

# TechWare Incorporated

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*Less time!*



*More data!*



*More to analyze!*



*Less frustration!*

## *MainTrac*

### **Program Manual** Version 2.14

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# Chapter 1



## Installing TechWare MainTrac

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System Requirements .....	1.2
Installing TechWare MainTrac .....	1.2

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Welcome to MainTrac!

If you are like many manufacturing facilities, you've been waiting for a user friendly Preventative Maintenance System that allows you to efficiently organize and capture the large amount of proactive maintenance needed in your facility.

Regardless of your computer knowledge, chasing the maintenance data required to keep your machines in tip top condition takes time that could be spent in a more productive way. Compiling this data not only takes time, but can also lead to maintenance emergencies and unexpected, expensive down times.

And yet, to get control of your maintenance operation, you need to have a complete profile of processes, machines and maintenance items associated with a specific plant. You want a system that's powerful and accurate.

TechWare MainTrac is the system you've been waiting for.

Use the procedure on the next few pages to install MainTrac, and then look over the rest of this Getting Started book so that you're sure to get the most out of your data.



## Requirements

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To use TechWare MainTrac for Windows, you need the following equipment and supplies:

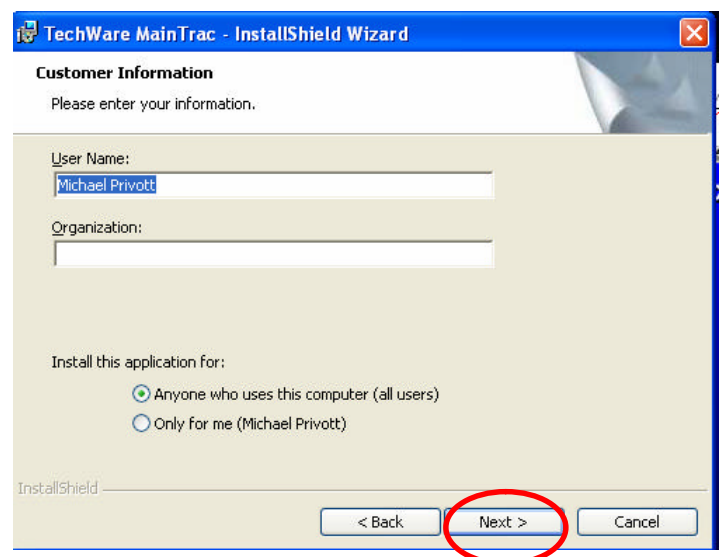
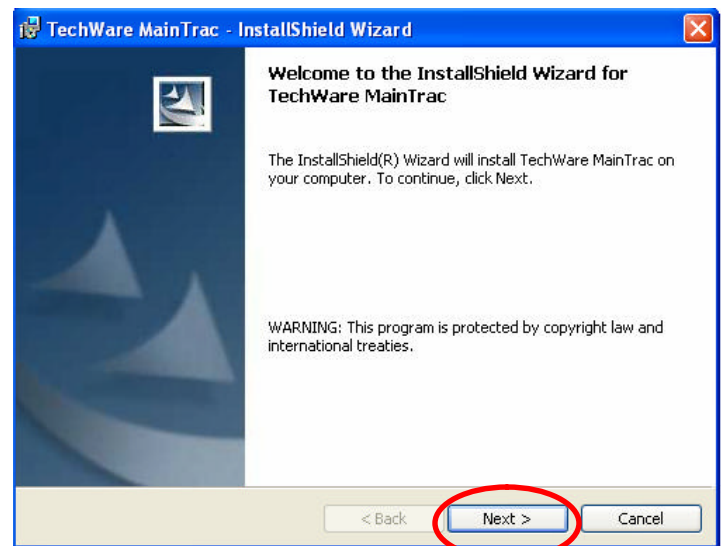
- Pentium Processor II 233 IBM-PC compatible or higher with 250MB of hard drive space
- 64MB RAM.
- VGA Monitor, SVGA monitor or better.
- Windows 9x, NT, 2000, XP.
- TechWare MainTrac for Windows install CD (compact disc).
- Laser or Ink Jet Printer supported by Windows.

## Installation for Windows

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To Install MainTrac :

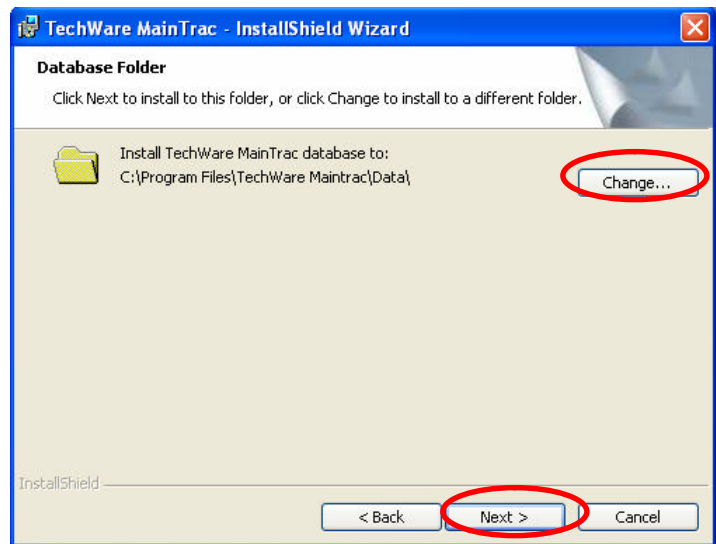
1. **Insert the MainTrac CD in you computer's CD tray. Your operating system should be set up with the Auto Run feature. If this feature is not available. *Select Setup* from *Disk 1*. The following will display on your monitor.**
2. **Click on the “Next >” button to continue.**
3. **Type in your User Name and Organization (optional). Select if installation should be for all users on this particular PC, or just for the designated “User Name”. Click on the “Next >” button.**



4. **TechWare MainTrac will be installed in the C:\TechWare MainTrac directory of your Program Files program group. (MainTrac will create the directory if it doesn't exist.)**

**NOTE:** TechWare MainTrac can be installed in a different directory as well as a different Program Group by selecting the “Change” button .

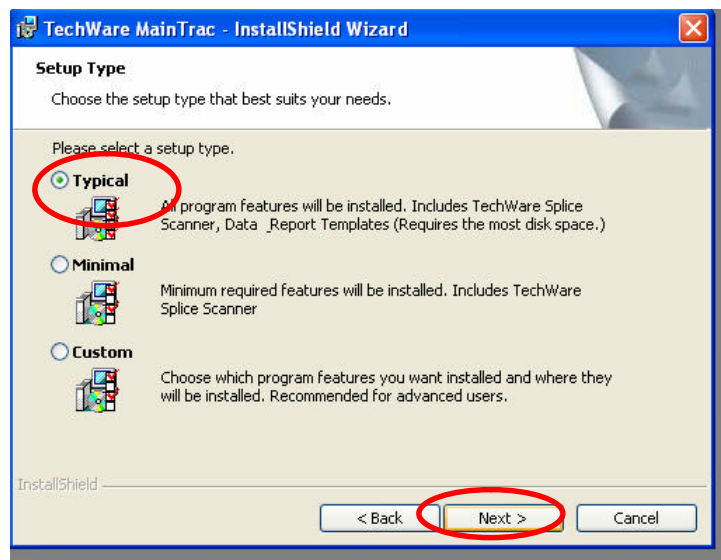
5. **Click on the “Next >” button.**



6. **Determine your Setup Type. We recommend leaving the default setting of “Typical”.**

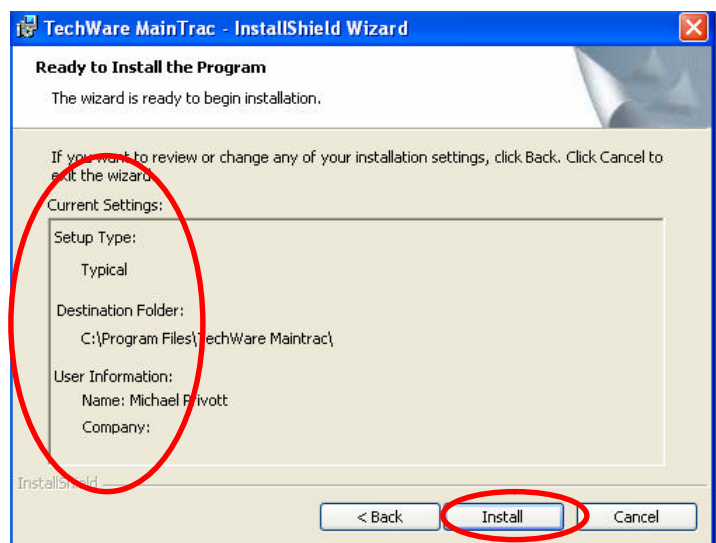
7. **Click on the “Next >” button. MainTrac will create a Program Folder for MainTrac .**

8. **Click on the “Next >” button.**

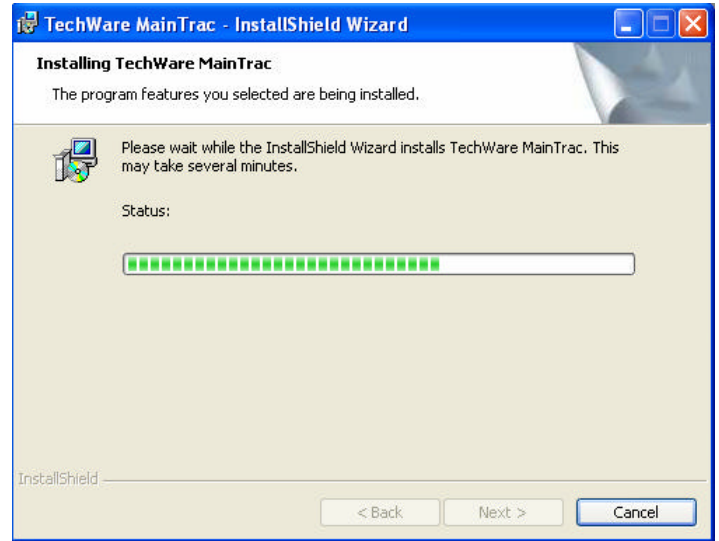


9. **MainTrac is ready to be installed. Review your setup choices making sure they are correct.**

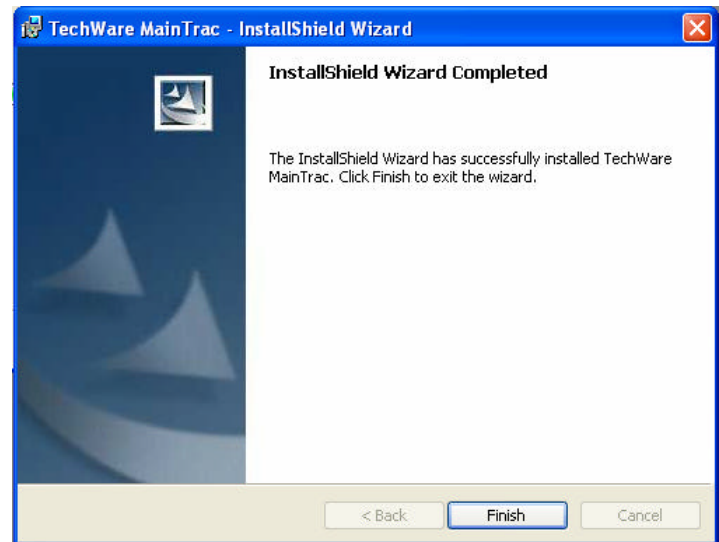
10. **Click on the Install button.**



11. **MainTrac software is now being installed on your computer. The status bar indicates the progress of the installation.**



12. **After all *MainTrac* files have been installed on your computer, the following will display on your monitor. Simply click on the “Finish” button. You are ready to run MainTrac!**  
Note: If install says computer needs to be rebooted, wait until install is complete.



## Chapter 2



### What is MainTrac? A Feature Overview

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An Alternative to Manual Preventative Maintenance Systems .....	2.2
Understanding and Using this Manual.....	2.4
Introduction to Common Areas of MainTrac .....	2.5

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TechWare's MainTrac allows you to enter and keep track of important preventative maintenance tasks and schedules throughout your manufacturing facility. It provides an effective tool for compiling and storing valuable maintenance statistics. MainTrac will allow you to gather maintenance data by using extensive reports on many variables that you thought were impossible to efficiently generate. MainTrac is sure to become an indispensable tool in making critical preventative maintenance and quality decisions.

With our simple color coding, MainTrac shows you what machine and item to target first. Run preventative maintenance schedules, record repair dates and keep an accurate account of equipment downtime. MainTrac makes all of these tasks simple and fast.

The following sections introduce you to the main features of MainTrac. You'll see how each feature helps you organize and collect your data so you get a complete picture of all of your machines requirements.



# **An Alternative to Manual Preventative Maintenance**

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What makes **TechWare MainTrac** an alternative to manual systems? At TechWare Incorporated, we strive very hard to make the setup and entry of preventative maintenance data as easy and painless as possible. In addition to our unique *one screen status display*, we have made navigating as efficient as possible with the use of drop down lists and easy search features wherever possible.

## **Flexibility**

### **Edit any data...**

Data can be accessed for as long as you want, and it's always editable. We understand that some data will contain mistakes that need addressing. Therefore, MainTrac allows you to correct those mistakes easily.

### **...but still protect your valuable data from unwanted changes.**

TechWare MainTrac has a password feature that gives you control over who can make changes to data. Users can be assigned rights such as **read-only**, this feature will allow users the capability to print a report or view records, but will not allow them to change any data. MainTrac has other security measures such as **write**, **delete** and **pack** rights. These features require supervisor access and are described in more detail later in the manual.

### **Create MainTrac company profiles all at once or a little at a time.**

MainTrac has the ability to create lists that are used for drop down lists as well as error correction. MainTrac does not require you to enter these lists all at once; they can be created "on the fly", as you need them. Some lists make more sense to do in advance, but that is entirely up to you!

## **Fast Data Entry**

MainTrac has several features to make data entry quick, consistent and easy to use.

### **Drop Down List selection**

In areas that require data entry, MainTrac has a feature that allows a list to be displayed in a window called a **drop down list**. This feature lets you scroll through the list and select the desired item. This saves time and ensures that you enter names, companies and so on, in a consistent manor every time.

### **Field Verification**

Fields that are manually entered and have a drop down list associated with that field, are automatically checked against the list and the entered value. If the value is not the same as the list, a message is displayed explaining that the value is not in the list. At this point, the user can select to keep the value or change and make adjustments accordingly.

## **Find Data Instantly**

MainTrac data is stored in tables that are indexed in a number of different ways. This allows a user to search for data by Plant Number, Manufacturing Process, Maintenance Item, different dates and so forth. This feature alone can be a valuable time saver. There are a couple of ways to search data, both of which will be explained later in this chapter.

### **Ordered Search**

Imagine for a minute, a list of things that you have written down in numerical order. Now, say for



example, that you would like that same list in alphabetical order. To do so would require you to re-write the list, which could be difficult, if not impossible, for a large list. MainTrac has the ability to give you these lists in many different ways with just a click of a button!





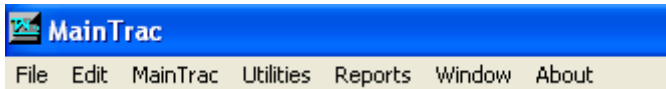
# Understanding and Using this Manual

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MainTrac is accompanied with this manual that will help in solving questions a user may have. It would be wise to read the manual before getting into MainTrac. If necessary, use the manual along with the MainTrac program to obtain a better feel for the working environment.

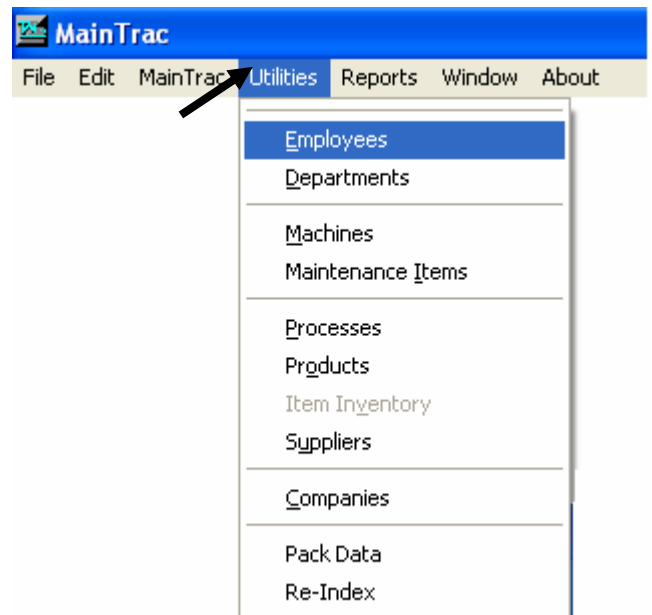
The MainTrac manual is set up to allow the user the ability to follow along with ease. Diagrams and helpful shortcuts are located throughout the manual

Within MainTrac, there are numerous menus and screens that help the user make their decisions. These menus are commands, which perform a MainTrac task. In this manual all of these menu items are explained. The use of menu diagrams along with the associated screen will be explained first.



Above is a clip of the MainTrac Menu Bar. From the Menu Bar, options can be selected in two ways. With a mouse, simply click on the word to obtain its pull-down menu as shown to the left, or select the option by pressing the letter of the command that is underlined. To activate the Menu Bar, press the **Alt** key simultaneously with the underlined letter.

*For example, to activate the Utilities Screen from the Main Menu Bar, press **Alt U**. The arrow up/down keys can be used to make your final selection. (to activate the sub menu bar as shown to the left, press the Shift key simultaneously with the underlined letter. i.e.: **ShiftE** will access Employees.*



Within this manual, there are several clips of screens and pull down menus. These are created to help the user gain a better understanding of both the manual and the program. Some screens may look similar, but pay close attention as most perform different functions. This manual takes a step-by-step look at the commands within MainTrac. Each of MainTrac's commands is explained below their appropriate menu box.

At the end of each description, there is often a bold face phrase to the left of center. This is known as a **keyboard shortcut**. Simply pressing a few keys can access certain functions in MainTrac. This saves time by skipping the menu bar and associated screens. Each command with a shortcut key has its own unique key throughout MainTrac.

Within this manual, **keyboard shortcuts** will be designated in bold type. An example of what the shortcut key would look like in the manual is:

**Ex: Keyboard Shortcut: Ctrl-A**

This manual's main purpose is to enable the user to become more comfortable with the MainTrac program. If read completely, the task in using MainTrac will be made much simpler. This manual will follow the order of the pull-down menu bars. As mentioned above, MainTrac has multiple ways in which commands can be executed. In some instances, commands can only be accessed via the menu screens or only by the pull-down menu bars.



# Introduction to General Areas of MainTrac

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Throughout MainTrac, the user may encounter similar commands on different screens. For example, some of the reports contain the same basic setup. It is for this reason that this section is being presented. This area will allow the user to become comfortable with the commands used frequently in the MainTrac program.

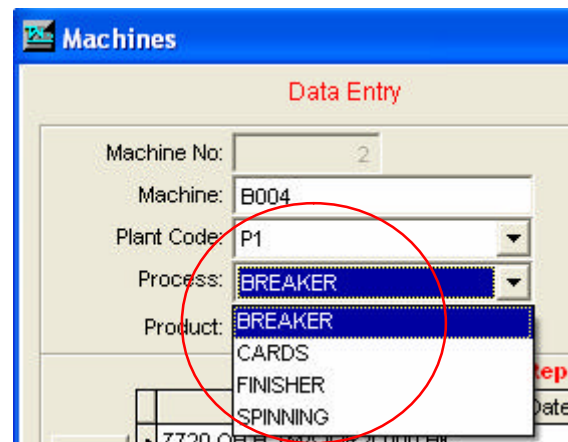
## Tab and Arrow Keys

One of the most basic principles about MainTrac is that of keystrokes. The use of keyboard **shortcuts** has been explained earlier (Chapter1- Using This Manual), but there are also other important keyboard functions. An example of this would be the **tab** key. When searching for commands in the various menus, it is possible to move through each function without actually performing them. By pressing the **tab** key, the user can move the highlighted area to a different action listed on the screen.

An alternative to the **tab** key is the arrow keys. The arrow keys work in much the same manor as the **tab** key except for the one major difference. The arrow keys move to every character within a field, whereas the tab key, when pressed, will move to the next field immediately, if the user passes the desired field, they can simply press **shift-tab** to reverse the direction. Both choices work will in performing their purpose of selecting items.

## Drop Down Lists

One of the best features MainTrac has is the ability to display lists of employees, companies, styles and even test procedures. Any time a down arrow is at the end of a selection field, a **Drop Down List** can be used. Simply click on the arrow to display all items within the list. By using the up and down arrow keys to navigate through the list, the user can choose the correct item. The user can also key in a name, MainTrac automatically checks that value against the drop down list. If the name is incorrect or not in the list, an option is given to allow the keyed name to remain, or be changed before continuing. With these two features, erroneous data can be kept to a minimum.



## MainTrac Toolbar Icons



Most screens within MainTrac have the same toolbar located at the bottom of the data sheet. Below we will review the functions of each icon.

**Note:** The function of each command is displayed on screen by using the mouse to point your cursor at a Control Icon (do not click the mouse).

## Controls

All users should become familiar with the controls section of the navigation bar. This box contains commands that can be used to move to different records within the table.



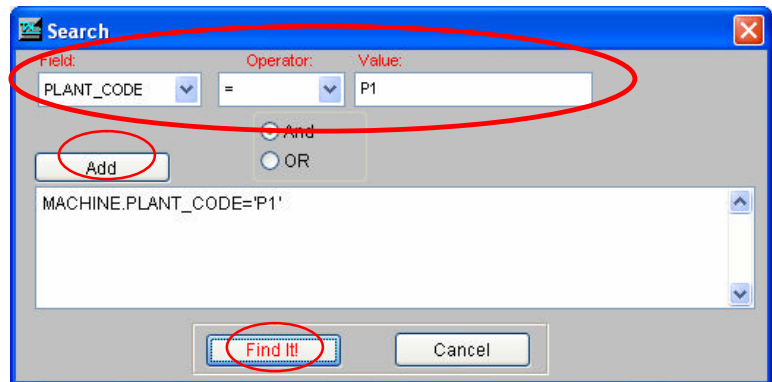
1 2 3 4

- 1) The **Top of file** button moves to the beginning of the table.
- 2) The **Next** button is used to move to the next record in the table. (The "next" record is listed in numerical order by Project.)
- 3) The **Previous** button is used to return to the previous record.
- 4) The **Bottom of file** button moves to the end of the table.

## Find/Search - MainTrac



When the *find* function is selected, the user will be presented with a menu that contains a number of different search topics. Use the arrow keys to scroll through the list. Users with a mouse can simply click on the arrows at the right hand side of the search box. Once the user selects a topic, they must enter the desired field to search. After you have entered your search criteria, begin your search by simply clicking on **Find It!**



The clip at the left searches for machines in plant 1.

1. Select the field name relating to plant code from the drop down menu (in this example; PLANT\_CODE is used).
2. Select an operator from the Operator drop down menu (in this example; = is used).
3. Type your search criteria into the Value box (in this example; P1 is used). Whole words as well as partial ones, or even single letters can be used in the search.
4. Click on the **Add** button. Your search criteria should be displayed in the box. (in this example; MACHINE.PLANT\_CODE=P1 is displayed).
5. Click on **Find It!** This starts the search and within seconds all Machines with Plant Code P1 will be displayed.

Within seconds, MainTrac retrieves the record(s) you need.



***Find/Search – Notes:*** When in the **Search** mode, the search icon on the MainTrac data screen toolbar will be highlighted red, and only data that meets the search criteria will be displayed.

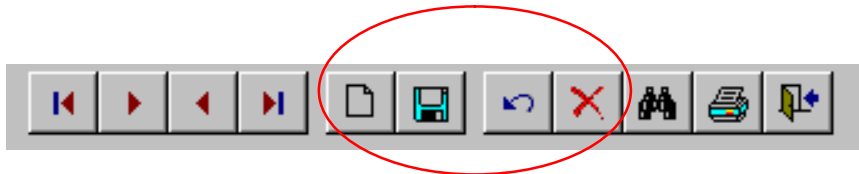
If you have more than one set of criteria, (search by plant code AND process) select either "**and**" or "**or**" and then repeat steps 1 through 4 before you select **Find It!**


Selecting "**and**" means **BOTH** criteria must be met. Selecting "**or**" means **EITHER** criteria can be met.


Click on the **cancel** button to exit the search mode.


## New/Edit/Save

On most of the MainTrac screens, there is a set of five commands labeled: **New**, **Edit**, **Save**, **Cancel** and **Delete**.



 The **New** button allows the user to create a new Project, Sample, Package or Rep.

 The **Save** button naturally saves any changes made to any record.

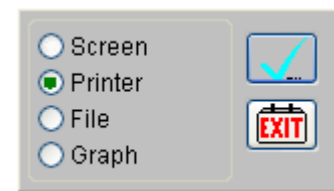
 The **Undo Changes** button will cancel your last transaction.

 The **Delete** function will tag a record for deletion. When pressed again, the record is unmarked for deletion.

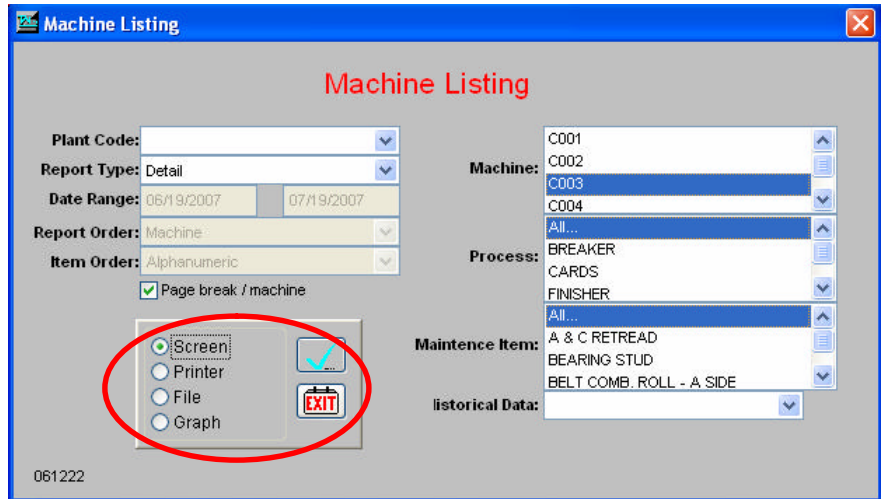
Deleting records in MainTrac is analogous to throwing a piece of paper in a trashcan. You can always retrieve the paper as long as the garbage collectors have not picked up the trash. When records are **Packed**, all records tagged for deletion are **permanently** removed from the database. More information on **Pack** can be found in Chapter 5.

## Output Device

Another common area of MainTrac is that of the Output Device screen. Once a report form has been completed, the user can select the device in which the media will be transferred. The operator can select **Screen**, **Printer**, **File**, or **Graph**. *This manual assumes that you have already defined your printer(s) in Windows.* With this in mind, if you select **Printer**, MainTrac will send the report to the default printer.



To the right is an example of the Report Request Form for Machine Listings. Output selection of **Screen** will allow the user to output their query to their computer screen. More detail will be given to Report Selection in *Chapter 6 - Reports*.

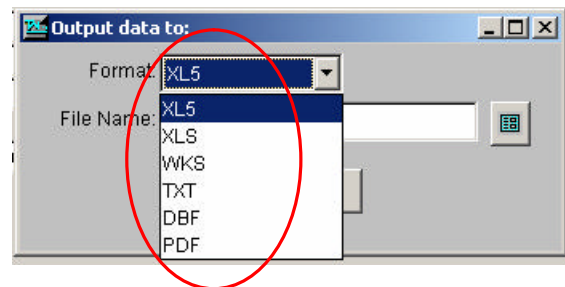


The image shows a software window titled "Machine Listing" with a red title bar. Inside, the title "Machine Listing" is displayed in red. The form contains several input fields and lists:

- Plant Code:** A dropdown menu.
- Report Type:** A dropdown menu set to "Detail".
- Date Range:** Two date pickers showing "06/19/2007" and "07/19/2007".
- Report Order:** A dropdown menu set to "Machine".
- Item Order:** A dropdown menu set to "Alphanumeric".
- Page break / machine:** A checked checkbox.
- Machine:** A list box containing "C001", "C002", "C003", and "C004".
- Process:** A list box containing "BREAKER", "CARDS", and "FINISHER".
- Maintenance Item:** A list box containing "A & C RETREAD", "BEARING STUD", and "BELT COMB. ROLL - A SIDE".
- historical Data:** A dropdown menu.
- Output Selection:** A group of radio buttons labeled "Screen", "Printer", "File", and "Graph". The "Screen" option is selected and circled in red.
- Buttons:** A green checkmark button, a red "EXIT" button, and a small icon button.
- Footer:** The number "061222" is displayed in the bottom left corner.

When the **File** option is chosen, MainTrac allows you to export the contents of the query to a file.

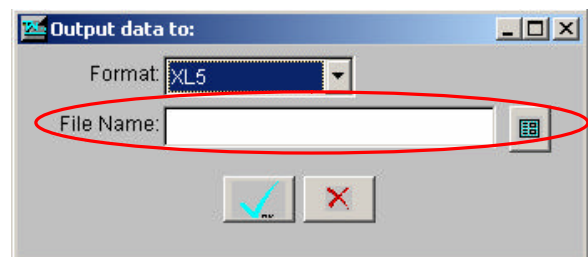
**Format:** This field will allow the user to select; Excel (XLS), Lotus123 (WK1), DBF (database file), TXT (text file) and PDF (portable document) formats from the drop down list.



The image shows a software window titled "Output data to:". It contains a "Format:" dropdown menu with a list of options: "XL5", "XLS", "WKS", "TXT", "DBF", and "PDF". The "XL5" option is selected and circled in red. To the right of the dropdown is a "File Name:" text field and a small icon button.

**File Name:** This field is used to name your file and "browse" for a path or location to store the file on your computer.

**Note:** the default path is the **Xfer Path** listed in the MainTrac **System Setup**. For more detail see *Chapter 3, System - System Configuration*.



The image shows the same "Output data to:" window. The "Format:" dropdown is set to "XL5". The "File Name:" text field is empty and circled in red. Below the text field are two buttons: a green checkmark button and a red "X" button.

The user can review any report prior to printing by selecting **Screen**. This enables the data to be displayed on the monitor for complete analysis prior to exporting or printing.

## Queries

As with most of the reports found in MainTrac, the operator can **query** the database on inputs they have selected. The power of MainTrac allows the operator to enter a handful of parameters for MainTrac to search. Different dates, Machines, Maintenance items and so forth, can be included on the same query. All reports in MainTrac perform in much the same fashion. You might say that these screens are an inclusive type report. Any information you enter will be included in the query.

For example, the clip below shows a query for a Machine Maintenance report. The report generated from this query will meet the following criteria:

All Maintenance items (Report Type: Detail) for All Plants/locations: (Plant Code: blank) between the dates of June 19, 2007 and July 19, 2007 (Date Range). This report will run in Oldest repair date order (Report Order: Oldest repair date) for Machine called C003.

Since Screen was selected in the Output section, the following report would be displayed on the monitor:

Date: 07/19/07 **TECHWARE INCORPORATED - Scheduled Maintenance Listing** Page: 1

Plant Code: P1 Process: CARDS Filter:

Machine	Repair	Major Item	Run Hours	Repair Date	PM Due Date	Adj. Hours	Comment
C003	FLATS REV GRD	N	2520	08/29/05	01/16/06	840	
C003	FLATS REV. NEW	N	4400	08/29/05	04/04/06	840	JDH HX33
C003	CYL WIRE	Y	8800	08/29/05	10/04/06	840	JDH 4577 - 35 Degree
C003	OH CARD	Y	8800	08/29/06	09/15/07	384	
C003	DOFFER WIRE	Y	17600	08/29/05	10/06/07	840	JDH 4540 - Serrated
C003	LICKER IN	N	17600	08/29/06	09/16/08	384	JDH 3445 - 40 p/in2

Notes: 04/26/06 - Flats, Stat., OH  
04/26/05 - RC 4577, 4540, HX33, 3445

*Items in red indicate major item repairs, and the Preventative Maintenance (PM) due date. Green indicates current, or okay items. More detail will be in Chapter 6 – Reports.*

The possibilities are endless!





## Chapter 3

### System Settings

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Access / Login .....	3.1
About MainTrac .....	3.2
Logout .....	3.2
System Setup .....	3.3
Modify INI files .....	3.4

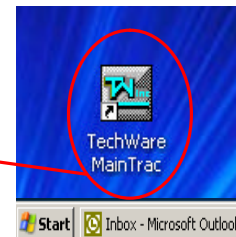
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### Access and Login

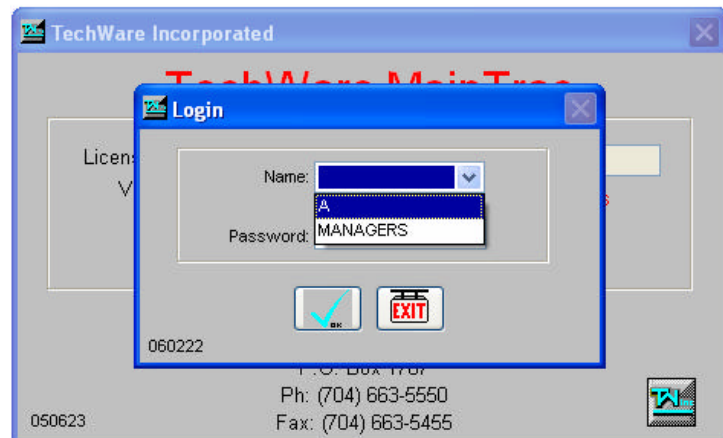
The "**Login**" function logs the user into MainTrac. Logging in is necessary when a user needs to add or edit a record. Each user has certain rights associated with their user name and password. These rights are defined in the "Employee Set-Up" screen found in Chapter 5. Users that do not login are given "guest" rights. This only allows them to print reports and review data.

**Keyboard Shortcut:** "**Ctrl - L**" Login can be accessed from the Main Menu screen by pressing "L" or by selecting "Login" from the System Menu bar.

- 1) From the main Windows desktop, double click on the MainTrac icon.



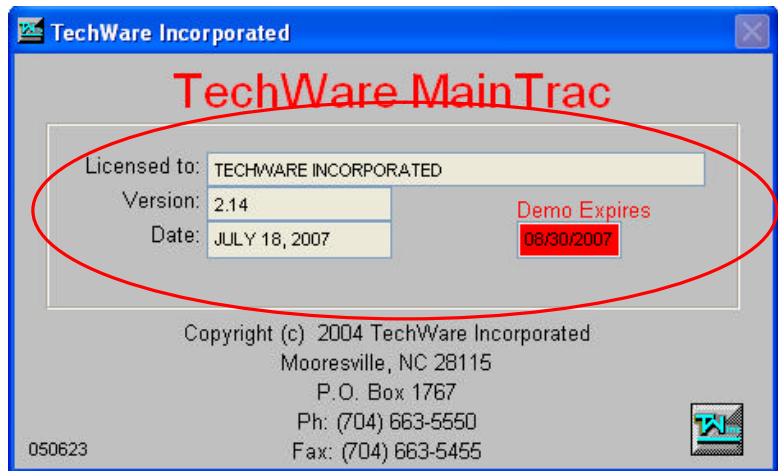
- 2) The **Login** screen will display automatically. Click on the down arrow to the right of the NAME field. A drop down list will provide all the users names (once they are entered). To get started, click on name "A" to select it from the user list and press enter. A password is not needed for this user name. We recommend removing this name from your list after all employee information is entered.





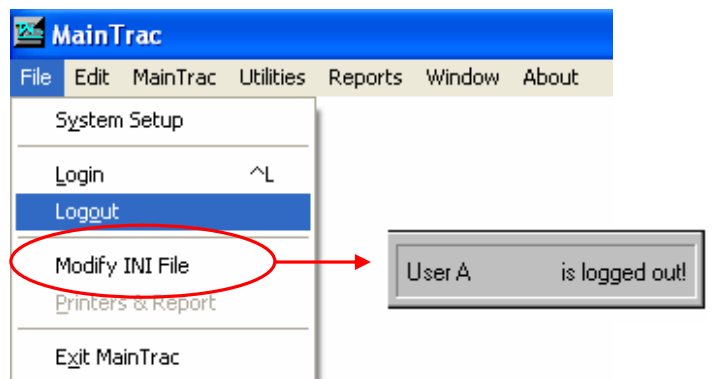
## About MainTrac

The "**About MainTrac**" screen explains the registration and license of the MainTrac Program. This allows the user to check on the serial and version number. If a version of MainTrac is installed as a demonstration, this screen will give the expiration information. If your version of MainTrac expires, call TechWare Incorporated for an activation key.



## Logout

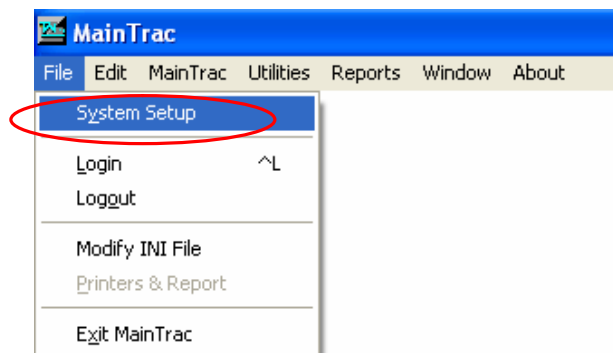
"**Logout**" by selecting "**Logout**" from the System Menu Bar. The "**Logout**" command returns the user to the "guest" status and allows only those "rights" associated with the "guest".



## System Setup

The "**System Information**" screen can be accessed by selecting "**File**" and then "**System Setup**" from the MainTrac Main Menu bar.

The **System Information** screen is used to define the default settings used throughout MainTrac.





The **Company Input** area allows the user to enter the Company Name, Address, City, State, Zipcode, Phone and Fax Numbers.

"**Data Path**" specifies where MainTrac will search for the data files on the computer.

The screenshot shows the 'System Information' dialog box with the following fields and settings:

- Company:** TECHWARE INCORPORATED
- Address:** 755 N. MAIN ST.
- City:** MOORESVILLE, NC
- Postal Code:** 28115
- Phone:** 704/663-5550
- Fax:** 704/663-5455
- Data Path:** C:\PROGRAM FILES\TECHWARE MAINTRAC\DATA\
- Xfer Path:** C:\PROGRAM FILES\TECHWARE MAINTRAC\
- Report Path:** C:\PROGRAM FILES\TECHWARE MAINTRAC\REPORTS
- Time Out:** 300
- Days Back:** 600
- Output Device:** Screen (selected), Printer, File
- Date Format:** MDY (selected), Set Centry (i.e. 1998) (checked), Prompt for Printer (checked), Auto "LID" deletion (checked), Ask to Save (unchecked)
- First Day of Wk:** Sunday
- Disclaimer:** TechWare Incorporated, 755 N. Main St., P.O. Box 1767, Mooresville, NC 28115, Ph: 704/663-5550

The dialog box has a blue title bar with the text 'System Information' and a close button. At the bottom, there is a toolbar with various icons for navigation and actions, and a version number '051020'.

"**Xfer Path**" is used as a method to copy data to another directory.

"**Report Path**" specifies where MainTrac will search for report files.

"**Time Out**" is used as an update/refresh feature. If numerous tasks are required throughout the day, "time out" can be used to refresh the MainTrac status screen to reflect entries made. The input is in seconds; therefore, a value of 300 would refresh or update any entries every five minutes.

"**Days Back**" is used to tell MainTrac the length of time to go back and get active data only. Reports can be generated for any length of time. (i.e: 365 days would equate to one year of Maintenance data.)

"**Output Device**" is the default setting used to tell MainTrac where the output will go. The settings are "Screen, "Printer" or "File". For more information on this topic, refer to Chapter 2, Introduction to General Areas of MainTrac.

"**Date Format**" is used to tell MainTrac to use MDY, DMY or YMD format for date.

"**First Day of Week**" is used to capture and calculate data for reports. The first work day of the



week should be entered here.

"**Set Century**" is used to display four digit date.

"**Prompt for Printer**" is used to display system printer options when MainTrac reports are selected for output.

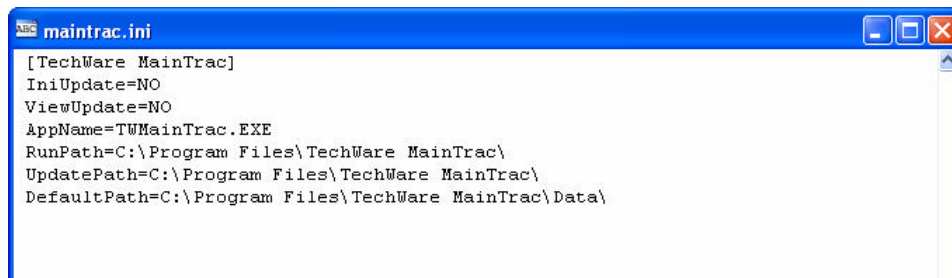
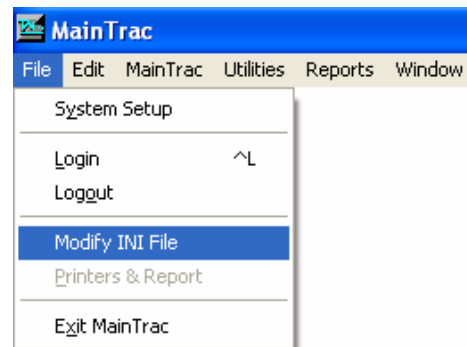
"**Auto Lid Deletion**" is used by the "TW Link" program to automatically delete raw data files collected from your equipment. If checked, any data already converted, will be deleted if it is over 2 weeks old. *This is a tie in feature to another TechWare Product. If you are interested in automatic data collection for Quality Control and SPC, please call us today at 704-663-5550, or email us at [sales@techwareinc.com](mailto:sales@techwareinc.com)*

"**Ask to Save**" can be used to prompt the user to save records.

"**Disclaimer**" can be used to print a disclaimer at the bottom of the page on various reports.

## Modify INI file

Pronounced *dot -in-ee file*, Is a file that has a.INI extension and contains configuration information for MainTrac. It is recommended that the default installation settings be used.



# Chapter 4

## MainTrac

MainTrac Status Screen ..... 4.1

### MainTrac Status Screen

"MainTrac Status Screen" can be accessed from the Main Menu screen by selecting "MainTrac" from the Main Menu bar, or by **Keyboard Shortcut: "Alt-M"**

Processes or Operations

Technware MainTrac

CARDSBREAKERFINISHERSPINNING

	C013 2/2	C025 2/2	C037 0/2	C049 2/2	C061 0/2	C109 2/2	C121 0/2	C133 0/1
	C014 0/0	C026 0/1	C038 2/2	C050 0/1	C062 0/0	C110 2/2	C122 0/2	C134 0/2
C003 1/2	C015 2/2	C027 2/2	C039 0/2	C051 0/2	C063 2/2	C111 2/2	C123 0/2	C135 0/1
C004 2/3	C016 3/0	C028 3/2	C040 0/2	C052 2/2	C064 0/2	C112 3/2	C124 0/2	C136 2/2
C005 0/0	C017 0/0	C029 0/2	C041 2/2	C053 0/1	C101 0/0	C113 3/2	C125 3/2	C137 1/2
C006 0/2	C018 2/2	C030 2/0	C042 0/0	C054 2/2	C102 0/2	C114 1/1	C126 2/2	C138 2/2
C007 0/2	C019 2/2	C031 0/2	C043 2/1	C055 2/2	C103 1/2	C115 3/2	C127 0/2	C139 0/2
C008 0/0	C020 2/0	C032 0/1	C044 0/2	C056 2/2	C104 0/1	C116 2/2	C128 1/2	C140 0/2
C009 2/2	C021 2/2	C033 2/2	C045 2/2	C057 1/1	C105 0/1	C117 2/2	C129 3/2	C141 0/0
C010 2/2	C022 2/2	C034 0/1	C046 2/0	C058 0/2	C106 0/0	C118 0/2	C130 3/2	C142 0/0
C011 0/2	C023 0/1	C035 0/0	C047 0/0	C059 0/2	C107 1/1	C119 0/2	C131 0/2	C143 0/1
C012 0/0	C024 0/0	C036 2/2	C048 0/2	C060 0/0	C108 0/0	C120 0/2	C132 0/1	C144 0/0

Machines and required repairs.

Date Range: 06/19/2007 To 07/19/2007  
Report Order: DETAIL Plant Code: ALL...

The MainTrac Status Screen is the heart of the MainTrac preventative maintenance program. You can quickly review all machine requirements on ONE status screen. Use this screen to drill down to individual repair history, repair items and downtime history. *Add* repairs and maintenance items. Adjust or enter down time requirements all from one status screen. By selecting Report Order: Exception , the Date Range can be used to view maintenance items within specific dates. Report Order:Detail lets the user see all maintenance items. The *Plant Code* is used to select specific Plants, or locations.

At the top of the screen are the “**Process**”(or operation) tabs. Within each process (or operation) is



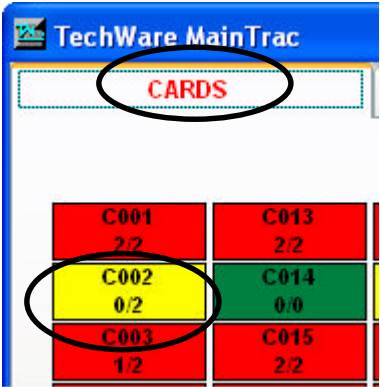
a grid that identifies each **Machine** and the nature of required repairs associated with it. **RED** indicates major repairs are past due. **YELLOW** indicates minor repairs are past due and **GREEN** indicates all repairs are current.

Let’s look closer at Machine name “C003”, under the Process (or operation) tab of CARDS.

Machine name “C003” is RED, indicating Major repairs are past the specified due date. The numbers “1/2” located under the Machine name indicate the quantity of Major repairs (first qty) and Minor repairs (second qty) past due. In this case, Machine name “C003” has 1 Major repair and 2 Minor repairs past due.

*Note: Machine name C002 is Yellow, indicating just 2 minor repairs past due 0/2, while Machine name C014 is Green, indicating nothing is past due 0/0.*

Double click on the Machine name “C003” block to zoom in on its repair history, past due repairs and down time history. The machine screen has three sections: 1. Machine identification. 2. Repair History. 3. Down Time History.



Machines

Data Entry

List

Machine No: 52

Type:

Machine: C003

Line: 1

Plant Code: P1

Process: CARDS

Product: SLIVER 100% C

Comment: 04/26/06 - Flats, Stat., OH  
04/26/05 - RC 4577, 4540, HX33, 3445

Repair History

Repair	Repair Date	Due Date	Comment
► CYL WMRE	08/29/2005	10/04/2006	JDH 4577 - 35 Degree
DOFFER WMRE	08/29/2005	10/06/2007	JDH 4540 - Serrated
FLATS REV GRD	08/29/2005	01/16/2006	
FLATS REV. NEW	08/29/2005	04/04/2006	JDH HX33
LICKER IN	08/29/2006	09/16/2008	JDH 3445 - 40 p/in2
OH CARD	08/29/2006	09/15/2007	

Down Time History

Start Date	End Date	Reset	Hour Adj.	Comment
► 02/25/2007	03/04/2007	<input type="checkbox"/>	168	-
12/22/2006	12/31/2006	<input type="checkbox"/>	216	-
12/24/2005	01/02/2006	<input type="checkbox"/>	216	-
11/23/2005	11/27/2005	<input type="checkbox"/>	96	-

Add Repair

Maint. Items

Add Down Time

070222

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Machine Identification

Repair History

Down Time History



The *Machine Identification Section* holds Plant Code, Process, Product and other information unique to that machine. *Repair History Section* contains information relating to maintenance item history and will also show any maintenance item that is past due. These items are highlighted in red. Scheduled repairs and new maintenance items can be added in this section by clicking on the appropriate task button to the left.

The last section on the Machines screen is set up for *Down Time History*. In this area, down time associated with the maintenance repair is entered. The adjusted hours column shows the amount of time the machine was shut down for repairs and is used in conjunction with the “run hours” to calculate correct due dates for scheduling. Functionality and file maintenance for this screen, and others, is covered in detail in *Chapter 5 - Utilities*



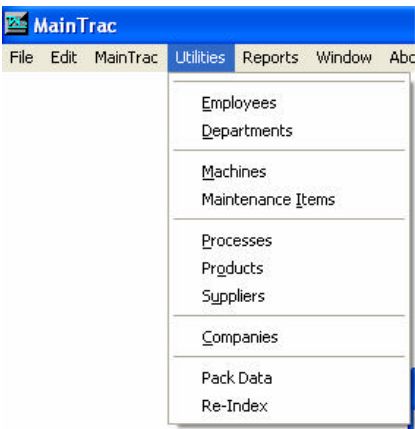
# Chapter 5

## Utilites and File Maintenance

Maintenance - File Functions and Operation.....	5.1
Machines File .....	5.2
Maintenance Items .....	5.3
Process Definitions.....	5.5
ReIndex and Pack Data.....	5-6

### Utilities - File Functions

**Utilities** can be accessed from the Main Menu by pressing **Alt-U**, or by selecting **Utilities** from the MainTrac Menu bar.



### Employees

**Employees** File is a detailed account of all the people associated with MainTrac. A clip of this screen is to the right. At this point, each employee that needs access to MainTrac is entered into the system. **First** and **Last** name, Title, Department, Phone etc. can be entered here. Each employee can have his or her own unique password that is entered in the "Password" box. The MainTrac Password can be alpha, numeric, or a mix of both. Once entered, certain "rights" need to be assigned to that individual. The first is **Maintenance Tech.**, this "right" selection allows Read Only review of records and reports. Second is **Write**, which allows the employee to add data or make changes to existing data.

A screenshot of the 'Employees' Data Entry window. The window has a title bar 'Employees' and a close button. It contains two tabs: 'Data Entry' (active) and 'List'. The form fields include: 'Emp No.' (15), 'Name' (First: A, Middle: , Last: A), 'Emp ID' (A), 'Title' ( ), 'Dept' (dropdown), 'Ext.' ( ), 'Fax' ( ), 'Phone' ( ), 'Password' ( ), 'Email' ( ), 'Confirm Pass' ( ), and 'Comment' (text area). At the bottom, there are checkboxes for 'Maintenance Tech.' (checked), 'Supervisor' (checked), 'Write' (checked), 'Delete' (checked), and 'Pack' (checked). A red circle highlights these checkboxes, with a red arrow pointing to them and the text 'Employee "rights"'.

Thirdly, **Delete**, allows the user to select records for deletion. Finally, the **Pack** right allows the user to REMOVE all the records selected for deletion. **Supervisor** – Highest level of access rights, only employees with supervisor rights can change certain data. You will find that most users need all but the "Pack" rights.






## Machines

This is the Master file that holds all the machines for each process (or operation). We touched briefly on this in Chapter 4 – MainTrac Status Screen.

**Machines** can be accessed by clicking on **Utilities** from the Main Menu bar and selecting **Machines**.

The file opens to the first machine entered. (*Note the Machine No. field*)

To enter a new machine, click on the

new record icon .

MainTrac automatically assigns a *Machine Number* in numerically sequential order. The *Machine* field is used to enter the name of the machine.

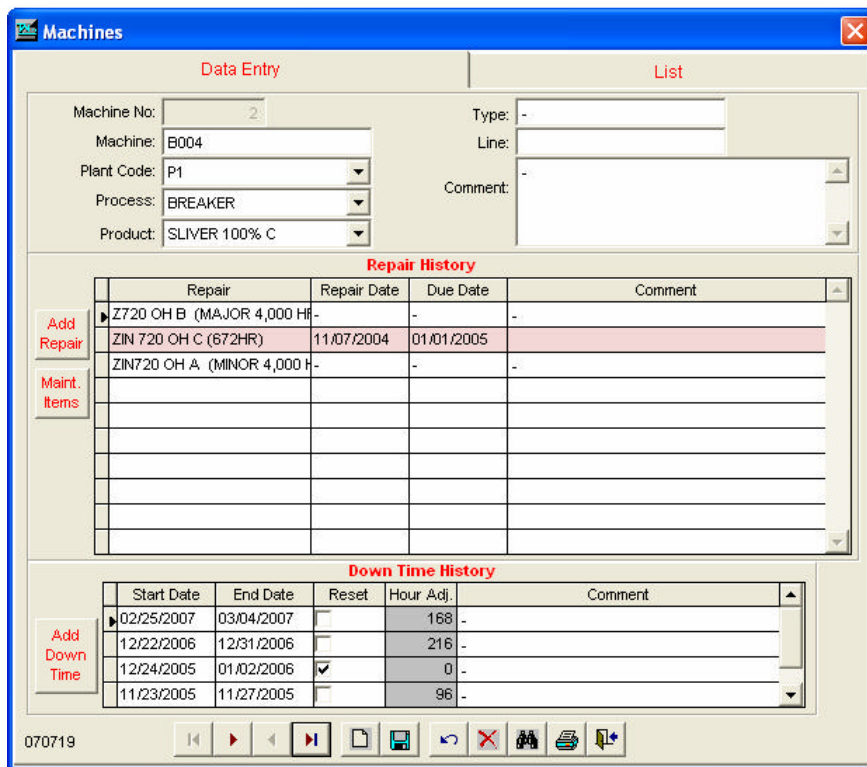
*Plant Code*: used to define plant location, if there are multiple facilities.

*Process*: Used to define the process or operation the machine is used in.

*Product*: Used to define the product made using this process and machine.

Click on the Save icon when

finished. .



## Maintenance Items

**Maintenance Items** can be accessed by clicking on **Utilities** from the Main Menu bar and selecting **Maintenance Items**.


To add a new Maintenance Item click on

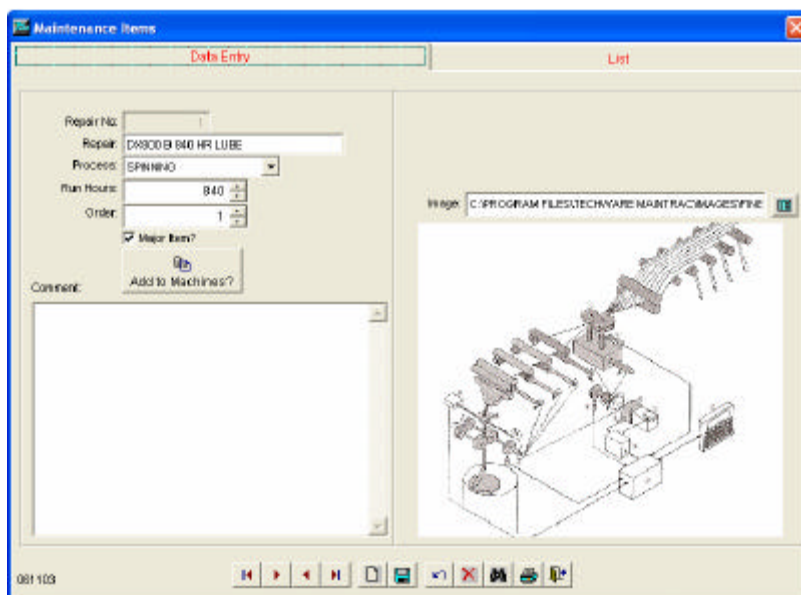
the new record icon .

*Repair number* is automatically assigned by MainTrac in a numerically sequential order. The *Repair field* is used to enter the name of the repair or maintenance item. *Process*: Used to define the process or operation this maintenance item belongs to. *Run Hours*: The number of hours the repair or maintenance item is expected to run before being replaced.

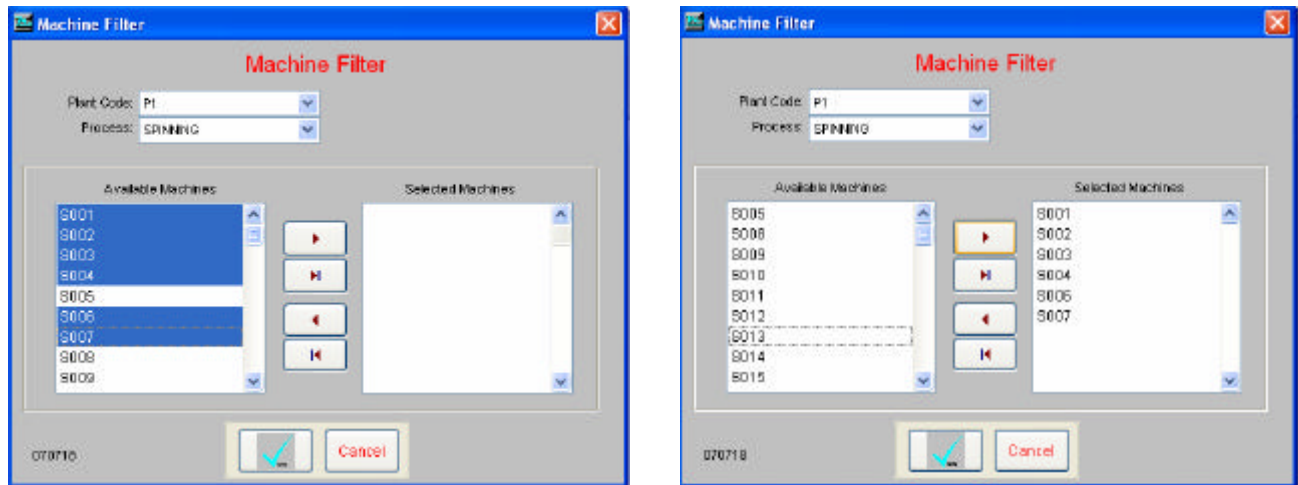
*Order*: The order in which the repair item is displayed.(i.e. 1=first, 99=last).

*Major Item*: Check if this is a critical

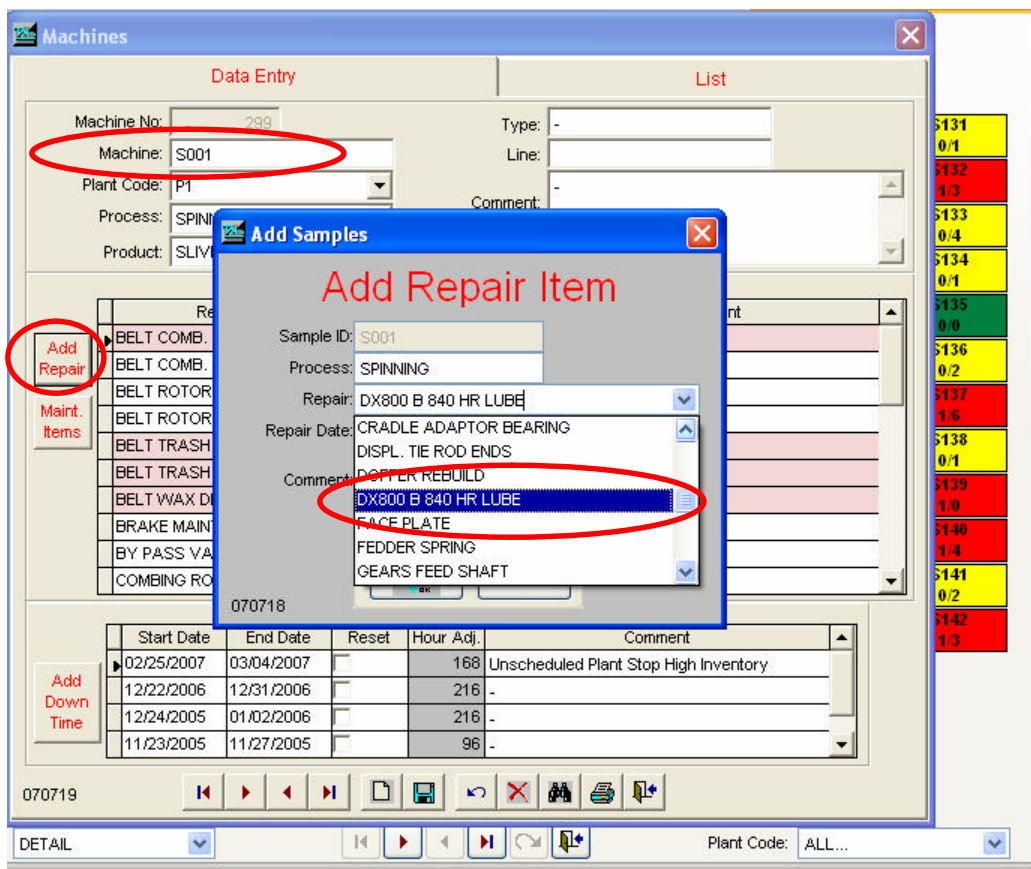
item. Save the new record by clicking on the Save Icon . Note that the “*Add To Machines*” task button is now accessible. By clicking on this button you can broadcast your new repair item to any/all machines.



Select the desired Machines from the “Available Machines” list. Using the arrow buttons in the center, move the selection to the “Selected Machines” list.



The item will be on the Add Repair list for all the machines selected.





MainTrac also allows the user to add repairs, Maintenance Items and Down Time from the “Machines” status screen by using the following task buttons located on the left hand side of that screen.



This task button allows you to add a scheduled repair to the machine you have selected. Click on the button and the screen to the left is displayed.

At this point, simply select a repair item from the drop down list, or add a new item. Enter the necessary repair date and click on the check mark icon to update. Any new repair item entered is saved to ‘Maintenance Item’ master file.

The 'Add Samples' dialog box has a title bar with a close button. The main title is 'Add Repair Item'. It contains the following fields: 'Sample ID' with value 'C003', 'Process' with value 'CARDS', 'Repair' with a dropdown menu showing 'CYL WIRE' (circled in red), 'Repair Date' with value '07/20/2007', and a 'Comment' text area. At the bottom are a checkmark icon labeled 'OK' and a 'Cancel' button. The version number '070718' is in the bottom left corner.



This task button accesses the “Maintenance Items” file and allows the user to edit or add (described on page 5.2) items to multiple machines.


To *edit* a maintenance item, click on the *List* Tab. A list of all machines will be displayed. Key the Machine name in the search field. Once the machine is found, click back to the Data Entry tab to display the machine data screen. You can change the process, run hours, comments, image, or review the list of machines this repair item is associated with (Add Machines button).


The 'Maintenance Items' window has a title bar with a close button. It features two tabs: 'Data Entry' and 'List' (circled in red). The 'Data Entry' tab is active, showing fields for 'Repair No.', 'Repair' (CYL WIRE), 'Process' (CARDS), 'Run Hours' (8800), 'Order' (1), a 'Major Item?' checkbox, a 'Comment' text area, and an 'Add to Machines?' button. The 'List' tab shows an 'Image' field with the path 'C:\PROGRAM FILES\TECHNAWARE\MAINTRAC\IMAGES\CAF' and a diagram of a machine component labeled 'Lickerin' with 'Feed Roll' and 'Cylinder' parts. The version number '081103' is in the bottom left corner, and a toolbar with various icons is at the bottom.

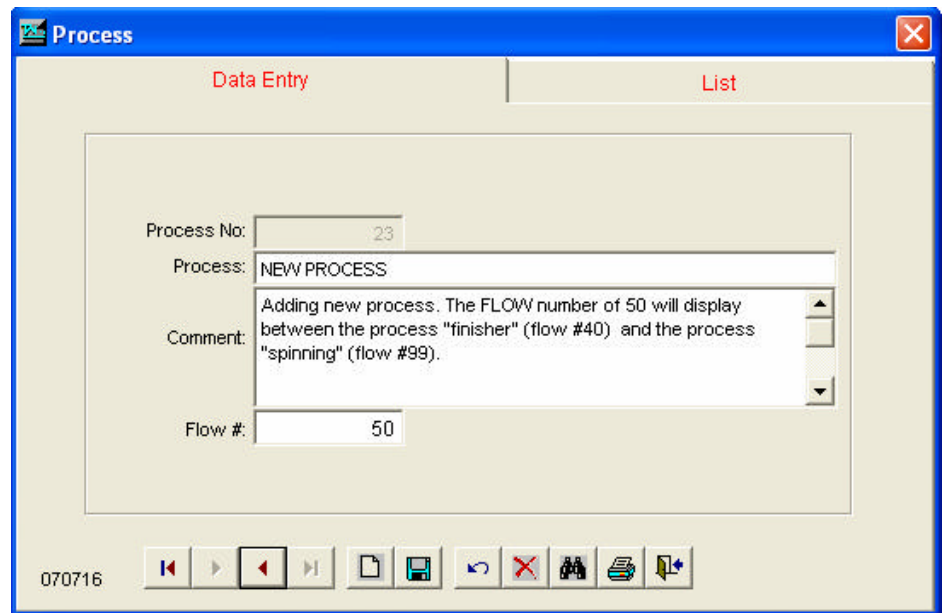
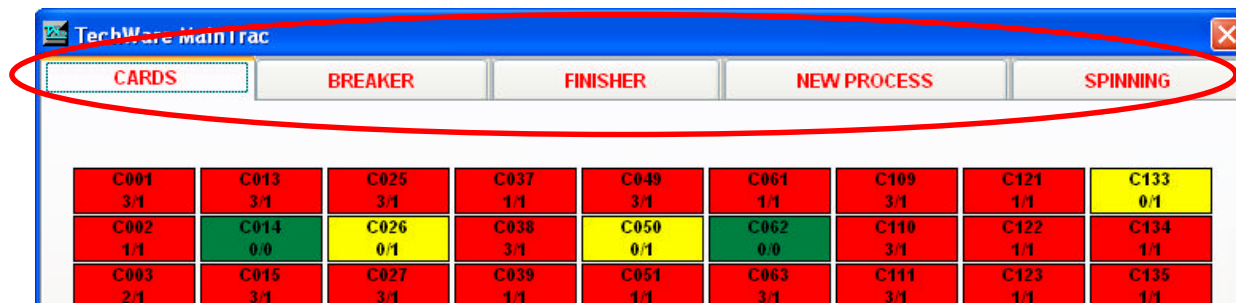


## Process Definition

One of the many strengths of MainTrac is the ability to define the layout of your Plant. The Process Definition screen allows you to enter each process (or operation). This field will hold up to 15 characters. The **Flow #** is used to determine the order of each process when viewing the MainTrac Status Screen. To add a new record, click on the

new record icon . Enter the new process in the *Process* field. *Comments* are optional. *Flow #* is required for display on MainTrac Status Screen.

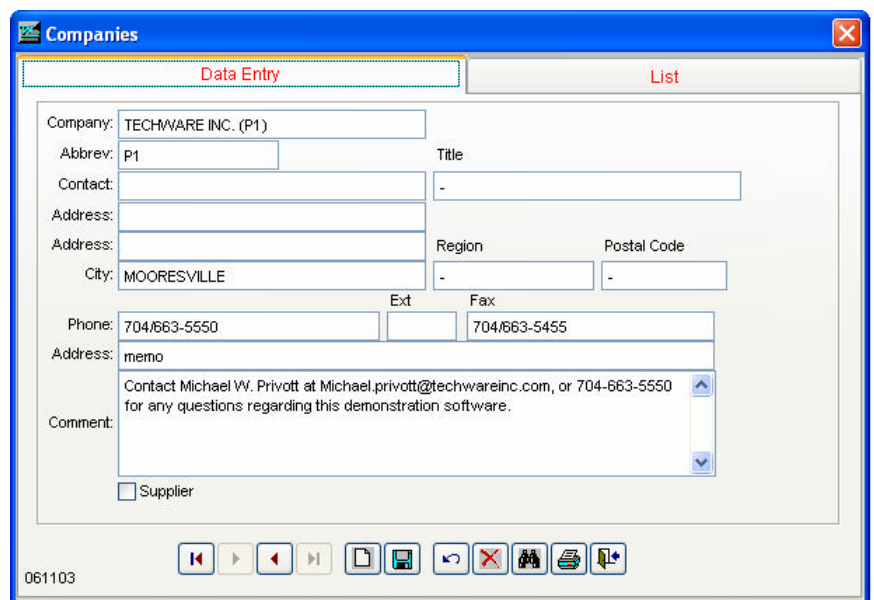
Click on the save icon  before exiting. The clip below shows the location of the “New Process” addition, when viewing the MainTrac Status Screen.

C001 3/1	C013 3/1	C025 3/1	C037 1/1	C049 3/1	C061 1/1	C109 3/1	C121 1/1	C133 0/1
C002 1/1	C014 0/0	C026 0/1	C038 3/1	C050 0/1	C062 0/0	C110 3/1	C122 1/1	C134 1/1
C003 2/1	C015 3/1	C027 3/1	C039 1/1	C051 1/1	C063 3/1	C111 3/1	C123 1/1	C135 1/1

## Companies

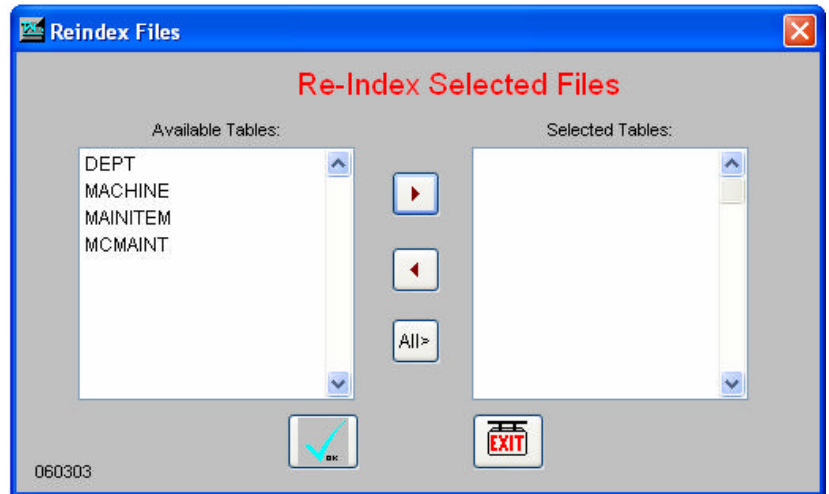
This screen is used to enter multiple facilities locations. The *Abbrev* field shows as the Plant Code on many other screens, and is used in searching and sorting data.




## Re-Index

From time to time, databases within the MainTrac program can become out of synchronization with the index files. Indexes are used extensively with MainTrac to help speed up certain processes. Certain environmental factors such as power outages or power surges can cause this to happen. For this reason, users should **Re-Index** occasionally or if the Controls do not seem to operate correctly.

**Note:** *Re-Index* can only be modified with a supervisor's access. If you attempt to access this area without the appropriate authorization, you will receive an error "*You are not logged in as a Supervisor.*" You are given a prompt to either retry or cancel the request.



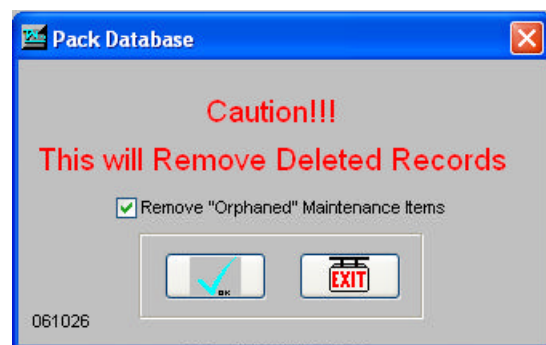
## Pack Data

As mentioned earlier in this manual, data in MainTrac is not really deleted until it is **packed**. This means that until you perform a **Pack Data** on a data file, deleted data can be recalled.

For this reason, use **EXTREME** caution with this feature.

The "*Remove Orphaned Projects*" box in the **Pack Data** function is needed when a user deletes a machine. The MainTrac.machine is deleted, but not the maintenance item data records associated with it. MainTrac looks at these records as "orphans". By checking this box, the records related to the deleted machine will be removed from MainTrac.

**Note:** Pack Data and Re-Indexing MainTrac files require exclusive rights and can be accessed by only one user.



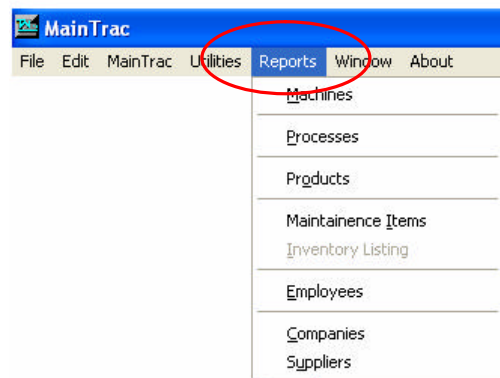
# Chapter 6

## Reports

Reports - General.....	6.1
Machine Reports.....	6.2
Maintenance Item Report.....	6.2
Output Device.....	6.3
Set up TIPS.....	6.3

### Reports General

Reports can be accessed from the Main Menu screen by pressing "**Alt-R**" or by selecting **Reports** from the MainTrac Menu bar. Depending on your MainTrac configuration, you may not see all the reports represented on this screen.

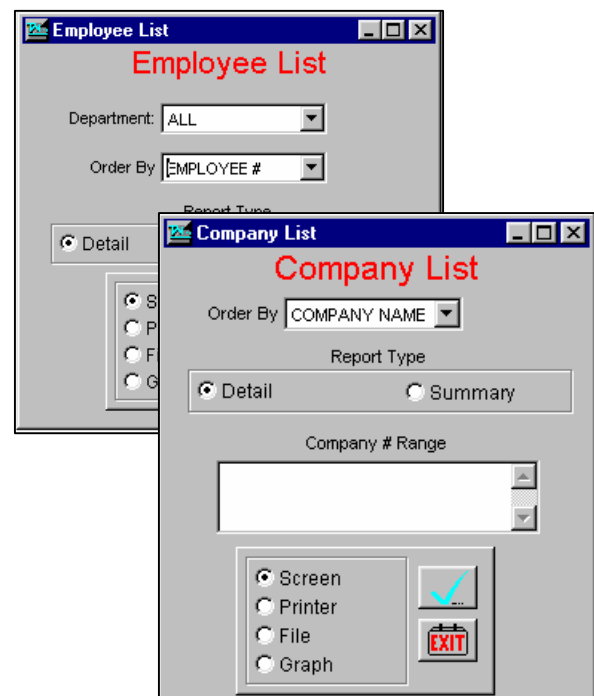


### Employee & Company Lists

Both of these reports are similar in structure and can accept a range of employees or companies to report on. Both reports can be requested as Detail or Summary.

The Employee List will sort information by Last Name, Employee Number or by Department.

The Company List will sort information by Company Name, or Company Number.



## Machine Report

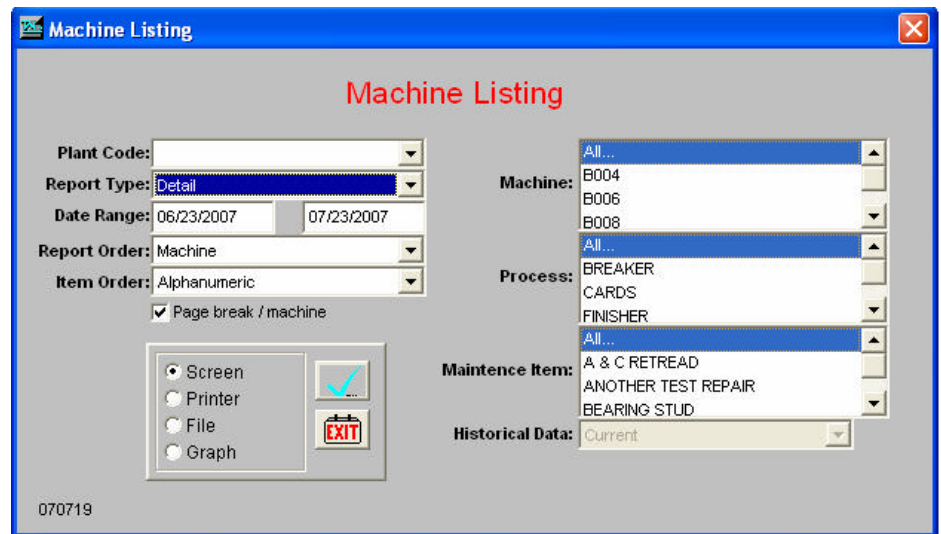
This report is used to list any/all repairs in any/all facility:

*Plant Code:* Choose one or all plant/facility locations.

*Report Type:* Detail will list all maintenance information regarding selected criteria.

*Exception* will list maintenance information regarding selected criteria within the Date Range entered. Standard will list only the machines within the processes.

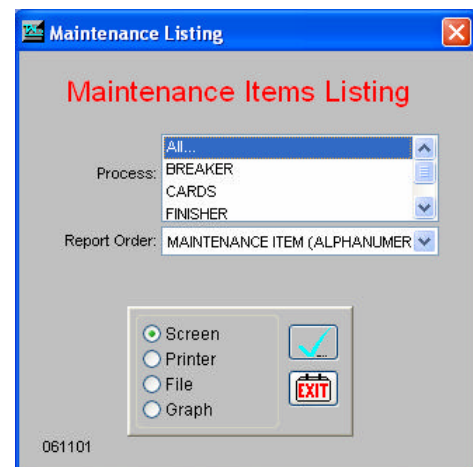
*Report Order:* Sort by Machine or Oldest Repair Date. *Item Order:* Choose from Alphanumeric or Order Number. *Machine:* Use to select ALL machines, or choose individual machines by using the Ctrl + click method. *Processes:* Use to select ALL Processes, or choose individual processes by using the Ctrl + click method. *Maintenance Items:* Use to select ALL Maintenance Items, or choose individual Maintenance Items by using the Ctrl + click method.

The 'Machine Listing' window features a title bar with a close button. The main area is titled 'Machine Listing' in red. It contains several input fields: 'Plant Code' (a dropdown menu), 'Report Type' (a dropdown menu with 'Detail' selected), 'Date Range' (two date pickers showing '06/23/2007' and '07/23/2007'), 'Report Order' (a dropdown menu with 'Machine' selected), and 'Item Order' (a dropdown menu with 'Alphanumeric' selected). There is a checked checkbox for 'Page break / machine'. Below these fields is a group box with four radio buttons: 'Screen' (selected), 'Printer', 'File', and 'Graph'. To the right of the group box are two buttons: a green checkmark button and a red 'EXIT' button. On the right side of the window, there are three list boxes: 'Machine' (containing 'All...', 'B004', 'B006', 'B008'), 'Process' (containing 'All...', 'BREAKER', 'CARDS', 'FINISHER'), and 'Maintenance Item' (containing 'All...', 'A & C RETREAD', 'ANOTHER TEST REPAIR', 'BEARING STUD'). A 'Historical Data' dropdown menu is set to 'Current'. The window number '070719' is in the bottom left corner.

## Maintenance Items

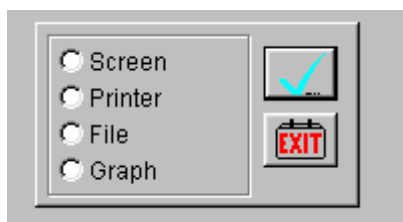
This report is used to list any or all Maintenance Items.

*Process:* Use to select Maintenance Items in ALL Processes, or choose individual processes by using the Ctrl + click method. Can be sorted by Alphanumeric or Order number.

The 'Maintenance Listing' window has a title bar with a close button. The main area is titled 'Maintenance Items Listing' in red. It contains two input fields: 'Process' (a list box with 'All...', 'BREAKER', 'CARDS', 'FINISHER') and 'Report Order' (a dropdown menu with 'MAINTENANCE ITEM (ALPHANUMER' selected). Below these fields is a group box with four radio buttons: 'Screen' (selected), 'Printer', 'File', and 'Graph'. To the right of the group box are two buttons: a green checkmark button and a red 'EXIT' button. The window number '061101' is in the bottom left corner.

## Output Device

Once you have entered your criteria into the report screen, you can select the Output Device. You can choose to report your information to the Screen, Printer, File.

This is a close-up of the output device selection group box. It contains four radio buttons: 'Screen' (selected), 'Printer', 'File', and 'Graph'. To the right of the radio buttons are two buttons: a green checkmark button and a red 'EXIT' button.

*Screen:* Requested information will be displayed on screen.

*Printer:* Requested information will be sent to default printer. If “prompt for printer” option in “system set-up” is checked, the user can select printer.

*File:* Requested information can be sent to different file formats. Detail to follow.



## Output to *File*:

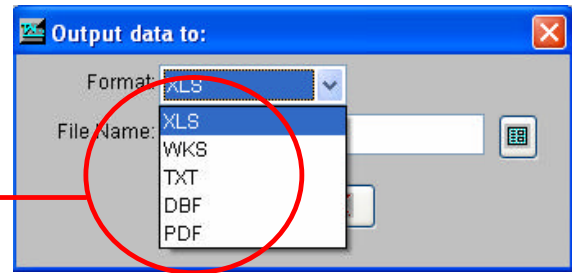
The clip to the right is the prompt that will appear in MainTrac. The user must select the file format:

*Excel*: XLS

*Text*: TXT

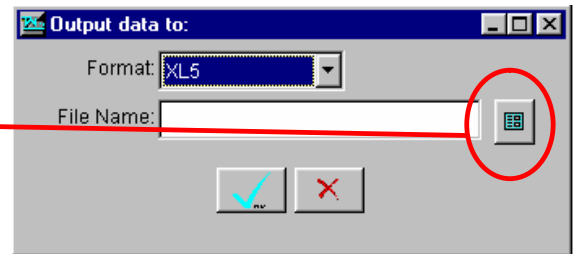
*Database*: DBF

*Portable Document Format*: PDF



The user must name the file. Unless otherwise specified, this file will automatically be sent to the MainTrac directory. To choose a different directory, click on the Browse button

Next, click your mouse on the checkmark icon; MainTrac will process your request in minutes.



## SET UP TIPS

Start by setting your data files up in the following order:

1. Enter EMPLOYEES and access rights.
2. Enter COMPANIES and Plant Locations.
3. Enter PROCESSES.
4. Enter MACHINES.
5. Enter MAINTENANCE ITEMS

