



# AFS Options Manual

*AFS-1*

*AFS-2*

*AFS-3*

*AFS-1HS*

*AFS-2HS*

*AFS-4HS*

***Every AFS machine is fully tested, lines balance and gas sensors calibrated before it leaves the factory. Please follow instructions in the following pages to ensure setpoints are correct for your facility.***

**Note:** This manual contains photographs and screen shots of an AFS-4. This manual and all operator functions are applicable to: AFS-1, AFS-2, AFS-4, AFS-1HS, AFS-2HS, and AFS-4HS. All efforts have been made to cover all settings and any changes to recommended settings should be fully understood by the operating facility.

## Table of Contents

Barcode Scanner

Barcode Log File

Daily Log File

Intra/Internet Access (including Website)

Change IP Settings

Network Settings

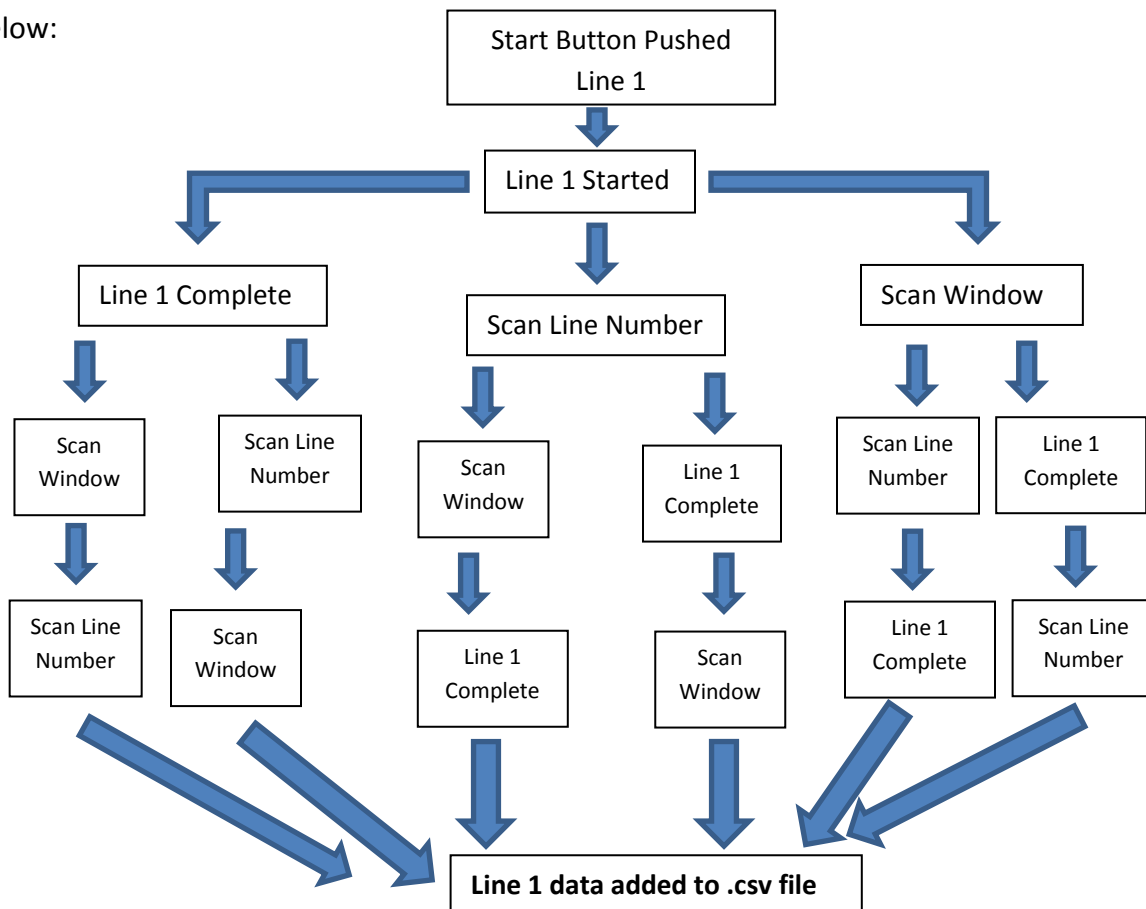
**Note:** Using the AFS data collection options will result in files that are written to the SD card in the PLC. The SD card slot is located on the top of the PLC in the door panel of the AFS machine.

## Barcode Scanner

This AFS option saves the argon fill information for each window scanned. The specific information that is saved is listed in the next section, Barcode Log File, which is the file that is created as a result of using the barcode scanning feature. This section merely explains how to use the scanner and its intended sequences of operation.

How to Use:

When the Start button is pressed to begin the process of gas filling, the Barcode Scanning process is reset. Once Start is pressed, the operator may then begin the barcode scanning process. For each cycle, two scans must be taken. The operator must scan both the barcode that represents the Line # and the barcode of the IGU being filled. These two items can be scanned in any order. See the following flowchart for sequence analysis. The IGU barcode and the Line # barcode must be scanned sequentially to properly store the data. The scanning can take place at any time during the cycle (or after the completion of the fill cycle), but must be done prior to pushing the start button for the next unit of the same line. Example for “line 1” below:



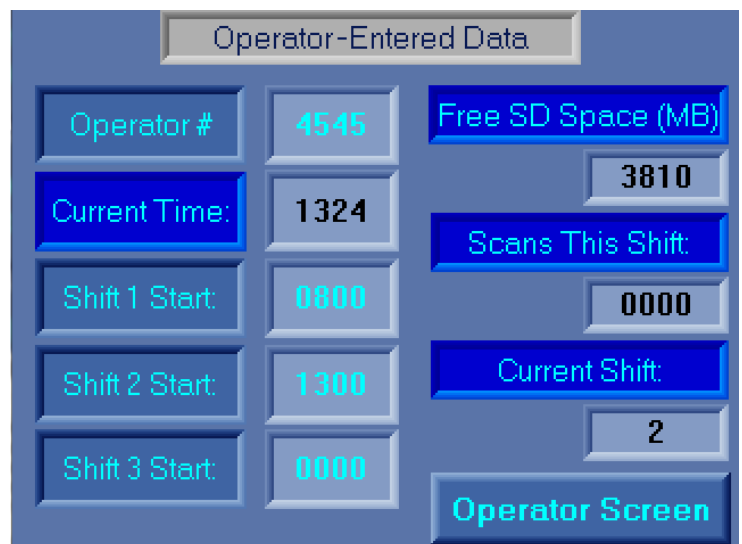
In this manner, all of the lines can be started and scanned in any sequence.

## Barcode Log File (AFSWINDW.csv):

Using the Bar Code Scanning option creates a file containing the following information:

1. Shift Number
2. Operator Number
3. Time of Day (hhmm)
4. Date (ddmm)
5. Year
6. Barcode Number (12 separate numbers, resulting in 12 columns in the spreadsheet)
7. Fill Percentage (957 indicates a 95.7% fill percentage)
8. Time to Fill (231 indicates a 23.1 second fill time)
9. Line Number (1-4)

The Shift # and Operator # are determined by the data entered on the “Operator-Entered Data” screen. The numbers that are not black are editable using the touchscreen on the controller.



## Daily Log File (DAILYVAL.csv):

Every day the following information is added

1. Current Year
2. Current Date (ddmm)
3. Number of Cycles for Line 1 (for that day)
4. Number of Cycles for Line 2
5. Number of Cycles for Line 3
6. Number of Cycles for Line 4
7. Total Number of Cycles (for that day)
8. Average Cycle Time for Line 1 (for that day)
9. Average Cycle Time for Line 2 (234 signifies an average time of 23.4 seconds)
10. Average Cycle Time for Line 3
11. Average Cycle Time for Line 4
12. Total Average Cycle Time (for that day)
13. Daily Average Time between Cycles (minutes)
14. Total Argon Used during the last completed shift 1 (in liters)
15. Total Argon Used during the last completed shift 2 (at the point of the file save)
16. Total Argon Used during the last completed shift 3
17. Total Argon Used during the last 3 completed shifts

## Inter/Intra-net Access (AFS Option – Internet/Email/Web-Server Connectivity)

The Daily Log file and the Barcode Log file can both be accessed remotely, either on a local network or over the internet (if option is purchased). Adjust the IP Settings is by selecting Edit IP Settings from the System Status screen.



**Note:** The changes you make from the “Edit IP Settings” screen will not take effect immediately. You must cycle the power in order for the updated IP settings to take effect.

## Network Settings

The SD Card in the PLC will contain a folder named “Web”, which contains the .htm files that will allow the data files to be accessed. **The username/password for the login is: afsys/argon.**

Selecting “Daily Data” will download the DAILYVAL.csv file. Selecting “Barcode Data” will download the AFSWINDW.csv file.

Assume for this example that the IP Address of your AFS Machine is set to 192.168.0.10 and the IP Address of your internet router is 78.93.103.22. If the computer that you are accessing this webpage on is on the same local network as your AFS Machine (so you are trying to access it over Intranet), then in your Internet Explorer browser, you need to enter 192.168.0.10. If the computer that you are attempting to access this webpage on is outside of the local network (so you are trying to access it over the Internet), then you need to type in 78.93.103.22. The router that has that IP address must be forwarding port 80 internet activity to 192.168.0.10.





Argon Filling Systems, Inc.

1000 Westgate Drive, Suite 151

St. Paul, MN 55114

Phone: 651-757-3472

Fax: 651-305-5154

**Made in the USA**