

ProGAGE1TM

CALIBRATION MANAGEMENT SOFTWARE

Version 2
for Windows

User's Manual

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Welcome to ProGAGE1 for Windows

Overview

Welcome to ProGAGE1 for Windows, a database software program that automates your calibration management tasks. ProGAGE1 saves time and gives you complete control over the measurement and test equipment that you use to do your job.

Who Uses ProGAGE1 and What Will it Do For Me? _____

ProGAGE1 was designed for use by quality control professionals who need a convenient, easy-to-use and powerful method for documenting, tracking and retrieving calibration information. ProGAGE1 will make the job of managing your gages and test equipment easier and ensure your calibration records are accurate and up-to-date. Specifically, ProGAGE1 will allow you to:

- Define records for each of your gage, test equipment and calibration standards
- Set up, compare and track calibration results
- Write, review and link calibration procedures to your gages
- Automatically calculate, schedule and track calibration due dates
- Generate a variety of reports such as Calibration Due Listings, Gage Inventory, Calibration Work Orders, Certificate of Calibration and more

Once you have mastered the essentials of the program, ProGAGE1 will become a vital tool for managing your calibration records.

How Does ProGAGE1 Work? _____

ProGAGE1 stores calibration data specific to particular measurement gages and allows you to access that data in a variety of useful ways. For example, by entering calibration standards and check points in one area of the program, you can view them in another area and print them out in yet another area. All the data, including procedural information, can be linked and is easily accessible by you and others in your work group.

Please read "How to Use this Manual" carefully before proceeding to Chapter 1. It is important for you to understand how we've organized and written instructional information so that you can become productive with ProGAGE1 quickly.

How to Use this Manual

The information in this manual is divided into three (3) parts:

Part 1 - Getting Started

This section describes system requirements and program conventions, gives you installation instructions and provides a detailed tour of the main menu.

Chapter 1 Before you Begin

Chapter 2 The Main Menu

Part 2 - Using ProGAGE1

This section describes in detail how to use all of the ProGAGE1 functions. *Each chapter will:*

- explain the purpose of the screen
- illustrate the file menus and screen-specific buttons
- define each field on the screen
- demonstrate how to enter data and display the results

Chapter 3 The Utilities Menu

Chapter 4 The Gage Master Entry Screen

Chapter 5 The Calibration Screen

Chapter 6 The Procedures Screen

Chapter 7 The Gage R & R Screen

Chapter 8 The Reports Screen

Chapter 9 The Usage Screen

Part 3 - Appendices

The appendix section describes information such as network installation, modifying the program configuration file (CONFIG.FPW), importing records from the DOS version of ProGAGE1 and a complete description of all files used by the program.

- Installing ProGAGE1 on a Network
- Modifying the ProGAGE1 Configuration File
- Importing Records from the DOS version ProGAGE1
- ProGAGE1 File Descriptions

How to Find Information Quickly

To find specific information quickly, refer to the detailed table of contents. You can skip certain sections or chapters if they don't apply to you. For example, if the software is already loaded for you by your administrator, you can skip the section in Chapter 1 on software installation. Or, if you already know the basics of Microsoft Windows and understand keyboard, screen and file conventions, you can skip the section on Windows conventions.

Since many of ProGAGE1's functions depend on other functions, we have cross-referenced information throughout the manual to make it easy for you to find what you need.

For a quick look at what ProGAGE1 does, please refer to the flowchart on the following page.

Writing Guidelines Used in this Manual

In order to help you clearly identify instructions in this manual, we have used certain writing guidelines. (For complete keyboard, screen and file convention definitions, refer to Chapter 1)

◆ Items of special interest or importance appear like this.

Menu Names appear in upper case bold type:

Example: Click on the **FILE** menu.

Menu Commands and Names of Fields appear in title case bold type:

Examples: Type the gage number in the **Gage ID** field.
Click the **Select All** menu command.

Keyboard and Button Commands appear in uppercase regular type:

Examples: Press the ENTER key.
Click the LIST PROCEDURES button.

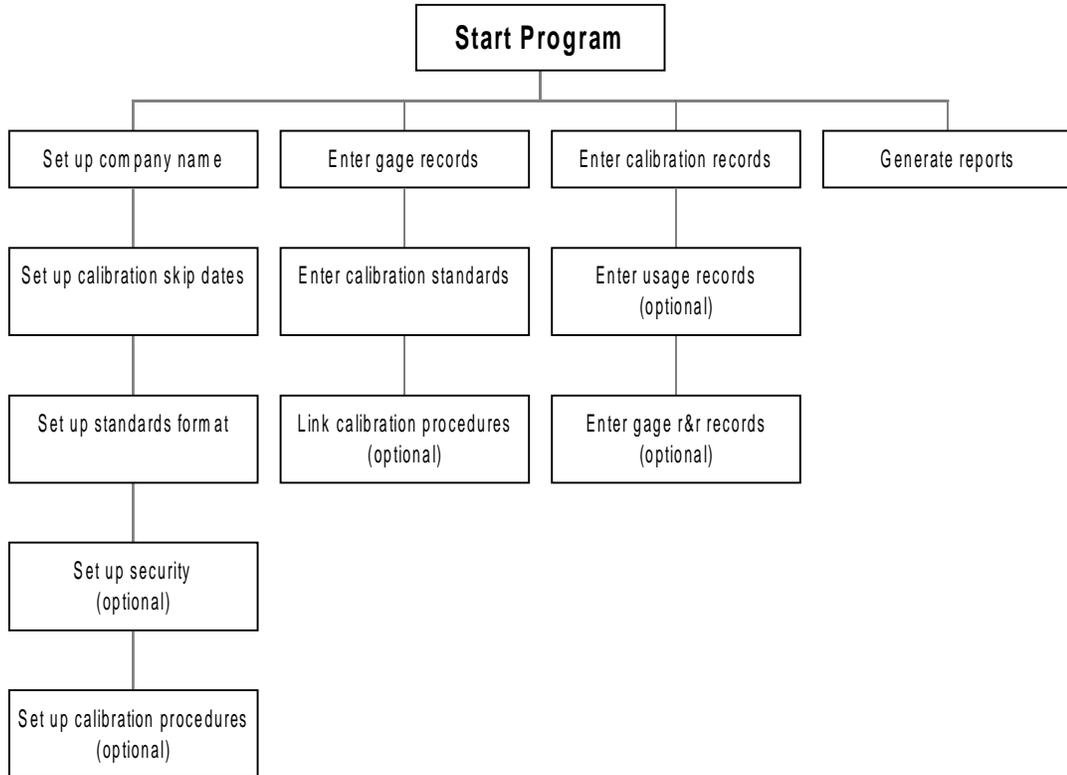
When Typing or Data Entry Instructions are Given, the information will appear in regular type set off by quotation marks (type the information exactly as shown *within* the quotation marks)

Example: Type "A:SETUP"

Program Flowchart

Shown below is a flowchart to help you better understand the program:

ProGAGE1 Flow Chart



Chapter 1: Before You Begin

This chapter discusses what you need to *have*, what you need to *know* and what you need to *do* before you can begin using ProGAGE1™.

What You Need to Have

To run ProGAGE1, you must have the following:

- IBM or compatible computer with 8 megabytes of available space for the program files plus 1MB or more additional space for your data on the hard drive
- 486/80Mhz or Pentium or higher CPU
- 8 megabytes of RAM (16MB or more for best performance)
- VGA or higher display monitor
- Mouse or compatible pointing device
- Microsoft Windows 3.1, Windows 95/98 or Windows NT
- Laser or Dot Matrix Printer (for hard-copy reports)

Year 2000 Compliance

ProGAGE1 is certified to be Year 2000 Compliant. If you wish to see the complete 4-digit year in your date fields, be sure to change the CENTURY setting in your CONFIG.FPW file to ON. The program is pre-configured to show 4-digit years, however if you only want 2-digit years or someone has inadvertently changed this setting please see the appendix for more information on the CONFIG.FPW file. If using a 2-digit year in date fields, then if the entered year is **less than 60**, the century is automatically converted to 2000. For example, if "01/25/02" is entered as a date, the program actually converts it to "01/25/2002".

What You Need to Know

The following are conventions that you must understand in order to use ProGAGE1. The first part of the list explains conventions that are universal to the Windows environment; The second half are program-specific conventions. If you are familiar with Windows, you can skip to the program-specific items.

Windows Conventions

Using the Mouse: Your mouse controls the movements of the pointer on the screen. You can point to an object, icon, menu, menu command, field, or button on the screen by moving the mouse. With the exception of buttons, pointing will highlight your choice. When asking you to select an item, we will tell you to click or double-click your mouse button. If available, equivalent keyboard commands using modifier keys are also identified.

Example: Click OK or press the ENTER key.
Click the **FILE** menu or press ALT + F.

Opening the ProGAGE1 Program Icon: An "icon" is a graphic representation of a program, directory, file or screen. The ProGAGE1 program installs in the Windows Program Manager as a program group window called "ProGAGE1 for Windows". The program will appear as an icon inside this group window.



1. Double-click on the ProGAGE1 for Windows group window in the Windows Program Manager.
2. Point to the ProGAGE1 program icon (thereby highlighting it) and either double-click or choose **Open** from the **FILE** menu and press the ENTER key.

Push Button: A push button is a gray box that contains key words or pictures that describe the action it triggers. The action associated with a push button occurs immediately when you click a push button unless it contains an ellipsis (...). The ellipsis indicates that another dialog will appear.

Dialogues: When you choose a menu option that is followed by an ellipsis (...), the box that appears is called a "dialog." Dialogs also appear at other times while using ProGAGE1 when more information is required to complete a command or expression. A dialogue requires you to provide additional information before a command can execute.

Modifier and Function Keys: There are three modifier keys located on the left side of your keyboard: SHIFT, CTRL and ALT. There is also a row of function keys located at the top of your keyboard. These keys do nothing by themselves, but when pressed in combination with other keys, they perform an established function.

Example: Pressing the ALT key and the letter F at the same time, is equivalent to clicking on the **FILE** menu.

Choosing a Command from a Menu: A Menu Bar appear above each screen.

ProGAGE1 for Windows		
File	Edit	Record
	U <u>ndo</u>	Ctrl+Z
	C <u>ut</u>	Ctrl+X
	C <u>opy</u>	Ctrl+C
	C <u>opy</u> G <u>age</u> R <u>ecord</u>	
	P <u>aste</u>	Ctrl+V
	C <u>lear</u>	
	S <u>elect</u> A <u>ll</u>	Ctrl+A

To choose a menu, point to the menu name and click or press SHIFT + the underlined letter of the menu name. A list of menu commands will "drop down."

To choose a command from a menu, point to the command you want and click your mouse button or use the UP ARROW or DOWN ARROW keys to navigate through the choices, then press the ENTER key. If there is a keyboard equivalent, it will be listed to the right of the command.

If a command in the menu appears "gray," it is disabled at that time.

Example: The **Paste** command is disabled until you use the **Cut** or **Copy** commands.

The Title Bar: The title bar is located at the top of each screen and displays the title of the screen you are working in.

Example Title Bar of Gage Master Entry Screen



Minimizing / Maximizing a Screen: You can minimize the screen you are in by clicking on the right button in the form Title Bar or by clicking on the left button in the Title Bar and clicking on **Minimize**. Minimizing a screen reduces it to an icon.

Clicking on the minimize button  ...

...reduces the screen to an icon 

To maximize the screen, double-click the icon.

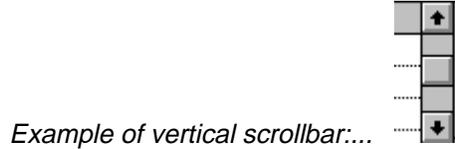
Moving a Screen / Window: To move the screen you're working in, click your mouse in the title bar, hold down the mouse button and drag the screen / window to the desired location.

Making a Window Bigger or Smaller: There are several ways to change the size of a window.

1. Some screens have a sizing bar around them. Click your mouse on the bottom right corner of the sizing bar. Hold down the mouse button and drag to the right side of the screen until the window is the desired size.
2. Other screens do not have a sizing bar but can be enlarged or reduced by clicking on the maximize/minimize buttons in the top right hand corner.

Scroll Bars: Scroll bars allow you to view parts of a form that are not visible. They can be either horizontal or vertical and are located either on the right top and bottom of the form or

on the bottom right and left of the form. In some cases, a form will have both a horizontal and a vertical scrollbar.



Cursor Movement Keys: There are keys on your keyboard, that like your mouse, are used to control the movement of your cursor on the screen. In addition to the actions described below, these keys will move you from field to field on a screen in ProGAGE1. Refer to the description of "Select Mode" in this chapter.

<u>Key</u>	<u>Action</u>
Right Arrow	Moves the cursor one character to the right.
Left Arrow	Moves the cursor one character to the left.
Up Arrow	Moves the cursor up one line.
Down Arrow	Moves the cursor down one line.
PgUp	Moves the cursor up one window of text.
PgDn	Moves the cursor down one window of text.
Home	Moves the cursor to the beginning of the current line.
End	Moves the cursor to the end of the current line.
CTRL + Right Arrow	Moves the cursor one word to the right.
CTRL + Left Arrow	Moves the cursor one word to the left.
CTRL + Home	Moves the cursor to the beginning of the text.
CTRL + End	Moves the cursor to the end of the text.

ProGAGE1-Specific Conventions

Menu Bar: Above each screen is a menu bar with various menu commands. Each chapter in this manual defines the menus and commands specific to the screen.

Field Types: There are seven types of fields in the ProGAGE1 program:

- Alpha-numeric — Allows you to enter either letters or numbers relevant to the name of the field.

Example: Description of a gage

Description	MULTIMETER M-25
--------------------	-----------------

- **Date** — You must enter a two-digit month, day and year. If it is a one-digit day or month, enter a preceding zero (0). You do not need to enter the slashes, the program does this for you automatically. **You can specify how your dates should be formatted by editing the CONFIG.FPW file (see the appendix for more information on this).**

Example: Purchase date of "02/05/94" **Purchase Date**

- **Numeric** — You can only enter numeric data in this type of field. If you attempt to type letters in the field, the program will alert you with a beep.

Example: Calibration hours of "0.25" **Hours**

- **Memo** — A scrollable field that allows you to enter text. The amount of text you can enter is limited only by the amount of disk space you have available on your hard drive.

Example: Comments about a gage **Comments**

- **Pop-up Field** — Like the menus in the menu bar, a pop-up field gives you pre-determined choices; You cannot enter text in a pop-up field. You view your field choices by clicking in the top right corner of the field with your mouse and then clicking on your choice, or by pressing either the UP ARROW key or DOWN ARROW key (refer to "Select Mode" in this chapter).

Example: Choosing Calibration Frequency Units



- **Check Box** — A check box is a hollow box followed by text. Settings can be turned on and off by clicking the check box or by pressing the ENTER key. If a check box has an X in it, the setting is on.

Example: Return status of gage (if checked, gage has been returned) **Returned**

- **Radio button** — A radio button field is a hollow circle followed by text. Unlike check boxes, only one radio button in a group can be chosen at any given time. Click a radio button to choose it. When a radio button is chosen, it appears filled and the previously chosen radio button in the group becomes deselected.

Example: Choosing to archive or restore records **Archive** **Restore**

Select Mode — You are in Select Mode when you access any screen; The first field on the screen will be "selected" or highlighted. There are several ways to navigate through and select other fields on the screen:

1. Click your mouse on any field on the screen. When you reach a pop-up field, the menu items will appear. Click your field choice; Your choice will appear in the field. To change your choice using the mouse, click the button in the upper right corner of the field to view the items again and repeat the step above. When you reach a check box field, click the box to check or uncheck it.
2. Press the DOWN ARROW key to advance to the next field, the UP ARROW key to move back to the previous field. When you reach a pop-up field, these keys will move you through your field choices. Once your desired choice appears, press the TAB key to advance to the next field or use your mouse. When you reach a check box, press the ENTER key or click with your mouse to check or uncheck the field.
3. Press the RIGHT ARROW key to advance to the next field, the LEFT ARROW key to move back to the previous field. When you reach a pop-up field, these keys will **not** scroll you through your choices; They advance you to the next field. Use the UP and DOWN ARROW keys or use your mouse to select a field item. When you reach a check box, press the ENTER key or click with your mouse to check or uncheck the field.
4. Press the TAB key to advance to the next field. When you reach a pop-up field, this key will **not** scroll you through your choices; It will advance you to the next field. Use the UP and DOWN ARROW keys or use your mouse to select a field item. When you reach a check box, press the ENTER key or click with your mouse to check or uncheck the field.
5. Press the ENTER key to advance to the next field. When you reach a pop-up field, this key will **not** scroll you through your choices; It will also **not** advance you to the next field. Use the UP and DOWN ARROW keys or use your mouse to select a field item. When you reach a check box, press the ENTER key again to check or uncheck the field.

Standard Navigation Buttons — The standard navigation buttons are located at the bottom left side of the screen. These buttons allow you to move back and forth between records. The four buttons have arrows on them which indicate the direction of movement. *These buttons are only active after you create your first record.*



First Record



Previous Record



Next Record



Last Record



- ◆ You can also navigate through records by using the menu commands listed under the **RECORD** menu.

Record	Sort by...	Wir
N ext		PGDN
P rior		PGUP
T op		CTRL+PGUP
B ottom		CTRL+PGDN
L ocate		Ctrl+L
Q uick Search		Ctrl+B
Change Gage ID...		
T oggle D elete		Ctrl+D

Other Standard Buttons: Other buttons on the screen that perform distinct functions include:

	NEW	Creates a new record.
	CLOSE	Closes the current record and returns you to the previous screen.
	LOCATE	Locates a record based on a field description.
	CANCEL	Cancels any changes you have made to the record.
	SAVE	Saves a new record or saves modifications made to an existing record.
	QUICK SEARCH	Quickly searches for record based on the gage id.

- ◆ The **CANCEL** and **SAVE** buttons are disabled until you have created a new record or modified an existing record.

Screen-Specific Buttons — These are buttons that are specific to the screen you are using and perform a unique function. Screen-specific buttons will be explained in detail in the following chapters.

Example: The Calibration Summary and Calibration Entry screens have a screen-specific button: Procedures. This button only appear on **these** screens.



Returning to the Main Menu: There are several ways to return to the Main Menu from a particular screen. (Refer to Chapter 2 for a detailed description of the Main Menu.)

1. Click the CLOSE button which appears at the bottom of the screens.
2. Click the **FILE** menu and click **Close**.
3. On some screens, you can click the left button in the Title Bar. A menu will appear; Click **Close** or press CTRL + F4.

What You Need to Do

Before you can use the program, you need to install it on your hard drive. For information on **Network Installations**, refer to the Appendix.

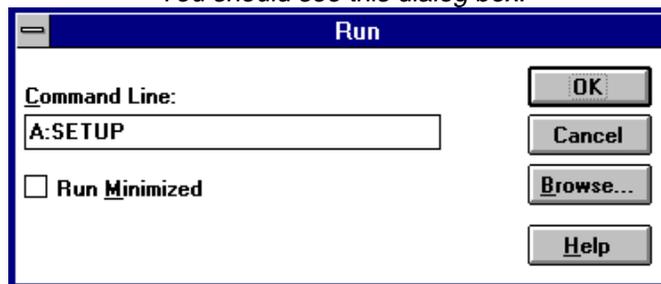
- ◆ Before installing ProGAGE1, you may wish to make a backup copy of the installation disks and store both the originals and the backup copies in a safe location. Remember, it's illegal to make copies of the master disks except to create working copies for backup purposes.

Installing ProGAGE1 on Your Hard Drive

Windows 3.1 Installation Instructions

1. To install ProGAGE1 on your hard drive, run Microsoft Windows and open the Program Manager.
2. Insert the disk labeled Diskette #1 into your disk drive [A] (or [B]).
3. In Program Manager, choose the **FILE** menu by clicking with your mouse or by pressing ALT + F.
4. Click **Run** with your mouse or press SHIFT + R.

You should see this dialog box:



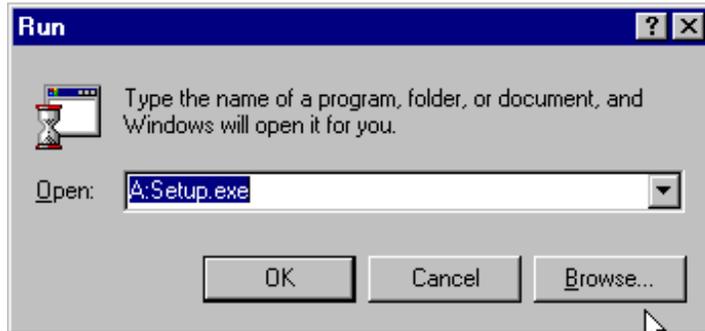
5. In the **Command Line** field, type "A:SETUP" (or "B:SETUP").
6. Click OK or press ENTER.
7. The setup program will ask you to enter other diskettes as needed. Follow the instructions on the screen.

During the installation, you will see the percentage of the installation process that has been completed.

8. After your ProGAGE1 program has been installed on your hard drive. You can then run the ProGAGE1 program and proceed to Chapter 2. It also recommended that you make a back-up copy of your empty database files and report files.

Windows 95 Installation Instructions

1. From desktop Click on Start, then Run.



2. Type A:\Setup.exe Insert the disk labeled Diskette #1 into your disk drive [A] (or [B]).
3. Click OK or press ENTER.
4. The setup program will ask you to enter other diskettes as needed. Follow the instructions on the screen.
5. During the installation, you will see the percentage of the installation process that has been completed.
6. After your ProGAGE1 program has been installed on your hard drive. You can then run the ProGAGE1 program and proceed to Chapter 2. It is also recommended that you make a back-up copy of your empty database files and report files.

Technical Support

To obtain support from American Quality Systems, you (or your company) must be a registered licensee; be sure to send in the registration form included in your ProGAGE1 package.

If you need technical support, please call (517) 545-2180, or fax us at (517) 545-0399, or e-mail us at: aqs@ismi.net or visit our web site at www.aqsinc.com.

Chapter 2: The Main Menu

This chapter explains the ProGAGE1 Main Menu, its purpose, menus, and screen-specific commands.



Purpose of the Main Menu

The Main Menu is the first screen that appears when you open the ProGAGE1 program and directs you to all other screens in the program.

Windows 3.1 Start-up Instructions

1. To access the **Main Menu**, double-click on the ProGAGE1 for Windows group window in the Windows Program Manager.
2. Point to the ProGAGE1 V2 program icon (thereby highlighting it) and either double-click or choose **Open** from the **FILE** menu and press the ENTER key.

Windows 95 Start-up Instructions

1. To access the **Main Menu**, from desktop, click on Start.
 2. Click Run.
 3. Click Programs.
 4. Select ProGAGE1.
- 4a. If security has been activated, the Password window may appear. Enter your name and password and click OK or press ALT + O.



3. The program Main Menu will appear.

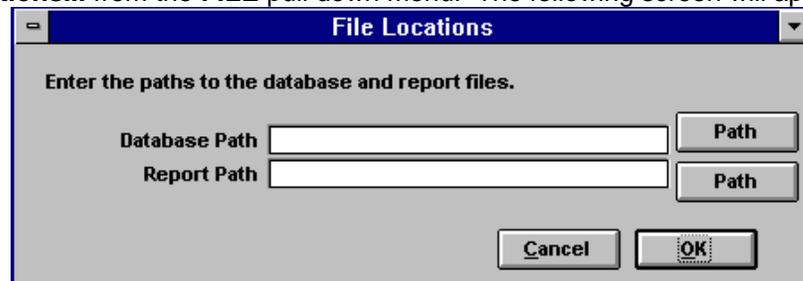
Customizing the Main Menu Screen

Under the "ProGAGE1 for Windows" title, you should see "Your Company Name" and "Your Division Name" (refer to the screen example above). You can customize these two fields with the name and division of your company (as well as other information) through the Settings button in the Utilities menu. Please refer to Chapter 3.

Locating the ProGAGE1 Files

ProGAGE1 uses two types of data files: database files and report files. The ProGAGE1 program itself should be installed on your hard drive, but the data files (and optionally the report files) may reside on a network server. When you open the program, it looks for the files in the program directory first. If it doesn't find them there, a dialogue box will appear telling you to locate the files. You can do this by using the **File Locations** command in the **FILE** pull down menu. Once the files are linked, ProGAGE1 will automatically "find" or access the data each time you open the program.

1. To locate the ProGAGE1 files (if they are not on your hard drive), choose **File Locations...** from the **FILE** pull down menu. The following screen will appear:



Note: If both program, data and report files are on your C drive (the default), then you can leave the Database Path and Report Path blank.

2. If you know the path to the database files, type it in the **Database Path** field. If you don't, click the PATH button.

The following file "Select Directory" dialog window will appear:



The directory "path" will be identified in the box on the right. A list of database files will appear in the box on the left.

Most ProGAGE1 users only have one set of database files. However, ProGAGE1 does allow for multiple data directories for different plants, departments, etc. Create as many different database directories as required, and be sure to install a copy of the empty database files (from your installation diskettes) for each unique database directory.

Navigate through available drives by selecting choices shown in the "Drive:" field. Navigate through available drive directories by double-clicking on directory names shown in the "Directory:" box.

1. After finding your ProGAGE1 database folder, click on it so it is highlighted.
2. Click the SELECT button. This will take you back to the File Locations screen. The path will now appear in the **Database Path** field.
3. If you know the path to the report files, type it in the **Report Path** field. If you don't, click the PATH button and navigate to the report files in the same manner as was done for the database files.
4. Click OK or press ALT + O.

You can now access the ProGAGE1 database and report files.

Using the Main Menu Screen Commands

There are nine buttons or “commands” on the Main Menu screen. Clicking on these buttons, or pressing the ALT key plus the underlined letter of the command, will move you to the screen indicated on the button.

You can also move to the desired screen by using the **DATABASE** menu commands.

The following sections of this manual describe each screen in detail, but here is a brief description of each command button.

Gage Master	Takes you to the Gage Master Entry screen. As the name implies, this is where you enter the master record for each of your gages.
Calibration	Takes you to the Calibration screen. The Calibration screen displays the gage information you entered on the Gage Master Entry screen. The Calibration screen allows you to enter calibration records and view the Calibration History.
Reports	Takes you to the reports section of the program which allows you to select and print pre-formatted reports based on your data. This is the only place in the ProGAGE1 program where you can print reports.
Procedures	Takes you to the Procedure screen which allows you to write and edit procedures. You can link procedures to a specific gage record and share the same procedures with other gages.
Utilities	Takes you to the Utilities Menu where you can enter information about your company, set up security, perform system maintenance operations (such as optimizing data files and archiving old records) and defining how you want your measurement values to be formatted.
Gage R & R	Takes you to the Gage R & R summary screen. You can enter Gage R&R study results in this screen and run the ProR&R program.
Help	Takes you to the on-line Help screens which were written specifically for the ProGAGE1 program.

Usage Takes you to the Usage summary screen. The ProGAGE1 program allows you to Issue and Return gages and view Usage History on a gage.

Exit Closes and exits the ProGAGE1 program.

Main Menu and Menu Commands

Following is a list of the available menus and an explanation of the commands available for each.

The FILE Menu

Menu Command	Description
<u>F</u> ile Locations	Used to tell ProGAGE1 where the database and report files are located.
Exit	Closes and exits the ProGAGE1 program.

The EDIT Menu

Menu Command	Description
<u>U</u> ndo CTRL + Z	Disabled
<u>C</u> ut CTRL + X	Disabled
<u>C</u> opy CTRL + C	Disabled
<u>P</u> aste CTRL + V	Disabled
Clear	Disabled
Select <u>A</u> ll CTRL + A	Disabled

The HELP Menu

Menu Command	Description
Database Access	Displays information on database access rights for the current user, number of records in each type of file and current number of users accessing the program.

Contents	Takes you to the Help file's table of contents.
Search for Help on	Allows you to search for a help topic.
About ProGAGE1	Displays information about the program.
Conversion	Displays a pop-up conversion utility that allows end users to convert areas, lengths, speeds, temps, time, volume and weight values to alternate equivalent values. (Refer to Chapter 10.)
Calculator	Displays a pop-up calculator. Calculated values can be copied and pasted into ProGAGE1. See appendix for more information.
Calendar/Diary	Displays a pop-up calendar. Also allows you to maintain a diary of events and appointments. Diary data is stored in the files FOXUSER.DBF and FOXUSER.FPT which are located in the application directory (usually C:\PGWIN).
Puzzle	Displays pop-up number sorting puzzle game.

Chapter 3: The Utilities Menu

Purpose of the Utilities Menu



You can perform several functions on the Utilities Menu. These include:

1. Settings - Records information about your company and customizes the Main Menu screen with your company name. Also used to define your company's Certificate of Calibration Statement, standard labor rates for calibration work performed and define the Bar Code hot-key. You can also set the format for how your calibration measurements will appear.
2. Skip Dates - Define calibration skip days (days for the program to avoid when determining calibration due dates).
3. Security - Create and delete users for the system and set security access privileges.
4. Optimize Files - Packs the database files (gets rid of *holes* left over from deleting records and permanently removes deleted records), reindexes the database tables and removes any orphaned records (child records which have no related parent records).
5. Archive - Archives (removes) and Restores (puts back) older calibration and gage usage records.
6. Standards Format - Allows you to specify how ProGAGE1 will display your measurements of reference standards when you enter your calibration records.
7. User Defined – Allows you to change the user defined field names on the gage master entry screen.

8. Export Meas. – Allows you to export calibration measurements to Excel (.xls) or Lotus (.wk1) file formats.
9. Reassign Gages – Allows you to reassign or take ownership of gages between different users.

Settings Screen

To access the Setting Entry screen, click the SETTINGS button in the Utilities Menu.

The Settings screen stores information about your company and customizes the Main Menu and reports with your company name. This screen also is used to define your company's Certificate of Calibration Statement, Standard Labor and Gage R&R rates for calibration and gage R&R work performed, setup Calibration Lead Time, Auto Calibration Display, Auto Calibration Pass/Fail, Restrict Measurement Editing, Honor Owner Property and defines the Bar Code hot-key.

Settings Entry Field Descriptions

Listed below are the fields in this screen:

Field Name	Description
Company Name	Two Alpha-numeric fields for entering the name and division of your company.

Address, City, State and Zip	Alpha-numeric fields for entering the address of your company.
Contact	An alpha-numeric field for the name of the contact person in your company. Whenever you enter a calibration record, this name is automatically placed into the "Calibrated by" field.
Phone, Fax	Alpha-numeric fields for your company's phone and fax numbers.
Calibration Certificate Statement	A memo field that allows you to enter text that appears in your certificates of calibration.
Standard Labor Rate	A numeric field that allows you to enter a default standard hourly labor rate. This rate is used on the Calibration screen for calculating costs. (Refer to Chapter 6.)
Gage R&R Labor Rate	A numeric field that allows you to enter a default standard hourly labor rate for conduction Gage R&R studies. This rate is used on the Gage R&R screen for calculating costs. (Refer to Chapter 8.)
Bar Code Hot Key	This field is useful if you are using a bar code wedge reader. When used in conjunction with this program, the hot key executes the "Quick Search" procedure when reading bar code information from your gages. You will need to set your bar code reader's "pre-amble" characters to match the bar code hot key setting. The default is CTRL-B.
Honor Leadtime	If checked this tells the program that you want it to honor the leadtime value in your gages (i.e., allows you to set the number of lead days needed for calibration notices). The "Lead Days" are entered in each gage master record.

Auto Calibration Display	When selected will allow user to see a complete listing of all gages that are overdue for calibration when clicking on Calibration Button from the Main Menu. (Refer to Chapter 6.)
Auto Calibration Pass/Fail	Tells the program whether or not to automatically pass or fail a calibration based on the measurement value. 
Restrict Measurement Editing	When checked, the user can not change the standards that are copied from the Gage Master record into the Calibration record.
Honor Owner Property	When check the program honors the gage owner field. This means that only the owner of that gage can edit and calibrate it (unless the user has gage administrator rights).

Screen Buttons: Other buttons on the screen that perform distinct functions include:

Button Name	Description
 Enter pass code to register program: ProGAGE1: <input type="password"/> Pro R&R: <input type="text"/> <input type="button" value="Cancel"/> <input type="button" value="Register"/>	Click this button if you have not yet registered your copy of ProGAGE1 or ProR&R (i.e. you purchased a "Trial Offer" license). A special pass code also can be entered here when you purchase additional network node licenses. Please call our sales office at 1-800-776-3090 for your pass code.

	<p>STANDARDS FORMAT Allows you to specify how ProGAGE1 will display your measurements of reference standards when you enter your calibration records.</p> <p>Use a series of 9's and a decimal point to represent how you want your measurements to be displayed. For example, if the standards format is set to "999.99" and you enter a measurement of "0.12345", the program will display it as "0.12". It is a good idea to set the format to accommodate both the largest and smallest measurement values you expect to enter (such as "9999.9999" or "999.999999"). This can always be adjusted later on if your needs change.</p>
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Settings Screen Menu Descriptions

Following is a list of the available menus and an explanation of the commands available for each.

The **FILE** Menu

Menu Command	Description
Close	Closes the Settings screen and returns you to the Main Menu screen.

The **EDIT** Menu

Menu Command	Description
<u>U</u> ndo CTRL + Z	Disabled.
Cu <u>t</u> CTRL + X	Cuts selected text.
<u>C</u> opy CTRL + C	Copies selected text.
<u>P</u> aste CTRL + V	Only active if you have previously cut or copied text. Pastes the cut or copied text at the current location of your text cursor.

Clear	Clears the contents from a selected field. <i>The entire field must be highlighted.</i>
Select <u>A</u> l CTRL + A	Selects or highlights the entire contents of a field.

When you fill in the two **Company Name** fields on the Settings screen and save the information using the SAVE button, this information will appear under the "ProGAGE1 for Windows" title on the Main Menu screen and in the pages of your reports.

Skip Dates Screen

ProGAGE1 allows you to record how often a gage needs to be calibrated (e.g., every two weeks) and calculates the exact dates on which the gage is to be calibrated. The Skip Days screen allows you to identify specific dates or *days of the week* on which you *do not want* calibrations to take place.

This function is useful if, for example, your company is closed on the weekends. Or, if an event is taking place on a certain date, making it impossible to perform a calibration (e.g., a holiday or vacation day).

To access the Skip Days screen, click the SKIP DAYS button on the Utilities Menu.

The screenshot shows a window titled "Skip Dates" with a sub-header "Calibration Skip Dates...". It features a calendar for December 1996. The calendar has two columns: the left column shows dates 1-31 with checkboxes, and the right column shows days of the week (Sun-Sat) with checkboxes. Below the calendar are radio buttons for "Increment" (unselected) and "Decrement" (selected). At the bottom are "Clear All" and "Close" buttons.

Skip Dates Field Descriptions

Field Name	Description
Month	A pop-up field for choosing the month in which you want to set skip days.

Year	A pop-up field for choosing the year in which you want to set skip days.
Current Month Calendar	<p>A calendar displaying the chosen month, used for defining skip days in that month. Each day on the calendar contains a check box field.</p> <p>Checking the field indicates you are choosing to skip that specific day, month and year <i>only</i>.</p>
Days of the Week Calendar	<p>A calendar displaying the days of the week, used for defining skip days in <i>all</i> months. Each day on the calendar contains a check box field.</p> <p>Checking the field indicates you are choosing to skip that day of the week <i>always</i>.</p> <p><i>Example: If your company is not open on weekends, check Saturday and Sunday.</i></p>
Increment	Choosing this field will move the calibration due date <i>forward</i> on the calendar (past all skip days).
Decrement	Choosing this field will move the calibration due date <i>backward</i> on the calendar (before all skip days).

Defining Calibration Skip Days

On the Skip Days screen:

1. Choose the month in which you want to set skip days from the **Month** field.
2. Choose the year in which you want to set skip days from the **Year** field.
3. To choose specific skip days in that month and year, click the check box associated with those dates on the **Current Month** calendar.
4. Repeat steps 1-3 to select skip days for any other months and years.
5. To choose weekly skip days, click the check box associated with that day of the week on the **Days of the Week** calendar.
6. Select either **Increment** or **Decrement** to indicate the skip days direction.

Clearing all Skip Days

To clear all defined skip days:

1. Press the CLEAR ALL button or press ALT + C.
2. You will see a confirmation dialogue box. Click OK to delete all defined skip days or press ALT + 0.
3. Click CANCEL to retain defined skip days.

Security Screen

The Security Screen allows you to create and delete users for the ProGAGE1 program and assign access privileges for the Main Menu screens.

To access the Security Entry screen, click the **SECURITY** button in the Utilities Menu.

The screenshot shows a form for creating a user. At the top, there are two input fields: "User Name:" with the text "John Jones" and "Password:" with the text "0000". Below these are two columns of checkboxes. The left column is titled "User Has Access To:" and includes checkboxes for "Gage Master", "Calibration/Usage", "Gage R&R", "Procedures", "Reports", "Utilities", and "Admin Gage Owner". The right column is titled "User Has Read-only Access To:" and includes checkboxes for "Gage Master", "Calibration/Usage", "Gage R&R", and "Procedures". The "Utilities" checkbox has the text "(For Supervisors Only)" next to it, and the "Admin Gage Owner" checkbox has the text "(Allows this user to edit all gages.)" next to it.

Security Entry Field Descriptions

Field Name	Description
User Name	A field for entering the name of a new user.
Password	A field for entering a password for the a new user.

<p>User Has Access To:</p> <p>Gage Master</p> <p>Calibration/Usage</p> <p>Gage R& R</p> <p>Procedures</p> <p>Reports</p> <p>Utilities *</p>	<p>Check box fields that indicate if you want to grant or deny access to these screens.</p> <p>Checking the box indicates that full access is granted.</p> <p><i>The default for a new user is full access to all screens.</i></p>
<p>Admin Gage Owner</p>	<p>If you have checked the "Honor Owner" check box in the Settings screen, the "Admin Gage Owner" allows this user to access any gage.</p>
<p>User Has Read Only Access To:</p> <p>Gage Master</p> <p>Calibration/Usage</p> <p>Gage R& R</p> <p>Procedures</p>	<p>Check box fields that allow you to grant "read only" access to these screens in the ProGAGE1 program. The user will be able to access and review the screen, but cannot modify or enter data. Checking the box assigns <i>read only</i> access.</p> <p><i>The default for a new user is full access to all screens.</i></p>

* IMPORTANT: Only certain "Supervisor" level personnel should be given access to the Utilities menu. Any person having access rights to the Utilities menu can view the passwords of other users as well as create and delete users.

Security Entry Menus and Menu Commands

The **FILE** Menu

Menu Command	Description
Close	Closes the Security Entry screen and returns you to the Utilities menu.

The **EDIT** Menu

Menu Command	Description
<u>U</u> ndo CTRL + Z	Disabled.

Cu <u>t</u> CTRL + X	Cuts selected text.
<u>C</u> opy CTRL + C	Copies selected text.
<u>P</u> aste CTRL + V	Only active if you have previously cut or copied text. Pastes the cut or copied text at the current location of your text cursor.
Clear	Clears the contents from a selected field. <i>The entire field must be highlighted.</i>
Select <u>A</u> ll CTRL + A	Selects or highlights the entire contents of a field.

The RECORD Menu

Menu Command	Description
<u>N</u> ext PGUP	Advances you to the next record.
<u>P</u> rior PGDN	Returns you to the record prior to the current record.
<u>T</u> op CTRL + T	Takes you to the first record.
<u>B</u> ottom CTRL + B	Takes you to the last record.
<u>L</u> ocate CTRL + L	Allows you to locate a specific user by using search criteria.
Toggle <u>D</u> elete CTRL + D	Allows you to delete (or undelete) users from the system.

Steps for Creating New Users and Granting Access Privileges

1. Click the NEW button at the bottom of the screen.
2. Enter the name of the new user in the **Name** field (upper / lower case doesn't matter).
3. Tab to the **Password** field and type a password for the new user (case matters - try to use only numbers if possible to simplify and avoid mistakes).
4. Assign access and read only access privileges to the ProGAGE1 screens by clicking on the corresponding check boxes.
5. Click the SAVE button or press ALT + S.
6. To add another user, click the NEW button again and repeat steps 2 - 5.
7. Click CLOSE when you are done. You will return to the Utilities Menu.

- ◆ The Password logon screen is only invoked whenever at least one user is created. When a user opens ProGAGE1, the Password logon screen will appear. The user must enter a valid name and password in order to use the program.

If you deny access to any particular screen, then that option will appear disabled ("grayed-out") on the Main Menu after the user logs on.

Deleting Users from the Program

To delete a user from the system, choose the **Toggle Delete** command from the **RECORD** menu or press CTRL+D. You will see the word "DELETED" on the far right side of the screen.

Using the Locate Command on the Security Entry Screen

The Locate command on the Security Entry screen allows you to search for a user based on field information.

To access the Locate screen, click the LOCATE button.

Locate Screen Field Descriptions

Field Name	Description
Table	A field displaying the table (file) that you will be searching.
Order	A pop-up field displaying the available search order choices. Name Record#

Search Fields	<p>A pop-up field displaying the field search choices.</p> <p>NAME PASSWORD GAGEACCESS GAGERD CALIBACCESS CALIBRD RPTACCESS... etc.</p>
Operator	<p>A pop-up field displaying operator choices.</p> <p>= Begins with < > Not equal (finds everything except what is typed) < Less than > Greater than < = Less than or equal to > = Greater than or equal to = = Exactly matches contains Contains what is typed</p>
Search Value	<p>A data field that allows you to identify the search data. <i>Example: NAME = Joe Smith</i></p>
Search Criteria area	<p>A field displaying your chosen criteria. <i>You must press the ADD button before the data appears in this field.</i></p>

Locate Screen Menus and Menu Commands

The menus and menu commands for the Locate screen are identical to those of the Security Entry Screen.

Searching for a User

On the Locate screen:

1. Select the search order from the **Order** field.
2. Select a field choice from the **Search Field** list.
3. Choose a symbol from the **Symbols** field.
4. Type in the search data in the **Search Text** field.

5. Press the ADD button.
6. Press the OR button if you want to search on more than one set of criteria.

Example: NAME = Joe Smith
 OR
 NAME = Joseph Smith

Your search criteria will appear in the **Criteria** field.

7. To clear the **Criteria** field, press the RESET button.
8. Otherwise, press the BROWSE button.
9. If records are not found based on your criteria, a message box in the upper right corner of your screen will alert you.
10. If records are found based on your criteria, the Security window will appear. This window displays your user access data in a table format.
12. To close the Security window, do one of the following:
 - Press CTRL + F4.
 - Click the left button in the Title Bar and Click **Close**.
13. To close the Locate screen and return to the Security Entry screen, click the CLOSE button.
14. To close the Security Entry screen and return to the Settings screen, click the CLOSE button or press ALT + C.

Optimizing Files

The optimize files function verifies the integrity of the data you have entered, reorganizes the index files and permanently deletes records that you have identified as "deleted."

- ◆ It is a good idea to optimize files on a regular basis to clear out extraneous data. Also, the files can **only** be optimized when no other users are running the program.

1. Click the OPTIMIZE FILES button on the Utilities menu.
2. A confirmation dialog box will appear. To proceed, click OK.

This process may take several seconds or several minutes - depending on the number of records in your database tables.

Archiving and Restoring Records

The archive function on the Utilities menu allows you to archive (off load) and restore (previously archived) calibration data and gage issue (usage) records. For example, at the beginning of each year, you may want to archive the data for the previous year so that it does not take up unnecessary space on your hard drive.

IMPORTANT: Always make a fresh backup copy of your database files before archiving or restoring records (these files are normally in the C:\PGWIN2\DBFS subdirectory). If the power fails or your computer hangs up during the Archive or Restore process, your database will be corrupted.

To access the Archive and Restore screen, click the ARCHIVE button on the Utilities menu.

The screenshot shows a dialog box titled "Archive and Restore". It contains the following elements:

- Action Type:** Radio buttons for "Archive" (selected) and "Restore".
- Records to Archive/Restore:** Radio buttons for "Calibration Records" (selected) and "Issue Records".
- Calibration/Issue Archive Filename:** Text box containing "C:\CAL95.DBF" and a "File" button.
- Measurement Archive Filename:** Text box containing "C:\MEAS95.DBF" and a "File" button.
- Gage ID:** Text box containing an asterisk (*).
- From Date (leave blank for all):** Text box containing "01/01/1995".
- Thru Date (leave blank for all):** Text box containing "12/31/1995".
- Buttons:** "Process" and "Close" buttons at the bottom right.

Archive and Restore Field Descriptions

Field Name	Description
<p>Action Type</p> <p><input type="radio"/>Archive</p> <p><input type="radio"/>Restore</p>	<p>A radio button field that allows you to choose the type of function you wish to perform. Choosing Archive will store data files in a specified location. Choosing Restore will make records that were previously archived accessible to you.</p>
<p>Records to Archive/Restore</p>	<p>A radio button field that allows you to choose the type of records you wish to archive or restore (Calibration or Issue Records).</p>
<p>Calibration / Issue Archive Filename</p> <p>Note: Filenames cannot begin with a number (“95CAL.DBF” is not acceptable but “CAL95.DBF” is acceptable)</p>	<p>A field that allows you to enter the path and filename in which to store the archived Calibration (or Issue) records. Enter a <i>new filename</i> to create a new archive file. Enter an <i>existing archive filename</i> to append to an existing archive.</p>
<p>Measurement Archive Filename</p> <p>Note: Filenames cannot begin with a number (“95MEAS.DBF” is not acceptable but “MEAS95.DBF” is acceptable)</p>	<p>A field that allows you to enter a path and filename for the archived measurement records. (Note: This field is <i>disabled</i> if you are archiving Issue records.)</p>
<p>Gage ID</p>	<p>Normally set for ALL gages (An asterisk “*” means all gage id’s). If you want to archive only for a specific gage id, then enter the gage id here. You can also use wildcards such as “TP-*” to archive only gages that match the wildcard pattern (e.g. an entry of “TP-*” would only archive records where the gage id started with TP- such as TP-001, TP-002, TP-003, etc.).</p>
<p>From Date (leave blank for all)</p>	<p>A date field that specifies which records to archive or restore, based on a start date.</p> <p><i>Leaving this blank will choose all the records.</i></p>

Thru Date (leave blank for all)	<p>A date field that specifies which records to archive or restore, based on an end date.</p> <p><i>Leaving this blank will choose all the records.</i></p>
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Creating a New Archive

1. Click the ARCHIVE button on the Settings screen. The Archive and Restore screen will appear.
2. Choose Archive in the **Action Type** field.
3. Choose the type of records to archive from the **Records to Archive/Restore** field.
4. If you know where you want the archived files stored and the filename you wish to use, type it into the **Calibration / Issue Archive Filename** field.

Important: If you are archiving Calibration Records, then enter a second archive filename into the Measurement Archive Filename field. This file is used to store any measurements that are related to the archived calibration records. This field is disabled if you are archiving Issue records.

5. If you would rather *navigate* to the archive drive and directory, click the FILE button. Click the **New** button field. Navigate to the desired drive and directory and enter the new filename into the "Output file:" field. Click the **Save** button and you will be returned back to the Archive and Restore screen.

The path and filename will now appear in the **Calibration / Issue Archive Filename** field on the Archive and Restore screen.

6. In the **Gage ID** field, enter a specific gage id, wildcard pattern or "*" for all gages.
7. Repeat steps 4 and 5 to fill in the **Calibration Measurement Filename** field.
8. To activate the archival process, click the PROCESS button.
9. To return to the Utilities menu, click the CLOSE button.
10. In Utilities menu, click the OPTIMIZE FILES button.

Restoring Previously Archived Records

1. Click the ARCHIVE button on the Utilities Menu.
2. Choose Restore in the **Action Type** field.
3. Choose the type of records from the **Records to Archive/Restore** field.
4. If you know where the archive files are stored and the filename used to archive them, type it in the **Calibration / Issue Archive Filename** field.
5. If you don't, click the FILE button to navigate to the file. Highlight the archive filename and Click the RESTORE button.
7. If necessary, repeat steps 4 and 5 to fill in the **Measurement Archive Filename** field.
8. To activate the restore process, click the PROCESS button.
9. To return to the Utilities menu, click the CLOSE button.

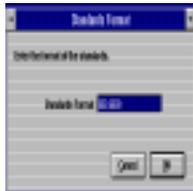
Standards Format Screen

The Standards Format Screen allows you to specify how ProGAGE1 will display your measurements of reference standards when you enter your calibration records. This is the same screen that appears when you click the “Standards Format” button in the Settings screen.

To access the Standards Format screen, click the STANDARDS FORMAT button on the Utilities menu.



Use a series of 9's and a decimal point to represent how you want your measurements to be displayed.

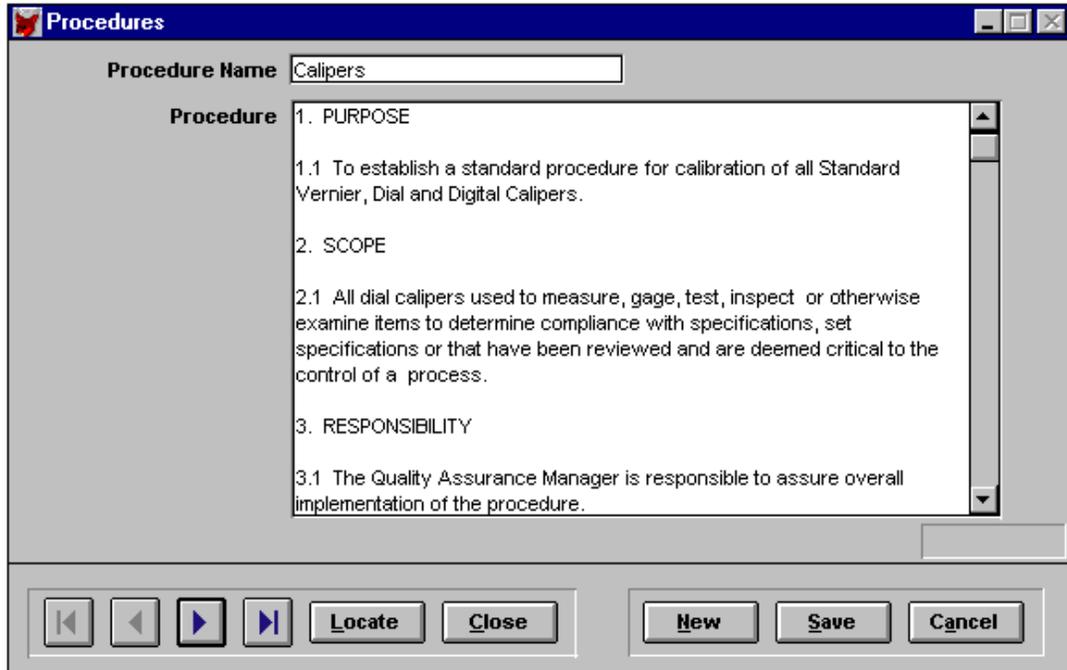


For example, if the standards format is set to “999.99” and you enter a measurement of “0.12345”, the program will display it as “0.12”. *It is a good idea to set the format to accommodate both the largest and smallest measurement values you expect to enter* (such as “9999.9999” or “999.999999”).

This setting can always be adjusted later on if your needs change.

Chapter 4: The Procedures Screen

This chapter explains the Procedures screen, its purpose, field descriptions, menus and commands, and screen-specific functions.



Purpose of the Procedures Screen

The Procedures screen allows you to create and edit calibration (or other procedures such as maintenance, repair, quarantine, etc.) procedures that you can link to one or more gage records (refer to Chapter 5). Because gages are *linked* to procedures, it is easy to keep your procedures up-to-date. If for some reason the procedure is revised, then all gages that are linked to the changed procedure will be updated as well (don't change the procedure name - just the procedure text).

Procedures Screen Field Descriptions

Field Name	Description
Procedure Name	An alpha-numeric field for entering the name of the procedure.
Procedure	A memo field for entering the body of the procedure text (to save time, you can copy and paste text from other applications into this field - however, no formatting such as font type, bolding, etc. will be copied. Only the text can be copied).

Procedures Screen Menus and Menu Commands

Following is a list of the available menus and an explanation of the commands available for each.

The FILE Menu

Menu Command	Description
<u>C</u> lose	Closes the Procedures Screen and returns you to the Main Menu screen.

The EDIT Menu

Menu Command	Description
<u>U</u> ndo CTRL + Z	Disabled.
<u>C</u> ut CTRL + X	Cuts selected text.
<u>C</u> opy CTRL + C	Copies selected text.
<u>P</u> aste CTRL + V	Only active if you have previously cut or copied text. Pastes the cut or copied text at the current location of your text cursor.
Clear	Clears the contents from a selected field. <i>The entire field must be highlighted.</i>
Select <u>A</u> ll CTRL + A	Selects or highlights the entire contents of a field.

The RECORD Menu

Menu Command	Description
<u>N</u> ext PGUP	Advances you to the next record.
P <u>r</u> ior PGDN	Returns you to the record prior to the current record.
<u>T</u> op CTRL + T	Takes you to the first record.
<u>B</u> ottom CTRL + B	Takes you to the last record.
<u>L</u> ocate CTRL + L	Allows you to locate a specific gage by using search criteria.
<u>C</u> hange Procedure Name	Allows you to change procedure name and the program will automatically update all the gages that are linked to the procedure.
Toggle <u>D</u> elete CTRL + D	<p>Allows you to mark procedures for deletion. Records will be permanently deleted when you optimize the files (refer to Chapter 3). The toggle feature allows you to "undelete" procedures that you have marked for deletion (if you change your mind before packing).</p> <p><i>When you mark a procedure for deletion, the word "DELETE" appears in red letters beneath the Procedure Field on the right side of the screen.</i></p>

The WINDOW Menu

Menu Command	Description
<u>C</u> ycle CTRL + F1	If you have more than one window open, this command will cycle you through the open windows.
<u>P</u> rocedure Selector	Takes you to the Procedure Selector window. This window displays the names all the procedures you have entered.

Creating Procedures

1. Click the **NEW** button or press **ALT + N**.
2. Type the name of the procedure in the **Procedure Name** field.
3. Type the procedure text in the **Procedure** field.
4. Click **SAVE** or press **ALT + S**.
5. To create another procedure, repeat steps 1-4.

New procedures may be created with 3rd party word processing software programs like Word or Word Perfect.

With ProGAGE1 for Windows open, run and create your procedure in Word, Word Perfect, Notepad or WordPad.

1. Using your mouse highlight the desired procedure text to be copied.
2. Press **CTRL C**.
3. Exit or minimize word processing program.
4. Maximize ProGAGE1 program.
5. Type the name of the procedure in the **Procedure Name** field.
6. Press **CTRL V** to have text pasted into the procedure text field within ProGAGE1.

American Quality Systems offers CalPro Calibration Procedures. CalPro consists of over 30 step-by-step, industry-proven set of calibration procedures for use with the ProGAGE1 package or can be incorporated directly into your company's existing Quality Control Manual via the supplied Word, WordPerfect and ASCII document files. CalPro Price: \$295.00

Navigating through the Procedures

There are several ways to navigate through the procedures you have created:

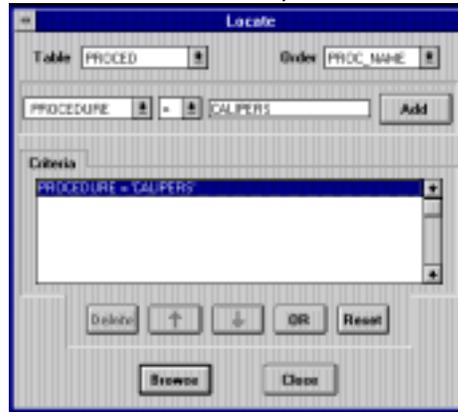
1. Use the standard navigation buttons on the bottom of the screen (refer to Chapter 1).
2. Click the **RECORD** menu and choose a menu command.
3. Use the keyboard equivalents listed next to the menu commands in the **RECORD** menu.
4. Use the **LOCATE** button to do a record search.

Using the Locate Command

The Locate command on the Procedures screen performs the same function as on the Gage Master Entry screen (refer to Chapter 4) but the search tables and search fields differ.

The available search table is: **PROCED**

The available search fields are: **PROC NAME, PROCEDURE**



When the search is complete, the Procedure browse window will appear.

Proced	
Proc_name	Procedure
CP-034	Memo
CP-045	Memo
CP-067	Memo

Viewing the Procedure Selector Window

The Procedure Selector window is a browse window which lists the names of all entered procedures.

1. To access the Procedure Selector window from the Procedure screen, click the **WINDOW** menu or press ALT + W.
2. Choose the **Procedure Selector** command or press ALT + P.

Proc_name
CP-034
CP-045
CP-067
Cal-Standard 001
Procedure 1
Procedure 2
Procedure 3
Procedure 4
Procedure 7
Procedure 8
Procedure 9

3. To choose a particular procedure, highlight the field.
4. To close the Procedure Selector window, do one of the following:

Click the left button in the Title Bar and click **Close**.

Press CTRL + F4.

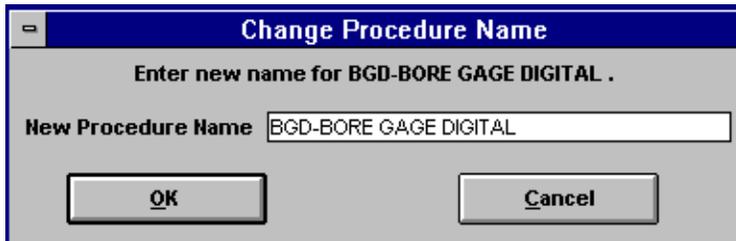
Click on **WINDOW** menu or press ALT + W and choose **Procedure Selector**.

The procedure you chose in step 3 will now appear on your screen.

Changing Procedure Names ---

To change the name of a procedure:

1. Click the **RECORD** menu.
2. Choose the **Change Procedure Name...** command.



3. Enter the new procedure name and click the OK button. The program will automatically update all gages that are linked to the procedure.

Returning to the Main Menu from the Procedures Screen ---

Click the CLOSE button at the bottom of the Procedures Screen.

Chapter 5: The Gage Master Entry Screen

This chapter explains the Gage Master Entry screen, its purpose, field descriptions, menus and commands, and screen-specific functions.

Gage Master Entry

Gage ID: C-10009
Description: CALIPER DIGITAL 6 IN
Type: VARI Units: IN / MM
Status: ACTIVE
Location: LAYOUT DEPT
Vendor: ACME - STARRETT
Purchase Date: 01/15/1998 Price: 145
Usage: 0
Owner: FRANK SMITH
Comments:

Schedule Type: CALENDAR Hrs: 0.50
Lead Time: 5 Days
Lead Date: 01/10/1998
Cal. Frequency: 60 Days EOM
Next Calibration: 01/15/1998 Over Due!
R&R Frequency: 120 Days
Next Gage R&R: 04/15/1998 Over Due!
User Defined 1-5: [Empty Fields]

Standard ID	Minimum	Nominal	Maximum	Uncertainty
1-INCH BLOCK	0.999000	1.000000	1.001000	
3-INCH BLOCK	2.999000	3.000000	3.001000	

Buttons: [Back] [Forward] [Locate] [Close] [Quick Search] [New] [Save] [Cancel]

Purpose of the Gage Master Entry Screen

As the name implies, the Gage Master Entry screen is the "Master" file for all of your gage record information. You create a "record" for each gage, identifying it with an ID number, calibration, gage R&R and other information specific to that gage. You can print bar code labels with the ID number, link procedures, define calibration standards for the gage and create a new calibration record from this screen.

Gage Master Entry Screen Field Descriptions

Field Name	Description
Gage ID	An alpha-numeric field for entering the assigned gage ID number. Must be unique for each gage record. <i>record</i> .
Description	An alpha-numeric field for entering a description of the gage.
Type	An alpha-numeric field for entering the type of gage.
Units	A field indicating the unit of measurement the gage uses.
Status	An alpha-numeric field for entering the status of the gage (i.e. "Ok", "In Repair", "Out of Service", etc.).
Location	An alpha-numeric field for entering the location of the gage.
Returned []	A checkbox field for indicating if the gage has been returned to its location.
Vendor	An alpha-numeric field for entering the name of the vendor or manufacturer from which the gage was purchased.
Purchase Date	A date field indicating the date on which the gage was purchased.
Price	A numeric field indicating the purchase price of the gage (whole numbers only).
Usage	A numeric field displaying gage usage cycles.
Owner	Allows you to assign or take ownership of gages between different security users (refer to Chapter 3).
Comments	A scrollable alpha-numeric field for entering comments or notes or any other type of information about the gage.

Schedule Type	An alpha-numeric field for entering the type of schedule you are using (Calendar, Usage, etc.).
Hrs	A numeric field for entering the number of hours it takes to calibrate the gage.
Lead Time	The number of days that you would like for lead time. For example, you may want to have 5 days advanced notice before the calibration is due so that you can locate the gage, give the department a temporary replacement gage and so on.
Lead Date	This is the date that you would like to have notice when running a report such as the "Calibration Due" report.
Cal. Frequency	A numeric and pop-up frequency unit (i.e. "Days", "Weeks") field used to enter the frequency of gage calibration.
EOM	Or End of Month field, A check box field that when checked will indicate that the next calibration date will automatically round off to the last day of the month that the calibration is due.
Next Calibration	This field can be manually entered <i>or</i> it will be automatically calculated for you when you enter calibration records (refer to Chapter 5).
R&R Frequency	A numeric and pop-up frequency unit (i.e. "Days", "Weeks") field used to enter the frequency of gage R&R studies.
Next Gage R & R	This field can be manually entered <i>or</i> it will be automatically calculated for you when you enter R&R records (refer to Chapter 7).
User Defined 1	An alpha-numeric field that you define. From the Utilities Menu, the end user can change the user defined field names on the gage master entry screen (refer to Chapter 3).
User Defined 2	Same as User Defined 1

User Defined 3	Same as User Defined 1
User Defined 4	Same as User Defined 1
User Defined 5	Same as User Defined 1
Standards	A table that allows you to set up a list of calibration standards or check points.

Gage Master Entry Screen Menus and Menu Commands

Following is a list of the available menus and an explanation of the menu commands available for each.

The **FILE** Menu

Menu Command	Description
<u>P</u> rint Bar Code Label CTRL + P 	<p>Allows user to print bar coded gage identification label for the gage.</p> <p>Requires optional "Calibration Label Kit".</p>
<u>C</u> lose	Closes the Gage Master Entry screen and returns you to the Main Menu screen.

The **EDIT** Menu

Menu Command	Description
<u>U</u> ndo CTRL + Z	Disabled.
<u>C</u> ut CTRL + X	Cuts selected text and places a copy in the clipboard.
<u>C</u> opy CTRL + C	Copies selected text.

Copy <u>G</u> age Record	Makes a copy of the current gage record. All entered data will be duplicated <i>except</i> the Gage ID number (including any linked procedures and standards). <i>You must give the copied record a new unique Gage ID number.</i>
Copy Standards...	Allows you to copy the list of standards from another gage to the current gage. You will need to enter the gage id of the source gage record.
<u>P</u> aste CTRL + V	Only active if you have previously cut or copied text. Pastes the cut or copied text at the current location of your text cursor.
Clear	Clears the contents from a selected field. <i>The entire field must be highlighted.</i>
Select <u>A</u> ll CTRL + A	Selects or highlights the entire contents of a field.

The **RECORD** Menu

Menu Command	Description
<u>N</u> ext PGUP	Advances you to the next record.
P <u>r</u> ior PGDN	Returns you to the record prior to the current record.
<u>T</u> op CTRL + T	Takes you to the first record.
<u>B</u> ottom CTRL + B	Takes you to the last record.
<u>L</u> ocate CTRL + L	Allows you to locate a specific gage by using search criteria.
Quick Search CTRL + B	Allows you to search quickly for a Gage record using the Gage ID number.

Change Gage ID	By selecting this, you can change the Gage ID of a record and it will perform a cascading update of all related records such as the Calibrations, Standards, Gage R&R Studies and so on.
Toggle <u>D</u> elete CTRL + D	<p>Allows you to mark gage records for deletion. Records will be permanently deleted when you optimize the files (refer to Chapter 3). The toggle feature allows you to "undelete" records that you have marked for deletion (if you change your mind).</p> <p><i>When you mark a record for deletion, the word "DELETE" will appear in red letters beneath the PROCEDURES button on the Gage Master Entry screen.</i></p> 

The SORT BY Menu

(The current sort order will appear in blue text  on the left side of the screen...)

Menu Command	Description
<u>G</u> age ID	Sorts the entered records using the Gage Identification Number field.
<u>D</u> escription	Sorts the entered records using the gage Description field.
<u>L</u> ocation	Sorts the entered records using the gage Location field.
<u>N</u> ext Calibration Date	Sorts the entered records using the Next Calibration Date field.
<u>T</u> ype	Sorts the entered records using the Type field.
<u>U</u> ser Defined 1	Sorts the entered records using the User Defined 1 field.

User Defined 2	Sorts the entered records using the User Defined 2 field.
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The **WINDOW** Menu

Menu Command	Description
<u>C</u> ycle CTRL + F1	If you have more than one window open, this command will cycle you through the open windows.
<u>G</u> age Selector	Takes you to the Gage Selector window. This window displays a list of all entered gage records in the order by which they have been sorted.
<u>U</u> sage History	Toggles between displaying and hiding the Usage History table which is a usage summary for the current gage record.
Gage R&R <u>H</u> istory	Toggles between displaying and hiding the Gage R&R History table which shows the summary information for each gage R&R study performed on the current gage.
<u>C</u> alibration History	Toggles between displaying and hiding the Calibration History table which shows the summary information for each calibration performed on the current gage.
Calibrate Gage (CTRL + G)	Takes you directly to the Calibration Entry screen which allows new calibration information to be entered (refer to Chapter 6). This is a short cut method that save you from having to return to the program main menu.
Issue Gage	Takes you to the Usage Entry screen which is used to enter issue information for a particular gage like when it was issued, by whom and to whom (refer to Chapter 7).

Return Gage	Takes you to the Usage Entry screen which is used to enter return information for a particular gage like when it was returned, by whom, from where and number of cycles used (refer to Chapter 7).
Link Procedures	A scrollable listing of all available procedures (refer to Chapter 4).
View Procedures	A scrollable listing of all procedures linked to the current gage.

Creating Gage Records

When you access the Gage Master Entry screen for the first time (before any records are created), the entry screen will be blank (no field information). Once records are created, and you re-open the Gage Master Entry screen, the existing gages records will appear in sorted order (sorted by Gage ID unless you use the SORT BY menu to change the sort field).

1. Click the NEW button to create a new gage record.
2. To create a gage record, you should first assign an identification number to the gage. Type this in the **Gage ID** field. *You can enter data in other fields first, but you cannot save the record without an ID number.*

Important!

Remember that the gage id field is *ASCII sorted* (not numerically sorted). This means that if you are entering numbers, you should pad with sufficient zeros so that all gage id's are the same length.

For example, if you entered gage i.d. numbers as 1, 2, 3 ... 20, the program will sort them as 1, 10, 2, 20, 3, 30, 4 ... etc. -- which is not what you want. To avoid this problem, the gage id's should be entered as 01, 02, 03, ... and so on.

As mentioned before, since the gage id field is used as a relational link to other data tables in the program, *it cannot be modified once you have saved the gage master record.*

3. Continue entering gage information in the fields on the screen.
4. To save the gage record, click the SAVE button or press ALT + S.
5. Click the NEW button to create another new gage record.

- ◆ When making modifications to existing records, remember to save the changes! ProGAGE1 will alert you to save with a beep.

Navigating Through Gage Records

There are several ways to navigate through the created gage records:

1. Use the standard navigation buttons on the bottom of the screen (refer to Chapter 1.)
2. Click the **RECORD** file menu and choose a file menu command.
3. Use the keyboard equivalents listed next to the file menu commands in the **RECORD** menu.
4. Use the QUICK SEARCH button to do a search.
5. Use the LOCATE button to do a record search.

Copying Gage Records

You can make a copy of any saved gage record. All field data will be duplicated *except* the Gage ID number.

1. Click the **EDIT** menu.
2. Click the **Copy Gage Record** command or press CTRL + G.
3. Type a new gage identification number in the Gage ID field.
4. Change any other pertinent information within the newly copied record.
5. Click the SAVE button or press ALT + S.

Deleting a Gage Record

You can mark gage records for deletion after you have saved them. Records will be permanently deleted when you optimize the files (refer to Chapter 3).

1. Click the **RECORD** menu.
2. Click the **Toggle Delete** command or press CTRL + D.

The toggle feature allows you to "undelete" records that you have marked for deletion (if you change your mind before optimizing files). If you prefer not to see records once they have been deleted, you can modify the CONFIG.FPW file so that prevents displaying records marked as deleted (please see the appendix section "CONFIG.FPW Configuration File" for details).

- ◆ When you mark a record for deletion, the word "DELETE" will appear in red letters beneath the PROCEDURES button on the Gage Master Entry screen.

Viewing the Gage Selector Window

The Gage Selector window is a browse window which lists all entered gage records in the order by which they have been sorted. The data appears in table format displaying the following fields from the Gage Master Entry screen: **Gage ID, Description, Type, Location, Next Calibration Date.**

1. To access the Gage Selector screen from the Gage Master Entry screen, click the **WINDOW** menu or press ALT + W.
2. Choose the **Gage Selector** command or press ALT + G.

Gage Selector				
Gage ID	Description	Type	Location	Next
ST-W007	SHORT TESTER DC HOL	ELC	MOVED TO A-3 A.L	04/14
RH-005	ROPEHANDLE GAGE 6TL	EPM	OFFICE DAN HEYDT	10/12
S-052	SCALE PORT-O-GRAM	OH	OXIDE LAB	07/19
TM-STD01	VWR STOPWATCH	VWR	PROCESS ENG. DEPT.	11/24
00021	CALIPER-DIAL 6 INCH	VARI	QC-STATION 2	/ /
000022	CALIPER-DIAL 6 INCH	VARI	QC-STATION 2	/ /
VM-E002	MULTIMETER M-8050A	FLK	TCH CENTER B-LAB	06/03
SH-BL0030	SHUNT 25A/100mV	METR	TEARDOWN 25A RCT	06/18
ST-QC002	SPARK TESTER DC HOL	ELC	TECH CENTER A-LAB	07/08
ST-TC001	SHORT TESTER 4040A	A-R	TECH CENTER A-LAB	09/30
S-044A	SCALE BB1200	MET	TECH CENTER (SPARE)	07/08
S-005	SCALE BW1500	OH	TECH CENTER A-LAB	07/08
S-009	SCALE SHIMADZU	SH	TECH CENTER A-LAB	07/08
S-043	SCALE PM200	ME	TECH CENTER A-LAB	07/11
S-047	SCALE BW1500	OH	TECH CENTER A-LAB	07/11
S-049	SCALE P203	ME	TECH CENTER A-LAB	05/01
VM-E010	MULTIMETER M-25	FLK	TECH CENTER A-LAB	06/04
S-050	SCALE CT600-S	OH	TECH CENTER B-LAB	07/11
S-051	SCALE D10-00	OH	TECH CENTER B-LAB	07/11

3. To choose a particular gage, highlight the field.
4. Close the Gage Selector screen by doing one of the following:
 - Click the left button in the Title Bar and click **Close**.
 - Press CTRL + F4.

The gage you chose in step 3 will now appear on your screen.

Issuing and Returning Gages

The Issue Gage and Return Gage functions are specific to a gage record. When a gage is issued (physically taken), you can record information, such as who took it and when. When the gage is returned, you can document the return information as well as keep track of gage operating cycles (or usage time). Historical gage usage summary information is displayed on the Usage History table.

Accessing the Usage Entry Screen

The Usage Entry screen can be accessed from either the Main Menu (Usage Button) or from the Gage Master Entry screen. To access the Usage Entry screen from the Gage Master Entry screen, click the **WINDOW** menu choose the **Issue Gage** or **Return Gage** file

command. Either command will get you to the Usage Entry screen. If "Issue Gage" is chosen, then the program automatically fills in the Issue Date field for you and un-checks the "Return" field of the gage master screen. If "Return Gage" is chosen, then the program automatically fills in the Return Date and places a check mark in the "Return" field of the gage master screen.)

Usage Entry Field Descriptions

Field Name	Description
Part No.	An alpha-numeric field for tracking the part or job number the gage was used for.
Issue Date	An alpha-numeric field for entering the date on which the gage was issued. <i>When using the Issue Gage menu command, this field will display the current date unless you change it.</i>
(Issued) By	An alpha-numeric field for entering who issued the gage.
(Issued) To	An alpha-numeric field for entering to whom the gage was issued.
Issue Location	The name of the location that the gage will be issued to (i.e. Department, Worksite, etc.). Any entry in this field automatically updates the "Location" field of the Gage Master screen.
(Issue) Reason	The reason that the gage was issued (for tracking purposes).

(Return) Date	A date field for entering the date on which the gage was returned. <i>When using the Return Gage menu command, this field will display the current date unless you change it.</i>
(Returned) By	An alpha-numeric field for entering who received the gage back.
(Returned) From	An alpha-numeric field for entering the person that returned the gage.
Cycles	A numeric field for entering the number of cycles the gage operated or number of days used while being issued.
Return Location	The name of the location that the gage will be returned to (i.e. Department, Storage Bin, etc.). Any entry in this field automatically updates the "Location" field of the Gage Master screen.

Usage Entry Menus and Menu Commands

The only active menus for the Usage Entry screen are **FILE**, and **EDIT**.

Issuing a Gage

On the **ISSUE** (left) part of the screen:

1. Assign and enter a part number for the gage being issued in the **Part No.** field.
2. Enter the date the gage was issued (if not the current date) in the **Date** field.
3. Enter the name of the person issuing the gage in the **By** field.
4. Enter the name of the person to whom the gage is being issued in the **To** field.
5. Enter the location that the gage is being issued to in the **Issue Location** field.
6. Enter the reason that the gage is being issued in **Reason** field.
7. Click the SAVE button or press ALT + S.
8. To close the Usage Entry screen, Click the CLOSE button.

Returning a Gage

On the **RETURN** (right) part of the screen:

1. Enter the date on which the gage was returned (if not the current date) in the **Date** field.

2. Enter the name of the person that received the gage in the **By** field.
3. Enter the name of the person that returned the gage in the **From** field.
4. Enter the number of cycles (or days) used in the **Cycles** field.
5. Enter the location to which the gage is being returned in the **Return Location** field.
6. Click the SAVE button.
7. To close the Usage Entry screen, click the CLOSE button.

- ◆ When you enter return information for a gage record, the **Returned** check box field will be automatically checked on the Gage Master Entry screen.

Viewing the Usage History Window

The Usage History window is a browse window that displays, in table format, the gage usage information you entered on the Usage Entry screen. The column headings in the table correspond to the fields on the Usage Entry screen.

1. To access this Usage History window, click the **WINDOW** menu and choose the **Usage History** command or press ALT + U.
2. To close the Usage History screen, click the **WINDOW** menu again and choose the **Usage History** again or press ALT + U.

Viewing the Calibration History Window

The Calibration History window is a browse window, in table format, that displays the calibration information you entered on the Calibration Entry screen. The column headings in the table correspond to the fields on the Calibration Entry screen.

1. To access the Calibration History window, click the **WINDOW** menu and choose the Calibration History command or press ALT + C.
2. To close the Calibration History window, click the **WINDOW** menu again and choose the Calibration History command again or press ALT + C.

Viewing the Gage R&R History Window

The Gage R&R History window is a browse window, in table format, that displays the Gage R&R information you entered in the Gage R&R Study screen. The column headings in the table correspond to the fields on the Gage R&R Study screen.

1. To access the Gage R&R History window, click the **WINDOW** menu and choose the Gage R&R History command or press H.
2. To close the Gage R&R History window, click the **WINDOW** menu again and choose the Gage R&R History command again or press H.

Using the Link Procedures Command

The **Link Procedures** command within **Window** pull-down menu at the Gage Master Entry screen allows you to link previously defined procedures to a particular gage. If you need to create procedures, return to the main menu and click the PROCEDURES button (refer to chapter 4 for detailed information on entering procedures).

- ◆ You must create procedures before you can link them (refer to Chapter 4).

Procedure Link Field Descriptions

Field Name	Description
Procedure Listing	A scrollable listing of all available procedures (refer to Chapter 4).
Linked Procedures	A scrollable listing of all procedures linked to the current gage.

Procedure Link Menus and Menu Commands

The menus are identical to those on the Gage Master Entry screen. All are disabled except the following:

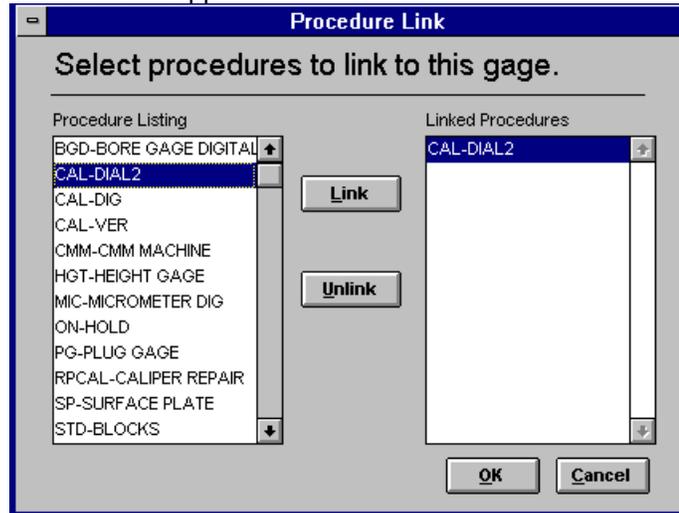
The **WINDOW** Menu

Menu Command	Description
<u>C</u> ycle CTRL + F1	If you have more than one window open, this command will cycle you through the open windows.

Linking Procedures

1. From the **Window** pull-down menu, click the LINK PROC button or press ALT + L.

The Procedure Link screen will appear.

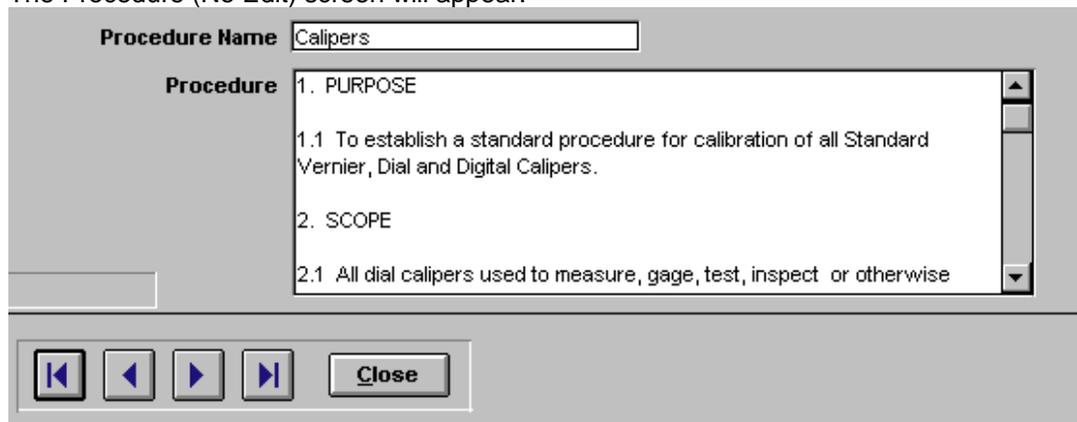


2. Click the procedure you wish to link to the current gage in the **Procedure Listing** field.
3. Click the LINK button. The procedure will now appear in the **Linked Procedures** area.
4. Repeat steps 2 and 3 if you wish to link more procedures.
5. To remove a procedure from the **Linked Procedures** area, click on it, then click the UNLINK button.
5. When you have finished linking procedures, click OK or press ALT + O.

Viewing Procedures Linked to a Gage

1. From the **Window** pull-down menu, click the VIEW PROC button or press ALT + L.

The Procedure (No Edit) screen will appear.



2. To close the Procedures (No Edit) screen, Click the CLOSE button.

Procedures (No Edit) Field Descriptions

Field Name	Description
Procedure Name	Displays the name of the procedure.
Procedure	Displays the procedure.

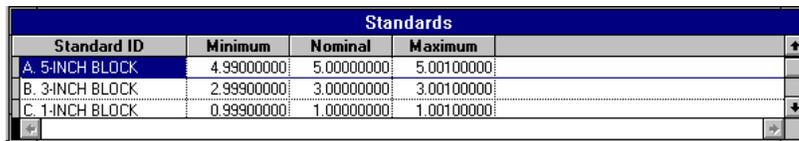
Procedures (No Edit) Menus and Menu Commands

The only menus available are FILE, EDIT, RECORD and HELP. They are identical to those on the Gage Master Entry screen with *two* exceptions.

- The **EDIT** menu commands are all disabled.
- The **Locate**, **Quick Search** and **Toggle Delete** commands are not options in the **RECORD** menu.

Using the Standards Table

The Standards Table is a scrollable table on the Gage Master Entry screen that allows you to define a list of calibration standards to use whenever calibrating the current gage.



Standards				
Standard ID	Minimum	Nominal	Maximum	
A. 5-INCH BLOCK	4.99900000	5.00000000	5.00100000	↑
B. 3-INCH BLOCK	2.99900000	3.00000000	3.00100000	
C. 1-INCH BLOCK	0.99900000	1.00000000	1.00100000	↓

Standards Field Descriptions

Field Name	Description
Standard ID	An alpha-numeric field for entering the identification number of each standard.
Minimum	A numeric field for entering the minimum allowable value.
Nominal	A numeric field for entering the nominal (or target) value.

Maximum	A numeric field for entering the maximum allowable value.
Uncertainty	The Uncertainty value of the calibration reference standard. This value can be obtained from the reference standard manufacturer and is expressed in units such as percentage (0.5%), proportion (0.005) or measurement units (0.0001 inch). <i>All values entered must be of the same units otherwise the calculated Overall Uncertainty value will be wrong.</i>

Entering Calibration Standards

1. Click on the Standards title bar to activate this field.
2. Click the BROWSE menu and choose **Append Record** or press CTRL + N.
3. Enter an identification number or name in the Standard ID field (you may want to control the sort order by numbering (i.e. 1., 2., 3...) or lettering (i.e. A., B., C...) your standards).
4. Enter a minimum allowable value in the **Minimum** field.
5. Enter a nominal (or target) value in the **Nominal** field.
6. Enter a maximum allowable value in the **Maximum** field.
7. Enter the uncertainty value of reference standard.
8. To add another standard, repeat steps 2-7.

◆ You can edit previously entered standards on the current gage record by clicking inside the **Standards** field.

Deleting Standards

There are two ways to delete a standard.

1. Click the standard to be deleted.
2. Click the **RECORD** menu.
3. Click the **Toggle Delete** command or press CTRL + D.
4. To "undelete," repeat steps 1-3.

or

1. Click the standard to be deleted.
2. Press CTRL + D.
3. To "undelete," repeat steps 1-2.

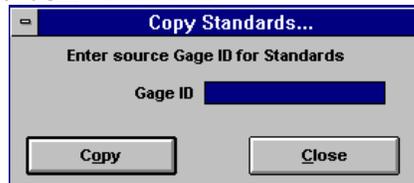
- ◆ When you mark a record for deletion, a "deletion marker" will appear next to the entry in the **Standards** field on the Gage Master Entry screen.

The toggle feature allows you to "undelete" records that you have marked for deletion (if you change your mind before optimizing the database files).

Copying Standards from Another Gage

You can copy the list of standards from another gage (source gage) to the current gage. This can save quite a bit of time when setting up similar types of gages. If standards are already set up for the current gage, then the copied standards will be *added* to the current list. To do this:

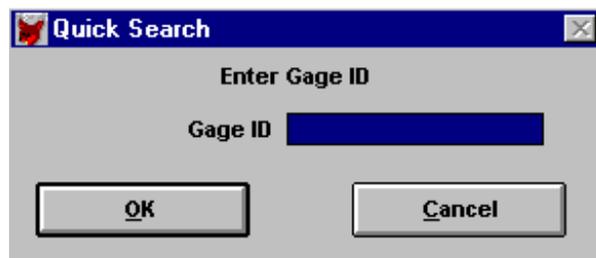
1. Click the **EDIT** menu.
2. Click the **Copy Standards...** command.



3. Enter the source gage's id number into the Gage ID field.
4. Click the COPY button.

Using the Quick Search Command on the Gage Master Entry Screen

The Quick Search command on the Gage Master Entry screen allows you to search for a gage record based on the gage id.



To access the Quick Search, click the Quick Search button.

Searching for a Gage Record

On the Quick Search screen:

1. Type gage id number
2. Press Alt + O or click OK

AQS offers an optional bar code reader with wand. This allows user to scan bar coded gage id label, or one of the bar coded reports to input gage id number. This feature improves efficiency by reducing data entry errors and retrieving gage record instantaneously.

Using the Locate Command on the Gage Master Entry Screen _____

The **Locate** command on the Gage Master Entry screen allows you to search for a gage record based on field information.

The screenshot shows a 'Locate' dialog box. At the top, it says 'Table GAGE' and 'Sort Order GAGEID'. Below that is a table with columns 'Field Name', 'Operator', and 'Search Value'. The first row has '*GAGEID', '=', and '200'. To the right of this row is an 'Add' button. Below the table is a 'Search Criteria' list box containing 'GAGEID = '100'', '*OR*', and 'GAGEID = '200''. Below the list box are buttons for 'Delete', up arrow, down arrow, 'OR', and 'Reset'. At the bottom of the dialog are 'Browse' and 'Close' buttons.

To access the Locate screen, click the LOCATE button.

Locate Screen Field Descriptions _____

Field Name	Description
Table	A field displaying the available search table. GAGE
Sort Order	A pop-up field displaying the available sort order choices. GAGEID DESC TYPE ... etc.

<p>Field Name</p>	<p>A pop-up field displaying the table's field name choices.</p> <p>*GAGEID *DESC *TYPE UM ... etc.</p> <p>Note: Field names that begin with an asterisk (*) are <i>indexed</i> fields - these offer the fastest locate operations.</p>
<p>Operator</p>	<p>A pop-up field displaying operator symbol choices.</p> <p>= begins with < > not equal (finds everything except what is typed) < Less than > Greater than < = Less than or equal to > = Greater than or equal to = = Exactly matches contains Contains what is typed into the Search Value field</p>
<p>Search Value</p>	<p>A data field that allows you to identify the search data.</p> <p><i>Example:</i></p>  <p>(where "001" is the Search Value)</p>
<p>Search Criteria</p>	<p>An area displaying your chosen criteria.</p>  <p><i>You must press the ADD button before the data appears in this area.</i></p>

Searching for a Gage Record

On the Locate screen:

1. Select the sort order from the **Sort Order** field.
2. Select a field choice from the **Field Name** field.
3. Choose an Operator from the **Operator** field.
4. Type in the search data in the **Search Value** field.
5. Press the ADD button.
6. Press the OR button if you want to search on more than one set of criteria.

Example: FREQUENCY = 30
 OR
 FREQUENCY = 60

Your search criteria will appear in the **Criteria** field.

7. To clear the **Criteria** field, press the RESET button.
8. Otherwise, press the BROWSE button.
9. If records are not found based on your criteria, a message box in the upper right corner of your screen will alert you.
10. If records are found based on your criteria, the Gage browse screen will appear. This screen displays your gage record data in a table format.
11. To close the Gage browse window, click the left button in the Title Bar and click **Close**.

Example Locate Commands

Listed below are examples of valid locate commands:

Field Name	Operator	Search Value	Outcome
GAGEID	=	100	Finds records where the gage id begins with 100 such as 100-01, 100-02, 100-03 and so on.
GAGEID	< >	100-01	Finds every record except the one whose gage id is 100-01.
GAGEID	<	999-99	Finds every record where the gage id is less than 999-99.
GAGEID	>	500	Finds every record where the gage id is greater than 500.
GAGEID	< =	800-10	Finds every record where the gage id is less than or

			equal to 800-10.
GAGEID	> =	500	Finds every record where the gage id is greater than or equal to 500.
DESC	= =	Caliper Digital	Finds every record where the description is exactly equal to "Caliper Digital".
DESC	Like	*Digital	Finds every record where the description ends with the "Digital".
GAGEID	IN	100-01, 300-20, 400-07	Finds every record where the gage id is in the list 100-01, 300-20 or 400-07.
DESC	Contains	inch	Finds every record where the description contains the word "inch".

Chapter 6: The Calibration Summary Screen

This chapter explains the Calibration Summary screen, its purpose, field descriptions, menus and menu commands, and screen-specific functions.

Calibration Due Table

If you have the “Auto Calibration Due Table” option turned on within the Settings screen, a table of all gages that are currently due or over due will appear as shown here:



If no gages are currently due, then the Calibration Due Table will not appear and only the Calibration Summary screen will be displayed.

The Calibration Due Table displays the ID of the gage, Description, Due Date and calibration completion status.

To view the “Calibration Summary” for the gage, highlight it and click the CALIBRATION SUMMARY button (discussed next). To just enter a new calibration record for the currently highlighted gage, click the CALIBRATE SELECTED GAGE button. If you want a printed listing of the table

Purpose of the Calibration Summary Screen

The Calibration Summary screen allows you to record and edit calibrations and view calibration history *specific to a gage*. It also allows you to compare standards (that you have defined previously in the Gage Master screen) to actual calibration measurements.

The top of the Calibration Summary screen displays the Gage Master record fields for the specific gage record (you cannot edit them here - they are shown for reference only). The bottom of the Calibration Summary screen displays the **Calibration History** table (the calibration records displayed reverse date order - so that the most recent calibration is at the top of the table). Another screen, the Calibration Entry screen, is used to enter the calibration information that appears in the **Calibration History** table.

Calibration Summary

Gage ID: C-10009
 Description: CALIPER DIGITAL 6 IN
 Type: VARI Units: IN / MM
 Status: ACTIVE
 Location: LAYOUT DEPT
 Vendor: ACME - STARRETT
 Purchase Date: 01/15/1998 Price: 145
 Usage: 0
 Owner: FRANK SMITH
 Comments: [Text Area]

Schedule Type: CALENDAR Hrs: 0.50
 Lead Time: 5 Days
 Lead Date: 01/10/1998
 Cal. Frequency: 60 Days EOM
 Next Calibration: 01/15/1998 Over Due!
 R&R Frequency: 120 Days
 Next Gage R&R: 04/15/1998 Over Due!
 User Defined 1: [Text Field]
 User Defined 2: [Text Field]

Gage ID: [Text Field] **Procedures**

Calibration Date	Results	Calibrated by	Next Date	Account Code

Navigation: [Back] [Left] [Right] [Forward] [Locate] [Close] [Copy] [Quick Search] [Edit] [New]

Calibration Summary Screen Field Descriptions

- ◆ The following fields are display only; You cannot edit these fields on this screen. To edit them, refer to Chapter 5.

Field Name	Description
Gage ID	An alpha-numeric field for entering the assigned gage ID number. Must be unique for each gage record. <i>record</i> .
Description	An alpha-numeric field for entering a description of the gage.
Type	An alpha-numeric field for entering the type of gage.
Location	An alpha-numeric field displaying the location of the gage.
Returned	A checkbox field for indicating if the gage has been returned to its location.
Vendor	An alpha-numeric field for entering the name of the vendor from which the gage was purchased.
Price	A numeric field indicating the purchase price of the gage (whole numbers only).
Purchase Date	A date field indicating the date on which the gage was purchased.
Unit of Measure	A field indicating the unit of measurement the gage uses.
Owner	Allows you to assign or take ownership of gages between different security users (refer to Chapter 3).
Comments	A scrollable alpha-numeric field for entering comments or notes or any other type of information about the gage.

Cal. Frequency	A numeric and pop-up frequency unit (i.e. "Days", "Weeks") field used to enter the frequency of gage calibration.
EOM	Or End of Month field, A check box field that when checked will indicate that the next calibration date will automatically round off to the last day of the month that the calibration is due.
Usage	A numeric field displaying gage usage cycles.
Hours	A numeric field displaying the number of hours the gage has been used.
Next Calibration	This date field will be automatically calculated for you when you enter calibration records.
Frequency R & R	Numeric and pop-up fields displaying the frequency of R & R.
Next Gage R & R	This field can be manually entered <i>or</i> it will be automatically calculated for you when you enter R&R records (refer to Chapter 7).
Schedule Type	An alpha-numeric field displaying the type of schedule you are using.
Status	An alpha-numeric field displaying the status of the gage.
User Defined 1	An alpha-numeric field that you define. From the Utilities Menu, the end user can change the user defined field names on the gage master entry screen (refer to Chapter 3).
User Defined 2	Same as User Defined 1
Calibration History	A table that allows you to view calibration history information.

Calibration Summary Screen Menus and Menu Commands

Following is a list of the available menus and an explanation of the commands available for each.

The FILE Menu

Menu Command	Description
<u>C</u> lose	Closes the Calibration Summary screen and returns you to the Main Menu screen.

The EDIT Menu

Menu Command	Description
<u>U</u> ndo CTRL + Z	Disabled.
<u>C</u> ut CTRL + X	Cuts selected text.
<u>C</u> opy CTRL + C	Copies selected text.
Copy Calibration Record	Makes a copy of a selected gage calibration record. All field data will be duplicated except the Calibration Date and Next Date fields. <i>These fields can be edited.</i>
<u>P</u> aste CTRL + V	Only active if you have previously cut or copied text. Pastes the cut or copied text at the current location of your text cursor.
Clear	Clears the contents from a selected field. <i>The entire field must be highlighted.</i>
Select <u>A</u> ll CTRL + A	Selects or highlights the entire contents of a field.

The RECORD Menu

Menu Command	Description
<u>N</u> ext PGUP	Advances you to the next record.

Prior PGDN	Returns you to the record prior to the current record.
Top CTRL + T	Takes you to the first record.
Bottom CTRL + B	Takes you to the last record.
Locate CTRL + L	Allows you to locate a specific gage by using search criteria.
Quick Search CTRL + B	Allows you to search quickly for a gage record using the Gage ID number.
Toggle Delete CTRL + D	<p>Allows you to mark calibration entries in the Calibration History field for deletion. Records will be permanently deleted when you optimize the files (refer to Chapter 3). The toggle feature allows you to "undelete" records that you have marked for deletion (if you change your mind before packing).</p> <p><i>When you mark a record for deletion, a "deletion marker" will appear next to the entry in the Calibration History field.</i></p>

The SORT BY Menu

(The sort order will appear in blue text to the left of the **Comments** field.)

Menu Command	Description
<u>G</u> age ID	Sorts the entered records using the Gage Identification Number field.
<u>D</u> escription	Sorts the entered records using the gage Description field.
<u>L</u> ocation	Sorts the entered records using the gage Location field.
<u>N</u> ext Calibration Date	Sorts the entered records using the Next Calibration Date field.
<u>T</u> ype	Sorts the entered records using the Type field.

<u>U</u> ser Defined 1	Sort the entered records using the User Defined 1 field.
<u>U</u> ser Defined 2	Sort the entered records using the User Defined 2 field.

The WINDOW Menu

Menu Command	Description
<u>C</u> ycle CTRL + F1	If you have more than one window open, this command will cycle you through the open windows.
<u>G</u> age Selector	Takes you to the Gage Selector window. This window displays a list of all entered gage records in the order by which they have been sorted. (Refer to Chapter 4.)

Calibration Records

When you access the Calibration Summary screen, the gage records will appear in gage id order.

To create a calibration record for the current gage, click the NEW button or press ALT + N.

The Calibration Entry screen will appear:

Standard ID	Minimum	Nominal	Maximum	Act. Before	Acc. Before	OT. Before
1-INCH BLOCK	0.999000	1.000000	1.001000	1.001000	0.001000	
3-INCH BLOCK	2.999000	3.000000	3.001000	2.999000	-0.001000	

Calibration Entry Field Descriptions

Field Name	Description
Gage ID	An alpha-numeric field displaying the assigned ID number for the gage being calibrated.
Calibration Date	An alpha-numeric field displaying the current date. <i>You can edit this date field.</i>

Next Date	An alpha-numeric field displaying the next calibration due date. ProGAGE1 calculates this date using the calibration Frequency field data you entered on the Gage Master Entry screen and the Calibration Date field data you entered on this screen.
Results	An alpha-numeric field displaying the results of the calibration.
Calibrated By	An alpha-numeric field displaying the user's log on name. <i>You can edit this field.</i>
User Defined	An alpha-numeric field for storing additional user defined data with regard to the calibration record.
Account Code	An alpha-numeric field for entering the gage calibration account code. <i>Example: You can use this field if you want charge the cost of calibration to a certain department or customer account.</i>
Reference No.	An alpha-numeric field for entering a gage calibration reference number. <i>Example: You can use this field as a work order number, P.O. number master standard set id number or job number.</i>
Labor Hours	A numeric field for entering the number of hours it took to calibrate the gage. This is automatically copied from the gage master record's "hours" field.
Labor Cost	A numeric field that calculates the labor cost using the standard hourly labor rate entered on the Settings screen (Refer to Chapter 2). <i>You can edit this field manually.</i>
Material Cost	A numeric field for entering a material cost associated with the gage calibration.

Other cost	A numeric field for entering any other cost associated with the gage calibration.
Total Cost	A numeric field that calculates the total cost of the gage calibration using the labor, material and other cost fields.
Overall Uncert.	<p>A numeric field that will calculate and display the total calculated uncertainty value using the root sum of squares method. This field is not editable.</p> <p>Uncertainty = Square Root (Uncertainty 1² + Uncertainty 2² +... Uncertainty N²)</p> <p>Where "Uncertainty N" is the last reference standard's uncertainty value.</p>
Pass/Fail	A pop-up field giving you pre-determined choices of Pass, Fail, Limited Use or blank.
Comments	A scrollable memo field for entering comments or notes or any other type of information about the gage.
Calibration Measurements	A table that allows you to enter and view <i>actual</i> calibration results which you can compare to calibration <i>standards</i> .

Calibration Entry Menus and Menu Commands

The FILE Menu

Menu Command	Description
Printer <u>S</u> etup	Allows you to change printer or printer settings
<u>C</u> lose	Closes the Calibration Entry screen and returns you to the Calibration Summary screen.

The EDIT Menu

Menu Command	Description
<u>U</u> ndo CTRL + Z	Disabled.
Cu <u>t</u> CTRL + X	Cuts selected text.
<u>C</u> opy CTRL + C	Copies selected text.
<u>P</u> aste CTRL + V	Only active if you have previously cut or copied text. Pastes the cut or copied text at the current location of your text cursor.
Clear	Clears the contents from a selected field. <i>The entire field must be highlighted.</i>
Select <u>A</u> ll CTRL + A	Selects or highlights the entire contents of a field.
Delete Measurement	Allows you to mark calibration measurement entries in the Calibration record for deletion. Records will be permanently deleted when you optimize the files (refer to Chapter 3). The toggle feature allows you to "undelete" records that you have marked for deletion (if you change your mind before optimize the files). <i>When you mark a record for deletion, a "deletion marker" will appear next to the entry in the Calibration Measurements field.</i>

Entering and Editing Calibration Data

1. On the Calibration Entry screen for the current gage, enter calibration information in the fields on the screen, modifying pre-calculated fields if desired.
2. To save the calibration record, click the SAVE button or press ALT + S.
3. Click the CLOSE button or press ALT + C.
4. To edit an EXISTING calibration record:
 - Click on the record in the **Calibration History** field on the Calibration Summary screen.
 - Click the EDIT button or press ALT + E. This will return you to the Calibration Entry screen, where you can modify the record.

- To save the modifications made to the record, click the SAVE button or press ALT + S. This will return you to the Calibration Summary screen.

◆ When making modifications to existing records, remember to save the changes! ProGAGE1 will alert you to save with a message.

Calibration Labels Using a Dot Matrix Printer

To print a calibration label, click the PRINT LABEL button shown on the Calibration Entry screen.



By default, the label will be printed to the printer attached to LPT1 and will look like this:

```
ID: 000-ABC-000
Desc: CALIPER-DIAL 6 INCH
Loc: WELDING
Last: 02/24/96
By: John Smith
Next: 08/25/96
```

For dot-matrix printers, you can use standard address labels that are 1 inch high by 3 inches wide.

If you want to customize the design of the Dot Matrix label you can create a configuration file that tells the program which printer port to use and which fields to print. The configuration file is just a text file consisting of 9 lines which you can create using Windows Notepad. The configuration file must be named "LABEL.CNF" and must be located in the program directory (usually C:\PGWIN2).

Here is the file layout for the file LABEL.CNF that controls the standard dot matrix label design. All 9 lines must be entered or an error will occur.

```
Line 1. LPT Port# (either LPT1: OR LPT2:)
Line 2. Gage ID (1=Print or 0=No Print)
Line 3. Description (1=Print or 0=No Print)
Line 4. Location (1=Print or 0=No Print)
Line 5. Last Date (1=Print or 0=No Print)
Line 6. Next Date (1=Print or 0=No Print)
Line 7. CalBy (1=Print or 0=No Print)
Line 8. 0 (reserved for future use - must be = 0)
Line 9. 0 (reserved for future use - must be = 0)
```

Example: To suppress printing of the Location field, the LABEL.CNF contents would be:

```
LPT1:
1
```

1
0
1
1
1
0
0

Note: The last 2 lines (lines 8 & 9) must contain 0's.

Calibration Labels Using the Label Printer Kit

If you want to print highly durable laminated calibration labels, you will need to order the optional "Calibration Label Kit".

If the Calibration Label Kit Printer is installed (the printer is actually a "Brother P-Touch PC Label Printer"), you will be automatically presented with a choice of 3 different label buttons when you click the PRINT LABEL button as shown below:



To print a 1/4 inch high label, click the "1/4 Inch" button. To print a 1/2 inch high label, click the "1/2 Inch" button. To print a 1 inch high label, click the "1 Inch" button.

As shipped, all three labels are pre-designed for you, however you can modify them to suit your specific needs using the "Modify Reports" icon.

Using the Procedures Button to View Linked Procedures

The Procedures Button on the Calibration Entry screen allows you to view the procedures that have been linked to the current gage. This command also appears on the Calibration Summary screen.

Using the Calibration Measurements Field

The **Calibration Measurements** field is a scrollable table field on the Calibration Entry screen that allows you to enter actual calibration data and compare it to standards that you have previously set up (via the gage master entry screen) for the gage.

Calibration Measurements						
Standard ID	Minimum	Nominal	Maximum	Act. Before	Acc. Before	OT. Before
1-INCH BLOCK	0.999000	1.000000	1.001000	1.001000	0.001000	
3-INCH BLOCK	2.999000	3.000000	3.001000	2.999000	-0.001000	

Calibration Measurements - Field Descriptions

Field Name	Description
Standard ID	An alpha-numeric field displaying the identification number of each standard.
Minimum	A numeric field displaying the minimum allowable value.
Nominal	A numeric field displaying the nominal (or target) value.
Maximum	A numeric field displaying the maximum allowable value.
Act. Before	Enter the actual measurement observed <i>before</i> adjusting the gage.
Acc. Before	A numeric field displaying the accuracy based on the before measurement (calculated as <i>Before</i> minus <i>Nominal</i>).
OT Before	This is a flag used to indicate <i>out-of-tolerance</i> conditions. This field will appear blank if the calibration is within the minimum and maximum limits; "+++" will appear if the calibration is above the maximum value and "---" if it is below minimum value.
Act. After	Enter the actual measurement observed <i>after</i> adjusting the gage.
Acc. After	A numeric field displaying the accuracy based on the before measurement (calculated as <i>After</i> minus <i>Nominal</i>).
OT After	This is a flag used to indicate <i>out-of-tolerance</i> conditions. This field will appear blank if the calibration is within the minimum and maximum limits; "+++" will appear if the calibration is above the maximum value and "---" if it is below minimum value.
Reference ID	An alpha-numeric field displaying the reference identification number.

Uncertainty	A numeric field for entering the Uncertainty value of the calibration reference standard. This value can be obtained from the reference standard manufacturer and is expressed in units such as percentage (0.5%), proportion (0.005) or measurement units (0.0001 inch). <i>All values entered must be of the same units otherwise the calculated Overall Uncertainty value will be wrong.</i>
Attribute	A field used for attribute type data such as pass/fail, go/no-go or appearance observations.
Comment	An alpha-numeric field for entering misc. standard information.

Calibration Measurements Menus and Menu Commands

The menus are identical to those on the Calibration Entry screen.

Entering Data in the Calibration Measurements Field

1. Click on the Calibration Measurements title bar to activate this field.
2. Click on any cell in the **Act. Before** or **Act. After** columns and enter your measurement.
3. Enter any other information into other columns.
4. Repeat for all measurements of the other standards.
5. If you want to add new standards that are not listed (for this calibration only), then select the BROWSE menu and choose Append Record (or press Ctrl-N).

◆ The accuracy and tolerance (OT) values will be calculated for you and are not editable.

Navigating Through Gage Calibration Records

There are several ways to navigate through other gage's calibration records on the Calibration Summary screen:

1. Use the standard navigation buttons on the bottom of the screen (refer to Chapter 1).
2. Click the **RECORD** menu and choose a menu command.
3. Use the keyboard equivalents listed next to the menu commands in the **RECORD** menu.
4. Use on the LOCATE button to do a record search.

Copying Gage Calibration Records

You can make a copy of any existing calibration record on the Calibration Summary screen.

1. Click on the record that you want to copy (click on any date in the calibration date column of the **Calibration History table**).
2. Click the **EDIT** menu.
3. Click the **Copy Calibration Record** command.

OR

1. Click on the record that you want to copy (click on any date in the calibration date column of the **Calibration History table**).
2. Click on the **COPY** button.



Deleting a Gage Calibration Record

You can mark calibration records for deletion after you have saved them. Records will be permanently deleted when you optimize the files (refer to Chapter 3).

There are two ways to delete a calibration record.

1. Click on the record in the **Calibration History** field on the Calibration Summary screen.
2. Click the **RECORD** menu.
3. Click the **Toggle Delete** command or press CTRL + D.
4. To "undelete," repeat steps 1-3.

OR

1. Click on the record in the **Calibration History** field.
2. Click in the small rectangular region to the left of the record.
3. To "undelete," repeat steps 1-2.

- ◆ When you mark a record for deletion, a "deletion marker" will appear to the left of the entry in the **Calibration History** field on the Calibration Summary screen.

The calibration done on "02/22/94" in the example below is marked as deleted...

02/22/94	Passed
01/15/94	Passed

The toggle feature allows you to "undelete" records that you have marked for deletion (if you change your mind before optimize the files the database tables).

Viewing the Gage Selector Window

The Gage Selector command on the Calibration Entry screen performs the same function as on the Gage Master Entry screen (refer to Chapter 4). It allows you to select another gage to work with.

Calibration History Table

The Calibration History table is a browse table that displays the calibration records you entered on the Calibration Entry screen. The calibration records displayed reverse date order - so that the *most recent calibrations are at the top* of the table. The column headings in the table correspond to the fields on the Calibration Entry screen. A pop-up Calibration History window is also available within the Gage Master Entry screen (refer to Chapter 4).

Calibration History					
Calibration Date	Results	Calibrated by	Next Date	Account Code	
03/28/94	Passed	M. Davis	04/27/94	Plant 02	
02/22/94	Passed	K. Jones	03/24/94	Plant 02	
01/15/94	Passed	J. Neuman	02/14/94	Plant 02	

Editing Calibration History Records

ProGAGE1 allows you edit your calibration history records. However, since the program will re-calculate the Next Calibration Date whenever you edit a record you will end up with the wrong Next Calibration Date (unless you are editing the most recent calibration history record). To correct the Next Calibration Date, **you must always remember to edit and save the most recent calibration record as a last step.**

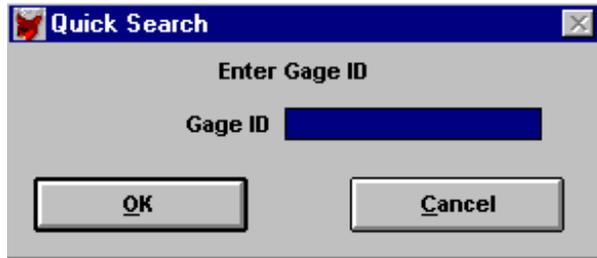
When editing calibration history records:

1. Click on the calibration history record that you want to edit and click the **Edit** button.
2. Make your changes to the record and save it.
3. Now, click on the most recent calibration history record (i.e. the one at the top of the Calibration History Table) and click the **Edit** button.

4. When the Calibration Entry screen appears, click in the Comments field and then click the **Save** button.

Using the Quick Search Command on the Calibration Summary Screen _____

The Quick Search command on the Calibration Summary screen allows you to search for calibration history records by the gage id.



To access the Quick Search, click the Quick Search button.

Searching for a Gage's Calibration Records

On the Quick Search screen:

1. Type gage id number
2. Press Alt + O or click OK

AQS offers an optional bar code reader with wand. This allows user to scan bar coded gage id label, or one of the bar coded reports to input gage id number. This feature improves efficiency by reducing data entry errors and retrieving gage record instantaneously.

Using the Locate Command _____

The Locate command on the Calibration Summary screen performs the same function as on the Gage Master Entry screen (refer to Chapter 4).

Returning to the Main Menu from the Calibration Summary Screen _____

Click the CLOSE button at the bottom of the Calibration Summary Screen to return to the Main Menu.

Chapter 7: The Usage Entry Screen

This chapter explains the Usage Entry screen, its purpose, field descriptions, menus and commands, and screen-specific functions.

The screenshot shows the 'Usage Summary' window with the following data:

- Gage ID: C-10009
- Description: CALIPER DIGITAL 6 IN
- Type: VARI
- Status: ACTIVE
- Location: LAYOUT DEPT
- Vendor: ACME - STARRETT
- Purchase Date: 01/15/1998
- Usage: 0
- Owner: FRANK SMITH
- Comments: (empty)
- Schedule Type: CALENDAR
- Lead Time: 5 Days
- Lead Date: 03/28/1998
- Cal. Frequency: 60 Days
- Next Calibration: 04/02/1998 (Over Due!)
- R&R Frequency: 120 Days
- Next Gage R&R: 04/15/1998 (Over Due!)
- User Defined 1: (empty)
- User Defined 2: (empty)

The Usage History table is currently empty:

Issue Date	Issue By	Issue To	Part No	Return Date	Return By	Return

Issuing and Returning Gages

The Issue Gage and Return Gage functions are specific to a gage record. When a gage is issued (physically taken), you can record information, such as who took it and when. When the gage is returned, you can document the return information as well as keep track of gage operating cycles (or usage time). Historical gage usage summary information is displayed on the Usage History table.

Accessing the Usage Summary Screen

To access the Usage Summary screen click on the Usage button on the Main Menu.

- ◆ The following fields are display only; You cannot edit these fields on this screen. To edit them, refer to Chapter 5.

Field Name	Description
------------	-------------

Gage ID	An alpha-numeric field for entering the assigned gage ID number. Must be unique for each gage record. <i>record</i> .
Description	An alpha-numeric field for entering a description of the gage.
Type	An alpha-numeric field for entering the type of gage.
Location	An alpha-numeric field displaying the location of the gage.
Returned	A checkbox field for indicating if the gage has been returned to its location.
Vendor	An alpha-numeric field for entering the name of the vendor from which the gage was purchased.
Price	A numeric field indicating the purchase price of the gage (whole numbers only).
Purchase Date	A date field indicating the date on which the gage was purchased.
Unit of Measure	A field indicating the unit of measurement the gage uses.
Comments	A scrollable alpha-numeric field for entering comments or notes or any other type of information about the gage.
Cal. Frequency	A numeric and pop-up frequency unit (i.e. "Days", "Weeks") field used to enter the frequency of gage calibration.
EOM	Or End of Month field, A check box field that when checked will indicate that the next calibration date will automatically round off to the last day of the month that the calibration is due.
Usage	A numeric field displaying gage usage cycles.
Hours	A numeric field displaying the number of hours the gage has been used.

Next Calibration	This date field will be automatically calculated for you when you enter calibration records.
R&R Frequency	Numeric and pop-up fields displaying the frequency of R & R.
Next Gage R & R	This field can be manually entered <i>or</i> it will be automatically calculated for you when you enter R&R records (refer to Chapter 7).
Schedule Type	An alpha-numeric field displaying the type of schedule you are using.
Status	An alpha-numeric field displaying the status of the gage.
User Defined 1	An alpha-numeric field that you define. From the Utilities Menu, the end user can change the user defined field names on the gage master entry screen (refer to Chapter 3).
User Defined 2	Same as User Defined 1
Usage History	A table that allows you to view usage history information.

Usage History Screen Menus and Menu Commands

Following is a list of the available menus and an explanation of the commands available for each.

The FILE Menu

Menu Command	Description
<u>C</u> lose	Closes the Calibration Summary screen and returns you to the Main Menu screen.

The EDIT Menu

Menu Command	Description
<u>U</u> ndo CTRL + Z	Disabled.
C <u>u</u> t CTRL + X	Cuts selected text.
<u>C</u> opy CTRL + C	Copies selected text.
<u>P</u> aste CTRL + V	Only active if you have previously cut or copied text. Pastes the cut or copied text at the current location of your text cursor.
Clear	Clears the contents from a selected field. <i>The entire field must be highlighted.</i>
Select <u>A</u> ll CTRL + A	Selects or highlights the entire contents of a field.

The RECORD Menu

Menu Command	Description
<u>N</u> ext PGUP	Advances you to the next record.
P <u>r</u> ior PGDN	Returns you to the record prior to the current record.
<u>T</u> op CTRL + T	Takes you to the first record.
<u>B</u> ottom CTRL + B	Takes you to the last record.
<u>L</u> ocate CTRL + L	Allows you to locate a specific gage by using search criteria.
Quick Search CTRL + B	Allows you to search quickly for a gage record using the Gage ID number.

Toggle <u>D</u> delete	CTRL + D	<p>Allows you to mark calibration entries in the Usage History field for deletion. Records will be permanently deleted when you optimize the files (refer to Chapter 3). The toggle feature allows you to "undelete" records that you have marked for deletion (if you change your mind before packing).</p> <p><i>When you mark a record for deletion, a "deletion marker" will appear next to the entry in the Usage History field.</i></p>
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The **SORT BY** Menu

(The sort order will appear in blue text to the left of the **Comments** field.)

Menu Command	Description
<u>G</u> age ID	Sorts the entered records using the Gage Identification Number field.
<u>D</u> escription	Sorts the entered records using the gage Description field.
<u>L</u> ocation	Sorts the entered records using the gage Location field.
<u>N</u> ext Calibration Date	Sorts the entered records using the Next Calibration Date field.
<u>T</u> ype	Sorts the entered records using the Type field.
<u>U</u> ser Defined 1	Sort the entered records using the User Defined 1 field.
<u>U</u> ser Defined 2	Sort the entered records using the User Defined 2 field.

The **WINDOW** Menu

Menu Command	Description
<u>C</u> ycle CTRL + F1	If you have more than one window open, this command will cycle you through the open windows.
<u>G</u> age Selector	Takes you to the Gage Selector window. This window displays a list of all entered gage records in the order by which they have been sorted. (Refer to Chapter 4.)

Creating Usage Entry Records

When you access the Usage Summary screen, the gage records will appear in gage id order.

To create a Usage Entry record for the current gage, click the Issue button.

The Usage Entry screen will appear:

Usage Entry Field Descriptions

Field Name	Description
Part No.	An alpha-numeric field for tracking the part or job number the gage was used for.
Issue Date	An alpha-numeric field for entering the date on which the gage was issued. <i>When using the Issue Gage menu command, this field will display the current date unless you change it.</i>

(Issued) By	An alpha-numeric field for entering who issued the gage.
(Issued) To	An alpha-numeric field for entering to whom the gage was issued.
Issue Location	The name of the location that the gage will be issued to (i.e. Department, Worksite, etc.). Any entry in this field automatically updates the "Location" field of the Gage Master screen.
(Issue) Reason	The reason that the gage was issued (for tracking purposes).
(Return) Date	A date field for entering the date on which the gage was returned. <i>When using the Return Gage menu command, this field will display the current date unless you change it.</i>
(Returned) By	An alpha-numeric field for entering who received the gage back.
(Returned) From	An alpha-numeric field for entering the person that returned the gage.
Cycles	A numeric field for entering the number of cycles the gage operated or number of days used while being issued.
Return Location	The name of the location that the gage will be returned to (i.e. Department, Storage Bin, etc.). Any entry in this field automatically updates the "Location" field of the Gage Master screen.

Usage Entry Menus and Menu Commands

The only active menus for the Usage Entry screen are **FILE**, and **EDIT**.

Issuing a Gage

On the **ISSUE** (left) part of the screen:

1. Assign and enter a part number for the gage being issued in the **Part No.** field.
2. Enter the date the gage was issued (if not the current date) in the **Date** field.
3. Enter the name of the person issuing the gage in the **By** field.
4. Enter the name of the person to whom the gage is being issued in the **To** field.
5. Enter the location that the gage is being issued to in the **Issue Location** field.
6. Enter the reason that the gage is being issued in **Reason** field.
7. Click the SAVE button or press ALT + S.
8. To close the Usage Entry screen, Click the CLOSE button.

Returning a Gage

On the **RETURN** (right) part of the screen:

1. Enter the date on which the gage was returned (if not the current date) in the **Date** field.
2. Enter the name of the person that received the gage in the **By** field.
3. Enter the name of the person that returned the gage in the **From** field.
4. Enter the number of cycles (or days) used in the **Cycles** field.
5. Enter the location to which the gage is being returned in the **Return Location** field.
6. Click the SAVE button.

7. To close the Usage Entry screen, click the CLOSE button.

- ◆ When you enter return information for a gage record, the **Returned** check box field will be automatically checked on the Gage Master Entry screen.

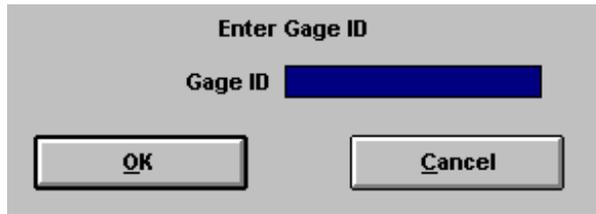
Viewing the Usage History Window

The Usage History window is a browse window that displays, in table format, the gage usage information you entered on the Usage Entry screen. The column headings in the table correspond to the fields on the Usage Entry screen.

1. To access this Usage History window, click the **WINDOW** menu and choose the **Usage History** command or press ALT + U.
2. To close the Usage History screen, click the **WINDOW** menu again and choose the **Usage History** again or press ALT + U.

Using the Quick Search Command on the Usage Summary Screen _____

The Quick Search command on the Usage Summary screen allows you to search for Usage history records by the gage id.



To access the Quick Search, click the Quick Search button.

Searching for a Gage's Usage Records

On the Quick Search screen:

1. Type gage id number
2. Press Alt + O or click OK

AQS offers an optional bar code reader with wand. This allows user to scan bar coded gage id label, or one of the bar coded reports to input gage id number. This feature improves efficiency by reducing data entry errors and retrieving gage record instantaneously.

Using the Locate Command _____

The Locate command on the Usage Summary screen performs the same function as on the Gage Master Entry screen (refer to Chapter 4).

Returning to the Main Menu from the Usage Summary Screen_____

Click the CLOSE button at the bottom of the Calibration Summary Screen to return to the Main Menu.

Chapter 8: The Gage R&R Screen

This chapter explains the Gage R&R Entry Screen, its purpose, field descriptions, menus and commands, and screen-specific functions.

To get to the gage r&r summary screen, or to run optional ProR&R module. Click the button labeled "Gage R&R" on the main menu of ProGAGE1.

Gage R&R Summary Screen

The following gage r&r summary screen will appear:

Gage R&R Summary

Gage ID: C-10009
Description: CALIPER DIGITAL 6 IN
Type: VARI Units: IN / MM
Status: ACTIVE
Location: LAYOUT DEPT
Vendor: ACME - STARRETT
Purchase Date: 01/15/1998 Price: 145
Usage: 0
Owner: FRANK SMITH
Comments: [Text Area]

Schedule Type: CALENDAR Hrs: 0.50
Lead Time: 5 Days
Lead Date: 03/28/1998
Cal. Frequency: 60 Days EOM
Next Calibration: 04/02/1998 Over Due!
R&R Frequency: 120 Days
Next Gage R&R: 04/15/1998 Over Due!
User Defined 1: [Text Field]
User Defined 2: [Text Field]

Gage ID: [Text Field]

R&R Date	Part No.	Method	R&R % Tol.	PV % Tol.	E.V.	E.V. % Tol.	E.V.

Navigation: [Home] [Left] [Right] [End] [Locate] [Close] [Quick Search] [Edit] [New]

Select the gage that you want to perform the gage r&r study on by using the navigation buttons on the form or using the "Quick Search" function in the Record menu.

Gage R&R Summary Screen Menus and Menu Commands

Following is a list of the available menus and an explanation of the commands available for each.

The FILE Menu

Menu Command	Description
<u>C</u> lose	Closes the R&R Study screen and returns you to the Gage R&R Summary screen.

The **EDIT** Menu

Menu Command	Description
<u>U</u> ndo CTRL + Z	Disabled.
<u>C</u> ut CTRL + X	Cuts selected text.
Copy Record	Copies the highlighted Gage R&R record to a new record.
<u>C</u> opy CTRL + C	Copies selected text.
<u>P</u> aste CTRL + V	Only active if you have cut or copied text. Pastes the cut or copied text at the location of your pointer.
Clear	Clears the contents from a selected field. <i>The entire field must be highlighted.</i>
Select <u>A</u> ll CTRL + A	Selects or highlights the entire contents of a field.

The **RECORD** Menu

Menu Command	Description
<u>N</u> ext PGUP	Advances you to the next record.
<u>P</u> rior PGDN	Returns you to the record prior to the current record.
<u>T</u> op CTRL + T	Takes you to the first record.
<u>B</u> ottom CTRL + B	Takes you to the last record.
<u>L</u> ocate CTRL + L	Allows you to locate a specific gage R&R record by using search criteria.

Quick Search CTRL + B	Allows you to quickly locate a gage if you know it's gage id value. You can also do a quick search by clicking on the Quick Search button: 
Toggle <u>D</u> eleteCTRL + D	Allows you to mark gage R&R records for deletion. Records will be permanently deleted when you pack the tables. The toggle feature allows you to "undelete" records that you have marked for deletion (if you change your mind before packing). <i>When you mark a record for deletion, the word "DELETE" will appear in red beneath the STUDY button on the Gage R&R Screen.</i>

The **SORT BY** Menu

(The current sort order will appear in blue text  on the left side of the screen...)

Menu Command	Description
Gage ID	Sorts the entered records using the Gage Identification Number field.
Description	Sorts the entered records using the gage Description field.
Location	Sorts the entered records using the gage Location field.
Next Study Date	Sorts the entered records using the Next Gage R&R Study Date field.
Next Calibration Date	Sorts the entered records using the Next Calibration Date field.
Type	Sorts the entered records using the Type field.
User Defined 1	Sorts the entered records using the User Defined 1 field.
User Defined 2	Sorts the entered records using the User Defined 2 field.

The **WINDOW** Menu

Menu Command	Description
<u>C</u> ycle CTRL + F1	If you have more than one window open, this command will cycle you through the open windows.
<u>G</u> age Selector	Takes you to the Gage Selector screen. This screen displays a list of all entered gage records in the order they have been sorted.

To enter a new study, click the New button and a blank data entry form will appear.

Gage R&R Entry Screen

If you do not have the optional ProR&R module installed, this screen will appear when you click the NEW or EDIT button on the Gage R&R Summary screen:

Gage R&R Entry

Gage ID	100-0001	
Part No.		Number Format
R&R Study Date	07/14/1998	E.V.
Characteristic		E.V. % Tol.
No. of Operators	3	E.V. % T.V.
Operator A		A.V.
Operator B		A.V. % Tol.
Operator C		A.V. % T.V.
No. of Parts	10	R&R
No. of Trials	3	R&R % Tol.
Method	AIAG	R&R % T.V.
LSL	0.00000000	T.V.
USL	0.00000000	Cost
		\$0.00

Close Save Cancel

If you have the optional ProR&R module installed, then this screen will appear when you click the NEW or EDIT button on the Gage R&R Summary screen:

R&R Study

Gage ID: C-10009
 Description: CALIPER DIGITAL 6 IN
 Spec. Limits: 0.0000 0.0000
 Date: 11/14/1998
 Comments:

Part No.:
 Part Name:
 Characteristic:
 Company Part No.:
 Hours/Cost: 0.00 0.00

Trials: 3 Oper.: 3
 No. Parts: 10
 No. Format: 999.9999
 Proc. Var.:
 Method: AIAG

Operator A: Operator B: Operator C:

	Trial 1	Trial 2	Trial 3	Trial 1	Trial 2	Trial 3	Trial 1	Trial 2	Trial 3
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

Repeatability E.V. Reproducibility A.V. Part Variation Range Analysis R & R

E.V.= A.V.= P.V.= R BAR= R.R.=
 %Tol= %Tol= %Tol= UCL-R %Tol=
 %T.V.= %T.V.= %T.V.= T.V. %T.V.=

Close Calculate Prefill Print No. Format Save Cancel

Please refer to your ProR&R manual for additional information on this screen.

Purpose of the Gage R&R Screen

You can manually enter Gage R&R study results data into the Gage R&R screen, but you must have the optional ProR&R module in order to enter raw measurement data and have the results calculated for you.

Gage R&R Screen Field Descriptions

Field Name	Description
Gage ID	A pop-up field for choosing a gage ID.
Part No.	The number of the part being measured.
R&R Date	The study date.
Characteristic	The characteristic being evaluated in the study.
No. of Operators	Number of operators used in study.
Operator A	Name of Operator A.
Operator B	Name of Operator B.
Operator C	Name of Operator C.
No. of Parts	Number of parts used in the study (5 - 10).
No. of Trials	Number of measurement trials that each operator performed (2 or 3).
Method	The calculation method used to calculate study results (AIAG, GM, Ford, etc.).
LSL	Minimum (lower) specification limit of the characteristic being measured.
USL	Maximum (upper) specification limit of the characteristic being measured.
Number Format	The format used to display the gage r&r measurements (use 9's to represent digits and a decimal point such as 99.999).
E.V.	Equipment variation.

E.V. % Tol	Percent of tolerance consumed by E.V.
E.V. % TV	Percent of total variation that E.V. contributes.
A.V.	Appraiser variation.
A.V. % Tol	Percent of tolerance consumed by A.V.
A.V. % TV	Percent of total variation that A.V. contributes.
R&R	Overall gage R&R variation.
R&R % Tol	Percent of tolerance consumed by R&R.
R&R % TV	Percent of total variation that R&R contributes.
TV	Total Variation. The total variation resulting from both gage variation and part variation.

Gage R&R Screen Menus and Menu Commands

Following is a list of the available menus and an explanation of the commands available for each.

The **FILE** Menu

Menu Command	Description
<u>C</u> lose	Closes the Gage R&R Screen and returns you to the Main Menu screen.

The **EDIT** Menu

Menu Command	Description
<u>U</u> ndo CTRL + Z	Disabled.
<u>C</u> ut CTRL + X	Cuts selected text.
<u>C</u> opy CTRL + C	Copies selected text.

<u>P</u> aste CTRL + V	Only active if you have cut or copied text. Pastes the cut or copied text at the location of your pointer.
C <u>l</u> ear	Clears the contents from a selected field. <i>The entire field must be highlighted.</i>
Select <u>A</u> ll CTRL + A	Selects or highlights the entire contents of a field.
<u>F</u> ind	Allows you to find specific text on the screen.
Find <u>A</u> gain	Allows you to find specific text on the screen.

The RECORD Menu

Menu Command	Description
<u>N</u> ext PGUP	Advances you to the next record.
P <u>r</u> ior PGDN	Returns you to the record prior to the current record.
<u>T</u> op CTRL + T	Takes you to the first record.
<u>B</u> ottom CTRL + B	Takes you to the last record.
<u>L</u> ocate CTRL + L	Allows you to locate a specific gage R&R record by using search criteria.
Toggle <u>D</u> elete CTRL + D	Allows you to mark gage R&R records for deletion. Records will be permanently deleted when you optimize the files (refer to Chapter 3). The toggle feature allows you to "undelete" records that you have marked for deletion (if you change your mind before optimize the files). <i>When you mark a record for deletion, the word "DELETE" will appear in red beneath the STUDY button on the Gage R&R Screen.</i>

The **WINDOW** Menu

Menu Command	Description
<u>C</u> ycle CTRL + F1	If you have more than one window open, this command will cycle you through the open windows.
<u>R</u> &R Selector	Takes you to the Gage R& R Selector screen. This screen displays a list of all entered gage R&R records in the order they have been sorted.

Creating Gage R&R Records

1. On the Gage R&R Entry screen, choose the gage record from the **Gage ID** field.
2. Continue entering gage R&R information in the fields on the screen.
3. To save the record, click the SAVE button or press ALT + S.
4. Click the NEW button to create a new gage R&R record.

◆ When making modifications to existing records, remember to save the changes! ProGAGE1 will alert you to save with a beep.

Navigating Through Gage R&R Records

There are several ways to navigate through the created gage R&R records:

1. Use the standard navigation buttons on the bottom of the screen (refer to Chapter 1).
2. Click the **RECORD** menu and choose a menu command.
3. Use the keyboard equivalents listed next to the menu commands in the **RECORD** menu.
4. Use on the LOCATE button to do a record search.

Deleting a Gage R&R Record

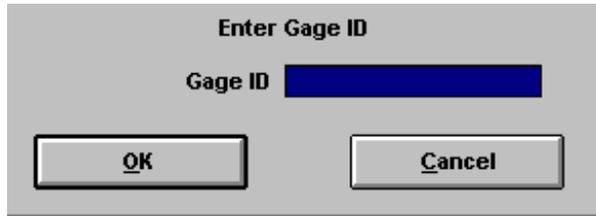
You can mark gage R&R records for deletion after you have saved them. Records will be permanently deleted when you optimize the files (refer to Chapter 3).

Gage R&R Selector Menus and Menu Commands

The menus are identical to those on the Gage R&R screen.

Using the Quick Search Command on the Gage R&R Summary Screen

The Quick Search command on the Gage R&R Summary screen allows you to search for Gage R&R history by gage id.



To access the Quick Search, click the Quick Search button.

Searching for a Gage's Usage Records

On the Quick Search screen:

1. Type gage id number
2. Press Alt + O or click OK

AQS offers an optional bar code reader with wand. This allows user to scan bar coded gage id label, or one of the bar coded reports to input gage id number. This feature improves efficiency by reducing data entry errors and retrieving gage record instantaneously.

Using the Locate Command

The Locate command on the Gage R&R screen performs the same function as on the Gage Master Entry screen (refer to Chapter 4) with *two* exceptions.

The available search table is: **GAGERR**
The order field displays: **GAGE ID, Record#**

Using the Study Command

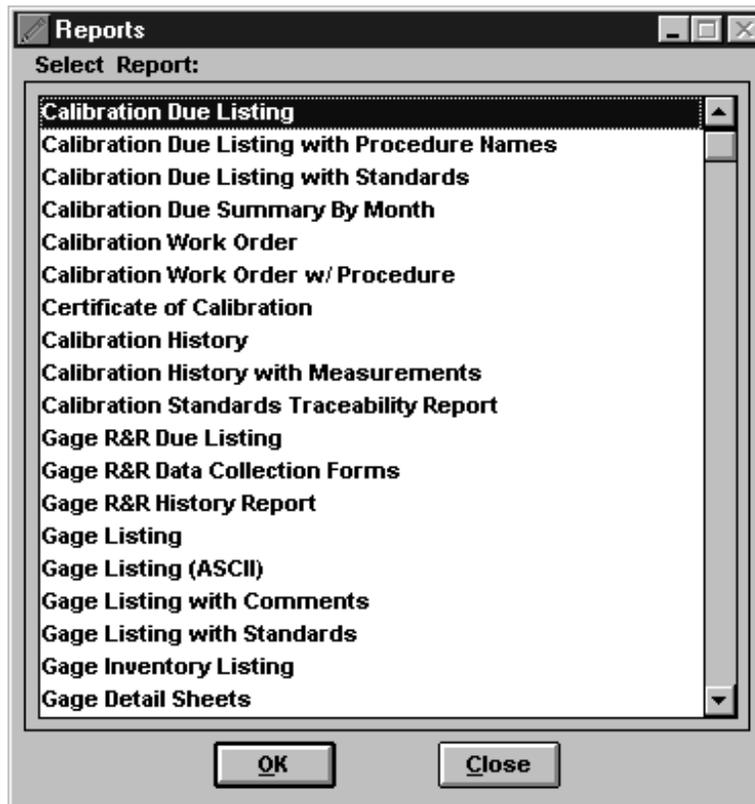
The STUDY button on the Gage R&R screen is disabled until you install the optional ProR&R analysis module.

Returning to the Main Menu from the Gage R&R Screen

Click the CLOSE button at the bottom of the screen.

Chapter 9: The Reports Screen

This chapter explains the Reports Screen, its purpose, field descriptions, menus and commands, and screen-specific functions.



Purpose of the Reports Screen

ProGAGE1 allows you to view or print various pre-formatted reports using the data you have entered in the program.

Reports Screen Field Descriptions

Field Name	Description
Select Report	A scrollable field that allows you to select any of the available reports such as: Calibration Due Listing Calibration Due Listing with Standards Calibration Work Order ... etc.
Select Button	Allows you to run the currently highlighted report (you can also double-click the report to select it)
Close Button	Closes the screen and returns you to the main menu.

Available Reports

Following is a table of the available reports:

REPORTS
Calibration Due Listing
Calibration Due Listing with Procedure Names
Calibration Due Listing with Standards
Calibration Due Summary By Month
Calibration Work Order
Calibration Work Order w/ Procedure
Certificate of Calibration
Calibration History
Calibration History with Measurements
Calibration Standards Traceability Report
Gage R&R Due Listing
Gage R&R Data Collection Forms
Gage R&R History Report
Gage R&R Study Report
Gage Listing
Gage Listing (ASCII)
Gage Listing with Comments
Gage Listing with Standards
Gage Inventory Listing
Gage Detail Sheets
Gage Detail Sheets - Compact
Gage Detail Sheets with Standards
Issue / Return Listing

Procedure Listing
Procedure Sheets
Procedure Index Report
Calibration Label 1 P-Touch (1/4 INCH)
Calibration Label 2 P-Touch (1/2 INCH)
Calibration Label 3 P-Touch (1 INCH)
Calibration Labels (Batch 1/4 INCH)
Calibration Labels (Batch 1/2 INCH)
Calibration Labels (Batch 1 INCH)
Bar Code Label 1 P-Touch
Bar Code Label 2 P-Touch
Bar Code Label 3 P-Touch
Calibration Costs Report
Gage R&R Cost Report
Calibration and Gage R & R Cost Report

* Note: the "Calibration Due Summary By Month" report MUST have the Next Calibration Date as the first sort field when running this report. Otherwise, the report results may be unpredictable.

Reports Screen Menus and Menu Commands

Following is a list of the available menus and an explanation of the commands available for each.

The **FILE** Menu

Menu Command	Description
<u>P</u> rinter Setup	Takes you to the Print Setup Screen which displays your printer and paper options.
<u>C</u> lose	Closes the Reports Screen and returns you to the Main Menu screen.

The **EDIT** Menu

Menu Command	Description
<u>U</u> ndo CTRL + Z	Disabled.
<u>C</u> ut CTRL + X	Cuts selected text.
<u>C</u> opy CTRL + C	Copies selected text.
<u>P</u> aste CTRL + V	Only active if you have previously cut or copied text. Pastes the cut or copied text at the current location of your text cursor.
Clear	Clears the contents from a selected field. <i>The entire field must be highlighted.</i>
Select <u>A</u> ll CTRL + A	Selects or highlights the entire contents of a field.

Using the Print Setup Command

The Print Setup command in the **FILE** menu allows you to choose the type of printer, network, paper and other options. Remember to use this command *before* printing any reports. Options will vary depending on the Windows printer driver you are using.

Previewing a Report

Accessing the Print Query Screen

1. Click on the report you wish to preview in the **Select Report** field.
2. Click the OK button.

One of the following Print Query Screens will appear, depending upon the type of report you choose. Some Print Query screens have a pair of date range fields ("From Date" and "Thru Date") and others don't. For example, there are date range fields in the Calibration Due Listing report, but none for the Procedure Listing report.

Example Print Query Screen with Date Range Fields

The screenshot shows a 'Print Query' dialog box for the 'Calibration Due Listing' report. The dialog is divided into several sections:

- From Date** and **Thru Date**: Both fields contain double slashes (//).
- Field Name**: A dropdown menu showing 'Gage ID'.
- Operator**: A dropdown menu showing '='.
- Search Value**: An empty text input field.
- Add**: A button to add the search criteria.
- Search Criteria**: A large empty text area for additional search criteria.
- Delete**, **↑**, **↓**, **OR**, **Reset**: A row of buttons for managing search criteria.
- To ASCII**: A checkbox that is currently unchecked, followed by an empty text field.
- Print**, **Preview**, **Cancel**: A row of buttons at the bottom.
- Order Report by**: A section on the right containing:
 - Select Fields**: A list box with 'Gage ID', 'Description', 'Type', 'Unit of Measure', 'Lead time', and 'Frequency'. Below it are **Insert** and **Remove** buttons.
 - Report Order**: A list box with 'Gage ID' and 'Next Calibration Date'.

Example Print Query Screen without Date Range Fields

Print Query Field Descriptions

Field Name	Description
From Date <i>This field appears only for certain reports.</i>	A date field for entering the starting date for the selected report data.
Thru Date <i>This field appears only for certain reports.</i>	A date field for entering the ending date for the selected report data.
Field Name	A pop-up field used to select the fields from which to compile the report.

Operator	<p>A pop-up field displaying operator symbol choices.</p> <p>= Begins with</p> <p>< > Not equal to (finds everything except what is typed)</p> <p>< Less than</p> <p>> Greater than</p> <p>< = Less than or equal to</p> <p>> = Greater than or equal to</p> <p>= = Exactly matches</p> <p>Like Supports the use of the wildcard character asterisk (*) in searches (i.e. Like "*METER*" finds all records containing the word "METER")</p> <p>IN For finding characters <i>IN</i> fields that are searched</p> <p>CONTAINS For finding records where the Field Name <i>contains</i> your Search Values. Separate multiple search values with commas.</p>
Search Value	<p>A field displaying your chosen search criteria.</p> <p><i>You must click the ADD button before the data appears in this field.</i></p>
Order Report By Select Fields	<p>A list of fields that you can pick from to have your report sorted by (multiple fields can be selected). For each field that you want the report sorted by, highlight the field and then click the INSERT button.</p> <p><i>The displayed field choices will differ depending on the report you have chosen.</i></p>
Report Order	<p>A field displaying your chosen report order field choices.</p> <p><i>You must click the INSERT button before the data appears in this field.</i></p>
Search Criteria area	<p>A field displaying your chosen criteria.</p> <p><i>You must click the ADD button before the data appears in this area.</i></p>

Example Print Query Commands

Listed below are examples of valid print query commands:

Field Name	Operator	Search Value	Outcome
Gage ID	=	100	Finds records where the gage id begins with 100 such as 100-01, 100-02, 100-03 and so on.
Gage ID	< >	100-01	Finds every record except the one whose gage id is 100-01.
Gage ID	<	999-99	Finds every record where the gage id is less than 999-99.
Gage ID	>	500	Finds every record where the gage id is greater than 500.
Gage ID	< =	800-10	Finds every record where the gage id is less than or equal to 800-10.
Gage ID	> =	500	Finds every record where the gage id is greater than or equal to 500.
Description	= =	Caliper Digital	Finds every record where the description is exactly equal to "Caliper Digital".
Description	Like	*Digital	Finds every record where the description ends with the "Digital".
Gage ID	IN	100-01, 300-20, 400-07	Finds every record where the gage id is in the list 100-01, 300-20 or 400-07.
Description	Contains	inch	Finds every record where the description contains the word "inch".

Print Query Menus and Menu Commands

The menus and menu commands are identical to those on the Reports screen.

Accessing the Page Preview Screen

1. On the Print Query screen, enter the from and through dates for the report you wish to preview (if applicable).
2. Select a search field from the **Field Name** list.
3. Choose an operator from the **Operator** field.
4. Type in the search data in the **Search Value** field.
5. Click the ADD button.
6. Click the OR button if you want to search using than one field or more than one other criteria.

Example: GAGEID = 001
 OR
 GAGEID = 002

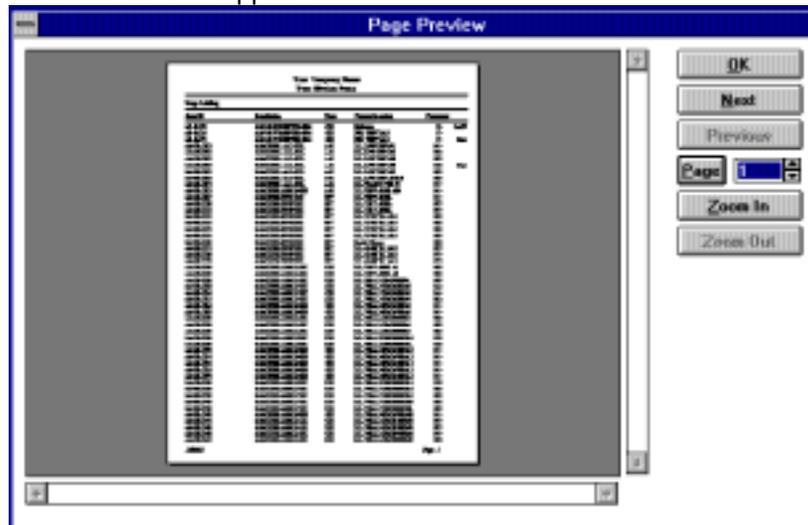
Your search criteria will appear in the **Search Criteria** field.

8. Select the report order from the **Select Fields** field.
9. Click the INSERT button.

The report order fields will appear in the **Report Order** field.

10. To clear a sort field from the **Report Order** field, highlight it and click the REMOVE button.
11. To preview the report, click PREVIEW button.

The Page Preview screen will appear.



Page Preview Screen Commands

The Page Preview is different from other screens in ProGAGE1. There are no fields in which to enter data; You can, however, execute certain commands on this screen. Following is a list of those commands.

Command Name	Description
Next	Advances you to the next page of the report.
Previous	Returns you to the previous page of the report.
Page	A pop-up field that allows you to choose a specific page of the report to view.
Zoom In	Gives you a close-up view of the report.
Zoom Out	Returns you to the normal full-page view of the report.

Returning to the Reports Screen

To return to the Reports screen after previewing the report, click OK on the Page Preview screen.

Printing a Report

- ◆ Remember to set your print options before printing.

The instructions for printing a report are the same as for previewing a report. However you will need to click the PRINT button instead of the PREVIEW button.

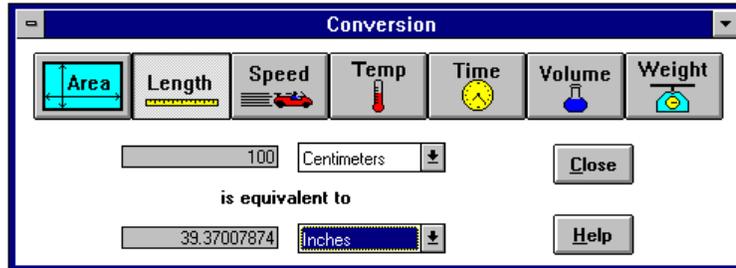
When the report has finished printing, ProGAGE1 will return you back to the Print Query screen. Click the CANCEL button to return back to the report selection menu.

Returning to the Main Menu from the Reports Screen

Click the CLOSE button at the bottom of the Reports screen.

Chapter 10: The Conversion Screen

This chapter explains the Conversion screen, its purpose, field descriptions, menus and commands, and screen-specific functions.



Purpose of the Conversion Screen

The Conversion screen is a unit conversion utility that was built into the ProGAGE1 program. It serves as an aid in converting one form of measurement unit to another form of measurement unit.

Accessing the Conversion Screen Commands

To access the conversion screen, from the Main Menu, click on the Help pull down menu and select Conversion.

Using the Conversion Screen Commands

There are seven picture buttons or "commands" on the Conversion screen. Clicking on these buttons (listed below) chooses the *form of measurement* indicated on the button. You can also use the commands in the **CONVERSION** menu or keyboard equivalents.

Command Buttons	Available Units of Measurement
Area	Acres, centimeters ² , feet ² , hectares, inches ² , kilometers ² , meters ² , miles ² , rods ² , yards ²
Length	Centimeters, cubits, fathoms, feet, fermis, furlongs, inches, kilometers, leagues, mega parsecs, meters, miles, millimeters, parsecs, rods, ropes, yards

Speed	Cm./sec, feet/sec, kilometers/hr, knots, meters/sec, miles/hr
Temp	Celsius, Fahrenheit, Kelvin
Time	Days, hours, minutes, seconds, weeks, years
Volume	Centimeters ³ , cups, feet ³ , fluid ounces, gallons, gills, hogsheads, inches ³ , liters, meters ³ , millimeters, pints, quarts, tablespoons, teaspoons, yards ³ .
Weight	Grains, grams, kilograms, ounces, pounds, quintals, slugs, stones, tons.

Conversion Screen Field Descriptions

Field Name	Description
Measurement 1	<p>A numerical field for entering the <i>number of measurement units</i>. A pop-up field for choosing the <i>form of measurement</i> to convert from. <i>In some cases, this is a scrollable field.</i></p> <p><i>Example: Enter 12 Inches</i></p>
Measurement 2	<p>A numerical field for displaying the <i>number of converted measurement units</i>. A pop-up field for choosing the form of measurement to convert to. <i>In some cases, this is a scrollable field.</i></p> <p><i>Example: 12 Inches</i></p> <p><i> Is equivalent to</i></p> <p><i> 304.8 millimeters</i></p>

Conversion Screen Menus and Menu Commands

Following is a list of the available menus and an explanation of the commands available for each.

The FILE Menu

Menu Command	Description
Close	Closes the Conversion screen and returns you to the Main Menu screen.

The **CONVERSION** Menu

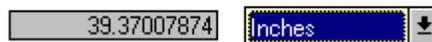
Menu Command	Description
<u>A</u> rea CTRL + E	Chooses the Area unit of measurement.
<u>L</u> ength CTRL + L	Chooses the Length unit of measurement.
<u>S</u> peed CTRL + D	Chooses the Speed unit of measurement.
<u>T</u> emperature CTRL + T	Chooses the Temperature unit of measurement.
<u>T</u> ime CTRL + ?	Chooses the Time unit of measurement.
<u>V</u> olume CTRL + M	Chooses the Volume unit of measurement.
<u>W</u> eight CTRL + H	Chooses the Weight unit of measurement.

Converting Measurements _____

1. Choose a form of measurement.
2. Choose a unit of measurement from the **Measurement 1** pop-up field.
3. Choose a unit of measurement from the **Measurement 2** pop-up field.
4. Enter the number of units to convert from in the **Measurement 1** numerical field.

A number will appear in the **Measurement 2** numerical field. This is the "equivalent to" calculation.

is equivalent to



5. To change the unit of measurement in either field, click on pop-up field(s) and make another choice.

Returning to the Main Menu from the Conversion Screen _____

Click the CLOSE button to return to the Main Menu screen.

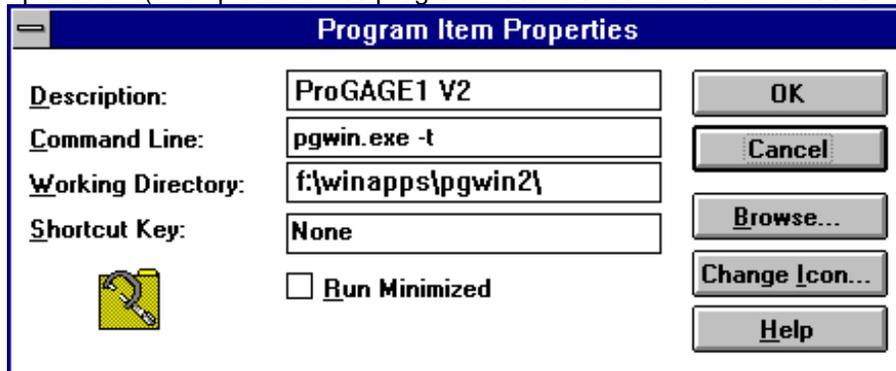
Appendix

Installing on a Network

This portion of the appendix discusses installation on a network.

Both Program and Data Files Installed to Network Server

1. Install the program by running the SETUP program on disk #1.
2. When prompted, enter the network server drive and directory that you want the program installed to.
3. If more than one user will be running the program at the same time, then make sure that the SHARE command has been loaded. **Also, modify the CONFIG.FPW file so that the "Exclusive" parameter is set equal to "OFF".**
4. On "Peer-to-Peer" networks such as Novell-Lite, Windows 95 and Lantastic, you may need to set the attribute of the PGWIN.EXE file to "Read-Only" (i.e. ATTRIB +R PGWIN.EXE).
5. For each program user, create a Windows program item with properties as shown in the example below (example assumes program was installed to F:\WINAPPS\PGWIN):



Installing Program on Local Drive and Data Files on a Network Server

1. Install the program by running the SETUP program on disk #1.
2. When prompted, enter the local hard drive and directory that you want the program installed to.
3. If more than one user will be running the program at the same time, then make sure that the SHARE command has been loaded. Also, modify the CONFIG.FPW file so that the "Exclusive" parameter is set equal to "OFF".

4. Copy the data files from the local hard drive's \PGWIN2\DBFS subdirectory to the designated data directory on the network server.
5. Run the program and choose **File Locations...** from the **EDIT** menu. Enter the new directory location of the data files (the directory on the network server). Quit the program and re-run to make the change take effect.
6. Repeat steps 1, 2, 3 and 5 for each program user.

Resetting the Number of Network Users

ProGAGE1 automatically keeps track of the number of users that are running the software at the same time. In the event of an abnormal program termination (i.e. network disconnect, computer lock-up, power failure, etc.), then the program counter will need to be reset. To do this, first make sure that no one is using the program. Then run the RESET.EXE program located in the program directory (usually in C:\PGWIN2).

CONFIG.FPW Configuration File

This portion of the appendix explains the special configuration file CONFIG.FPW which is used to set certain program operation parameters. This file is located your C:\PGWIN2 directory (or in whatever directory you installed ProGAGE1). The CONFIG.FPW file can be edited using Windows Notepad utility or run the icon "Edit Config.fpw file".

Default Contents and Parameter Settings of CONFIG.FPW

The *default* contents and parameter settings of the CONFIG.FPW file are:

TITLE = ProGAGE1 for Windows
HELP = PGWIN.HLP
BELL = ON
STATUS BAR = ON
CLOCK = STATUS
CENTURY = ON
DATE = AMERICAN
MARK = "/"
EXCLUSIVE = ON
DELETED = OFF
ESCAPE = ON
TMPFILES =
DECIMALS = 5
F2 = ''
F3 = ''
F4 = ''
F5 = ''
F6 = ''
F7 = ''
F8 = ''
F9 = ''

Configuration Parameters Explained

Each of the CONFIG.FPW file parameters are described in detail below:

TITLE

Defines the program's title window contents (ProGAGE1 for Windows).

HELP

Defines the name of the help file to use when the program is running. Can optionally include the complete drive letter and directory path.

BELL

Enables or disables the sounding of a "bell" whenever the end of a field is reached or when an invalid character is typed into a field.

STATUS BAR

Enables or disables the display of the status bar at the bottom of program windows. The status bar indicates the status of the Insert, Num Lock and Caps Lock keys of the keyboard. It can also display the time (see CLOCK setting).



CLOCK

Enables or disables display of the Clock on the status bar. To disable, enter CLOCK = OFF.

CENTURY

Indicates if a 2-digit or 4-digit century value is used in date fields. If set to ON, then 4-digits are used (i.e. 01/01/1994 - American format).

DATE

Specifies how date fields are formatted in the program. Possible values include:

Setting	Format
AMERICAN	mm/dd/yy
ANSI	yy.mm.dd
BRITISH/FRENCH	dd/mm/yy
GERMAN	dd.mm.yy
ITALIAN	dd-mm-yy
JAPAN	yy/mm/dd
USA	mm-dd-yy
MDY	mm/dd/yy
DMY	dd/mm/yy
YMD	yy/mm/dd

The default date setting is AMERICAN.

MARK

Specifies the character mark used to separate the month, day and year in date fields. The mark character must be enclosed in double quotes (i.e. "/", "-", ".", etc.).

EXCLUSIVE

Tells the program how to open database files in a multi-user environment. Leave this parameter set to "ON", unless you have a network version of the program. If set to "OFF", then processing will be slower and the DOS's **SHARE /L:500** command must be loaded before running Windows 3.x (if you use Windows 95, 98 or NT you don't need the SHARE command).

DELETED

This parameter tells the program to hide records that are *marked* as "deleted". Normally this is set to OFF, so that you can continue to see deleted records (and undelete records - at least until the tables have been packed using the Optimize button in the Utilities menu). If you don't want the program to show records that have been deleted, then set this parameter to ON.

ESCAPE

This parameter tells the program to enable or disable use of the Esc key. When set to ON, the Esc key undoes any editing to the entire record (all changes to the record are lost). If set to OFF, then the Esc key is ignored (the only way to undo record changes is to click on the screen's CANCEL button).

TMPFILES

Sets the drive and directory where the temporary files are stored. This can be useful for optimizing performance in a multi-user environment. Careful placement of these files can improve performance, particularly on a network. Temporary files have the extension (*.tmp). Normally, these files are deleted automatically when the program terminates. *Example:* TMPFILES = F:\TEMP (this tells the program to use drive F and the directory \TEMP for storing temporary files). If possible, these files should be placed on the fastest drive available. On networks the fastest drive is usually the workstation's local drive. Be sure to provide ample disk space for the temporary work files as some can grow quite large.

DECIMALS

Specifies the default number of decimal places to used in numeric fields (only used by the Report Writer module).

F2 = '' Through F9 = '' FUNCTION KEY MACROS

These parameters tell the program how to assign function keys F2 - F9 (function keys F11 and F12 are also supported, if your keyboard has them). This time-saving feature allows you to assign commonly used words and phrases to the keyboard function keys.

The word (or phrase) can be up to 254 characters in length and must have a single quote character (') both in front and behind the word (or phrase).

For example, if you wanted to assign the phrase "Send out for repair" to the F2 function key, then you would enter:

F2 = 'Send out for repair'

If you include a semi-colon (;) within the phrase or at the end of the phrase, then a carriage return will be added (during playback of the function key macro, it will act as if you pressed the Enter key on your keyboard). This means that if you add a semi-colon to the end of a phrase (i.e. F2 = 'Send out for repair;'), then the phrased will be played back in the current field and the cursor will jump to the next field. The semi-colon also allows you to enter multiple lines into a memo field. For example, if you entered:

F2 = 'Send out for repair; place DO NOT USE label on gage'

then the program would respond with two lines as follows:

Send out for repair
place DO NOT USE label on gage

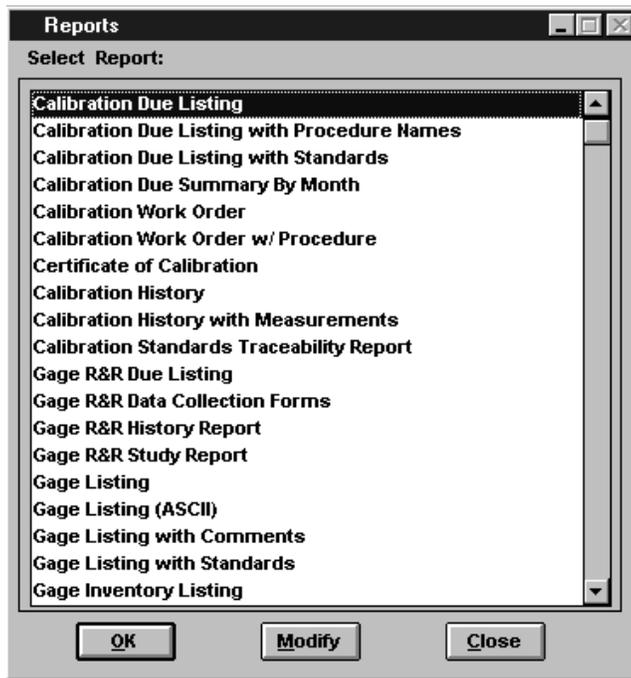
Modifying Reports

ProGAGE1 allows you to modify the standard report designs to suit your needs. Please refer to the on-line Report Writer Documentation for more information. This is provided in a Microsoft Word document file named "PGW-RW.DOC". To view or print, run the "Modify Reports Documentation" icon or use MS Word to open the file (located in C:\PGWIN).

In the ProGAGE1 for Windows program group window, double-click the "Modify Reports" icon



The screen that appears will present all reports that can be modified. Highlight the report that you want to modify and click the [Modify] button. The [OK] button allows you to test your modified report by letting you print or preview the report on-screen - you will need this button later on to verify your report changes.



For more information on modifying your report designs, please run the icon "Modify Reports Documentation" - requires MS Word or Windows 95/98/NT WordPad to view the on-line document.

Accessories - Calculator, Calendar and Puzzle

This portion of the appendix explains how to use the accessories found in the **Help** menu. The accessories are only available in the Main Menu, Gage Master and Calibration Summary screens.

Calculator

The Calculator desk accessory can be used like a typical calculator. The results can be

copied and pasted by highlighting the result and pressing CTRL-C. To paste, position your cursor into the desired area and press CTRL-V.

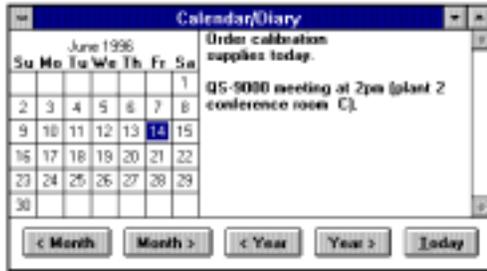


You can either click on the calculator buttons or use the keyboard equivalents shown below:

Keystroke	Equivalent
Q	Square Root $\sqrt{\quad}$
R	MR
N	Reverse sign \pm
A	M+
Z	MC
S	M-
C	Press once to erase current value, twice to erase current calculated value and operator.
MC	Clears stored number from memory.
MR	Restores number from memory.
M+	Stores a number in memory or adds to number in memory.
M-	Subtracts from number in memory.

Calendar / Diary

The Calendar/Diary accessory is used to schedule appointments and look up calendar dates



This dialog contains these options:

< Month Changes month backward

Month > Changes month forward

< Year Changes year backward

Year > Changes year forward

Today Selects today's date

Diary This is a text region. Use standard text editing techniques.

Deleting Old Diary Entries

To delete old diary entries, select the DIARY menu and choose **Delete**. Displays a dialog to verify that you want to delete all entries prior to the selected date.

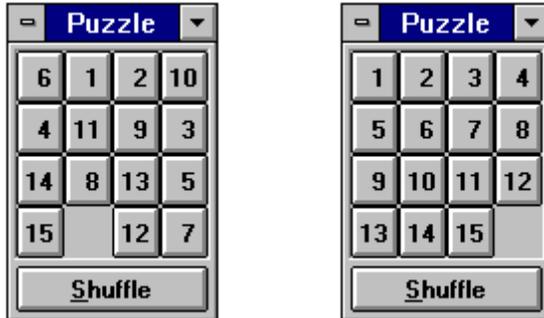
Backing Up Diary Files

If you want to backup your diary entries, backup both the FOXUSER.DBF and FOXUSER.FPT files found the application directory (usually C:\PGWIN2).

Puzzle

Choose the SHUFFLE button to scramble the numbers, then click on one number at a time to move it to the adjacent empty square. You're a winner when the numbers are in order.

To cheat, press Ctrl+End.



Importing and Exporting Records

At present, there is no utility included for importing or exporting records. However, there are 3rd party programs that support importing and exporting of FoxPro format database files. MS Access, MS Foxpro and Data Junction are some of the available programs you can use to import your records (as well as export). Although MS Excel does allow for editing of DBF files, it can corrupt the relationship between the data (DBF) file and the associated index (CDX) files. It is OK to view *or print* records using Excel, but do not save the DBF file.

If needed, you can have AQS technical services perform the import for you (there is a charge for this service).

File Maintenance and Repair

Aside from backing up your database files regularly (daily backups are best), it is recommended that you regularly (at least weekly) run the **SCANDISK** and **DEFRAG** utilities to keep your hard drive and files in good working order (see your Windows User's Guide for more information on these operating system utilities).

Also, run the "Optimize Files" selection in the ProGAGE1 Utilities menu often (i.e., weekly) as this keeps your indexes in good working order and compacts your database files.

To avoid hard disk and file problems:

- Wait at least 10 seconds before powering off your computer (gives the hard drive cache a chance to physically write to disk).
- Do not re-boot or shut your computer off while in Windows - always exit Windows normally.
- Never move your computer while it is running - the heads of the hard drive will crash into the spinning disk platter.

Repairing Corrupt Database Files

If your ProGAGE1 database files do become corrupt, you can try to repair them using the included **dbrx.exe** utility. If the corruption is not too extensive (such as bad file header data or bad end of file markers) this utility will work fine. *To use the utility:*

1. Quit ProGAGE1 (if you are currently running it).
2. In Program Manager, select File | Run.
3. Enter "C:\PGWIN2\DBRX C:\PGWIN2\DBFS*.DBF" into the command line field and click the OK button (if your DBF files are kept in another drive or directory then use that drive and directory path instead).



If the database still seems corrupted, you can contact technical support for assistance. *There will be a nominal file repair charge.*

Backing Up Your Database Files

You should regularly (daily if possible) backup your database files. The files that you need to backup are normally located in the C:\PGWIN2\DBFS directory. If you have modified any of the reports, you should also backup the C:\PGWIN2\REPORTS directory as well. If you are ever sent a program update disk, always do a fresh backup prior to installing the update. If you don't have a backup utility program, you can just copy your files to diskette or another hard drive directory using File Manager or Windows Explorer.

Files Used by ProGAGE1

This portion of the appendix outlines the different files used by the program.

Program Files

Listed below is the list of program files used by ProGAGE1. These are usually located in the C:\PGWIN2 directory (unless installed elsewhere).

Filename	Description
CALCOPY.EXE	Utility to import procedures from optional "ProGAGE1 Procedures"
CALENTRY.APP	Calibration Entry Module
CONFIG.FPW	Program Configuration File (ASCII Text)
CONVERT.APP	Unit conversions module (run from within ProGAGE1)
CONVERT.EXE	Unit conversions program (run independently of ProGAGE1)

CONVERT.ICO	Unit conversions program icon
FILELOC.DBF	Stores locations of data files and report files
FOX2600.ESL	Run-time file for FoxPro
FOXRUN.PIF	Used to run DOS programs from within ProGAGE1 (for Label.exe)
FOXTOOLS.FLL	Program library for Windows API function calls
FOXUSER.DBF	Stores diary entries and logs user activity
FOXUSER.FPT	Stores diary entries and logs user activity
GAGE.ICO	ProGAGE1 Icon
GAGENTRY.APP	Gage Master Entry Module
LABEL.EXE	Program that prints calibration labels
LABEL.EXE	Label printing program (for dot-matrix printers)
LABEL.PIF	Program information file - manages
MODREP.EXE	Report writer program (allows reports to be modified)
MODREP.ICO	Modify reports documentation icon
NEW.ICO	New Version 2 information icon
NOTEPAD.ICO	Modify "Edit Config.fpw file" icon
PGW-RW.DOC	Word file for Modify Reports documentation
PGW2-UP.WRI	Write file explaining new ProGAGE1 Version 2 features
PGWIN.EXE	Main program module
PGWIN.HLP	ProGAGE1 Windows Help File
PROCED.APP	Procedure Entry Module
REBUILD.EXE	Utility to re-build corrupted index files
REPORT.ICO	Modify Reports program icon
REPORTS.APP	Reports Menu
RESET.EXE	User Counter Reset Module
RESET.ICO	Reset Users Icon
RR_VER.DBF	Stores release version number of ProR&R module
RRENTY.APP	Gage R&R Entry Module
STUDY.EXE	ProR&R Gage R&R Study Program Module
UTILITY.APP	Utility and Settings Module
V2UPDATE.EXE	Copies database files from version 1.x to version 2
VERSION.DBF	Stores release version number of program

Report Files

Listed below is the table of report files used by ProGAGE1 (only files with the extension *.FRT are listed - each report file also has an associated *.FRX file with the same base name). These files are normally located in a sub directory of C:\PGWIN2 named \REPORTS (i.e. inside C:\PGWIN2\REPORTS).

Filename	Description
BARSTK1.FRT	Bar Code Label 1 (1/4 inch design for use with Label Printer)
BARSTK2.FRT	Bar Code Label 2 (1/2 inch design for use with Label Printer)
BARSTK3.FRT	Bar Code Label 3 (1 inch design for use with Label Printer)
CALCOST.FRT	Calibration Cost Report
CALHIS.FRT	Calibration History Report
CALHIS2.FRT	Calibration History Report with Measurements

CALORDER.FRT	Calibration Work Order
CALSTK1.FRT	Calibration Label 1 (1/4 inch design for use with Label Printer)
CALSTK2.FRT	Calibration Label 2 (1/2 inch design for use with Label Printer)
CALSTK3.FRT	Calibration Label 3 (1 inch design for use with Label Printer)
CALSTKB1.FRT	Calibration Label 1 Batch (1/4 inch design)
CALSTKB2.FRT	Calibration Label 2 Batch (1/2 inch design)
CALSTKB3.FRT	Calibration Label 3 Batch (1 inch design)
CALTRACE.FRT	Calibration Standards Traceability Report
CERTCAL.FRT	Certificate of Calibration
COSTCAL.FRT	Calibration and Gage R & R Cost Report
DUELIST.FRT	Calibration Due Listing
DUELSTCS.FRT	Calibration Due Listing w/ Calibration Standards
DUELSTPL.FRT	Calibration Due Listing w/ Procedures
DUESUMM.FRT	Calibration Due Summary by Month
GAGE.FRT	Gage Master Listing
GAGECOM.FRT	Gage Master Listing w/ Comments
GAGECS.FRT	Gage Master Listing w/ Calibration Standards
GAGEDET.FRT	Gage Record Detail Report
GAGEDET2.FRT	Gage Record Detail Report with Standards
GAGEDET4.FRT	Gage Detail Sheet - Compact Design
GAGEINV.FRT	Gage Inventory Report
GAGEUS.FRT	Gage Usage Report (Issue / Return Listing)
GTEXT.FRT	Gage Listing (ASCII)
PROCIND.FRT	Procedure Index Report
PROCLIST.FRT	Procedure Listing
PROCSHT.FRT	Procedure Sheets
RRCOST.FRT	Gage R&R Cost Report
RRDUEFRM.FRT	Gage R&R Data Collection Forms
RRDUELST.FRT	Gage R&R Due Listing
RRHIS.FRT	Gage R&R History Report
RRSUM.FRT	Gage R&R Study Summary Report
WORDREP.FRT	Calibration Work Order with Procedures

Data Files

Listed below are the data files. These are FoxPro V2.6 formatted database files). Index files are of the compound index type. These files are normally located in a sub directory of C:\PGWIN2 named \DBFS (i.e. inside C:\PGWIN2\DBFS).

Filename	Description
CALIB.CDX	Calibration Index
CALIB.DBF	Calibration Record Data
CALIB.FPT	Calibration Memo Text
FACTORS.DBF	Units conversion factors data
GAGE.CDX	Gage Master Index
GAGE.DBF	Gage Master Data
GAGE.FPT	Gage Master Memo Text
PROCED.CDX	Procedure Index

PROCED.DBF	Procedure Data
PROCED.FPT	Procedure Memo Text
PROCLINK.CDX	Procedure / Gage Link Index
PROCLINK.DBF	Procedure / Gage Link Data
QM_DICT.CDX	Data Dictionary Index
QM_DICT.DBF	Data Dictionary File (for field names)
REPORTS.CDX	Report Titles Index
REPORTS.DBF	Report Titles Data
SEC.CDX	Password Security Index
SEC.DBF	Password Security Data
SETTINGS.CDX	Program Settings Index
SETTINGS.DBF	Program Settings Data
SETTINGS.FPT	Program Settings Memo Text
SKIPDAY.CDX	Skip Dates Index
SKIPDAY.DBF	Skip Dates Data
STDCALIB.CDX	Calibration Measurements Index
STDCALIB.DBF	Calibration Measurements Data
STDGAGE.CDX	Calibration Standards Index
STDGAGE.DBF	Calibration Standards Data
STUDY.CDX	Gage R&R Study Index
STUDY.DBF	Gage R&R Study Data
TABLIST.CDX	List of Tables (data files) Index
TABLIST.DBF	List of Tables (data files) Data
UNITS.DBF	Units Data (for Conversion Module)
USAGE.CDX	Issue / Return (gage usage) Index
USAGE.DBF	Issue / Return (gage usage) Data
USERS.DBF	User Counter Data
UTLDB.CDX	Utility Database Index
UTLDB.DBF	Utility Database Data

Database File Layouts and Field Names

Listed below are the design layouts for the most important data files used by ProGAGE1. These are all FoxPro V2.6 formatted database files.

Filename:GAGE.DBF

Field Name	Type	Bytes
GAGEID	Text	20
DESC	Text	20
TYPE	Text	4
UM	Text	15
FREQUENCY	Number (Double)	8
FREQ_UNITS	Text	10
LEADTIME	Number (Double)	8
LEADDATE	Date/Time	8

FREQ_RR	Number (Double)	8
FREQ_UN_RR	Text	10
HOURS	Number (Double)	8
NEXT_CALIB	Date/Time	8
NEXT_RR	Date/Time	8
LOCATION	Text	20
STORAGE	Text	20
PURCH_DATE	Text	8
VENDOR	Text	25
PRICE	Number (Double)	8
RETURNED	Yes/No	1
USAGE	Number (Double)	8
SCHED_TYPE	Text	10
STATUS	Text	20
USER_DEF1	Text	20
USER_DEF2	Text	20
USER_DEF3	Text	20
USER_DEF4	Text	20
USER_DEF5	Text	20
ROUNDMONTH	Yes/No	1
COMMENTS	Memo	-

Filename: STDGAGE.DBF

Field Name	Type	Bytes
GAGEID	Text	20
STANDARDID	Text	20
MINIMUM	Number (Double)	8
NOMINAL	Number (Double)	8
MAXIMUM	Number (Double)	8
UNCERT	Number (Double)	8

Filename: PROCED.DBF

Field Name	Type	Bytes
PROC_NAME	Text	25
PROCEDURE	Memo	-

Filename: PROCLINK.DBF

Field Name	Type	Bytes
GAGE_CAL	Text	20
PROC_NAME	Text	25

Filename: CALIB.DBF

Field Name	Type	Bytes
GAGEID	Text	20
GAGESTAND*	Text	11

ACCNT_CODE	Text	25
REFER_NO	Text	25
PASS	Text	15
CALDATE	Date/Time	8
NEXTDATE	Date/Time	8
RESULTS	Text	40
CAL_BY	Text	10
LABOR_HOUR	Number (Double)	8
LABOR_COST	Number (Double)	8
MATER_COST	Number (Double)	8
OTHER_COST	Number (Double)	8
TOTAL_COST	Number (Double)	8
COMMENTS	Memo	-
CUSER_DEF1	Text	20
CUSER_DEF2	Text	20
CUSER_DEF3	Text	20
CUSER_DEF4	Text	20
CUSER_DEF5	Text	20
OVERALL	Number (Double)	8

* The GAGESTAND field is used as a relation to the STDCALIB.DBF file. Must be a unique value.

Filename: STDCALIB.DBF

Field Name	Type	Bytes
GAGESTAND*	Text	25
STANDARDID	Text	20
GAGEID	Text	20
CALDATE	Date/Time	8
MINIMUM	Number (Double)	8
NOMINAL	Number (Double)	8
MAXIMUM	Number (Double)	8
ACT_BEF	Number (Double)	8
ACC_BEF	Number (Double)	8
OT_BEF	Text	3
ACT_AFT	Number (Double)	8
ACC_AFT	Number (Double)	8
OT_AFT	Text	3
REF_ID	Text	20
UNCERT	Number (Double)	8
COMMENT	Text	40
ATTRIBUTE	Text	20
ALLOWEDIT	Yex/No	1

Filename: USAGE.DBF

Field Name	Type	Bytes
GAGEID	Text	20
ISSUE_DATE	Date/Time	8
ISSUE_BY	Text	15
ISSUE_TO	Text	15
PART_NO	Text	20
RET_DATE	Date/Time	8
RET_BY	Text	15
RET_FROM	Text	15
RET_CYCLES	Number (Double)	8
ISSUE_LOC	Text	20
RET_LOC	Text	20
REASON	Text	20

Importing Records From ProGAGE1 DOS Version

This portion of the appendix explains how to import records from the DOS version of ProGAGE1. Through Program Manager, run the program file PGIMPORT.EXE which is located in the \IMPORT subdirectory of the \PGWIN2 directory as shown here:



After the Importer screen appears, enter the directory containing the ProGAGE1 for Windows database directory (usually this is C:\PGWIN2\DBFS). By default, all types of records will be imported (Gages, Calibrations, Usage, Gage R&R and Procedure records). If there are any types of records that you don't want to import, then uncheck the corresponding check boxes.



Click the START button to begin the import process. The import program assumes that the DOS version files are located in the directory C:\PROGAGE1. If this is not the case, then the

import program will prompt you to enter the correct path and data filename that it is looking for (after you click the START button).

Import Files

Listed below are the import program files. These are only used if you are going to import data from the DOS version of ProGAGE1. After importing, you may want to remove these files to conserve disk space. These are usually located in the C:\PGWIN2\IMPORT subdirectory.

Filename	Description
PGIMPORT.EXE	Import Program Module (this is the program file you run)
RRUN.EXE	ASCII text file generation module
COMMDLG.DLL	Dynamic Link Library File (for dialog boxes)
VBRUN300.DLL	Visual Basic Runtime Dynamic Link Library
XBS110.DLL	Dynamic Link Library for Xbase File I/O
CMDIALOG.VBX	VBX file used by Import Module
GAGES.DEF	ProGAGE1 DOS Gage File Definition
CALIBS.DEF	ProGAGE1 DOS Calibration File Definition
PROC.DEF	ProGAGE1 DOS Procedure File Definition
GRR.DEF	ProGAGE1 DOS Gage R&R File Definition
GF-EXP.DEF	Gage File Export Definition
CF-EXP.DEF	Calibration File Export Definition
IF-EXP.DEF	Issue File Export Definition
PF-EXP.DEF	Procedure File Export Definition
PL-EXP.DEF	Procedure Link File Export Definition
RF-EXP.DEF	Gage R&R File Export Definition
GAGEEXP.PIF	Windows PIF File to run Gage File Import
CALEXP.PIF	Windows PIF File to run Calibration File Import
PROCEXP.PIF	Windows PIF File to run Procedure File Import
LINKEXP.PIF	Windows PIF File to run Procedure Link File Import
RREXP.PIF	Windows PIF File to run Gage R&R File Import
USEXP.PIF	Windows PIF File to run Usage File Import

If you get the error message “**Installable ISAM not found**”, then your computer is not capable of running the DOS import utility. Please contact technical support for help on importing your DOS database records (a small fee will be charged to you for this data import service).