Guide to Using

Job Costing & Tracking

GraphiTech Computer Systems

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Overview

What's Inside

The Millennium Job Costing & Tracking system is a State-of-the-Art, Windows95/98/NT compatible program designed to be run on a networked computer.

Reports are available for Job Cost Labor and Materials as well as for Equipment and Employee productivity. Drill-Down Pivot reports provide comprehensive analysis of labor for every conceivable department, period, job and employee range. Add to this capability Shift Reports, Payroll Reports, inventory usage, and Real Time Tracking of Jobs, and you have an instant knowledge database of entire plant activity, right at your fingertips.

The program is interfaced to GraphiTech's KeySys and/or TermSys Shop Floor Data Collection Systems as well as to both Dos Professional Estimator and Millennium Professional Estimator. In addition, the Millennium Job Costing module interfaces to both Inventory and several Customer databases.

Job Costing WorkStation

The PC required for use with Millennium Job Costing may be minimally configured as follows:

- 133 MHz Pentium
- 16 MB of Ram
- 1-3 GB Hard Drive

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

Network

Various networks may be used with *Job Costing*. These include Novell, NT, and others, all of which must support Win95/98/NT.

Data Modes

The system can be set to either Database Mode or Compatible Mode. Both modes store received and processed data into a relational database model. However, if your network is running in Compatible Mode, the data is also processed using the old format from the MS-DOS version of Job Costing. If you are using other MS-DOS GraphiTech products like TermSys, KeySys, Estimator, etc., it is suggested you run in Compatible Mode.

The disadvantage of Compatible Mode is speed. Job Costing will save processed data twice in Compatible Mode. If you do *not* have any other MS-DOS versions of GraphiTech products or modules, it is strongly suggested to set the mode to *Database Mode* for improved efficiency, reliability and speed.

Please call GraphiTech Technical Support at **800-634-TECH** for further assistance on selecting the appropriate mode.

Installing Millennium Job Costing

To load *Millennium Job Costing*, 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, click *START* followed by RUN. Type the drive letter followed by the word SETUP (for example *D:SETUP*) and hit the enter key. 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 reading 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.

About Your Company

If the box shown is empty, please enter your company name. Click on the *Next* button to proceed.

Destination Folder

Here you will want to provide the location of the *Millennium* Folder, which is the location to be used for the programs. It is assumed that you are operating under Windows 95/98/NT, thus long filenames are used for default entries. In fact, the computer you are installing this program into must have a Windows 95/98//NT operating system. The destination folder may however, be limited to 8 characters if you desire. One such name would be *Millenia*.

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 as created above. Click *Next* to continue.

Sample Files

Not recommended if you already have live data. Accept the default *No*, and click *Next*. If you wish to use sample files with *Job Costing*, then select the appropriate option followed by *Next.* If you select *Yes*, then a screen will display asking for the sample folder where you want to copy these sample files. Select the desired folder as in the previous steps.

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 Job Costing 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 Job Costing

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 2
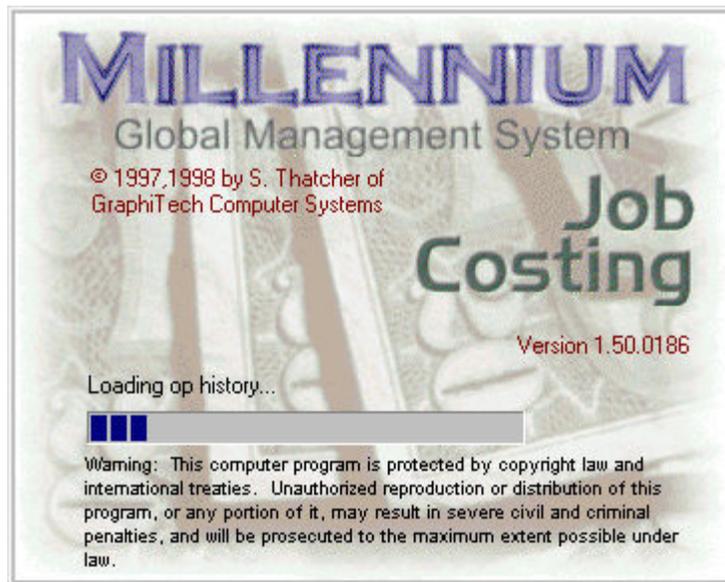

Figure 2. Splash Screen

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 menu selections. On the left is found all menu selections. As you click each menu bar, you are presented with several icons from which to choose. The information pertinent to that icon will then appear in the larger window to the right.

Within the Main Menu you may enter information such as Time Card data for items which were not entered during normal data collection procedures or as a result of modification to normal employee times.

In addition, you may use the icon "Terminal Activity" to view which employees are logged into the various Terminals or KeyPads in and around the plant.

System Settings

In order to permit the program to function properly with your current data, we need to start with certain settings. For example, Figure 3 illustrates the initial setting whenever you plan to import data, as we plan to do next.
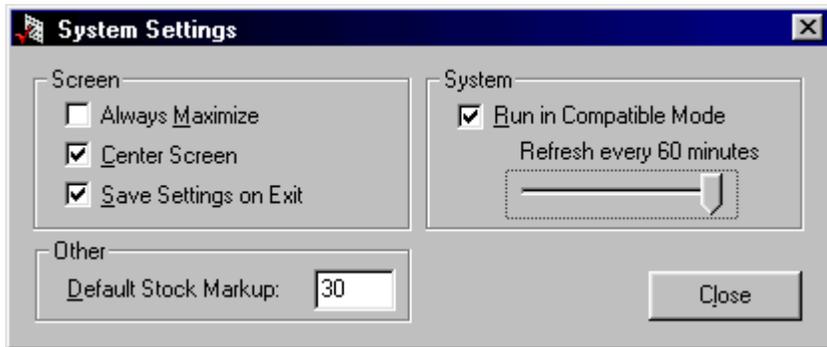
Figure 3. Initial System Settings

You will note that the compatibility box is checked and the refresh cycle is set to 60 minutes. This is done to avoid conflicts with data collection and refreshing of data while rebuilding. The setting for the refresh rate may then be returned to 5 minutes once the import has been accomplished. See Figure 4 below.
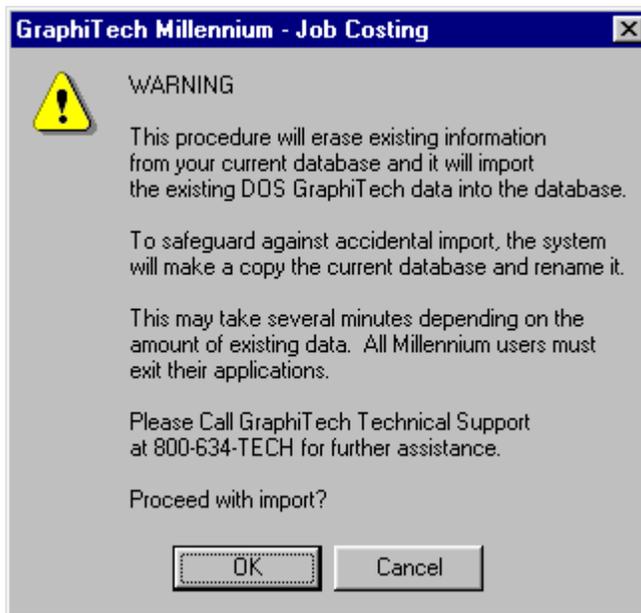

Figure 4. Final Warning when Importing Data Files.

Under the Menu Selection entitled "Data Files" you will find an import icon that will need to be accessed *PRIOR* to running the program live. Once you select the "Data Files" menu, you are requested to enter the word "password" prior to gaining access. See section entitled "Data Files" for more information. Click the "Import Files" Icon. You will need another password (again called "password") to gain access to this area. A warning will also be issued prior to actually importing data.

Be certain that you do not have any DOS programs running (primarily printing work orders, entering orders, etc).

About Millennium Job Costing

Figure 5 illustrates the screen that appears when you click the icon "About Millennium Job Costing" in the Main Menu.
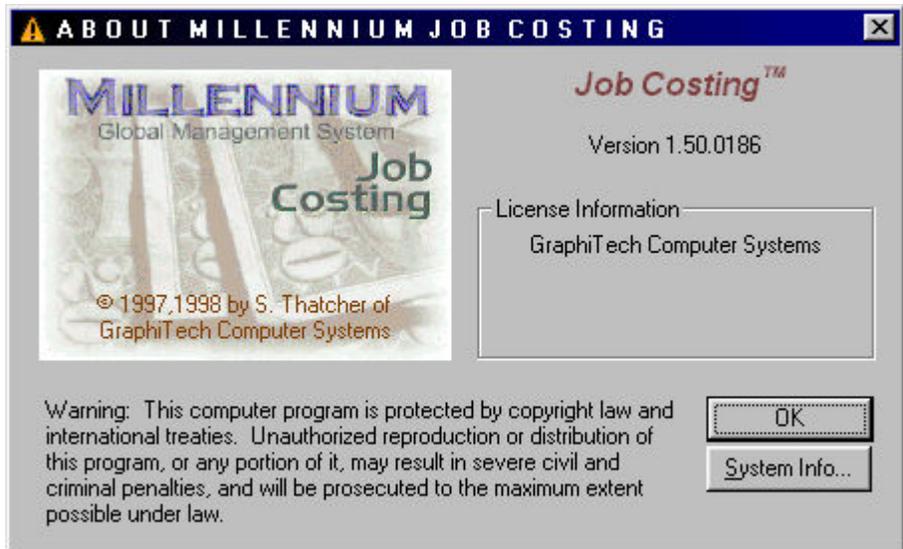
Figure 5. About Millennium Job Costing

You may review System Information here as well as directly as stated above.

Terminal Status

If you also have either or both of GraphiTech's Millennium Data Collection Systems, the Terminal Status screen in the Main Menu will permit you to review activity within various departments. For example, suppose you needed to know where an employee was located. Just click on the department where they are normally located and you have the answer. If they aren't there, look in several other terminal areas until you find them or determine that they left for the day. Figure 6 illustrates how the screen appears.
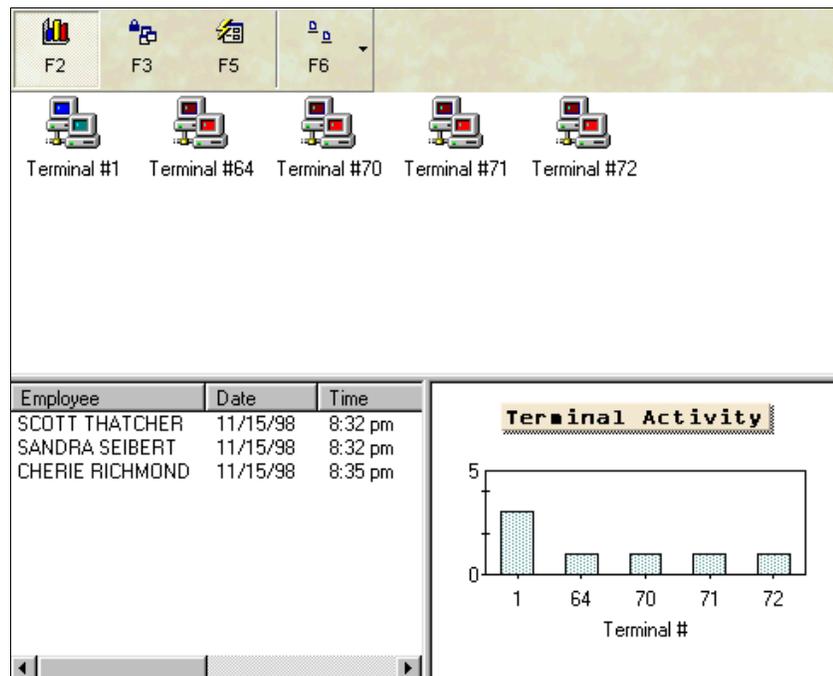
Figure 6. Terminal Status Screen

The Terminal identifies KeySys KeyPads from Numbers 64 through 99 while Terminals are identified by numbers 1 through 63.

Time Card Data Entry

This type of entry is used to add additional time to a job should the automated methods prove inadequate. Remember that the shop floor data collection is a real time system, thus time may not be added to a job through a data collection module. In addition to time, materials may also be added to the job in this manner. Figure 7 illustrates the type of data that may be entered while using this portion of the program.

Figure 7. Time Card Data Entry

Order Entry

After entering your password, you may access this area of the program. Order entry may be used if this is a stand-alone program in which no estimating or other Order Entry function is available elsewhere. A short printed work order may also be printed once it has been entered or retrieved from existing orders. Figure 8 identifies the types of information that may be entered.

Figure 8. *Order Entry*

F4 is the printer setup as shown in Figure 9.

Figure 9. Printer Setup

F5 will produce a printed work order based on the display showing in Figure 8. A sample of the printed work order is shown in Figure 10 and may be used with any

type of printer capable of using true type fonts (that includes HP, Brother, Panasonic, in both Laser and Dot Matrix).
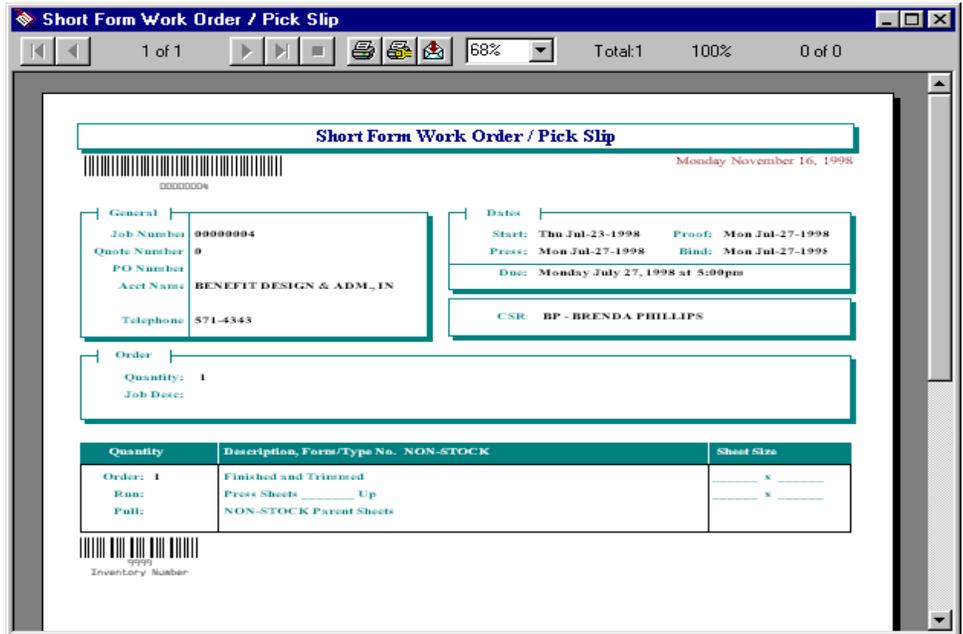

Figure 10. Partial Work Order Printout.

Figure 11 identifies the bar above the work order. These buttons allow you to perform various functions on the data within the job log (one of which is shown in Figure 10 above).

Figure 11. Edit and Operations Toolbar.

F2 is the edit tool. By clicking on the icon or hitting F2, you are able to select and edit data contained on the screen. To save the data, click the Save button located to the far right as shown in Figure 8. If you need to move to the top of the file (Home), hit the arrow and bar pointing to the left. To move up one record at a time, click the single arrow pointing to the left or hit page up. If you wish to add a new job to the file, simply click on the "Ins" Icon above or hit the Insert key. When you are in the insert mode, two other keys are available to you, namely the Cancel Key (ESC) and the Update Key (F10). The Icon with the X through it represents the delete key, which may be clicked or you may use ALT D to perform the same function. When using the delete key, be sure the record you wish to delete is showing.
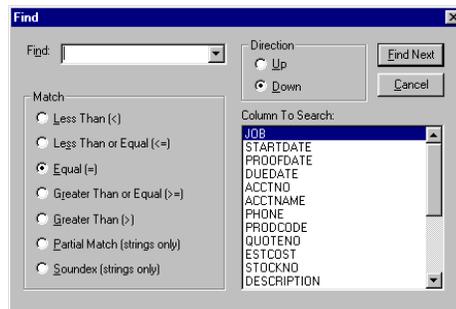

Figure 12. Find and Search Parameters

The Icon, which shows a pair of binoculars, represents the Find Command. Figure 12 indicates the degree to which you may search for different jobs in the field. The smaller binoculars with the arrow is available whenever you have made a search and wish to "Find Again".

To the far right of the tool bar is a number which contains the total number of jobs which are either active or that are contained within the Job Log.

Archiving Jobs

If you wish to remove a job from the Job Log, you will need to archive it. Figure 13 illustrates how the screen appears when you are in this area. You may identify customers, job numbers or focus on the list itself in order to scroll and locate specific jobs.
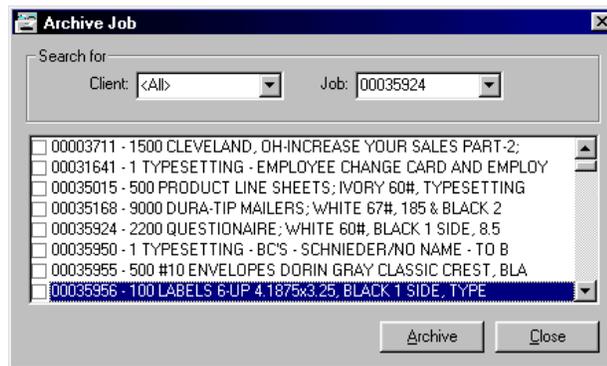
Figure 13. Archiving Jobs

Data Files

Departments

Within the Data Files menu selection are many individual files, which are used to maintain the database. Figure 14 illustrates the appearance of the file, which is used to maintain various departments.
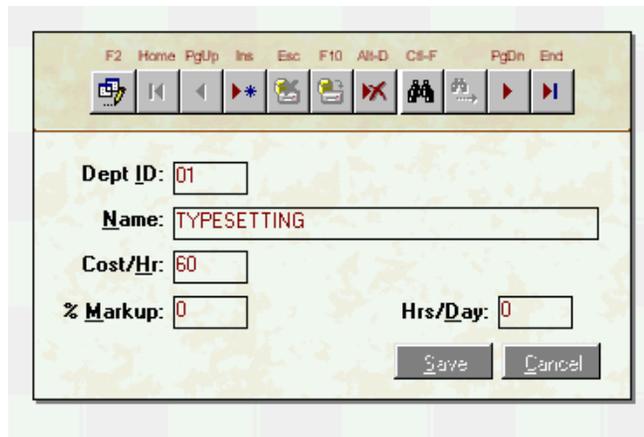

Figure 14. Department Files

The toolbar at the top of the screen works in the same manner as previously described. The department ID consists of a 2-digit code from 01 to 99 and represents the main department. In the Older version, you were limited to 28 departments. In the Windows, you may have up to 99. The Name field describes the name of the department. Next is entered the Cost per Hour for that department. This information is derived from estimating, budgeted hourly rates or from current knowledge about the department. A Percent Markup field is also provided as well as a provision for the total number of man-hours this department can absorb or produce on a daily basis. This last field is used for the purpose of obtaining productivity. Be sure to include total labor hours, not just the number of hours available per day. For example, if two employees work one shift only then 16 hours are available for this Department/Machine.

Operations

The Operations file has a similar appearance. See Figure 15. It requires you to scroll to the department and then enter the operations within that department.

Figure 15. Operations Files.

The Opcode is a three-digit number from 001 to 999 that is assigned to the operation. In general. Previous versions were limited to 14 operations within a department. Now, you may have up to 999 operations. The name is entered into the next field.

The percent of cost area is provided in order to allow the user to place similar machines of varying cost into the same department. For example, suppose you had a tabletop folder, a drill and hand collating within the Department called Small Bindery. If you found that you generally needed $25 per hour in that department, but only needed to realize $20 per hour in the hand collating area, then you would place an 80 in the field for % cost. The effective rate would then be 80% of $25 (The department rate).

The last field represents the Standard for that operation. If, in Figure 15 above, you could realize a keyboarding rate of 60 WPM (and that represented the standard you wished to collect), then you would enter 60 in that field. If no standards are available for that operation, then leave the field blank or showing zero.

Employees

The employee file is used to identify those persons associated with your company, either full or part time. In addition, sometimes several employees are entered as Contract #1, Contract #2, etc., for purposes of having name badges available for the temporary help that so often is necessary.

Figure 16. Employee File.

As shown in Figure 16, the same toolbar is used throughout the data entry/modification procedure. The Employee ID is a two-character identifier for the employee. This same identifier is used, in bar code form, on badges, in conjunction with entering of data and for Payroll purposes. The SS Number is also used for Payroll purposes. The name, address, state and phone number are also entered as required.

The last field identifies the number of hours this employee is required to work. This number is used to identify various efficiencies within the Shift Report, and to provide a basis for overtime pay in the Payroll (Time Card) Report.

Product Codes

Product Codes are used within the Historical Ledger program, Work Orders and the Saves Quotes of Estimating. They define the type of work that is being processed.

Figure 17. Product Codes.

Jobs

This area is used to edit data that has already been entered to the specific Job file. Figure 17 identifies the data available to edit.

Figure 17. Job Edit Screen.

Once you have selected the appropriate job number, either from the list available or by entering the job number directly, the first record of data will appear in the lower window. The toolbar above the lower window will permit you to edit the data as required.

Note: When editing inventory information, first find the stock number then ONLY edit the quantity number that appears after the inventory number. If the inventory was entered by mistake, then set the quantity to zero rather than trying to delete the two records.

Passwords

Figure 18 illustrates the procedure to use when changing your passwords. As long as you know the password, then you may change them.
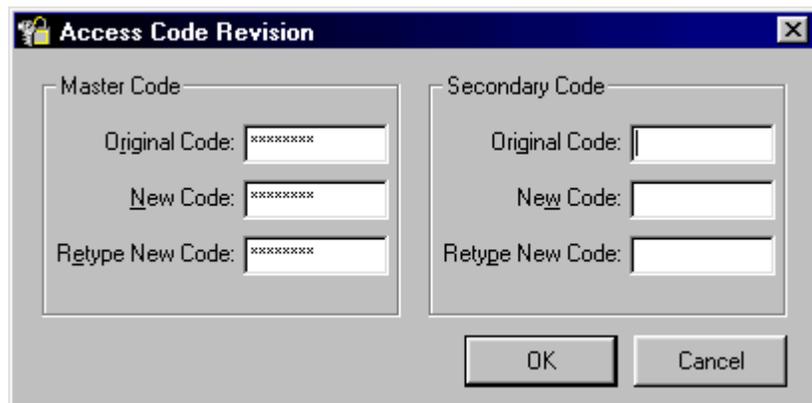
Figure 18. Password Revisions.

Stock Markup

Figure 19 illustrates the procedure for changing the markup of stocks on either a global or individual means. In general, you will want to have the stock markup have the same value in this table as it does within the stock inventory program.
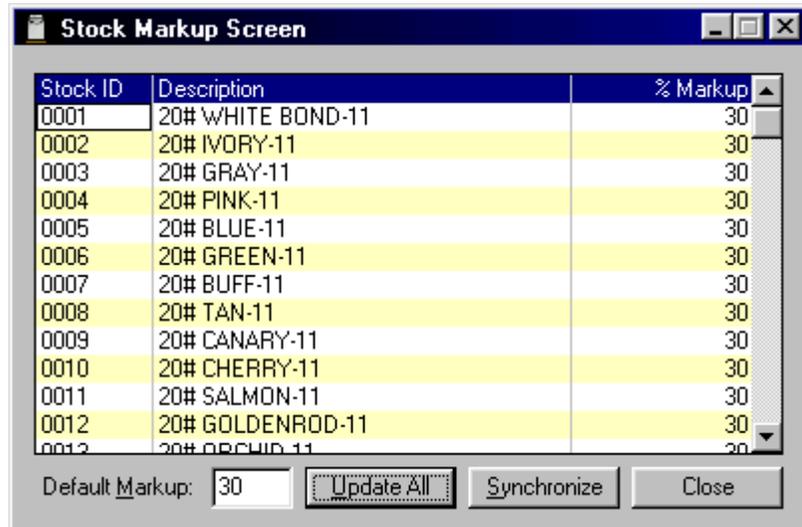

Figure 19. Stock Markups.

In order to update the markup values, enter the desired markup into the Default Markup cell and click on the Update All command button. If you wish to have the markup values revert to the values within Inventory, then click on the command button Synchronize. For individual markup modifications, click on the record line you wish to change, move to the markup cell and retype the desired markup and hit Enter or tab to the next cell.

Break Codes

There are several codes that trigger certain events in the Shop Floor Data Collection system. They can be found in the DOS directory and are called CONCUR.BRK and are also within the Access Database itself.
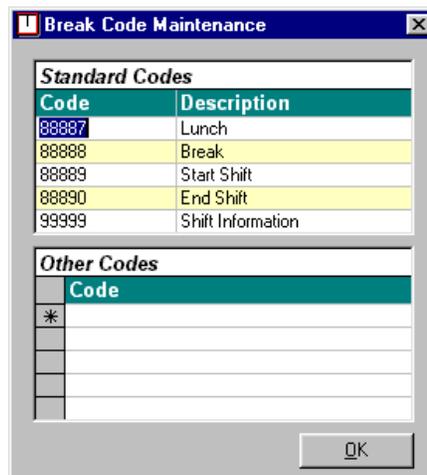

Figure 20. Break Codes

Other Codes as shown above are for future expansion.

Repair Data Files

As data is transferred to the Access Database and additional data is recorded from one or more workstations, there may be times in which data gets slightly corrupted. If this occurs, or you suspect that it has occurred, access the repair function as shown in Figure 21.

Menu Selection

By simply selecting the appropriate menu bar as shown under "Data Files", you are presented with a sliding selection screen. As you select any one of the icons, the appropriate window appears to the right and permits data entry for that selection. In the case of repairing data files, you are only requested for a password followed by a brief warning. Once you respond to these two areas, the re-indexing will commence. You should be certain that there are no other users logged on when performing either this function, or the "Import Data Files" function. Both of these operations will rebuild your database.

Passwords are set to the word "password" and are not case dependent. They may be changed in the "Data Files" area of the menu. If you are already using Job Costing, you may already have set these passwords when in Dos.

Figure 21

Reports

All reports are generated from three separate menu selections. They are

1. **Reports**. This area provides access to Job Listings, Activity, Job Cost and the Pivot Report (a drill down analysis of departmental labor activity).

2. **Production**. The Employee Production Hours is a means for reviewing total hours logged in a given time period. The Shift Report provides detailed line by line listing of activity of each employee. The Summary Shift Report is a summary or departmentalized report. The Time Clock is the same as is used by many manual time clocks. A Production Analysis is a review of employee production compared to a given standard, and finally the Departmental Production is a means for reviewing how well each piece of equipment maintained its level of production efficiency.

3. **Work-In-Progress**. Sometimes called Work-in-Process. The Job Cost Summary report provides only labor and materials for all jobs selected. Work-in-Progress Overdue provides a late days tracking for all jobs within the plant. And last is the Job Status/Location report that allows you the ability to print out the location of each job in the plant.

Glossary of Terms

Employee ID

A 2-character identifyer for the employee and is used as the barcode for badges, jobs, etc.

Status Screen

A means of viewing from any terminal the status of activity in a specific department.

Time Card

In this program, it is used to enter labor and materials to a Job.

Order Entry

The process of entering an order for use by the system.

Archiving

Removing data from a live storage area to one that is used less often.

Department ID

A 2 digit number that identifies the specific department being referenced.

Opcode

A 3-digit code that specifies the operation number being referenced.

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