


# Main Start-up Screen

WAITING ON START SIGNAL FROM UPSTREAM	LOGON STATUS:	DEFAULT	
	CURRENT RECIPE:	shapes	
	MACHINE STATE:	AUTO WAITING	
	MACHINE MODE:	AUTO	

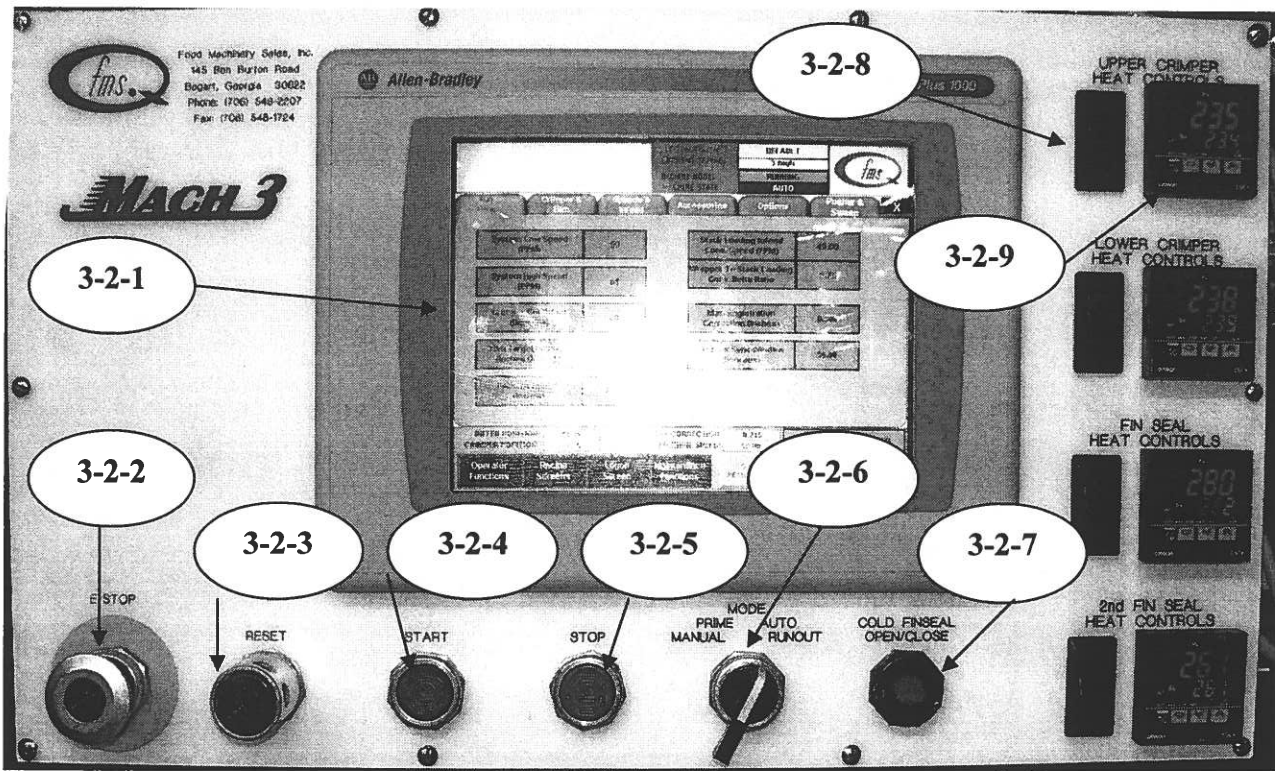


BIFEED POSITION:	0.625	LAST CORRECTION:	-0.250			
CRIMPER POSITION:	359.8	MACHINE SPEED:	0.000			
LOGON	RECIPE	ALARM HISTORY	COLD FINWHEEL CLOSED	OPERATOR FUNCTIONS	INPUT / OUTPUT MONITOR	MAINT. / ADMIN. FUNCTIONS

This is the Screen the Machine will start up with at Power up. From here the operator can go to the logon screen and enter there assigned code. Then they will be able to enter all screens accessible at their logon level.



## Main Control Panel



**Fig. 3-2 Main Control Panel**

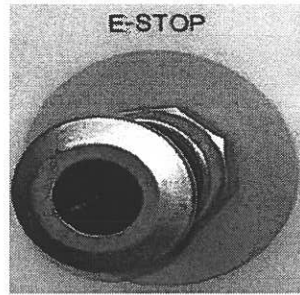
The Main Control Panel contains an Operator Interface Terminal that is a Touch Screen display. At the bottom of the Control Panel are operator control buttons, used to control the wrapper. The Screen display allows the operator quick access to the many control screens that operate and configure the wrapper, at the touch of the screen. The operator can select options to various screens by touching the button for that screen. The buttons and switches control the Start, Stop, and Mode settings and open the cold fin wheels. The heat controllers are for adjusting and monitoring heat to the Upper and Lower Crimpers and the 1<sup>st</sup> and 2<sup>nd</sup> Fin Seals. The bat switches are for toggling the heat controllers On of Off.

### 3-2-1 Operator Interface Terminal (OIT/MMI)

The Operator Interface Terminal is a Touch Screen display used to monitor, and allows the operator quick access to the many control screens that operate and configure the wrapper. The OIT has Standard communications (Ethernet & RS232), DC input, 128 MB Flash/128 MB RAM.

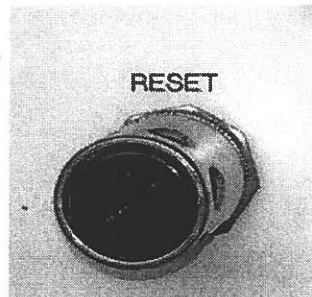


### 3-2-2 Emergency Stop Button



Turns off power to all motors and control power. The wrapper will come to an immediate stop. Servomotors will lose power not their reference position. In order to restart the wrapper, the e-stop needs to be reset. Depending on customer specifications, there may be more than one emergency stop on the machine.

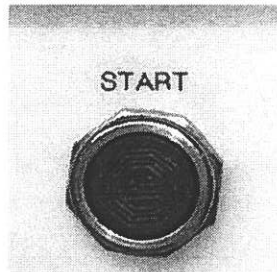
### 3-2-3 Reset Button



Push to reset after an emergency stop condition. Once this button is pressed, the Wrapper will reset to home if all alarms/safeties have been cleared.

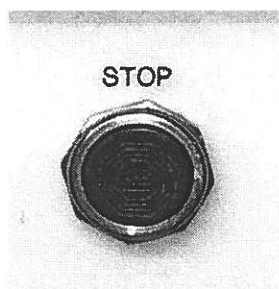


### 3-2-4 Start Button



Push to begin normal production depending on the mode of operation selected and the Green light will be on signaling that it is running. If the green light is flashing the wrapper is waiting for an upstream or downstream piece of equipment and a message will be displayed on the error screen.

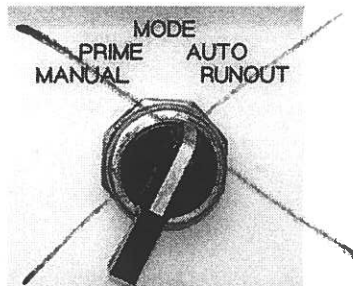
### 3-2-5 Stop Button



Push the stop button the wrapper will slow and then stop at the end of the cycle. Servos will not lose their reference position. The Amber light will be on when the wrapper has stopped.



### 3-2-6 Mode Switch (4-positions)



*NOT APPLIED*

#### 3-2-6.1 Manual

This is used for maintenance purposes and setup. The equipment will not look for any inputs from other equipment. Film and cards can be setup in this position the machine will not be checking for product.

#### 3-2-6.2 Prime

This position is used for sanitation when the wrapper is started in this mode only the flight chain will run so the chain can be washed.

#### 3-2-6.3 Auto

If there is no product the wrapper waits till it receives a signal from the robot to start. The green light will be blinking till all conditions are right.

#### 3-2-6.4 Runout

Runout ignores the upstream and downstream ready signals. It also does not care if the cards are placed or the infeed sensors see product very much like manual.

### 3-2-7 Cold Finseal Button



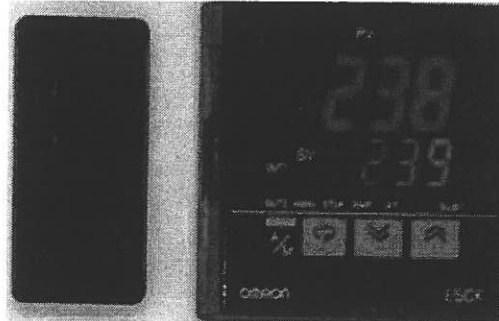
Push first time to open the cold finseal. Push second time to close cold finseal. And indicator on the screen will indicate the state of the cold finseals as open or closed



### 3-2-8 Heat Control Switch (On/Off)

There are four heat controllers used they are called Upper Crimpers, Lower Crimpers, 1<sup>st</sup> and 2<sup>nd</sup> Fin Seals. Each one has it's own heat Control Switch On/Off. This switch is used to turn on the heat controller unit for operation or turn off for service.

### 3-2-9 Heat Controller Units



The four heat controller units used for the wrapper are interfaced with thermocouples; these controllers provide quick setup and precise temperature management of the application.

The PID control with analog or on/off outputs greatly reduces or eliminates temperature swings, helps stabilize workload temperature, improves control efficiency, increases component life and reduces energy costs. Using the PID control method, auto tuning allows for fast startup of a heating, cooling or heating and cooling temperature application with little operator knowledge of the system's characteristics.

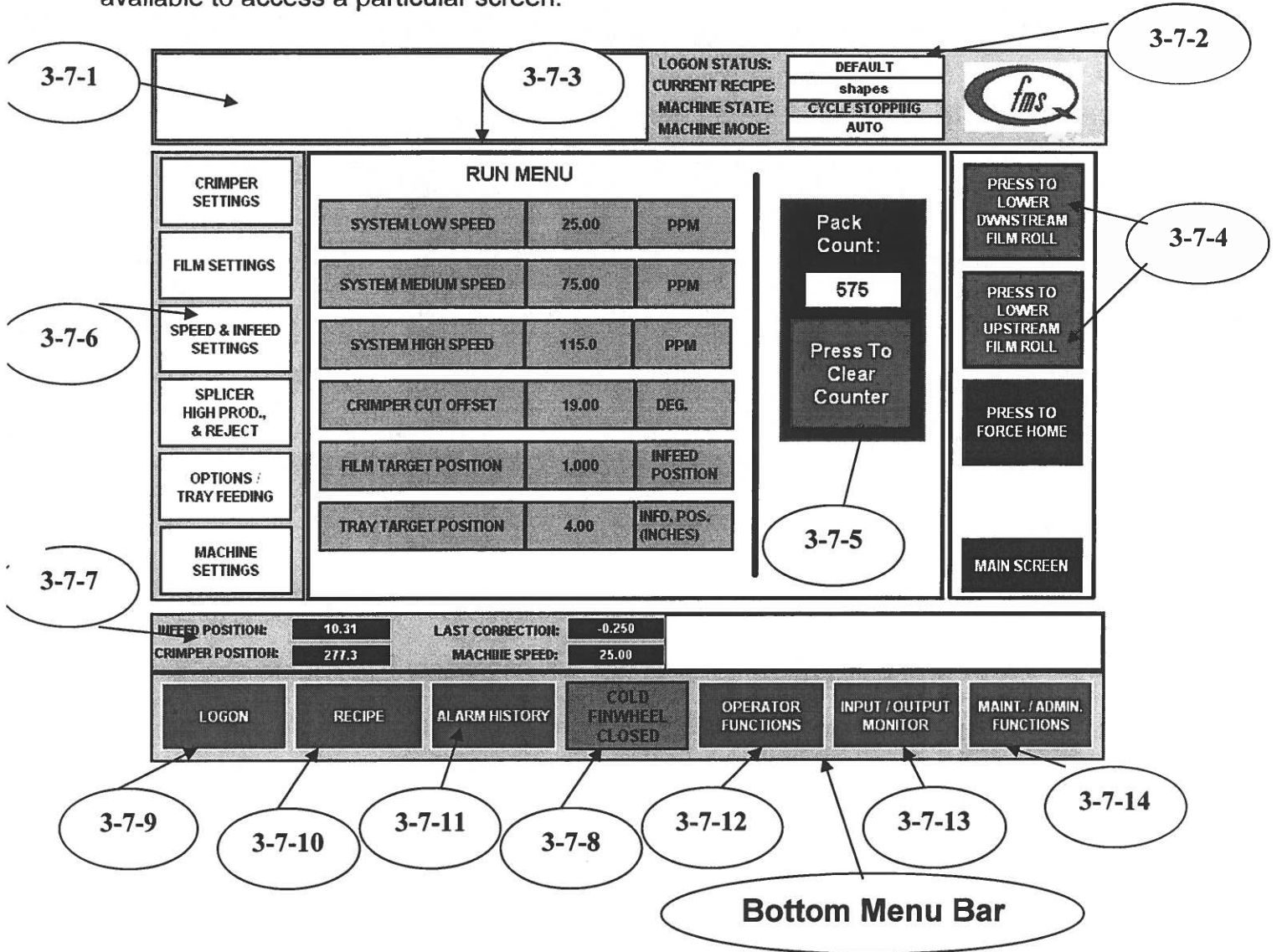
The LED display helps ensure excellent process parameter visibility in many levels of ambient light. LED technology is highly reliable and uses less power than other technologies, reducing maintenance and power costs.

A current transformer (CT) is not provided with the unit to provide indication as to whether a heater is open or overloaded.



### Main Operator Touch Screen

The normal operating screen for the Operator to use, this has all the parameters that the Operator needs for the wrapper. No Logon or code is needed for this screen. The Menu Bar runs along the bottom of the Screen Display indicates which options are available to access a particular screen.



**Fig. 3-7 Main Operator Touch Screen**

#### 3-7-1 Alarm Banner

This will display all active alarms and as the alarms are cleared, they will be removed from the box. The wrapper will not run until all of the alarms are cleared. The temperature alarms will clear as the heaters reach their set points.



*Main Operator Touch Screen (cont.)***3-7-2 Wrapper Status Areas**

Important information at a glance they are current; Logon on status, Current Recipe, Machine State, and the Mode of the Wrapper.

**3-7-3 Run Menu Area**

These parameters are the most used parameters by an Operator and can be accessed without a Logon code. They will be covered later in the chapter.

**3-7-4 Film Roll Buttons**

The Film Roll buttons allow the operator to Lower and Raise the film spool assemblies for easy loading of the new rolls of film. They are maintained switches, when pressed the film will lower to a more easily loading height. Pressing the button after loading will slowly raise the assembly to the upper storage height.

**3-7-5 Pack Counter**

This counts the total amount of packages from the crimper; this does not tell good from bad packs only the total off the wrapper.

**4-7-6 Setup Parameter Screens**

These parameter screens may or may not be accessible from an operator level. They may only be available at Maintenance or above Logon Level. Depending on company supervision.

**3-7-7 Position Bar**

The **infeed position** in inches this is the length of the flight, which is <sup>9</sup>~~12~~ inches on this wrapper and rolls over at twelve to 0. This is for setting up parameters in the setup files.

The **crimper position** in degrees of rotation 0 to 360 degrees as in the crimper offset position. This is for setting up parameters in the setup files.

The **last correction** is used on registered film to show you the last film correction move in inches the wrapper made on the printed film.

The **machine speed** is indicated here when the wrapper is running.





***Main Operator Touch Screen (cont.)*****3-7-8 Cold Fin Open Close Indicator**

This is used to indicate the state of the Cold Fin as being open or closed.

**3-7-9 Logon**

Located in the Bottom Menu Bar is the Logon screen button. This screen is where you enter a code to gain access to the screens that is used for setup of the wrapper and control to the Infeed. Three different levels of access are used.

- A) Operator
- B) Maintenance
- C Administrator (FMS)

**3-7-10 Recipe**

Located in the Bottom Menu Bar is the Recipe screen button. This area displays the current level of access to the screens. It also displays the active recipe that is loaded for the wrapper to run a product. The display will also indicate if any changes were made to the recipe loaded. If the product is running and no corrections need to be made the Save Recipe button should be pressed to save the Recipe to the Memory storage.

**3-7-11 Alarm History**

Located in the Bottom Menu Bar is the Alarm History screen button. This will display the Alarm screen. Used mostly to determine or trouble shooting the wrapper. It can be viewed or cleared to start a new record.

**3-7-12 Operator Functions**

Located in the Bottom Menu Bar is the Operator Functions screen button. This will return you to the operator run menu.

**3-7-13 I/O Monitor**

Located in the Bottom Menu Bar is the I/O Monitor screen button. This is a visual screen of the sensors on the wrapper and infeed you can use this to check the operation of the sensors. Red indicates off and green indicates the sensor is on, turning the input on or off.



*Main Operator Touch Screen (cont.)*

**3-7-14 Maintenance/ Administration**

Located in the Bottom Menu Bar is the Maintenance/Administrator screen button. Maintenance and Administration level screens, High-level access screens not for operator access. They might not require administration screens in some fms installations and is determined by fms engineering.



Run Menu Options Screen

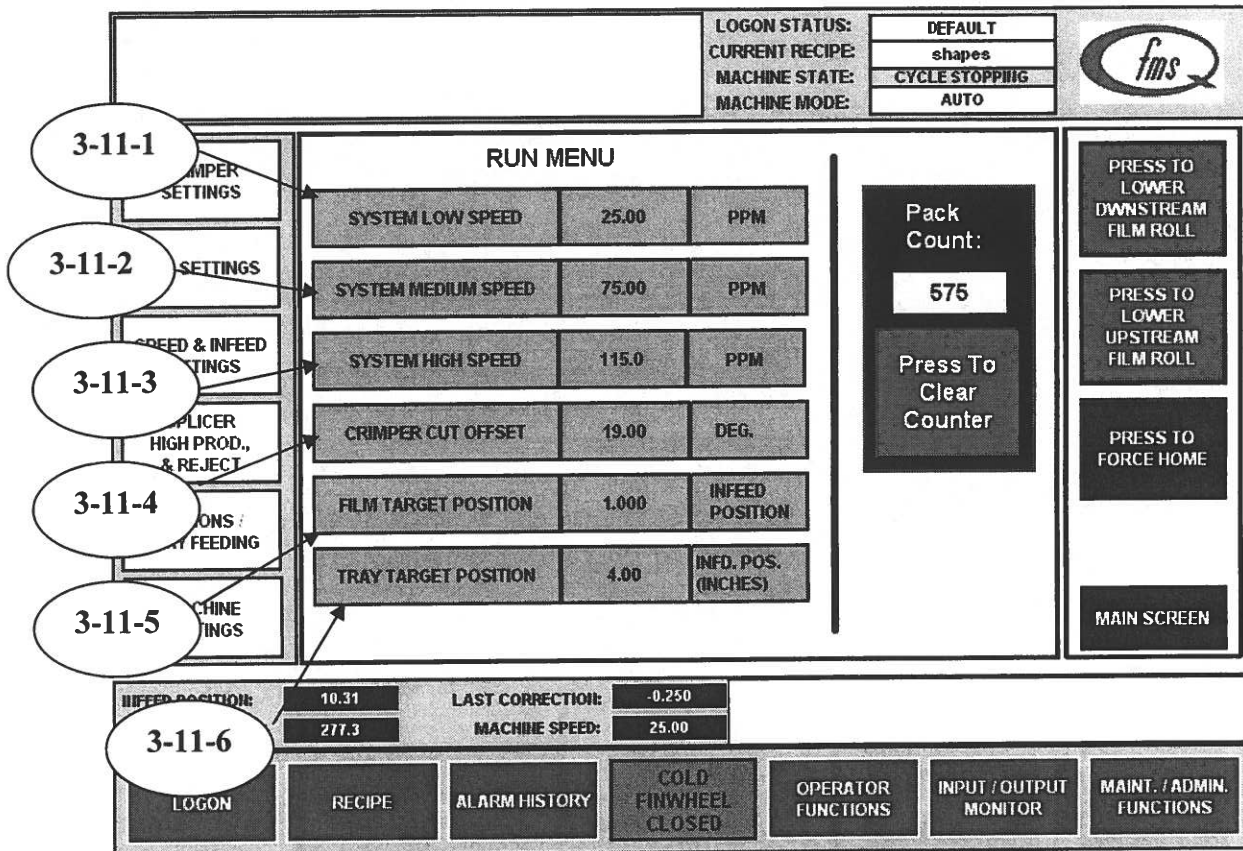


Fig. 3-11 Run Menu Options Screen

~~3-11-1 Low Speed~~

~~The lowest speed the wrapper will run, determined as to the product setup.~~

~~3-11-2 Medium Speed~~

~~The medium speed the wrapper will run, determined as to the product setup. Not used in this line.~~

~~3-11-3 High Speed~~

~~The highest speed the wrapper will run, determined as to the product setup. Not used in this line!~~



*Run Options Screen (cont.)***3-11-4 Crimper Offset Position**

Refers to the position of the cut head in relationship to the product. This should be set so that the cut is made in the center between the packs. Increasing the number brings in the crimper later moving the product forward and decreasing the number moves the back toward the infeed.

**3-11-5 Film Target Position*****Not used on clear or unprinted film!***

This value is used to center the film in relationship to the product. To move the print downstream (toward discharge) you decrease (-) the number. To move the print back toward the infeed of the wrapper increase the number (+).

**3-11-6 Tray Target Position**

This sets the position of the tray in relation to placing it in the flight pins of the wrapper. To move the product forward (moving the lug back) you decrease the number. To move the product backward (lug forward) you increase the number.



## Stack Indicator Lights

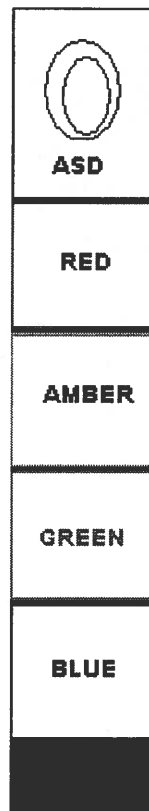


Fig. 3-13 Stack Indicator Lights

**Red Light (Steady)** An emergency stop condition has occurred.

**Amber Light (Steady)** Machine is ready to run (all alarm conditions have been cleared). This light illuminates after a cycle stop condition or after the wrapper has been reset.

**Amber Light (Flashing)** The wrapper has been reset and is checking home position or the Wrapper is being jogged.

**Green (Steady)** Wrapper is running.

**Green (Flashing)** The Start button has been pressed, but the machine is waiting for a signal from the upstream or down stream equipment, indicating that it is ready, before starting.

The splicer is "armed" and ready. A new roll is loaded and splicing can begin when the end of film is detected on the old roll.



**Audible Signaling Device (ASD)**

**(2 Seconds Steady)** Indicates the machine is ready to start-up.

***Keep Hands clear of the Machine!!!!***

**Audible Signaling Device (ASD)**

**(4 Short Beeps)** At the end of the fourth beep, the machine will home.

***Keep Hands clear of the Machine!!!!***

**Audible Signaling Device (ASD)**

**4** **(3 Short Beeps)** The wrapper is stopping for a high product on the infeed, clear high product and restart the wrapper.

***Keep Hands clear of the Machine!!!!***



**QUICK START****Wrapper Operators Start-up Check List**

Turn on the power to the Wrapper!

Turn on the heaters for the Crimper and Fin wheels.

**Do not run the Wrapper until the Rails are Properly cleaned on the feeder and wrapper infeed!**

Check all safety switches on the wrapper for proper operation, and Alarms.

Check the operation of the Photo Eyes on the infeed, for operation and alignment. Notify maintenance of any problems found.

High Product Photo Eye  
 Product Present Photo Eye  
 Wrapper Product Photo Eye  
 Infeed Product Between Flights Photo Eye  
 Low Speed Photo Eye  
 High Speed Photo Eye  
 90-degree Transfer Infeed 1<sup>st</sup> Backlog Photo Eye  
 90-degree Transfer Infeed 2<sup>nd</sup> Backlog Photo Eye  
 90-degree Transfer Outfeed Backlog Photo Eye  
 90-degree Transfer Infeed Product Present Photo Eye  
 Product In Position Photo Eye  
 Split Belt Length Detection Photo Eye  
 Split Belt #1 Inspection Photo Eye (3-High)  
 Split Belt #2 Inspection Photo Eye (4-High)

Turn the wrapper mode switch to the Manual position.

Load the film and thread the film into the former open the cold fin wheels pull the film past the cold fins and close press the button to close the fins.

Press the start button and run the film to check it is tracking properly!

Pull out the Emergency stop button and clear any Alarms on the top of the wrapper display screen.

**This is only on power-up!** If all Alarms are clear the blue light for the Reset button will flash. Press the Reset button and the wrapper will home. First the Flight chain will find it's Home position. Then the Crimper will find it's Home. Last they will sync together.



Thread the film through the film feed and into the former...close fin wheels.

The Amber light will be on solid if the wrapper is ready to go.

Turn the wrapper mode switch to the Auto position.

If the Sweep ready Press the Green Button.

***Start – Up After Cycle Stop***

Clear any “ soft fault alarm conditions indicated in the Upper Left corner of the Touch Screen.

Press the Start Button.

***End of Day Shut-down***

Run out all Products.

Open the Pinch Roller to prevent flats spots on the roller surface.

Turn off the Heat on the Crimpers and Fin Wheels.

Log Off the Wrapper and E-Stop the Wrapper.

Log Off the Loader and Press the E-Stop button.





# Alarm History Screen

	LOGON STATUS: <b>DEFAULT</b> CURRENT RECIPE: <b>shapes</b> MACHINE STATE: <b>RUNNING</b> MACHINE MODE: <b>AUTO</b>	
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ALARM HISTORY

Alarm time	Acknowledge time	Message
* 9/20/2004 1:06:17 PM	9/20/2004 1:06:29 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:06:11 PM	9/20/2004 1:06:14 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:06:07 PM	9/20/2004 1:06:08 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:05:55 PM	9/20/2004 1:06:04 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:05:35 PM	9/20/2004 1:05:45 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:05:21 PM	9/20/2004 1:05:32 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:05:06 PM	9/20/2004 1:05:08 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:04:43 PM	9/20/2004 1:05:03 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:04:35 PM	9/20/2004 1:04:40 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:04:31 PM	9/20/2004 1:04:33 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:04:20 PM	9/20/2004 1:04:26 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:03:54 PM	9/20/2004 1:04:05 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:03:48 PM	9/20/2004 1:03:49 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:03:33 PM	9/20/2004 1:03:39 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:03:18 PM	9/20/2004 1:03:25 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:03:11 PM	9/20/2004 1:03:16 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:02:52 PM	9/20/2004 1:03:10 PM	HIGH PRODUCT DETECTED
* 9/20/2004 1:02:32 PM	9/20/2004 1:02:48 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:02:29 PM	9/20/2004 1:02:29 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:02:25 PM	9/20/2004 1:02:26 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:02:21 PM	9/20/2004 1:02:21 PM	WAITING ON START SIGNAL FROM UPSTREAM
* 9/20/2004 1:02:14 PM	9/20/2004 1:02:15 PM	WAITING ON START SIGNAL FROM UPSTREAM

CLEAR ALARM HISTORY

MAIN SCREEN

INFEEED POSITION:	2.748	LAST CORRECTION:	-0.250
CRIMPER POSITION:	74.65	MACHINE SPEED:	25.00

LOGON	RECIPE	ALARM HISTORY	COLD FINWHEEL CLOSE	OPERATOR FUNCTIONS	INPUT / OUTPUT MONITOR	MAINT. / ADMIN. FUNCTIONS
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**Fig. 3-17 Alarm History Screen**

This will display the Alarm screen. Used mostly to determine or trouble shooting the wrapper. It can be viewed or cleared to start a new record.

Active Alarm Screen, which lists any currently active alarm conditions. The condition will remain on the screen (alarm box upper left corner) until it is cleared. Several alarms can be displayed on this screen.



# Logon Screen

WAITING ON START SIGNAL FROM UPSTREAM	LOGON STATUS:	MHT	
	CURRENT RECIPE:	SHAPES	
	MACHINE STATE:	AUTO WAITING	
	MACHINE MODE:	AUTO	

LOGON

LOGOUT

USER NAME OPERATOR, USER: OP  
 USER NAME MAINTENANCE, USER: MNT  
 USER NAME ADMIN, USER: ADMIN

MAIN SCREEN

INFEED POSITION:	0.631	LAST CORRECTION:	-0.250
CRIMPER POSITION:	359.9	MACHINE SPEED:	0.000

LOGON	RECIPE	ALARM HISTORY	COLD FINWHEEL CLOSED	OPERATOR FUNCTIONS	INPUT / OUTPUT MONITOR	MAINT. / ADMIN. FUNCTIONS
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**Fig. 3-18 Logon Screen**

The Logon Screen selects the access level from Administrator, Maintenance or the Operator. The access level determines the number of screens available to you.

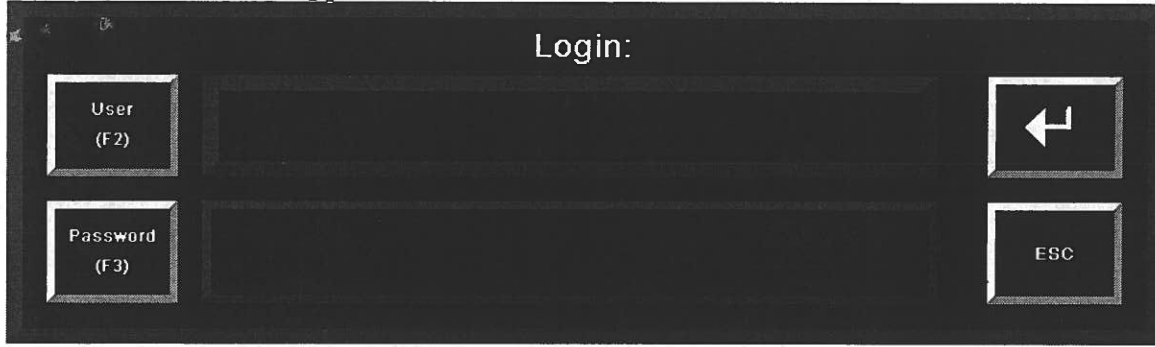
The Logout button changes back to the systems access level back to default.

To Logon to the Control Panel, touch the **Logon** button on the screen.

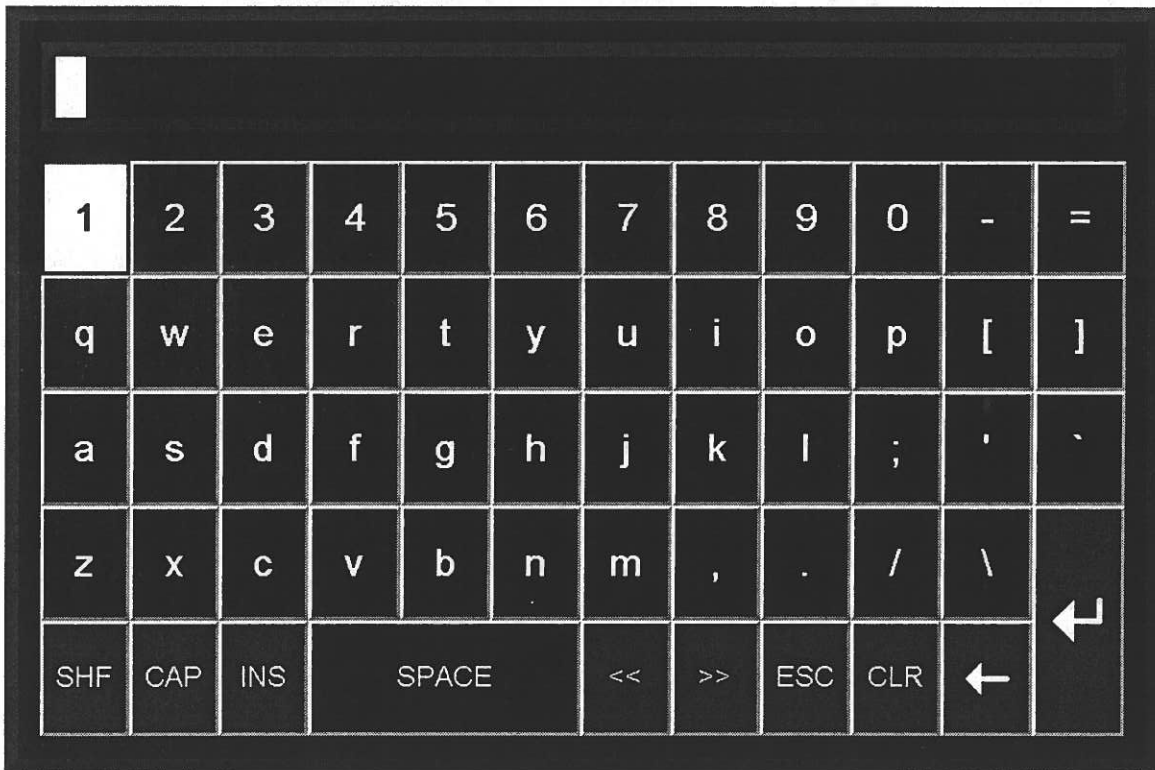
NOTE: The **Logon Status** block area on the top of the display will keep you informed as to user logon is active or inactive.



The Login screen will appear.



Pressing the User button will bring up the following keypad screen to enter your Logon level.



This screen allows users to change the current access level of the Operator Interface. To log on, the user must enter an access level and the password that corresponds to that access level.



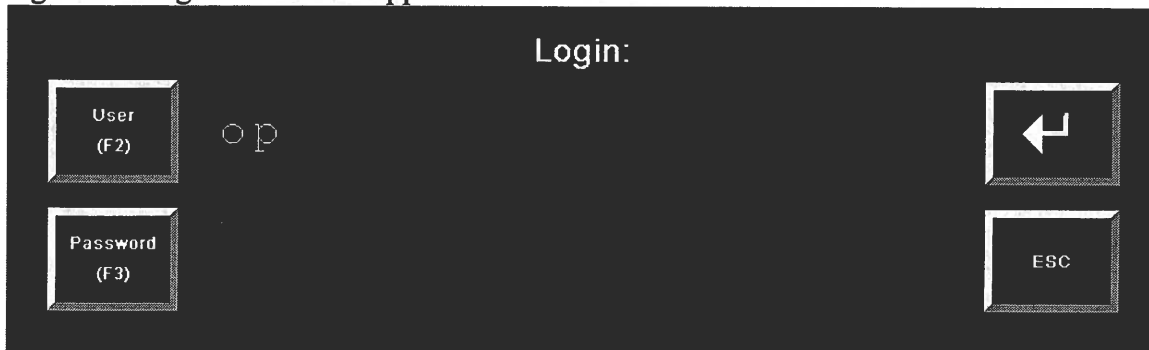
The available access levels are:

Access Level	User Name	Description
Default	<Logged Out>	The Default logon is the access level at system initialization. The Default logon has access to the following: <b>Operator Functions:</b> The <i>Run Menu</i> tab. <b>Recipe Screens:</b> No access. <b>Maintenance Functions:</b> <i>I/O Monitor</i> tab.
Operator	OP	The Operator logon allows access to all of the following: <b>Operator Functions:</b> All parameter screens except the <i>Machine Setup</i> tab. <b>Recipe Screens:</b> No access. <b>Maintenance Functions:</b> <i>I/O Monitor</i> Tab.
Maintenance	MNT	The Maintenance logon allows full access to all screens except Admin tab under <b>Maintenance Functions</b>
Administrator	ADMIN	The Admin logon allows full access to all screens.

NOTE: The **Logon Status** block area on the top of the display will keep you informed as to user logon is active or inactive.

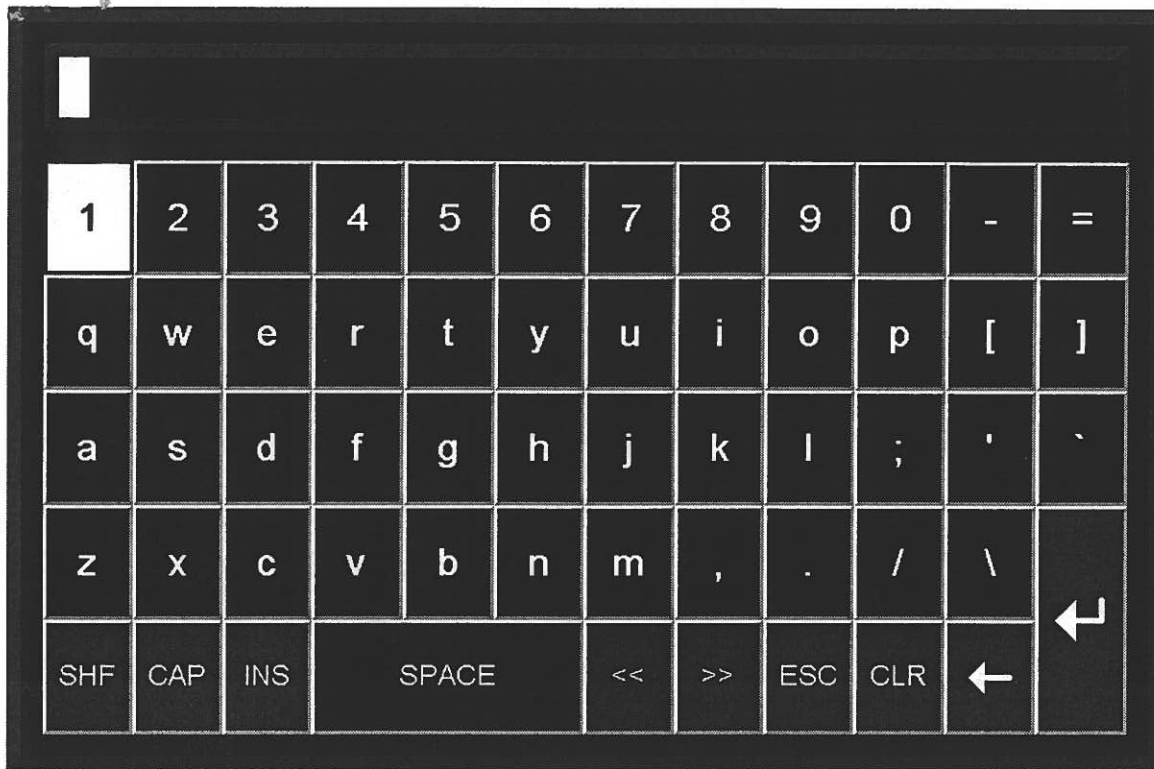
When you have entered your User Name, press the keypad screen's **Enter** key.

Again the Login screen will appear.



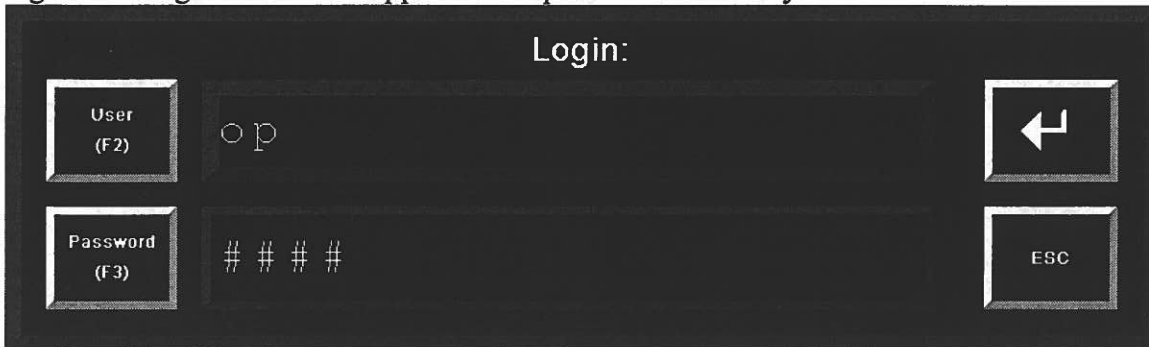
Pressing the **Password** button will bring up the keypad screen to enter your password.





When you have entered your password, press the keypad screen's **Enter** key.

Again the Login screen will appear. Now press it's **Enter** key.



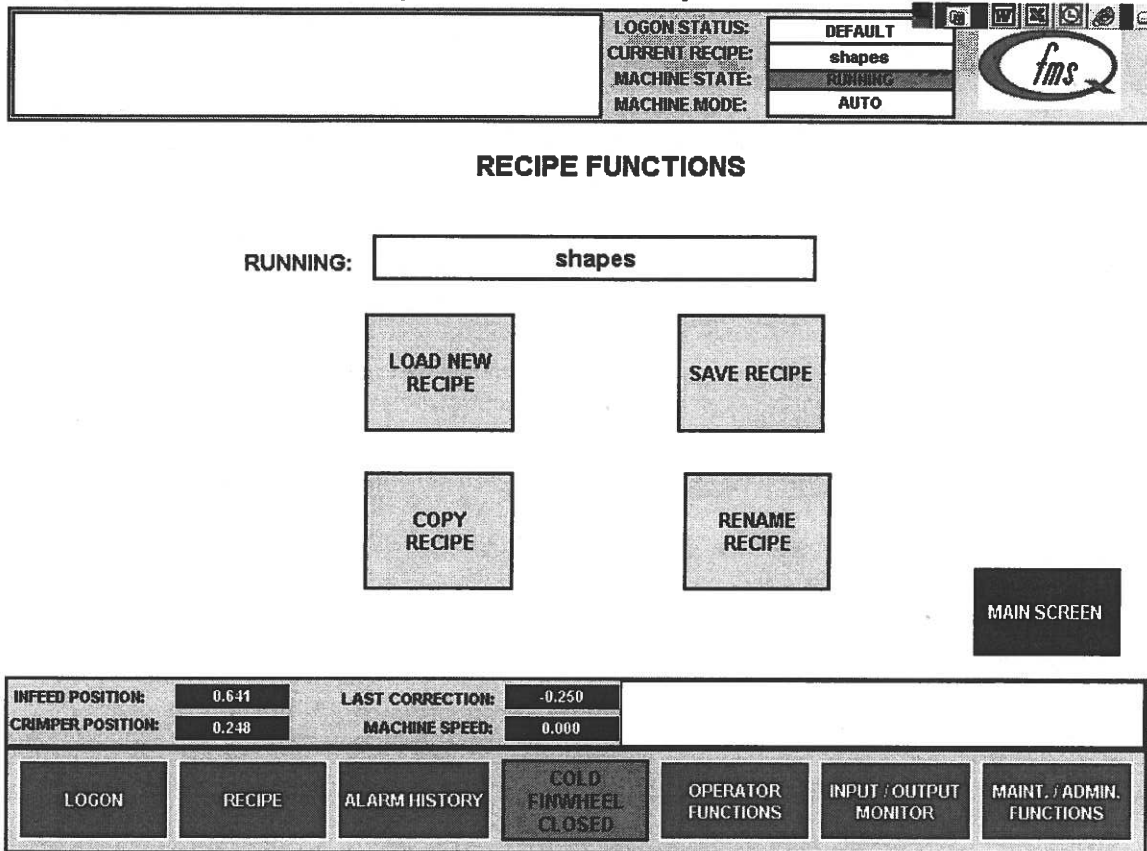
**NOTE:** The **Logon Status** block area on the top of the display will keep you informed as to user logon is active or inactive.



## Recipe Functions Screen

The **Recipe Screen** displays existing Product Setups and allows the operator to **Save** and **Download** new or existing product setups. These programs contain a record of settings for various types and sizes of products being run.

To access the recipe screen just **Press the Recipe Button** on the screen.

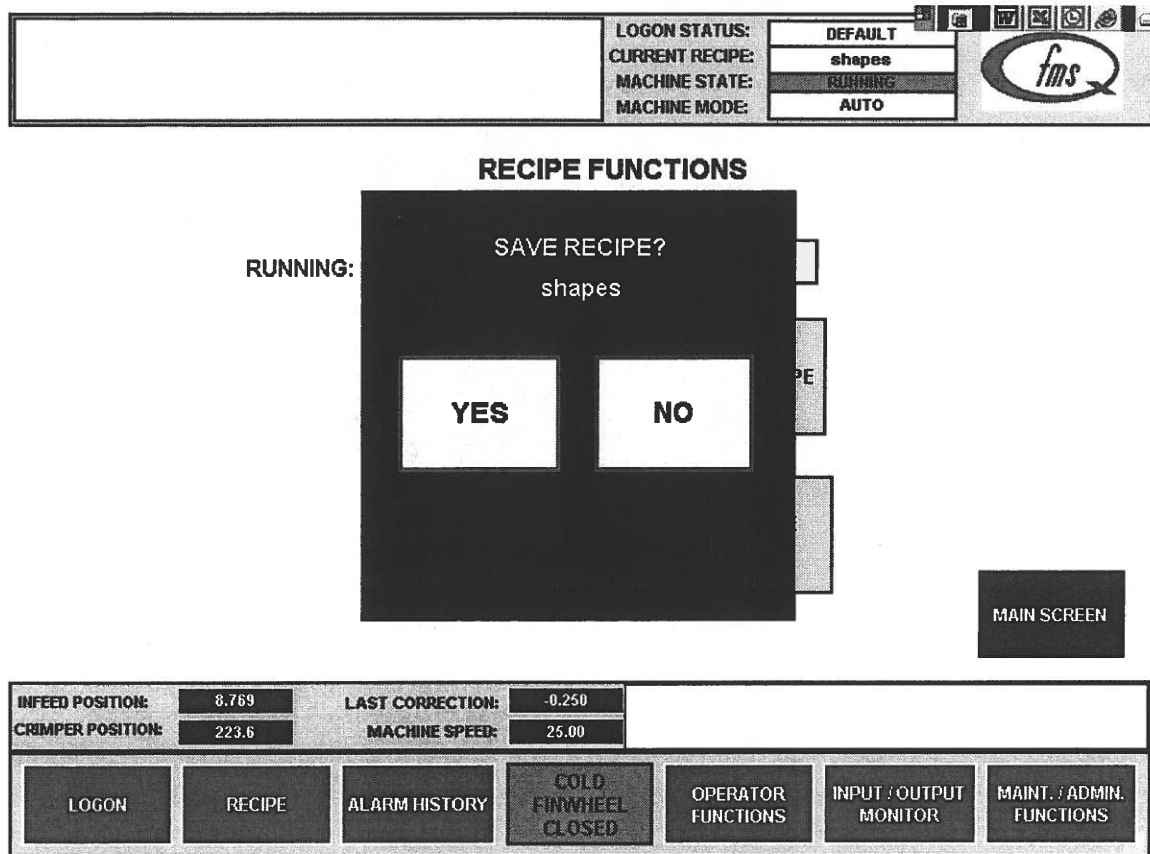


**Fig. 3-22 Recipe Functions Screen**

At this screen you select what you would like to do in the recipe file.



# Save Recipe Screen



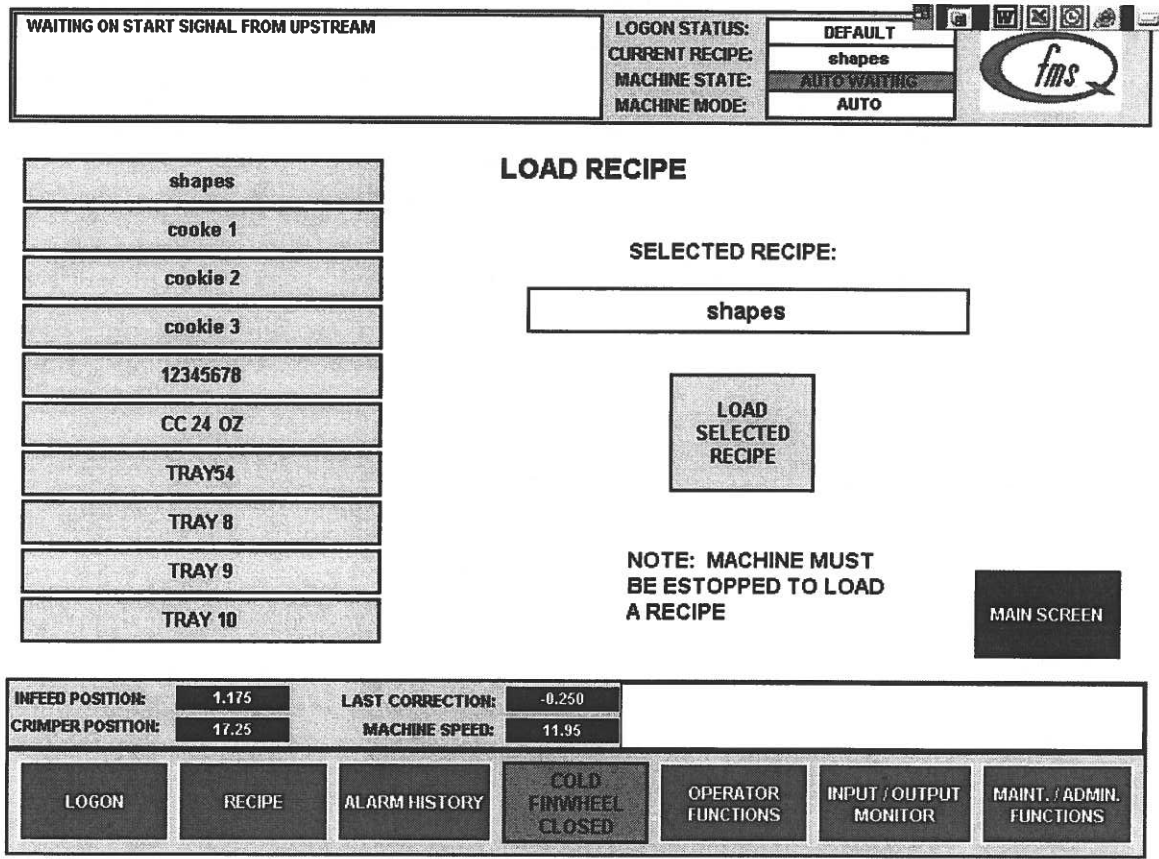
**Fig. 3-23 Save Recipe Screen**

Recipe Save will appear when the Save button is pressed a default will ask again Save Recipe Yes/No?



# Load Recipe Screen

The Wrapper needs to be stopped and the **E-Stop Button** pressed to change the recipe but can be saved at anytime.



**Fig. 3-24 Load Recipe Screen**

Touch the Recipe in the list on the Left to select. Then **press the Load Recipe** button.

Current recipe in the top of the screen will change and the alarm box will momentarily display Recipe Loaded.

