

Armstrong **Software Program**

Steam Trap Sizing and Selection 

User's Manual ■ Steam Trap Sizing and Selection

For selected IBM and IBM Compatible Computers
Version 2.0

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PREFACE

This User's Manual explains how to use the Armstrong Software Program 1, Steam Trap Sizing and Selection. **Your use of this software is subject to a License Agreement. See page 14.**

BEFORE YOU BEGIN

Armstrong Software Program 1 is designed to be used in conjunction with Armstrong Educational Handbook N-101 and Steam Trap Catalog 108. If you do not have these catalogs, contact Armstrong for copies.

Before starting this program, refer to Page 3, "Computer Equipment" to determine if your computer and our software are compatible. If you are not familiar with the general operation of your computer system, contact the appropriate department in your company for assistance.

STEP-BY-STEP INSTRUCTIONS

This User's Manual provides detailed, step-by-step instructions for using all features of Armstrong Software Program 1.

The best way to learn how to use Program 1 is to familiarize yourself with this manual, Handbook N-101, and Catalog 108. Next, review the Operating Instructions, beginning on page 4.

Once you become familiar with User's Manual, you may use the Table of Contents for quick reference to the particular section of interest.

IMPORTANT

ARMSTRONG SOFTWARE PROGRAM 1 SHOULD BE UTILIZED AS A GUIDE FOR THE SIZING AND SELECTION OF STEAM TRAPPING EQUIPMENT BY EXPERIENCED PERSONNEL. SIZING, SELECTION AND INSTALLATION SHOULD ALWAYS BE ACCOMPANIED BY COMPETENT TECHNICAL ASSISTANCE OR ADVICE. WE ENCOURAGE YOU TO CONTACT ARMSTRONG OR ITS LOCAL REPRESENTATIVES FOR COMPLETE DETAILS.

INTRODUCTION

BRINGING ENERGY DOWN TO EARTH

Any company that is energy conscious is also environmentally conscious. Less energy consumed means less waste, fewer emissions and a healthier environment.

In short, bringing energy and environment together lowers the cost industry must pay for both. By helping companies manage energy, Armstrong products and services are also helping to protect the environment.

Since 1900, Armstrong has been in the business of conserving energy as it applies to steam operated machinery and equipment. Our developments and improvements of steam trap design and function have led to countless savings in energy, time and money. In an effort to share and expand this steam conserving knowledge, we at Armstrong have developed Software Program 1. It deals with the sizing and selection of steam traps for a wide variety of applications and industries.

ARMSTRONG SOFTWARE PROGRAM 1

Unnecessary steam trap costs begin with sizing guesswork. When it comes to the sizing and selection of steam traps, guesstimates add needless costs - initially and at every stage of a trap's service life.

Most incorrectly sized steam traps are oversized. That means you pay for more trap than you need to do the job. What's more, an oversized trap works harder, accelerating wear. And, when it fails, a trap too big for the job wastes more energy than one that's correctly sized.

Until now, steam trap sizing and selection were difficult, time consuming at best. Outright guesses at worst. Now, you can put an end to the guesswork with Armstrong Software Program 1, our computerized method of sizing and selecting steam traps.

HERE'S WHAT IT CAN DO

Program 1 is menu driven, user friendly software. You merely answer a few easy-to-understand questions concerning your specific steam trap application and Program 1 will:

- Calculate condensate loads
- Apply correct safety factors
- Recommend the most efficient steam trap models
- Print the complete steam trap specifications

Armstrong Software Program 1 provides plenty of options for

retaining and transferring data, including moving data to a word processing program.

TRAINING FOR ENERGY CONSERVATION

In a recent survey of plant engineers, plant managers and key maintenance engineers, 89 percent said that there will be a greater need for training in the years ahead. One of the primary areas of training is in the arena of steam trap and steam system maintenance because of the great potential to save energy and money.

Armstrong conducts educational Steam Energy Seminars and also offers customers a library of training materials. These resources include video tapes, handbooks, sectional models, flip charts and more. Most are available at no charge.

For more information, request a copy of Bulletin No. 815 "REFERENCE GUIDE TO ARMSTRONG'S TRAINING AIDS — A descriptive listing of various training aids produced by Armstrong to facilitate the training of people responsible for steam energy conservation".

REPLACEMENT DISKETTES

If you need a replacement diskette, or if there are others in your company who are responsible for steam trap sizing and selection, we will be happy to send Armstrong Software Program 1 at no charge. Please send their name(s) and address(es) to the following address:

Attention: ASP-1
Marketing Services Department
Armstrong International, Inc.
816 Maple Street
Three Rivers, MI 49093
Phone: (616) 273-1415

COMPUTER EQUIPMENT

This program may be used on most IBM and IBM compatible computers. The minimum hardware requirements are:

- IBM PC or Compatible
- One diskette drive
- 512K bytes of Random Access Memory (RAM)
- **PC-DOS/MS-DOS 3.0 or later version**
- *Printer (You may size and select steam traps on a computer system without a printer.)
- 350K is required for hard disk installation
- Mouse (optional)

START-UP METHODS

When using Program 1, you must use the DOS provided with your computer.

USING PROGRAM 1 WITH YOUR DOS DISKETTE

1. Insert the DOS diskette in disk Drive A.
2. Turn on the computer.
3. Enter the current date and time if requested on the screen and press **<ENTER> (RETURN)** to continue.
4. When the Prompt A> appears on the screen, remove the DOS diskette and insert Program 1 into Drive A. Type **N101** and press **<ENTER> (RETURN)**.

INSTALLING PROGRAM 1 TO A FIXED (HARD DRIVE)

These installation instructions are written for the C> and A> drives. If your drive names are different please substitute the correct drive name.

1. Insert the diskette into drive A and close the disk drive door.
2. At the C> prompt type A:\ press <ENTER>
3. At the A> prompt type INSTALL C: and press <ENTER>.
4. A message will appear to inform you that the program has been successfully installed to your hard drive.

To run the program after it has been installed on your hard drive, you must change to the directory to which the program was installed.

Example: at the C> prompt type CD C:\ARMTRAP2. Then simply type N101 at the DOS Prompt and press <ENTER>.

NOTE: We recommend that you set up a Data Path for use in storing information. Please refer to Item 13 "Access to Data Files" on the Main Application Menu for the procedure to do this.

OPERATING INSTRUCTIONS

IMPORTANT USER INSTRUCTIONS FOLLOW. WE SUGGEST THAT YOU READ THIS SECTION OF THE USER'S MANUAL IN ITS ENTIRETY BEFORE USING THE PROGRAM.

Sample Input Screen

The diagram shows a sample input screen for the 'Heat Exchangers - Shell & Tube' program. The screen is titled 'Heat Exchangers - Shell & Tube ARMSTRONG SOFTWARE PROGRAM 1 Ver. 2.0'. It contains three input fields for 'Outside Surface Area of Coil - (sq. ft.):', 'Liquid Entering Temperature - deg F:', and 'Liquid leaving Temperature - deg F:'. Each field has a default value of '(0)'. Below the input fields are command buttons: 'F1 = Restart Application', 'F2 = Page Back', 'TAB = Move cursor to next Field or Button', and 'ENTER = Process input Data'. At the bottom of the screen are three command buttons: '() Continue', '() F9 - Main Menu', and '() F10 - Exit Program'. Annotations with arrows point to the input fields, default values, and command buttons.

```
Heat Exchangers - Shell & Tube  ARMSTRONG SOFTWARE PROGRAM 1 Ver. 2.0

  Outside Surface Area of Coil - (sq. ft.):  [ ] (0)
  Liquid Entering Temperature - deg F:      [ ] (0)
  Liquid leaving Temperature - deg F:       [ ] (0)

F1 = Restart Application                    F2 = Page Back
TAB = Move cursor to next Field or Button  ENTER = Process input Data

( ) Continue  ( ) F9 - Main Menu  ( ) F10 - Exit Program
```

Key Functions

Listed below are keys used throughout this program for inputting and editing data. They are active only when displayed at the bottom of the screen.

TAB - MAY BE USED to move to the next input field or command button. (A mouse may be used to move to the input field or to execute a command button).

<ENTER> - Processes input data.

F1 - Restart Application.

F2 - Page Back.

F9 - Return to Main Menu.

F10 - Exit Program.

Default Values

Values are retained as defaults in certain screens, minimizing the need to re-enter data.

CAUTION: Carefully review all default values. Pressing the <ENTER> key before reviewing the default values may result in incorrect information about your application.

OPERATING INSTRUCTIONS (continued)

Program 1 is menu driven and user friendly, minimizing the time required to learn how to use it.

1. Load the program into your computer as instructed in "Start-Up Methods".
2. This program contains two screen types. The **first screen type** does not request information from you. Simply read the information on the screen, and press <ENTER> to continue. Following are two introductory screens from Program 1.

Screen #1

```
ARMSTRONG SOFTWARE PROGRAM 1 Ver.2.0  
  
ARMSTRONG SOFTWARE PROGRAM 1  
Steam Trap Sizing & Selection  
Version 2.0  
12/92  
  
(C) Copyright Armstrong International, Inc. 1992  
Microsoft Basic Compiler  
(C) Copyright Microsoft Corp. 1990  
  
Use of this software is subject  
to a License Agreement.  
See page 14 of User's Manual (Bulletin 819)  
  
< Press ENTER to continue >
```

Screen #2

```
ARMSTRONG SOFTWARE PROGRAM 1 Ver.2.0  
  
ARMSTRONG SOFTWARE PROGRAM 1  
STEAM TRAP SIZING & SELECTION  
  
This program is a supplement to Armstrong's Educational Handbook  
N-101, Steam Conservation Guidelines for Condensate Drainage and  
Steam Trap Catalog 108.  
  
If you do not have Handbook N-101 and Catalog 108, ask your  
Armstrong Representative or Armstrong for a copy.  
  
This program should be utilized as a guide for the selection of  
steam trapping equipment by experienced personnel. Selection or  
installation should always be accompanied by competent technical  
assistance or advice.  
  
We encourage you to contact Armstrong or its local representative  
for complete details.  
  
[ ARMSTRONG's Telephone No. (616) 273-1415 ]  
  
< Press ENTER to continue >
```

3. The **second screen type** requests specific information from you. One example of this type of screen is the “Main Menu”, shown below. Review the applications listed and then input your selection. As an example, please enter No. 5 - Heat Exchangers and then press **<ENTER>** to continue.

Application Menu		ARMSTRONG SOFTWARE PROGRAM 1 Ver.2.0	
Main Menu			
Choices			N-101 reference
1	Steam Distribution System	pg. 16-19	
2	Steam Tracer Lines	pg. 20-21	
3	Space Heating Equipment	pg. 22-24	
4	Process Air Heaters	pg. 25	
5	Heat Exchangers	pg. 26-27	
6	Evaporators	pg. 28-29	
7	Jacketed Kettles	pg. 30-31	
8	Stationary Steam Chamber	pg. 32-33	
9	Rotating Dryers w/Syphon	pg. 34-35	
10	Flash Tanks	pg. 36-37	
11	Absorption Units	pg. 38	
12	Select a Trap (Known Parameters)		
13	Access to Data Files		
0	Exit Sizing Program		
	Enter Your Choice:	<input type="text" value="5"/>	
TAB = Move cursor to next Field or Button ENTER = Process Input Data			
(♦) Continue () F1 - Restart Program () F10 - Exit Program			

PRINTING YOUR STEAM TRAP SPECIFICATION:

Below is the print menu screen for Program 1. You may size a steam trap and either print a complete specification or view it on your computer screen.

Choice 1. To **view** the steam trap specification on your computer screen, simply enter No. 1 on the print menu. The specification will appear on your screen.

Choice 2. To **print** the steam trap specification, first make sure your computer is connected to a printer. Then enter No. 2 on the print menu. Your steam trap specification will then be printed.

Heat Exchangers-Shell & Tube		ARMSTRONG SOFTWARE PROGRAM 1 Ver.2.0	
Choices	Description Of Choices		
1	Print sizing output to the screen		
2	Print sizing output to the printer		
3	Save sizing output to a new text file		
4	Save sizing output to an existing text file (Choice 4 - Replaces data in the existing file)		
5	Append sizing output to an existing text file		
6	Save input data to a new file		
7	Save input data to an existing file (Choice 7 - Replaces data in the existing file)		
0	Return to Sizing Program		
	Enter Your Choice:	<input type="text" value="2"/>	
F1 = Restart Print Program		F2 = Page Back	
TAB = Move cursor to next Field or Button		ENTER = Process Input Data	
(♦) Continue () F9 - Main Menu () F10 - Exit Program			

PRINTED SPECIFICATIONS

EXAMPLE "A" -- Complete Specification (Output)

Application: Heat Exchangers -Shell & Tube Rev. No. 10:30
Trap ID No.: Plant 1
Comments: Replace existing failed trap with 814 LV

SPECIFIC CONDITIONS

Type of Trap:	Inverted Bucket
Model No.:	Armstrong Model 814 LV
Orifice Size:	1/2
Maximum Operating Pressure:	30 psig.
Flow Direction:	Horizontal (Side Inlet/Side Outlet)
Connection Size:	1 in. NPT
Req. Trap Capacity:	5291 lbs/hr
Req. Operating Pressure:	15 psig.
Trap Safety Factor:	2:1 at 15 psig.
Max. Allowable Pressure/Temp. Rating:	250 psig. at 450 F

List of Materials for Pressure-Containing Parts

Body:	ASTM A-278, CLASS 30
Cap:	ASTM A-278, CLASS 30
Bolts:	SAE Gr. 2 (8 required)
Nuts:	SAE Gr. 2 (8 required)
Gasket	Compressed Non-Asbestos
Weight of Trap:	44 lbs.

GENERAL CONDITIONS

Manufacturer, trap model number, and maximum operating pressure shall be identified on the trap.

The stainless steel mechanism shall be free floating, employing no hinges, fixed pivots or pivot pins. Flow through the square edged orifice, mounted in the top of the trap, shall be controlled by a hemispherical valve actuated by the inverted bucket. The valve and seat shall be stainless steel hardened, ground, and lapped thereby assuring tight shut-off. The inverted bucket shall be austenitic stainless steel (except for cast iron bucket weight on larger traps) and continuously vent non-condensable gases.

OPTIONS (CONTACT THE FACTORY OR YOUR REPRESENTATIVE FOR DETAILS.)

SS	Body & cap to be cast austenitic stainless steel.
Scrub Wire	Bucket with a vent scrub wire.
T	Bucket with a thermostatically controlled air vent.
CV	Internal stainless steel check valve.
Pop Drain	Condensate drain for low pressure/freezing applications.
LV	Bucket with increased air venting capacity.

PRINTED SPECIFICATIONS

EXAMPLE "B" -- Abbreviated Specification (Output)

ARMSTRONG SOFTWARE PROGRAM 1 Ver. 2.0

Application: Heat Exchangers - Shell & Tube Rev. No.: 10:30
Trap ID No.: Plant 1
Comments: Replace existing failed trap with 814 LV
Type of Trap: Inverted Bucket
Model No.: Armstrong Model 814 LV
Orifice Size: 1/2
Maximum Operating Pressure: 30 psig.
Connection Size: 1 in. NPT
Req. Trap Capacity: 5291 lbs/hr
Req. Operating Pressure: 15 psig.
Max. Allowable Pressure/Temp. Rating: 250 psig. at 450 F
Trap Material: ASTM A-278, CLASS 30

EXAMPLE "C" -- Abbreviated Specification (Output) combined into a letter

January 3, 1992

Dear Jerry:

As you requested, we have evaluated our shell and tube heat exchanger in plant 1 and are recommending an inverted bucket trap. The following report will give you a description of the recommended trap:

ARMSTRONG SOFTWARE PROGRAM 1 Ver. 2.0

Application: Heat Exchangers - Shell & Tube Rev. No.: 10:30
Trap ID No.: Plant 1
Comments: Replace existing failed trap with 814 LV
Type of Trap: Inverted Bucket
Model No.: Armstrong Model 814 LV
Orifice Size: 1/2
Maximum Operating Pressure: 30 psig.
Connection Size: 1 in. NPT
Req. Trap Capacity: 5291 lbs/hr
Req. Operating Pressure: 15 psig.
Max. Allowable Pressure/Temp. Rating: 250 psig. at 450 F
Trap Material: ASTM A-278, CLASS 30

Sincerely,

ABC Company

Maintenance Department

Note: This trap specification information was placed into a word processor to be included in a letter.

PRINTING YOUR STEAM TRAP SPECIFICATION:

Program 1 provides many options for retaining and transferring data. You may save your output files and then print a complete specification (Example A). You also may bring a complete or abbreviated specification (Example B) into a letter or report in your word processor and make modifications (Example C).

Choice 3. Saves the sizing specification to a new text file.

Procedure:

- A. The window will open for you to select what type of sizing (specification) output you want to create. The choices are a complete specification (.TSO) or an abbreviated specification (.TSS).
- B. A window will open asking for the name of the file. If that file name has been used for an existing file, the program will ask you to assign another file name.

Choice 4. Saves the sizing specification to an existing text file.

WARNING: This choice will replace the original sizing specification in the file with the new sizing specification. **THE ORIGINAL SIZING WILL BE LOST!** If you wish to keep the original file, you must save the file with a new name.

Procedure:

- A. The window will open for you to select the type of sizing output you want to replace. The choices are a complete sizing specification (.TSO) or an abbreviated specification (.TSS).
- B. A window will open displaying all file names that are in the data path.
- C. Select the file that you want replaced, using the arrow keys or the mouse.
- D. After the file has been selected, pressing the **<ENTER>** key will replace the old sizing data with the new sizing data.

Choice 5. Appends (adds) the sizing specification to an existing file.

Procedure:

- A. The window will open for you to select the type of sizing output you want to add. The choices are a complete sizing specification (.TSO) or an abbreviated specification (.TSS)

B. A window will open displaying all file names that are in the data path.

C. Select the file that you want to append, using the arrow keys or the mouse.

D. After the file has been selected, pressing the **<ENTER>** key will add the sizing data to the end of the file.

INSTRUCTIONS FOR PRINTING AND/OR MODIFYING SAVED SIZING FILES

You may use your word processor to edit or print (.TSO or .TSS) files that have been saved. You may also incorporate your sizing file(s) into a letter or report.

1. Follow the software manufacturer's recommendations for retrieving files into your word processor. You may then print, combine or edit the file.

2. **NOTE:** If you do not have a word processor and have saved the sizing specifications to a file, you may print the report, but you may not edit it. To print the file, use the following DOS command. At the C:> (DOS) prompt enter the following:

C: Type file name.TSO/LPT1 to print a complete sizing specification(s).

C: Type file name. TSS/LPT1 to print an abbreviated sizing specification(s).

OPTIONS FOR RETAINING SYSTEM INPUT DATA:

You may retain certain **system** information in input data files. You may retain input files for one or more systems in your plant. Some system inputs will transfer to the default values of the steam trap sizing program. This could be helpful if you are sizing **more than one trap for the same type of application and with the same system parameters.**

The following instructions apply:

Choice 6. Saves the input that you have entered to a new system input file (.TSI). (This file is used only by Program 1 as default values and cannot be modified by the user.)

Procedure:

- A. The window will open for you to save the system input you have created to a (.TSI) file.
- B. A window will open asking for the name of the file. If that file name has been used for an existing file, the program will ask you to try again with another file name.

Choice 7. Saves the input that you have entered to an existing system input file.

NOTE: This choice will replace the original system input values in the file with the new system input values. **THE ORIGINAL INPUT FILE WILL BE LOST!** If you wish to keep the original file, you must save the file with a new name.

Procedure:

- A. The window will open for you to select the name of the system input file you want to replace.

- B. A list box window will open displaying all file names that you have in your data path.
- C. Select the file that you want replaced, using the arrow keys or the mouse.
- D. After the file has been selected, pressing the **<ENTER>** key will replace the old system input data with the new system input data.

INSTRUCTIONS FOR DELETING SAVED SPECIFICATION OUTPUT AND INPUT FILES.

For information on deleting saved files, refer to the section entitled “Operating Instructions for No. 13 — “Access to Data Files”.

OPERATING INSTRUCTIONS FOR NO. 12 — “SELECT A TRAP”

Application No. 12 — “Select a Trap” is a *trap selection program* which should be used only by experienced personnel who know the sizing parameters of their application. It is **NOT** a trap *SIZING* program. In this portion of the program **YOU** are sizing and selecting steam traps for your application, **NOT ARMSTRONG**. We suggest that you contact either your Armstrong Representative or the Armstrong Application Engineering Department (616) 273-1415 if you need assistance in sizing and selecting steam traps for any applications not found on the Application Menu of this program.

After you review the operating instructions, you may wish to become familiar with “No. 12 — Select a Trap”. We recommend, however, that you use this **only** if the other selections on the Application Menu do not meet your specific requirements.

1. Refer to the Start-Up Methods in this manual. Load the program into your computer using either Method 1 or 2.
2. Review the introductory screens and press **<ENTER>** to continue.
3. Review the Application Menu on the screen. Input item No. 12 — “Select a Trap” and press **<ENTER>** to continue.
4. The next four screens request specific information about your application.

PROBLEM: Assume a trap application which generates 750 lbs. of condensate per hour at a constant steam pressure of 150 psig. There is a safety factory of 3:1 and there is no system back pressure. Input this information when prompted.
NOTE: The first screen is shown on the next page.

Select a Trap ARMSTRONG SOFTWARE PROGRAM 1 Ver.2.0

Maximum Steam Pressure - psig: (0)

Return Line Pressure - psig: (0)
(back pressure)

TAB = Move cursor to next Field or Button ENTER = Process Input Data

(*) Continue () F9 - Main Menu () F10 - Exit Program

5. On the next three screens you will be requested to input data listed below. Please input the information shown in **bold** type.

Is Steam Pressure Modulating? Safety Factor Condensate Load - lbs/hr:
 Input: **YES** Input: **3** Input: **750**

6. The screen below shows the Input Values you entered into the program.

Input Values

Max. Steam Pres. = 150 psig.
 Return Line Pres. = 0 psig.
 Safety Factor = 3
 Modulating Pres. = Y
 Condensate Load = 750 lbs/hr.
 Req. Capacity (3:1 SF) = 2250 lbs/hr. at 150 psig.

< Continue > < Re-enter Data > < Print Data >

7. The following screen lists the various traps which may be applicable to your installation. For our sample, enter No. 3 and press the **<ENTER>** KEY to continue.

Select a Trap ARMSTRONG SOFTWARE PROGRAM 1 Ver.2.0

Choice	Trap Series	Material (psig)	MOP	Type	Connections
1	200	Cast Iron	250	IB	Bottom Inlet/Top Outlet
2	300 - 400	Forged Steel	1000	IB	Bottom Inlet/Top Outlet
3	800	Cast Iron	250	IB	Side Inlet/Side Outlet
4	880*	Cast Iron	250	IB	Side Inlet/Side Outlet
5	980*	Cast Steel	600	IB	Side Inlet/Side Outlet
6	1010 - 1013	Stn. Steel	450	IB	Bottom Inlet/Top Outlet
7	1810 - 1812	Stn. Steel	650	IB	Side Inlet/Side Outlet
8	2010 - 2011	Stn. Steel	400	IB	All-Position (360 degrees)
9	5000 & 6000	Forged Steel	2700	IB	Bottom Inlet/Top Outlet
10	DC	Several	250	DC	Several
11	A,B,J,K,L&M	Cast Iron	250	F&T	Side Inlet/Side Outlet
12	MS & LS	Cast Steel	450	F&T	Side Inlet/Side Outlet
13	Thermostatic	Stn. Steel	300	Thermic	In-Line
14	CD	Steel	600	CD	Several

* w/Integral Strainers

Enter Your Trap Choice: (0)

F1 = Restart Application F2 = Page Back

(*) Continue () F9 - Main Menu () F10 - Exit Program

8. The remaining operating instructions for No. 12 - "Select a Trap" are similar to those used for other applications.

OPERATING INSTRUCTIONS FOR NO. 13 — “ACCESS TO DATA FILES”

Application No. 13 “Access to Data Files” allows you to:

- Use an existing system input file to provide defaults for steam trap sizing applications.
- Change data path.
- Delete system input (.TSI) files.
- Delete sizing specification output (.TSO and .TSS) files.

Shown below is the menu screen for accessing data files.

```
Application Menu                                ARMSTRONG SOFTWARE PROGRAM 1 Ver.2.0
-----
                        Access to Data Files
                Press ENTER with EXISTING Highlighted to use as
                        an existing data file for inputs.

                Press ENTER with MAINT Highlighted to do data
                        file maintainance
-----
                < EXISTING >  < MAINT >  < Return to Sizing Program >
```

Procedure for Accessing Existing Files

- To use an existing system input file to provide defaults for steam trap sizing applications, first make sure the cursor is on **EXISTING** at the bottom of the screen. Next, press the <ENTER> key.
- A window will open listing all the system input file names you have saved. Use either your arrow key or your mouse to select the file you want to use. Then press the <ENTER> key to continue. The input system file you selected is now being loaded.
- The “Access to Data Files” menu will reappear on the screen. Using your TAB key, move the cursor to “Return to Sizing Program” and press the <ENTER> key. You are now back in the Trap Sizing Program and may select an application when the Main Application Menu appears.

Procedure for Accessing Maintenance Files:

- To do data file maintenance, first make sure the cursor is on **MAINT** at the bottom of the screen. Next, press the <ENTER> key. A window will open showing the types of maintenance which may be done to your files. The choices are:

Choice 1. Change Data Path for stored files.

- Select No. 1 and press the TAB key to move the cursor to Continue and then press the **ENTER** key. A window will open with a brief description on changing your data path. The present path for your data files is shown at the bottom of the screen. If you want to change the data path, select YES and press the <ENTER> key to continue. If you do not want to change the data path, move the cursor to NO and press the <ENTER> key.

NOTE: We recommend that you keep your program files separate from your data files.

- B. When the next window opens, type the name of your new data path as C:\TRAPS\DATA and press the TAB key to move the cursor to Continue, and then press the <ENTER> key. The next window confirms that your new data path is C:\TRAPS\DATA.

Your .TSS, .TSI and .TSO files will now be stored in the directory (data path) which you created. You will only need to do this procedure one time. The program will automatically default to this directory for saved files. You may now press the <ENTER> key to return to the menu screen for accessing data files. Then enter 0 to exit the program. When the next screen comes up, you should use the TAB key and move the cursor to "Return to Sizing Program" and press the <ENTER> key again to return to the Main Application Menu.

Choice 2. Delete Sizing Input Files (.TSI)

- A. Select No. 2 and press the TAB key to move the cursor to Continue and then press the <ENTER> key. A window will open listing the .TSI file names you have saved. Select the file you want to delete by using the arrow keys or a mouse and press <ENTER>. A message asking if you really want to delete this file will appear on the screen - YES or NO? The program will default to YES. If you do not want to delete the file you selected, use the TAB key to move the cursor to NO and then press <ENTER>.
- B. If you change your mind and do not want to delete the file you selected while you are in the file name window, simply use the TAB key and move the cursor to CANCEL. Then press the <ENTER> key.

Choice 3. Delete Sizing (Output) Specification Files (.TSO)

- A. Select No. 3 and press the TAB key to move the cursor to Continue and then press the <ENTER> key. A window will open listing the .TSO file names you have saved. Select the file you want to delete by using the arrow keys or a mouse and press <ENTER>. A message asking if you really want to delete this file will appear on the screen - YES or NO? The program will default to YES. If you do not want to delete the file you selected, use the TAB key to move the cursor to NO and then press <ENTER>.
- B. If you change your mind and do not want to delete the file you selected while you are in the file name window, simply use the TAB key and move the cursor to CANCEL. Then press the <ENTER> key.

Choice 4. Delete Sizing Specification (Output) Schedule Files (.TSS)

- A. Select No. 4 and press the TAB key to move the cursor to Continue and then press the <ENTER> key. A window will open listing the .TSS file names you have saved. Select the file you want to delete by using the arrow keys or a mouse and press <ENTER>. A message asking if you really want to delete this file will appear on the screen - YES or NO? The program will default to YES. If you do not want to delete the file you selected, use the TAB key to move the cursor to NO and then press the <ENTER> key.
- B. If you change your mind and do not want to delete the file you selected while you are in the file name window, simply use the TAB key and move the cursor to CANCEL. Then press the <ENTER> key.

Choice 5. Instructions

- A. Select No. 5 and press the TAB key to move the cursor to Continue and then press the <ENTER> key to return to the Maintenance Menu.

Choice 0. Exit This Menu

- A. Select No. 0 and press the TAB key to move the cursor to Continue and then press the <ENTER> key. This will return you to the "Access to Data Files" menu. Using the TAB key, move the cursor to "Return to Sizing Program" and press the <ENTER> key to return to the Main Application Menu.

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