock. It may be the same size as the Press Size but will *Never* be smaller.

Sheetwise: A Press Sheet that is passed through the press and contains different images on both front and back of the sheet.

W&T: A term used to describe either a *Work & Turn* or a *Work & Tunble*. As opposed to Sheetwise, this type of run involves the same image on the front side as well as the back side of a press sheet. Further descriptions for W&T include *Head to Head* and *Head to Foot.*

Difficulty: This dynamic tool will allow you to raise or lower the difficulty and consequently raise or lower the speed of the press respectively and to conversely lower or raise the running spoilage of a job, all simultaneously. In addition, you will see the speed or spoilage curve shift as you change the difficulty. If you wish to view the actual numbers associated with this change in difficulty, click on details for either speed or spoilage.

Wash Ups: The number that will display automatically is based on the number of heads identified in the press file.

Plates & Plate Type: Identify the total number of plates for the job. If this press contains more than one type of plate, then select that plate from among the types listed under *Plate Type.*

Up: This number is automatically calculated based on the number of Finished Sheets (forms) imposed upon the Press Sheet. See further definition in Glossary.

On: The number of Finished Sheets (forms) that are different. This definition refers to a form that is truly different, not just a W&T in which the form is simply turned over. See further definition in Glossary.

Out: The number of Press Sheets imposed upon the Parent Sheet.

Pages: This number will be calculated automatically when in Book Production Mode, based upon the number of signatures and the number of pages per signature. If you wish to force a value other than what is shown, simply enter the value and it will turn red, indicating that you have altered the calculated value. If you are in Sheet Production Mode, then the value will be gray and will not be available to change.

Sides: In general you must specify the number of sides. This value is not calculated automatically.

Press Type: The radio buttons are used to define the type of press work being performed. In general, use only the Offset or Perfecting buttons since the Web feature is only available at additional cost.

Production: This drop down list identifies whether the type of job involves pages or whether it involves flat sheets (sides). The reasons for this distinction are several. When in *Sheet* mode, all cutting of the finished piece is assumed to be done on a flat sheet, even if the estimator indicated that folding of the finished sheet was to take place. If *Book* mode however, the finished sheet is generally recognized as the folded piece (based on the number of pages per signature) and any cutting of the finished piece would reflect the lower number of pieces per lift associated with book work.

Notes: The notes identified in this section are printed on the Work Order (if room is available).

Evaluate Speed and/or Spoilage Curves: By clicking on the "*Details"* portion of the speed/spoilage curves, you obtain the results shown in Figure 24.

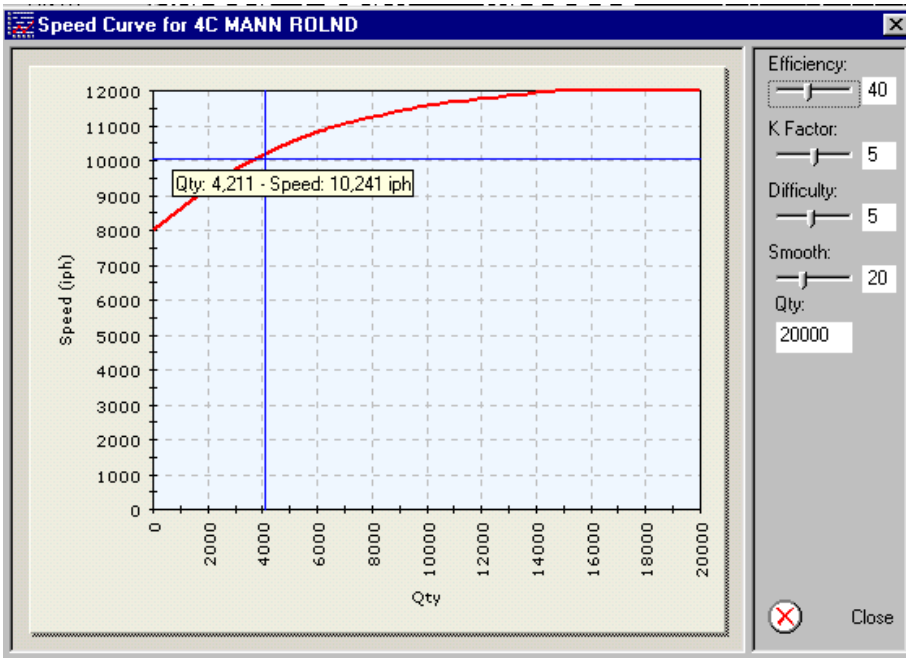


Figure 24 – Speed/Spoilage Modifications

By moving the Efficiency and/or K-Factor slides, you will be able to see what effect these values have on the overall performance of the press with respect to this particular job. Also, the difficulty slide will contribute to this view as well.

The *Quantity* cell may be changed so that you see the curve results over a smaller quantity such as 5000 or 2000 or larger quantities such as 50000 or 60000.

The *Smooth* slider only shows more or less points on the curve, but does not add to or detract from the results of the curve.

Ink Selections

Figure 25 identifies the Ink Selection guide. Here you may select from a drop down list of inks based on your input into the data files of cost and ink mileage.

If you wish to identify process colors for the job simply click on the ***AutoProcess*** button. Then simply identify the appropriate coverages for those colors.

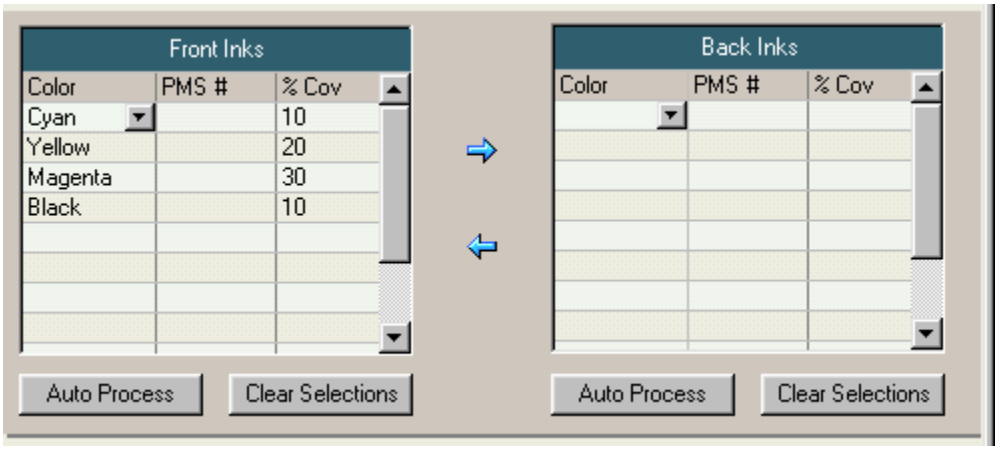


Figure 25 – Ink Selections

Should you need to duplicate the information on the back side, click the arrow pointing to the right.

If you have any PMS colors, then select an ink from the drop down list (preferably a color) and then type in the PMS number in the center column, rather than trying to enter every PMS number there is into the table.

Bindery

The Millennium Estimator contains one of the most powerful bindery features ever designed for the estimator.

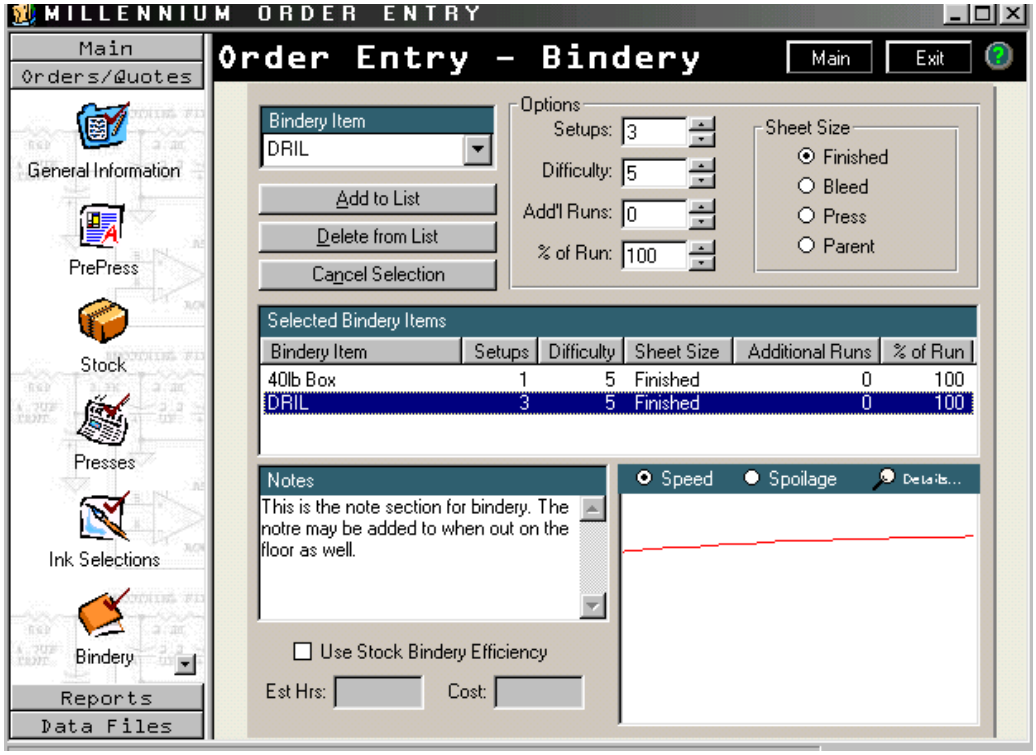


Figure 26 – Bindery Input

If you have already looked over the types of information utilized within the Bindery File, you are then aware of the magnitude of sophistication that has gone into developing this portion of the program.

Items such as *Additional Run Percentage* and *Additional Make-ready Time* to name a couple combine with a bindery input section that allows the estimator to define the size of the sheet being acted upon (which also defines the quantity being acted upon), the number of set-ups used, the difficulty, whether there are *Additional Runs* associated with the operation and the *Percent of the Run.*

The cutter, for example, is "aware" of the type of cut being performed (i.e., evaluates if the cut is on a booklet or flat sheet, what thickness is the sheet, how does the size effect the time to cut, is the cutter automated with an airbed or manual, plus much more).

The bindery input is straightforward. Look for the bindery item desired. Identify the number of setups (example: folder may require two gates to set up thus you would enter a 2). If desired, enter a difficulty, any additional runs and/or a percentage of run. Then click on the *Add to List*.

If you wish to change the difficulty of the bindery item after it has been added to the list, you may do this only by clicking on the item in the list, then selecting the details of the speed or spoilage curve, and changing the difficulty there.

Any changes other than difficulty that are required, will need to be done by adding another bindery item and then deleting the old one.

Up to 15 bindery items may be entered for any one job from a selection of hundreds.

If Bindery Efficiency has been identified in the stock file and you wish for it to be effective on this job, click the box entitled *Use Stock Bindery Efficiency.*

As before, notes may be added at your discretion.

Services

This section may be used for outside services or as an area for adding additional costs imposed by the customer such as AA's.

Figure 27 – Services

The Vendor Service selection list allows for you to add the desired service on the fly, without having to enter the data in the Data Files portion of the program. If you find you are having trouble adding the desired data in this way however, you may wish to enter it in the Data Files.

Summary Screen

The following summary screen depicts a 2/0 flyer printed in black and warm red with a 3-hole standard drill. Note that all of the information regarding the job is displayed for an immediate quote to the customer.

The Press Summary window identifies basic information about the job for confirmation purposes.

Under the Bindery Operations window, you can review that all appropriate bindery functions were included.

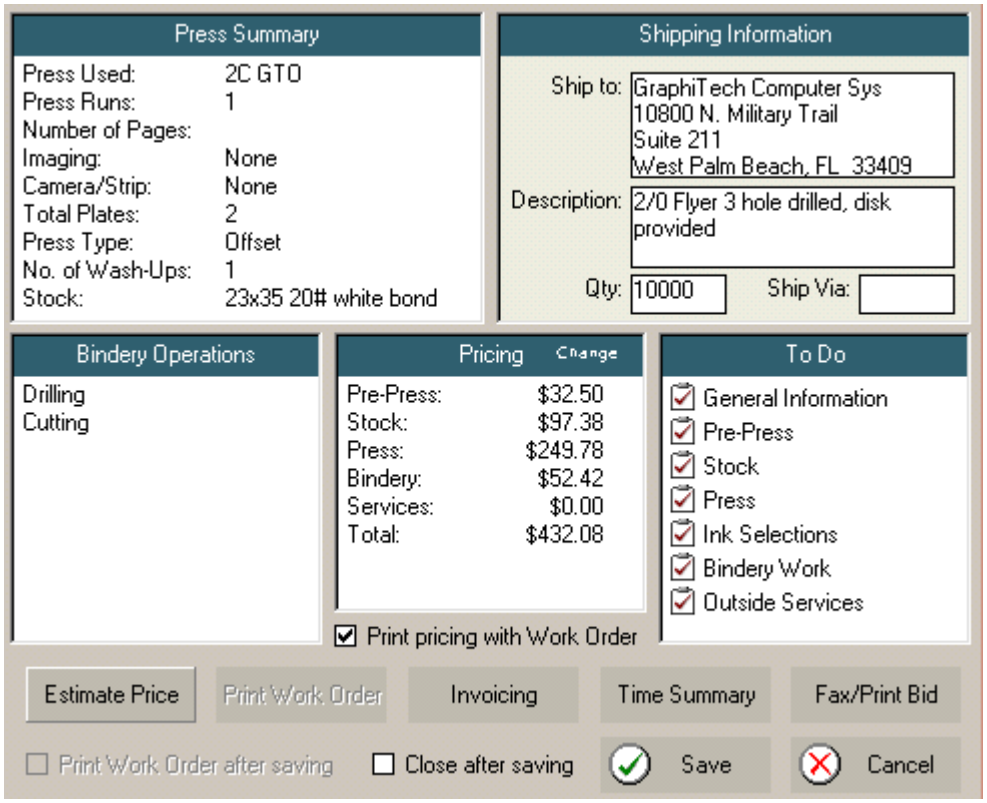


Figure 28 – Summary Screen

The Pricing window identifies the retail price for each major department for the first quantity. Just to the right of the word "Pricing" is another word called "Change". If you wish to see the prices for all other quantities, or should you want to make any changes to the prices, then click this word and the image in Figure 29 appears.

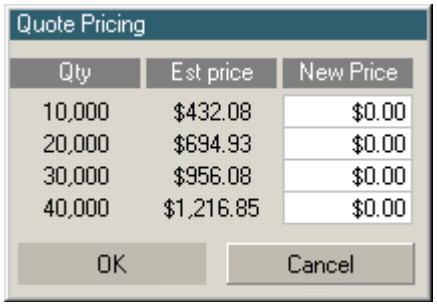


Figure 29 – Modify Price

To the right of the Pricing window is the "To Do" List. As you go to each window of the Order Entry program, a check mark is placed next to the appropriate window. If you don't see a check mark next to an area that you know to be a part of the quote, then simply double-click the box and you are taken to that window. To return to the summary screen, simply click on the summary icon.

During a quote, you have several options available to you. These include *Invoicing, Time/Cost Summary Information, Fax, Print or Email a Bid* and if you are working on a Job, the ability to print out a *Work Order.*

Invoicing

This optional feature allows you to invoice the job you have showing or to access an appropriate interface such as our full featured Data Pro Accounting or the versatile QuickBooks Pro Accounting.

In all cases, the invoice produced will populate the Historical Ledger program thus providing you with vast amounts of historical information on each customer. If you have the older DOS version of the program, then this data may be converted for use with the Millennium version.

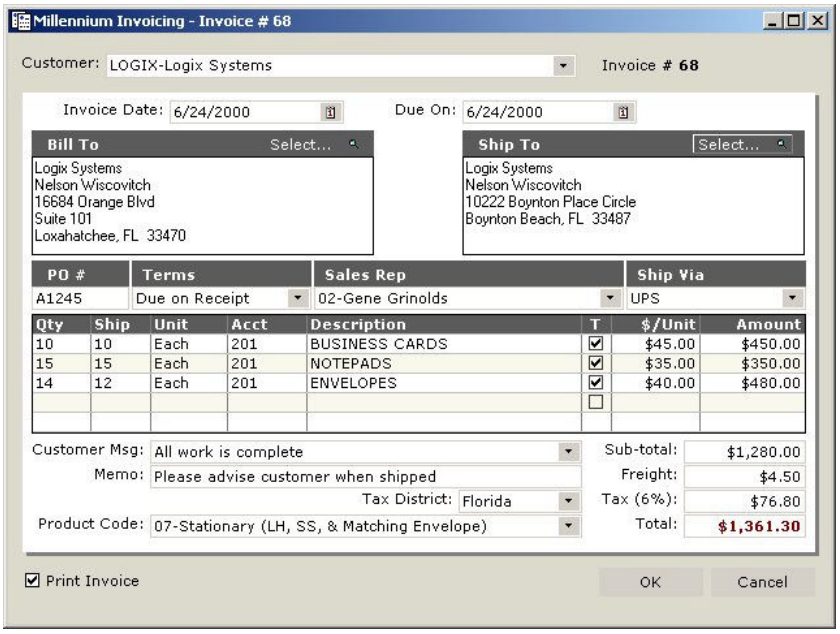


Figure 30 – Millennium Invoicing

Reports

Time Cost Summary

The Millennium estimator includes 4 reports that will help to identify any variances when performing an estimate.

The first report is called the General Time/Cost and is seen in Figure 31. It identifies all aspects of the printed job for all quantities quoted. The report is divided into Eight sections. They are: *Customer, Pre-Press, Speed & Spoilage, Job Time in dual formats, Job Costs, Quantities and Expendables, Cost of Job* and *Selling Price of Job.*

All reports of time are done in dual formats. Whenever you see a number with a decimal, it represents hours and hundredths of an hour as in 2.5 represents 2 hours 30 minutes. If the display contains a colon, then the format is in Hours and Minutes. And would read as 2:30.

Because GraphiTech utilizes tangential speed and spoilage curves for the determination of operating characteristics, you will generally note that while the speed increases as quantities increase, the run spoilage (waste) will decrease. All

printouts showing these variations may also be confirmed when viewing the speed and spoilage curves of Figure 24.

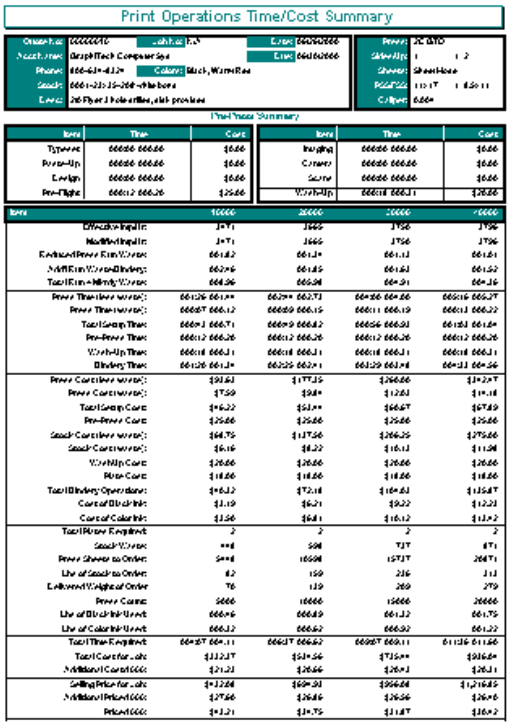


Figure 31 – General Time/Cost Summary

Bindery Time Cost Summary

The bindery areas are provided as totals in the General Time/Cost report however there is a separate report dedicated only to bindery as partially shown in Figure 32.

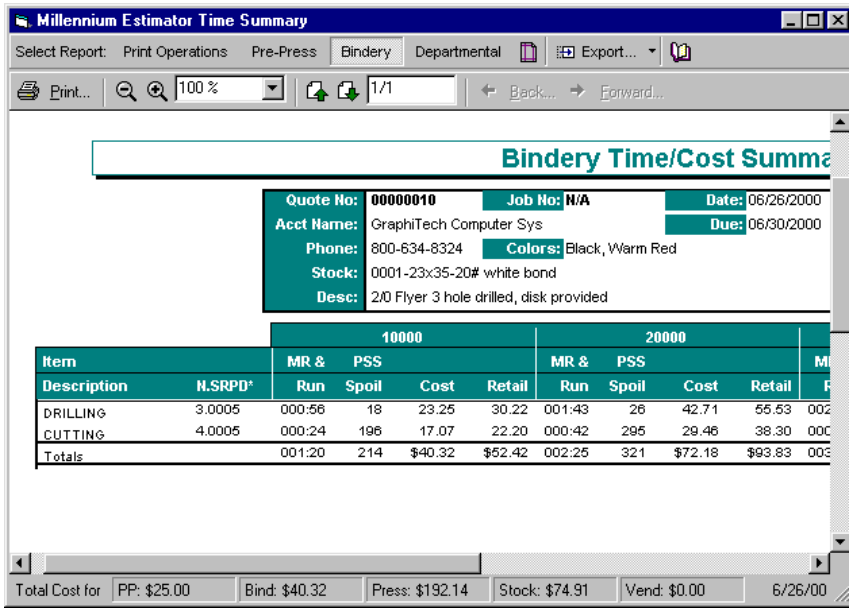


Figure 32 – Bindery Time/Cost Summary

And if you are more inclined toward departmental pricing, then the following Pricing report would be beneficial to you.

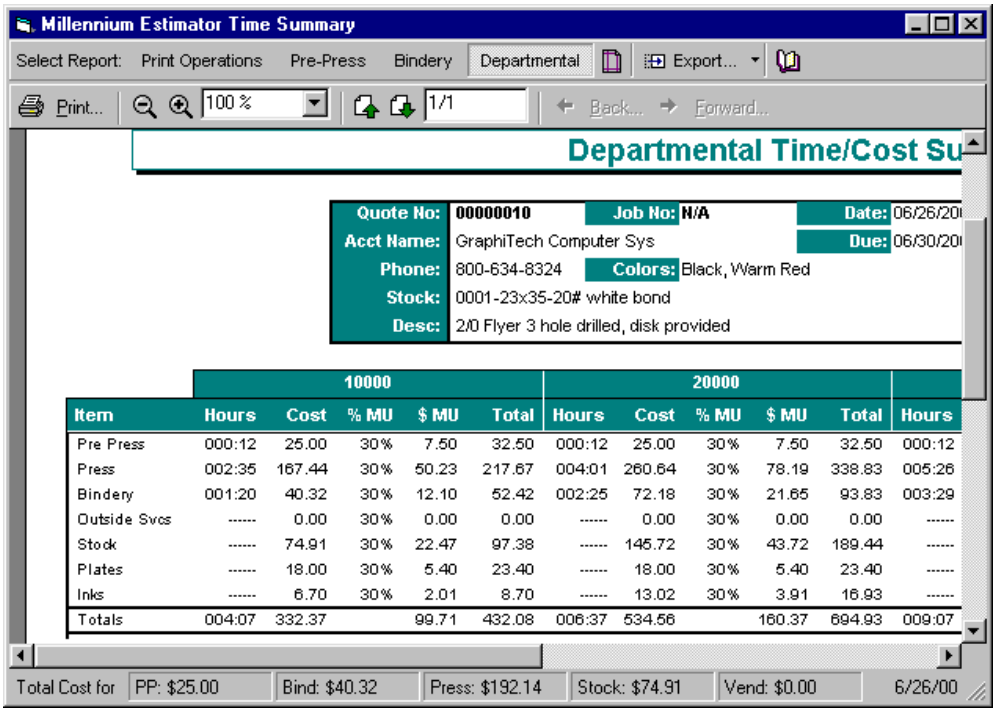


Figure 33 – Departmental Summary

In this report, all major departments are shown, along with materials. Both the costs and the retail prices are shown along with dollar and percentage markups.

Quotation Bids

In today's eCommerce oriented market, it is becoming more and more efficient to either fax or email the bid to your customer. And although the bid may still be printed and either mailed or given to your customer, you may find it easier to simply electronically deliver it to your customer

After clicking the button that launches the Bid routine, the following screen will appear.

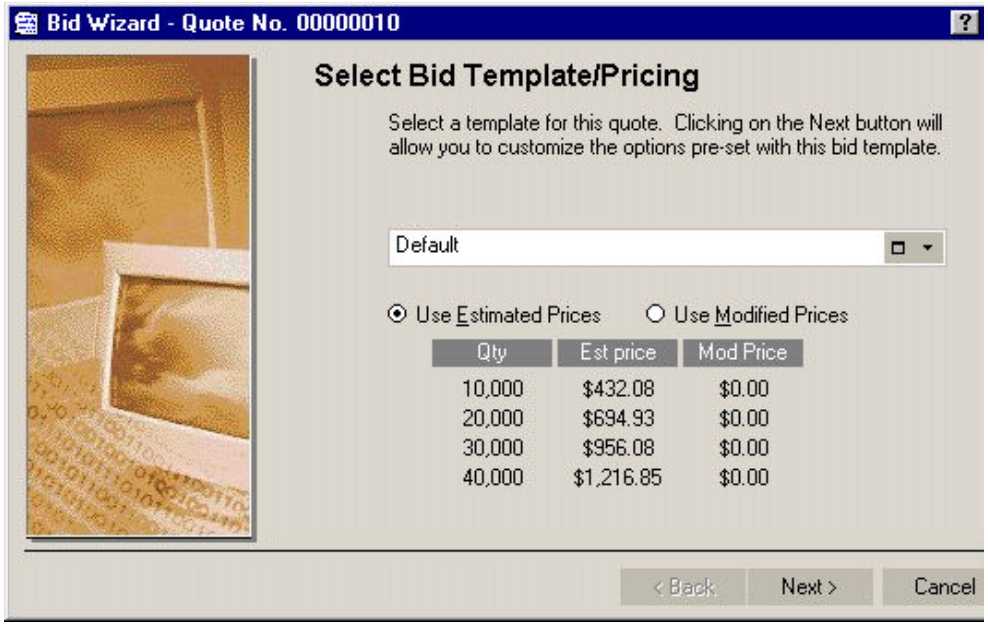


Figure 34 – Bid Selection Screen

The bid will usually appear with the Default form in use, however you may create several types of bids based on this design. One company for example, maintains a different set of disclaimers based upon the type of job, i.e., web, perfecting, silk screen, etc.

By clicking on the box to the right of the word Default, you see how the various default values are set.

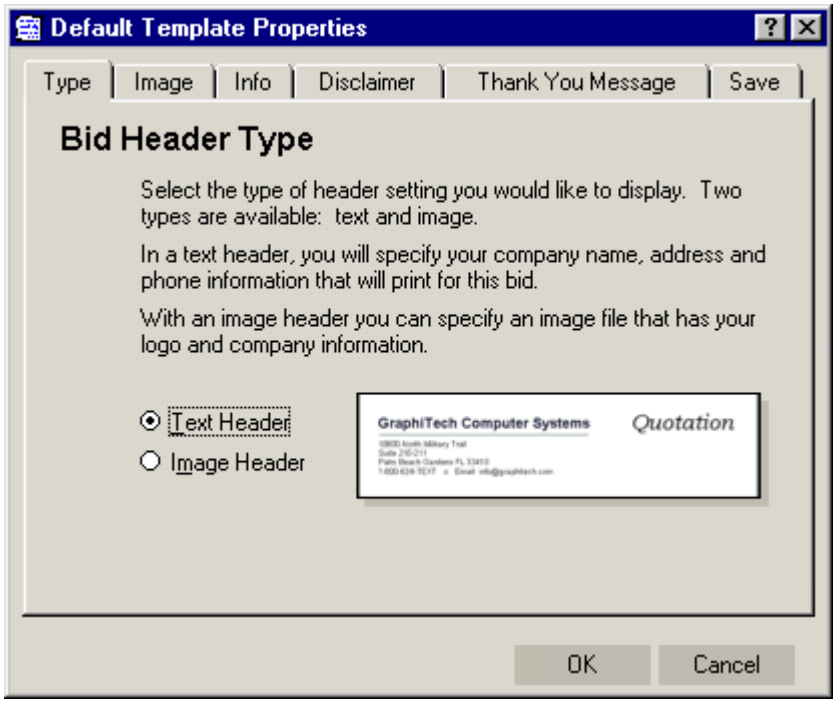


Figure 35 – Default Values

Note that you may specify either a Text head or if you have a scanned logo available, you may specify the Image header. If you click on the Text header, then under the info tab you will find an area for entering your company information.

The other tabs may be modified as well and generally include Printing Standards information. Once the information is saved, you will note as you progress through the bid that several areas are automatically generated for you. These of course, may be retyped by you.

Faxing a Bid

In order to fax a bid, you must have one of the many fax programs installed on your computer such as WinFax. In order to fax the bid, all you need to do is indicate that you want to print out a copy of the bid, then select the fax as your output, rather than a printer. You will then be prompted for appropriate phone info. Remember, that your customer file contains all of the fax, cell phone and other numbers that may be required.

Email a Bid

If you are using a standard email server or subscribe to an ISP that provides information about your email capabilities, then you should be able to fill out the required information readily.

In Figure 36, the type of information required is shown.

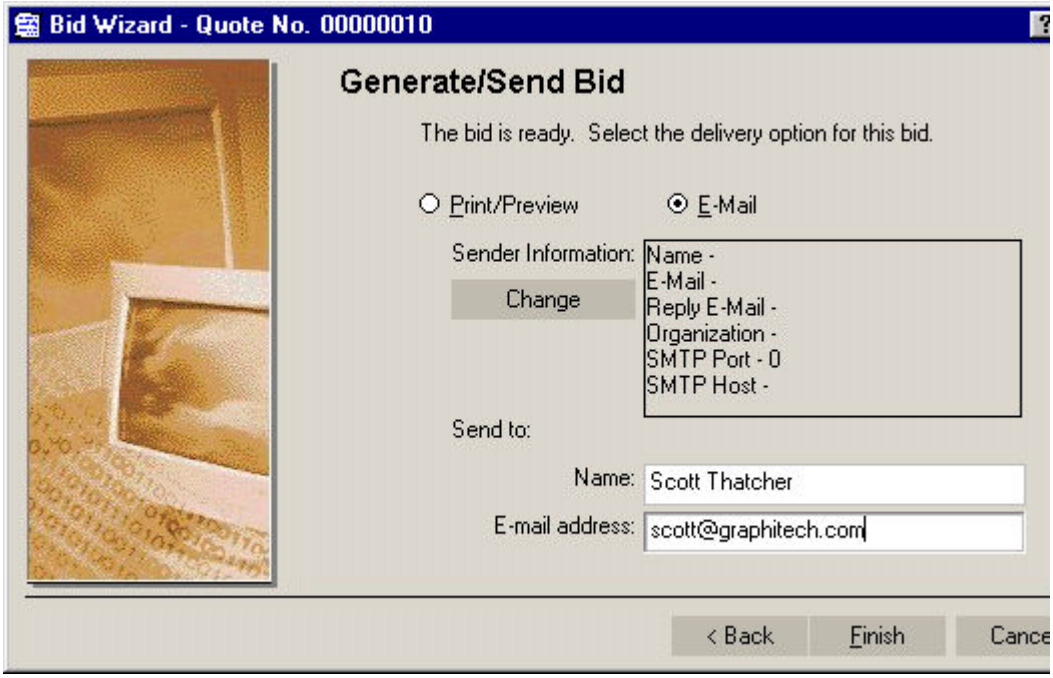


Figure 36 – Email Specifications

To change the specifications, click on "Change". This information must be filled out prior to actually sending the bid by email.

You must be connected to an email server or ISP prior to using this feature.

Millennium Work Order

In order to obtain a work order, you must have a job number assigned. In the above example, we created a small quote of 10,000 – 40,000 flyers. The customer has called back and stated our bid was good and that they wish to order 20,000 of the Flyers.

By either returning to the order screen (click on cancel at bottom of summary screen), or by loading a new Order Entry program if you happen to be in a quote and cannot get out of it, select Orders/Quotes and click on the Icon identified as "***Go!***". The following screen will then appear.

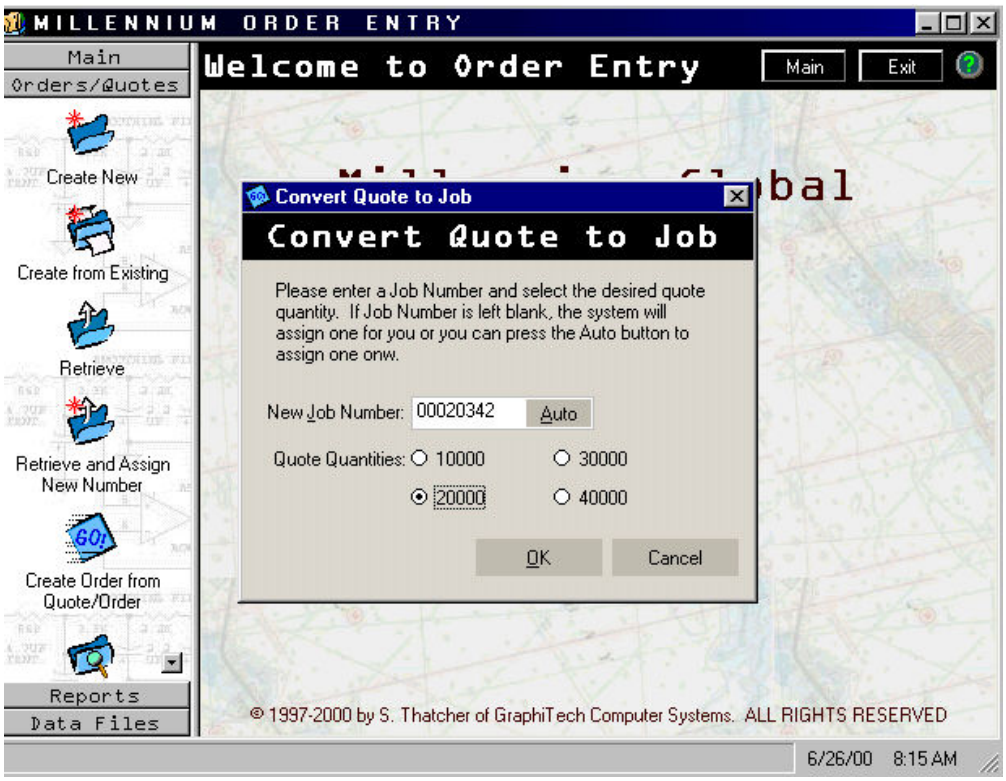


Figure 37 – Converting Quote to Job

Note that at this point you may freely change the job number to any number desired. It must be a total of 8 digits but you need only enter the significant numbers (preceding zeroes are not required but zeroes following the number are required). When finished, click OK.

After retrieving the appropriate information and assigning the job number, the program will immediately revert to the summary screen.

It is always a good idea at this point to save your work by clicking on the save button. Also, you may wish to re-calculate the price by clicking on the estimate button to confirm the earlier quote.

The only difference that will be obvious between the Quoted Summary Screen and the Job Summary Screen is that when there is a job number assigned, the command button "***Print Work Order***" will appear and be available to use.

Figure 38 shows a partial printout of the Work Order.

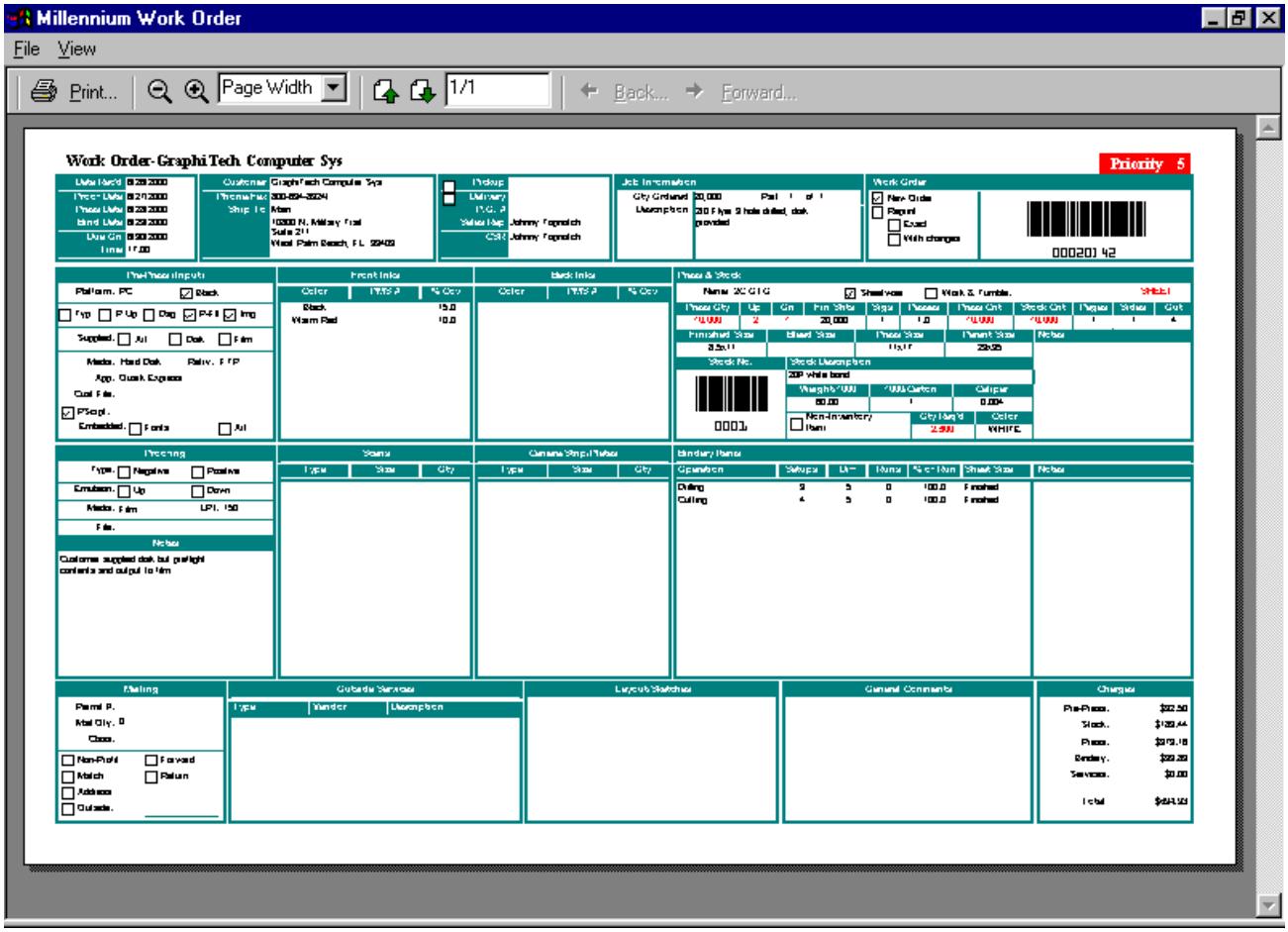


Figure 38 – Work Order

Glossary of Terms

Out

The number of Press Sheets imposed upon the Parent Sheet.

On

The number of Finished Sheets (forms) that are different. This definition refers to a form that is truly different, not just a W&T in which the form is simply turned over. If a job consisted of 4-8.5x11's on a press sheet of 17.5x22.5 and of those four forms, two were the same, and two were different, then On would be 2.

Up

The number of Finished Forms imposed upon the Press Sheet. The standard definition includes the word identical, however this definition only refers to total forms, whether identical or not.

Make-ready

The total amount of time required to mount and adjust plates within any given job. May or may not include work & turn time or re-mounting time.

Press Runs

The total number of passes through a press for a given number of signatures. Example: 2 Signatures of 4/4 and 4/2 will require 4 passes or runs on a 4 color press but will require 7 passes on a 2 color press.

Signatures

A one or two sided sheet upon which one or more forms are imposed. Usually identified when producing books. Example: An 8 page signature includes 4-2 sided forms. When flat sheets are printed one side and cut apart and collated, the signature then is run 4-up to produce 4-1 sided forms.

Run Time

That portion of time allocated to an operation that involves the actual operation or running of the equipment. Does not include make-ready or setup.

Hourly Cost

Usually referred to as the Budgeted Hourly Cost for a particular center or operation. May also refer to Out of Pocket cost.

Job Ticket

See definition below for Work Order.

Order Entry

The process of entering information about an order or project.

Work Order

A means of conveying information about a job or project to production personnel.

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