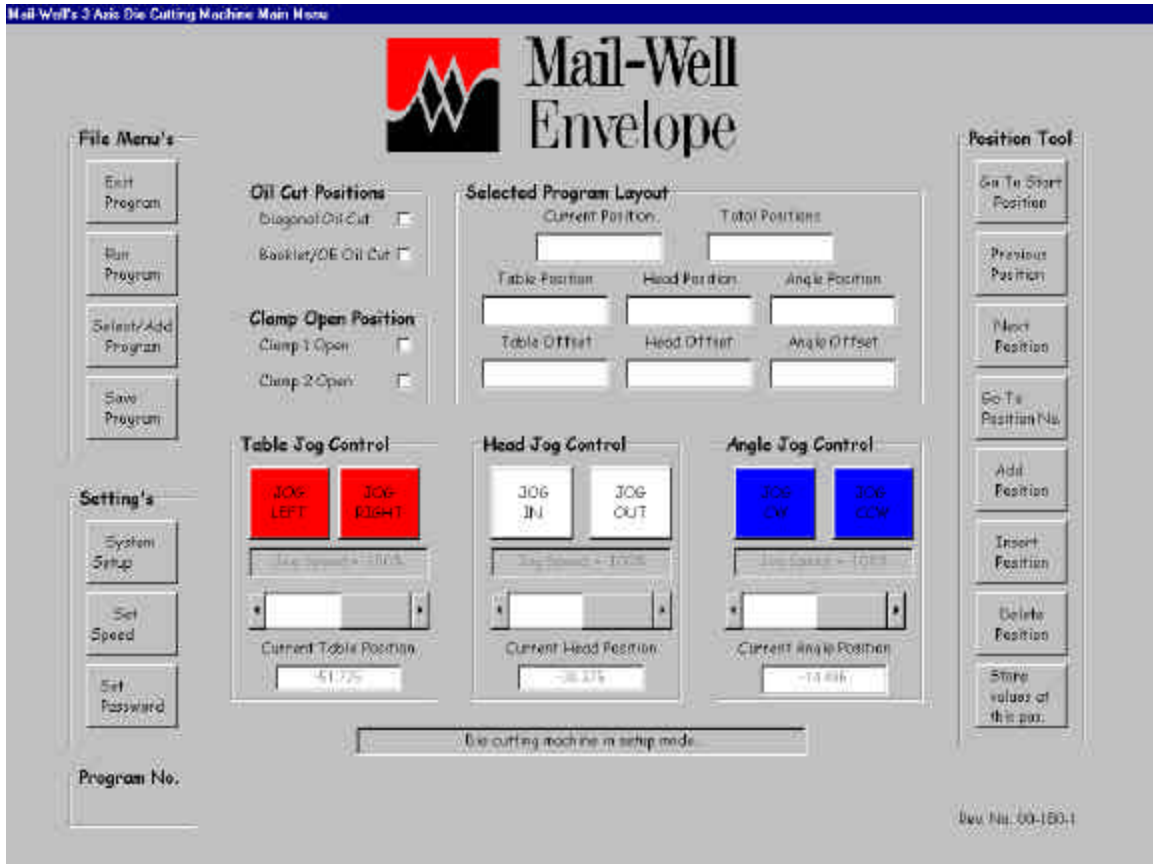# MAIL–WELL 3 AXIS DIE CUTTING MACHINE CONTROL SYSTEM
OPERATIONS MANUAL

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MAIL–WELL 3 AXIS DIE CUTTING MACHINE CONTROL SYSTEM
OPERATIONS MANUAL
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HOW TO SELECT A PROGRAM

1. Select a program. You do this by pressing the *Select/Add Program* on the main screen.

2. The database screen will appear with the programs.

3. If the program/record is not visible, you can scroll by pressing the arrow down key on the right side of the table.   Or you can search for a die number by pressing the text box below the *Search Die No.*, enter the die number using the keyboard screen, then press Search Die No. The table above will show all the records with that die number. Or you can search for an envelope height and width by pressing the text boxes below the *Enter Height* and *Enter Width* and enter the height and width you want to search for, and then press *Search Size*. The table above will show all the programs/records that have that envelope height and width.

4. Highlight the program/record you want by pressing the Die No. field of the record on the table.

5. Press the *Select Program* button.

6. The program is now selected and the main screen will appear.

HOW TO RUN A PROGRAM IN AUTO MODE

1. Lower the Safety Window.

2. Insure the Lift Davit is in place with the set pin inserted.

3. Switch the Program SS to the Off position.

4. Select the Position Adv. SS to the Auto position.

5. Select the Ejector Mode SS to the Norm position.

6. Make sure the Die Safety Foot Pedal is up and the Foot limit switch is pulled up.

7. Load envelope paper.

8. Pull the Emergency Stop PB out.

9. Push the Control Power On PB in. The PB should illuminate white to indicate that control power is on.

10. Push the Hydraulic Pump Motor On PB. The PB should illuminate green to indicate that the pump motor is running.

11. Remove the die safety spacer from the hydraulic press and set it in the die safety spacer holder. Note that there is a switch to check that the die safety spacer is in the holder. The machine will not run without the die safety spacer in its holder.

12. Press the Alarm Reset PB to reset all alarms that occurred at start-up.

13. Home the servo motors by pressing the Cycle Stop PB & Alarm Reset PB simultaneously. The Cycle Start PB light will flash green as the servo motors are homing. When the servos are home the Start PB light will stop flashing.

14. Select the program to run with the computer touch screen database interface.

15. Set the computer touch screen program to run. Run will be indicated by the stop and go traffic signal light to be illuminated green.

16. Press the Cycle Start PB to start auto mode.

17. The machine will cut all positions and oil cuts and return to the start position.

18. Remove the cut envelope paper and load the new paper.

19. Repeat the process starting at step number 16.

HOW TO RUN A PROGRAM IN STEP MODE

1. Lower the Safety Window.

2. Insure the Lift Davit is in place with the set pin inserted.

3. Switch the Program SS to the Off position.

4. Select the Position Adv. SS to the Step position.

5. Select the Ejector Mode SS to the Norm position.

6. Make sure the Die Safety Foot Pedal is up and the Foot limit switch is pulled up.

7. Load envelope paper.

8. Pull the Emergency Stop PB out.

9. Push the Control Power On PB in. The PB should illuminate white to indicate that control power is on.

10. Push the Hydraulic Pump Motor On PB. The PB should illuminate green to indicate that the pump motor is running.

11. Remove the die safety spacer from the hydraulic press and set it in the die safety spacer holder. Note that there is a switch to check that the die safety spacer is in the holder. The machine will not run without the die safety spacer in its holder.

12. Press the Alarm Reset PB to reset all alarms that occurred at start-up.

13. Home the servo motors by pressing the Cycle Stop PB & Alarm Reset PB simultaneously. The Cycle Start PB light will flash green as the servo motors are homing. When the servos are home the Start PB light will stop flashing.

14. Select the program to run with the computer touch screen database interface.

15. Set the computer touch screen program to run. Run will be indicated by the stop and go traffic signal light to be illuminated green.

16. Press the Cycle Start PB to start in step mode.

17. The machine will cut one position, each time the start button is pressed. I.e. the machine will step through all the programmed positions each time the start button is pressed.

18. Once all the positions have been cut or stepped through, press the start button to return the servos to the start position.

19. Remove the cut envelope paper and load the new paper.

20. Repeat the sequence starting at position 16.

HOW TO MAKE A PROGRAM

1. Press the *Select/Add Program* button on the main screen. This will bring you to the data base screen.

2. Press the *Add Program* button on the database screen.

3. Press the *Die No:* text box.

4. Enter the *Die No:* by pressing the characters on the keyboard screen. As you press the characters on the keyboard screen, you will see what's been typed in the text box next to the *Data To Input:* label. When you have the *Die No.* you want, press the enter key.

5. Press the *Envelope Height:* text box.

6. Enter the *Envelope Height:* by pressing the characters on the keyboard screen. As you press the characters on the keyboard screen, you will see what's been typed in the text box next to the *Data To Input:* label. When you have the *Envelope Height* you want, press the enter key.

7. Press the *Envelope Width:* text box.

8. Enter the *Envelope Width:* by pressing the characters on the keyboard screen. As you press the characters on the keyboard screen, you will see what's been typed in the text box next to the *Data To Input:* label. When you have the *Envelope Width* you want, press the enter key.

9. Press the *Style:* text box.

10. Enter the *Style:* by pressing the characters on the keyboard screen. As you press the characters on the keyboard screen, you will see what's been typed in the text box next to the *Data To Input:* label. When you have the *Style* you want, press the enter key.

11. Press the *Flap Size:* text box.

12. Enter the *Flap Size:* by pressing the characters on the keyboard screen. As you press the characters on the keyboard screen, you will see what's been typed in the text box next to the *Data To Input:* label. When you have the *Flap Size* you want, press the enter key.

13. Press the *Sheet Length:* text box.

14. Enter the *Sheet Length:* by pressing the characters on the keyboard screen. As you press the characters on the keyboard screen, you will see what's been typed in the text box next to the *Data To Input:* label. When you have the *Sheet Length* you want, press the enter key.

15. Press the *Sheet Width:* text box.

16. Enter the *Sheet Width:* by pressing the characters on the keyboard screen. As you press the characters on the keyboard screen, you will see what's been typed in the text box next to the *Data To Input:* label. When you have the *Sheet Width* you want, press the enter key.

17. Press the *Number of Cuts:* text box.

18. Enter the *Number of Cuts:* by pressing the characters on the keyboard screen. As you press the characters on the keyboard screen, you will see what's been typed in the text box next to the *Data To Input:* label. When you have the *Numbers of Cuts* you want, press the enter key.

19. Check all your selections. If you want to change anything, repeat entering the data for the particular field you want to change.

20. Press the *Update Program* button.

21. The program will be added to the database and a *Machine Program:* number will be generated automatically.

22.   Press the *Die No.* field of the newly added program on the table above.

23.   The program/record should be highlighted on the table.

24.   Press the *Select Program* button.

25.   The program now goes to the main screen where you will train your positions.

HOW TO TRAIN POSITIONS FOR A PROGRAM

1. Select the Current Position that you want to train by using the Position Tool, *Next Position* and *Previous Position* buttons. If this is a new program there should only be one position.

2. Move the table, head, and angle servo motors via the joystick or jog control buttons to the position you want them. Note that you must have powered up the machine and homed the servo motors before you can jog the motors.

3. Press the *Store values at this pos.* button. The program will save the values of the current positions to the program cut position, i.e. step. If this is the last position of the program the program will automatically add another position for you to program. If you don't want to use the added position, simply delete it by pressing the delete position button.

4. Another way to program the positions is to directly enter the position value. The table and head positions are in millimeters and the angle position is in degrees. To enter a position value directly, press the text box below Table Position, Head Position, or Angle Position. The keyboard entry screen will appear for you to enter your new position value. If you want to edit a value, e.g. add 2 millimeters, you can press the add button on the keyboard screen, then press 2, then press enter. This makes minor adjustments easy to make.

5. If you want to check the position you just programmed you can move directly to it by using *the Go To Position No.* button. Select the position/programmed cut you want to go to by pressing the *Previous Position* or *Next Position* buttons, then press the *Go To Position No.* button. The machine will move to that position.

6. Make sure to save the program when changes have been made.

HOW TO ADD A CUT POSITION TO A PROGRAM

1. Press the *Add Position* button. This will add a position to the end of the program, i.e. if you have eight cuts, the *Add Position* button will add the ninth cut.
2. Once you've added the position simply train your position as instructed above.

HOW TO INSERT A CUT POSITION INTO A PROGRAM

1. Press the *Insert Position* button. This will insert a new position at the current position and automatically renumber the cut positions after the inserted position.
2. Once you've inserted the new cut position simply train your cut position as instructed above.

HOW TO DELETE A CUT POSITION FROM THE PROGRAM

1. Select the cut position to delete by pressing the *Next Position* or *Previous Position* buttons. Press the Delete Position button. This will delete the current cut position selected and automatically renumber the number of cuts in a program.

HOW TO MAKE AN OIL CUT POSITION IN A PROGRAM

1. Select the position you want as an oil cut by pressing the *Next Position* or *Previous Position* buttons. Press the *Diagonal Oil Cut* or *Booklet Oil Cut* button. This will make the current position an oil cut position. If you want a new position to be an oil cut position, add or insert a new position, then select it to be the oil cut position.

HOW TO SET THE CLAMPS TO OPEN IN A PROGRAM

1. Select the position you want a clamp to open by pressing the *Next Position* or *Previous Position* buttons. Press the *Clamp 1 Open* or the *Clamp 2 Open* box. This will make the current position the position where the selected clamp will open. The clamp will open after the cut at the position selected. If there are no clamp open positions selected, the clamps will open after the last cut

PUSH BUTTON DESCRIPTIONS

Emergency Stop PB ....When pushed in will drop control power to the complete control system and aborts the current machine cycle. The Emergency Stop PB will illuminate red when pressed.

Control Power On PB..........When pushed in will restore control power to the complete control system. The Emergency Stop PB must be pulled out for control power to be restored. The Control Power On PB will illuminate white when control power is on.

Hydraulic Pump On PB.......When pushed in will turn on the hydraulic pump motor. Control power must be on for the hydraulic pump motor to come on. The Hydaulic Pump On PB will illuminate green when the motor is on.

Hydraulic Pump Off PB.....When pushed in will turn the hydraulic pump motor off.

Position Advance SS..........When Man is selected the Start PB will have to be pushed each time to move the machine to the next position. When Auto is selected the Start PB will be pushed once to start the entire sequence, i.e., the machine automatically cuts all the positions until the cycle is complete, or the Stop PB is pressed, or an alarm occurs.

Cycle Start PB....................Starts the machine cycle and will illuminated solid green when the machine is running in auto mode. The Cycle Start PB will blink green when the servo motors are performing their homing sequence.

Cycle Stop PB.....................Stops the machine cycle when running in auto mode.

Alarm Reset PB...................Resets an alarm. Illuminates flashing red when an alarm is present.

Auto Cut SS ....When selected off the die will not cut the envelope. When selected on the die will cut at each position. When selected off the machine will only run in manual mode, i.e., the operator will have to push the start button to advance to each position.

Ejector Mode SS ....When selected to Norm the ejector will strip the paper after each cut. When selected to Low the ejector will stay down (low) while the machine is running.

Program Mode SS ....When selected on enables the Cycle Start PB to energize the ram cylinder down for programming purposes. This enables the operator to get the die close to the paper for programming the positions. Note, the table has to be clear of the clamps and over the paper for the ram cylinder to actually come down.

Open Clamp 1 PB ....When pushed will open clamp 1 if it is closed.

Open Clamp 2 PB.................When pushed will open clamp 2 if it is closed.

Close Clamps PB ....When pushed will close clamps 1 & 2.

MAIN MENU SCREEN DESCRIPTIONS
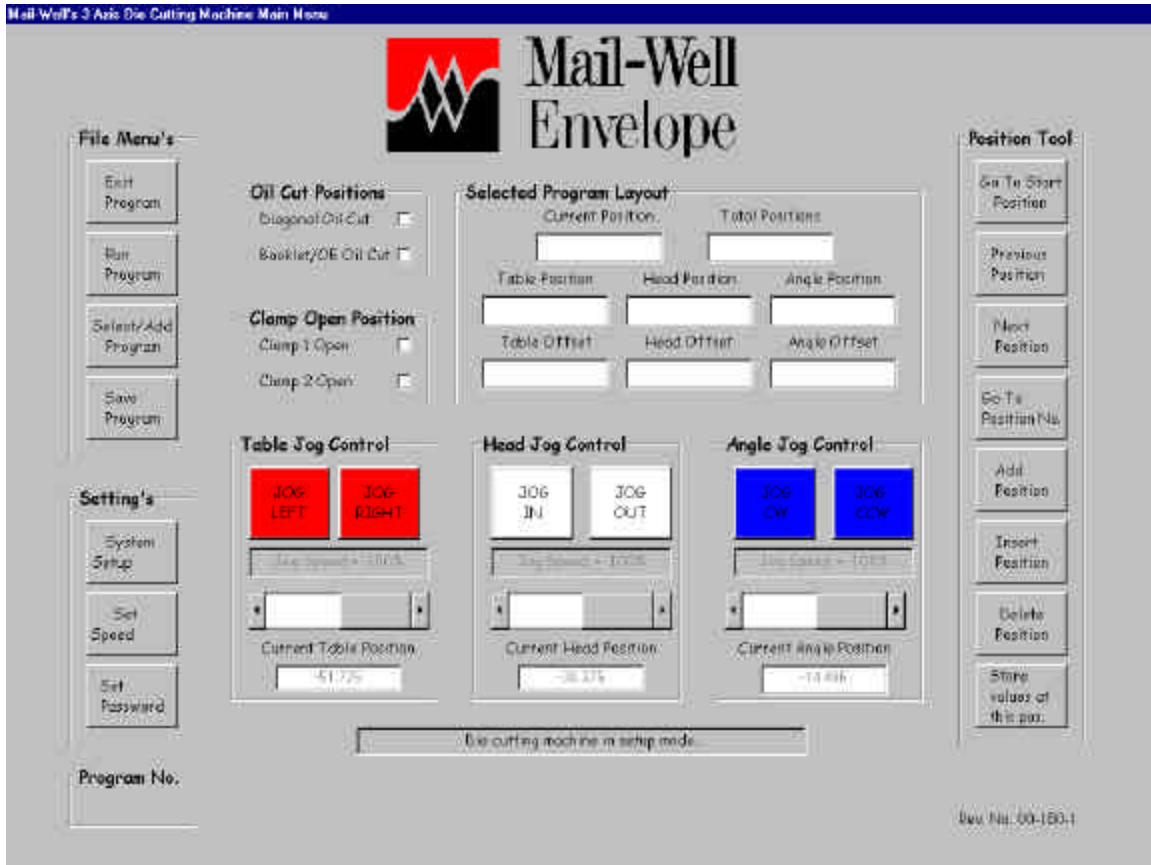
Exit Program ....Exits the computer touch screen program. This requires a system setup password to operate.

Run Program ....Selects the screen to run the program.

Select/Add Program.........Selects the screen to run the program.

Save Program......................Saves the current program positions to the program number in the database.

System Setup ....This is password protected. It is used to re-program the Diagonal & Booklet oil cut positions.

Set Speed...........................Sets the speed of the servo motors. The choice is based on a percentage of maximum speed. 100% is the maximum.

Set Password......................This is password protected. It is used to change the password.

Diagonal Oil Cut..................Pressing this tells the program that this cut at the (current position) will be cut at the diagonal oil cut position. A check mark to the right of the Diagonal Oil Cut position will indicate this position is set up as an oil cut.

Booklet Oil Cut ....Pressing this tells the program that this cut at the (current position) will be cut at the Booklet oil cut position. A check mark to the right of the Booklet Oil Cut position will indicate this position is set up as an oil cut.

Clamp 1 Open ....Pressing this tells the program that after the cut at the (current position) clamp 1 will open. A check mark to the right of the Clamp 1 Open indicates this is where clamp 1 will open. If Clamp 1 Open is not selected at any of the positions, then it will open after the last cut.

Clamp 2 Open ....Pressing this tells the program that after the cut at the (current position) clamp 2 will open. A check mark to the right of the Clamp 2 Open indicates this is where clamp 1 will open. If Clamp 2 Open is not selected at any of the positions, then it will open after the last cut.

Table Jog Left....................Pressing this jogs the table under the die.

Table Jog Right ....Pressing this jogs the table away from the die.

Table Slide Bar....................Sliding to the left decreases table jog speed, sliding to the right increases table jog speed. The speed is adjusted from 0 to 100%.

Current Table Position......Indicates the table's current position, based in millimeters.

Head Jog In ....Pressing this jogs the die head towards the operator.

Head Jog Out......................Pressing this jogs the die head away from the operator.

Head Slide Bar....................Sliding to the left decreases Head jog speed, sliding to the right increases Head jog speed. The speed is adjusted from 0 to 100%.

Current Head Position.......Indicates the head's current position, based in millimeters.

Jog CW ....Pressing this jogs the die angle in the clockwise direction.

Jog CCW.............................Pressing this jogs the die angle in the counter clockwise direction.

Angle Slide Bar...................Sliding to the left decreases angle jog speed, sliding to the right increases angle jog speed. The speed is adjusted from 0 to 100%.

Current Angle Position......Indicates the angle's current position, based in degrees.

Current Position ....Indicates the current program position (step).

Total Positions....................Indicates the number of positions (steps) in the program.

Table Position......................Indicates the programmed table position in millimeters for this program step. Pressing the Table Position display allows the operator to enter in the position manually from the touch screen keyboard screen.

Head Position ....Indicates the programmed head position in millimeters for this program step. Pressing the Head Position display allows the operator to enter in the position manually from the touch screen keyboard screen.

Angle Position.....................Indicates the programmed angle position in degrees for this program step. Pressing the Angle Position display allows the operator to enter in the position manually from the touch screen keyboard screen.

Go To Start Position.........Moves the table, head, and angle to their home positions.

Previous Position................Moves the selected program layout current position to the previous position. If the current position is the first position a message will be displayed.

Next Position.....................Moves the selected program layout current position to the next position. If the current position is the last position a message will be displayed.

Go To Position No..............Moves the table, head, and angle to the selected program layouts current position.

Add Position.......................Adds a position after the last programmed position to the selected program layout. Increases the total number of positions by one and makes the current position the new added (last) position.

Insert Position...................Inserts a new position before the selected program layout current position. Increases the total number of positions by one and makes the current position the new added (inserted) position.

Delete Position...................Deletes the selected program layout current position. Decreases the total number of positions by one.

Store Values at this pos...Stores the current table, head, and angle positions at the selected program layout current position (step). If the selected program layout current position is the last position, the program will automatically add another position to be programmed and make the current position the new added last position. If the new added last position is not desired, just delete it.

Message Text Box.............Indicates machine status, i.e., mode of operation and alarm messages.

KEYBOARD SIMULATION SCREEN DESCRIPTIONS
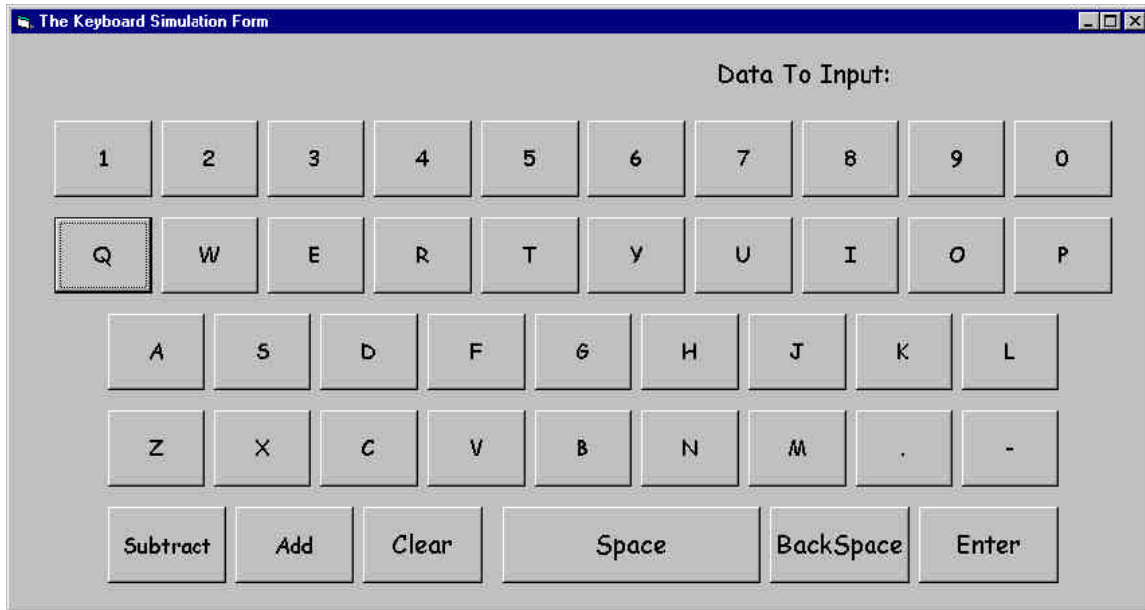
Data To Input .... Displays the keys that are pressed on the keyboard. This is the information string that the operator is going to enter.

Clear .... Pressing this, clears the Data To Input string.

Space .... Pressing this, places a space in the Data To Input string.

Backspace .... Pressing this, deletes the previous character in the Data To Input string.

Enter .... Pressing this, accepts the Data To Input string and sends the string to the calling function.

Plus .... Adds to the current value in the calling function. E.g., adjusting the programmed position of the Table Position 2mm. Press Plus, then press 2, then press enter.

Minus .... Subtracts from the value in the calling function. E.g., adjusting the programmed position of the Table Position -2mm. Press Minus, then press 2, then press enter.

0-9, A-Z .... Pressing each key adds the character to the Data To Input string.

Die & Envelope Search Results

Die No.	EnvelopeH	EnvelopeW	DieStyle	FlapSize	SheetL	SheetW	#CutsOut	Program
B32	10	13	BLKT	2.5	36	32.75	2	54
C112	9.5	12.5	OEC5	2	36	32.75	2	55
UP4	4.125	9.5	OSD	1.5	32.750	36	10	57
E109	6	8.5	OS	1.5	32.5	36	6	62
E109	6	8.5	OS	1.5	29	36	5	63
D43	9	12	OS25S	3	35	28	4	64
A69	6	9	OEC5	8	43	32.25	6	65
R45	9	6	OE15S	1.75	38	25	6	66
E-64	3	9	OSD	1.5	36	32.75	9	67
U.S-99.5	3	9	BOKLT	1.5	36	32.75	12	68

Selected Program

Die No.: B32
Envelope Height: 10
Envelope Width: 13
Style: BLKT
Flap Size: 2.5
Sheet Width: 32.75
Sheet Length: 36
Number of Cuts: 2
Machine Program: 54

Edit Program

Add Program
Edit Program
Update Program
Delete Program
Cancel Update

Search Tool

Search Die No.
Select Program
Enter Name
Search Size
Enter Height
Enter Width

The Current Record is 1
The Total Records is 14

Exit

Die & Envelope Search Results

Die No...................................Alpha/Numeric field that displays the Die No.

EnvelopeH ....Numeric field that displays the envelope height.

EnvelopeW ....Numeric field that displays the envelope width.

DieStyle...............................Alpha/Numeric field that displays the die style.

FlapSize...............................Numeric field that displays the flap size.

SheetL ....Numeric field that displays the sheet length.

SheetW................................Numeric field that displays the sheet width.

#CutsOut.............................Numeric field that displays the total number of envelope cuts in a program.

Program...............................Numeric field generated automatically to store as the program file name.

Selected Program

Die No...................................Alpha/Numeric field that displays and enters the Die No. To enter the die number, the operator presses the text box to the right of *Die No.* The keyboard screen will appear to enter the information.

Envelope Height ....Numeric field that displays and enters the envelope height. To enter the envelope height the operator presses the text box to the right of *Envelope Height*. The keyboard screen will appear to enter the information.

Envelope Width...................Numeric field that displays and enters the envelope width. To enter the envelope width the operator presses the text box to the right of *Envelope Width*. The keyboard screen will appear to enter the information.

Style.......................................Alpha/Numeric field that displays and enters the Die Style. To enter the die style the operator presses the text box to the right of *Style*. The keyboard screen will appear to enter the information.

Flap Size................................Numeric field that displays and enters the flap size. To enter the flap size the operator presses the text box to the right of *Flap Size*. The keyboard screen will appear to enter the information.

Sheet Length ....Numeric field that displays and enters the sheet length. To enter the sheet length the operator presses the text box to the right of *Sheet Length* The keyboard screen will appear to enter the information.

Sheet Width ....Numeric field that displays and enters the sheet width. To enter the sheet width the operator presses the text box to the right of *Sheet Width* The keyboard screen will appear to enter the information.

Number of Cuts....................Numeric field that displays and enters the total number envelope cuts in a program. To enter the number of cuts the operator presses the text box to the right of *Number of Cuts*. The keyboard screen will appear to enter the information.

Machine Program.................Numeric field generated automatically to store as the program file name.

Edit Program

Add Program.........................Clears the selected program fields for a new program to be added.

Edit Program ....Enables the operator to edit the current selected program fields.

Update Program....................Updates (Saves) the current selected program to a record. Used after adding or editing the selected program fields.

Delete Program.....................Deletes the current selected program record from the Die & Envelope program database.

Cancel Update...................Cancels the current addition or editing of a program record. This is used before the Update Program. This enables the operator to abort adding or editing a program.

Search Tool

Search Die No. ....Starts searching the database for the contents of the *Enter Name* text box. If the *Enter Name* text box is empty, pressing the search will show all the records.

Enter Name ....To enter the die name to search the operator presses the text box below Enter Name. The keyboard screen will appear to enter the information.

Search Size......................Starts searching the database for the contents of the *Enter Height* & *Enter Width* text boxes.   If the text boxes are empty, pressing the search will show all the records.

Enter Height ....To enter the height to search, the operator presses the text box below *Enter Height*. The keyboard screen will appear to enter the information.

Enter Width......................To enter the width to search, the operator presses the text box below *Enter Width*. The keyboard screen will appear to enter the information.

Select Program.................Selects the program to run. The program selected is highlighted in the database Die & Envelope Search Results table. Highlight (select) a record by pressing it on the touch screen.

Exit.....................................Exits the Die & Envelope select screen and returns to the main screen.

RUN PROGRAM SCREEN DESCRIPTIONS
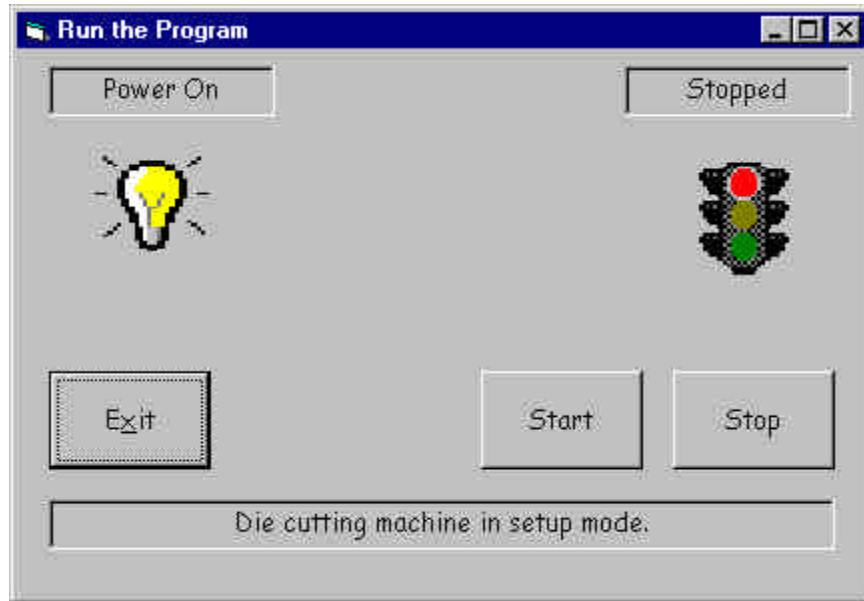
Start.....................................Starts the Touch Screen program to allow the machine to run. If the Touch Screen program is running, the stop & go light will be illuminated green. The touch screen must be in run mode for the machine to run.

Stop.....................................Stops the Touch Screen program, which will stop the machine. If the Touch Screen program is stopped, the stop & go light will be illuminated red. Any alarm will take the touch screen out of run mode.

Exit.....................................Exits the Run screen and returns to the main screen.

Light Bulb Icon....................Illuminates when machine control power is on and turns off when control power is off.

Stop & Go Light Icon........Illuminates green when touch screen program is ready to run. Illuminates red when the touch screen program is stopped.

Message Text Box.............Indicates machine status, i.e., mode of operation and alarm messages.
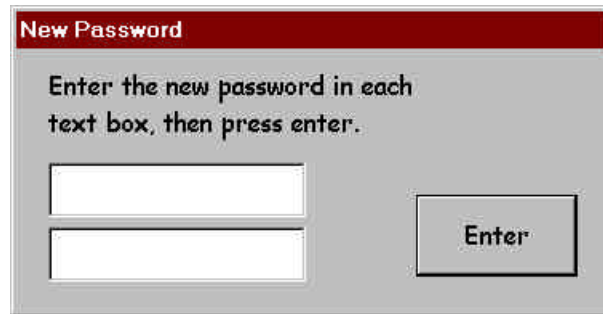
PASSWORD CHECK SCREEN DESCRIPTIONS

Type password Text Box..................Press the blank text box below this description to display the Keyboard screen. Type your password, then press the enter button.

Enter ....Pressing this, sends your password to the calling function.

NEW PASSWORD SCREEN DESCRIPTIONS
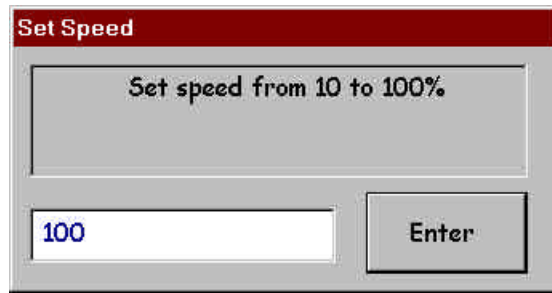
New Password

Enter the new password in each
text box, then press enter.

Enter

Enter new password text boxes.....Press each blank text box below this description to display the Keyboard screen. Type your new password, then press the enter button. Both entries must match for it to be a valid password.

Enter ....Pressing this, sends your new password to the calling function. If the information typed was invalid, an error message will be displayed
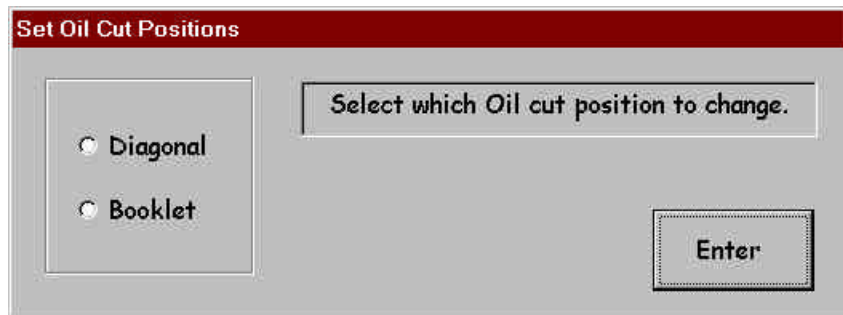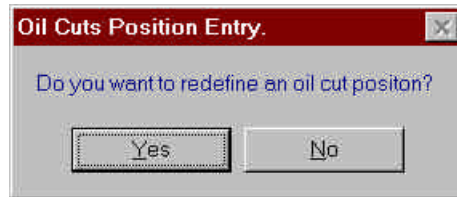
SET SPEED SCREEN DESCRIPTIONS

Set Speed

Set speed from 10 to 100%

| 100 | **Enter** |

Set speed from 10% to 100% ....Press the blank text box below this description to display the Keyboard screen. Type your speed, then press the enter button.

Enter ....Pressing this, sends your new speed to the calling function. If the information typed was invalid, an error message will be displayed.

REDEFINE OIL CUT POSITION SCREEN DESCRIPTIONS

Oil Cuts Position Entry. ☒

Do you want to redefine an oil cut positon?

| Yes | No |

Set Oil Cut Positions

○ Diagonal

○ Booklet

Select which Oil cut position to change.

Enter

Redefine Oil cut position yes ....Pressing yes will bring the screen to set oil cut positions.

Redefine Oil cut position no ....Pressing no will return you to the main screen. The oil cuts will not be changed.

Select Oil cut pos. to change ....This function is password protected. Press the diagonal option button to re-program the diagonal oil cut position. Press the booklet option button to re-program the booklet oil cut position. The screen will prompt the operator to make sure that the die and table are at the correct position. If the positions of the die and table are correct, press enter as prompted on the screen. If the position has not been set, press cancel or no. Always set the position before re-programming them.

Enter ....Pressing this, sends your selection of changing the diagonal or booklet oil cut position. The operator will be prompted as described above after the Enter button is pressed.

CONTROL SYSTEM MESSAGE DESCRIPTIONS

Emergency Stop initiated, power off
Indicates that the machine control power is off. This can occur by pressing the Emergency Stop push button.

Ready to run in position adv. man. Mode
Indicates that the machine has no alarms and is ready to run in manual mode. Manual mode is selected by the Position Advance selector switch. Manual mode requires that the Start push button be pressed each time, to advance to the next position.

Ready to run in position adv. auto. Mode
Indicates that the machine has no alarms and is ready to run in auto mode. Auto mode is selected by the Position Advance selector switch. Auto mode requires that the Start push button be pressed one time to advance through all positions.

Running in auto mode
Indicates that the machine is running in auto mode. The green light on the Start push button will be illuminated when running auto mode.

Alarm! Indramat servo drives not ready
Indicates that a servo drive amplifier is not ready to run.   To find out which drive is not ready, check the status indicator on each servo amplifier. The servo amplifiers are located on the back panel of the electrical enclosure. Each servo amplifier has a two character display showing the status of the drive.   With control power on the drive display should indicate AF. If a drive does not indicate AF, that is the drive there's a problem with.   When control power is turned back on the startup sequence brings power to the drive controller, then the 480volts to the drive, then it enables the drive.

Alarm! Servo motor starter overload breaker tripped
Indicates that a servo drive motor starter has tripped. To find out which drive motor starter is tripped, check the circuit breaker trip on the motor starter.   The motor starters are located in the disconnect enclosure mounted to the machine. To reset, switch the motor starter circuit breaker back to the on position.

Alarm! Servo motor position or limit error
Indicates that a position error or a limit error has occurred on a motor. A position error would be caused by a motor stall or encoder fault. A limit error would be cause by the actual limit switch being tripped or by a software limit. Press the Emergency stop to drop control power. Turn control power back on by pressing the Control Power On push button. Reset the messages on the display. Home the servo motors by pressing the Reset Alarm push button and Cycle Stop push button simultaneously.

Alarm! Table not in postion to bring die down in program mode
Indicates that the table has not been moved to the point where it clears the end clamp. This occurs in program mode when the Start push button is pressed to bring the die down for programming positions.

Alarm! Servo motor controller not ready error
Indicates that the servo motor controller card in PC is not running. To correct this try dropping control power with the Emergency Stop push button and turning control power back on with the Control Power On push button.   If this doesn't work, cycle power to the machine by turning off and on the main disconnect switch.

Alarm! Servo motors homing sequence timeout
Indicates that the servo motors have not completed the homing sequence within the programmed acceptable time frame. Press the Emergency stop to drop control power. Turn control power back on by pressing the Control Power On push button. Reset the messages on the display. Home the servo motors by pressing the Reset Alarm push button and Cycle Stop push button simultaneously. As the servos are homing, watch to see which servo motor isn't homing.

Alarm! Servo motors move timeout
Indicates that one of the servo motors didn't reach it's position within the programmed acceptable time frame. Press the Emergency stop to drop control power. Turn control power back on by pressing the Control Power On push button. Reset the messages on the display. Home the servo motors by pressing the Reset Alarm push button and Cycle Stop push button simultaneously.

Alarm! Cut (Ram) cylinder retracting timeout
Indicates that the cut (ram) cylinder was retracting (i.e. coming back up), and it didn't make the retract limit switch. The problem could be that the ram didn't retract, or the switch didn't make because it's out of adjustment, or bad.

Alarm! Cut (Ram) cylinder extending timeout
Indicates that the cut (ram) cylinder was extending (i.e. coming down), and it didn't make the extend limit switch. The problem could be that the ram didn't extend, or the switch didn't make because it's out of adjustment, or bad.

Alarm! Hydraulic pump heat exchanger flow switch off
Indicates that the heat exchanger fan motor is not running. This will cause the hydraulic pump motor to shut off. Check the heat exchanger fan motor for power. The circuit breaker for the fan motor could have tripped, or the fan motor is bad.

Alarm! Hydraulic pump motor starter overload tripped
Indicates that the hydraulic pump motor starter overload is tripped. Possibly caused by a overheated motor, or the motor is going bad. Check the circuit breaker trip on the motor starter. The motor starters are located in the disconnect enclosure mounted to the machine. To reset, switch the motor starter circuit breaker back to the on position.

Alarm! Die safety, remote E-stop or latch bar Lim. Sw. tripped
Indicates that the die safety circuit has been set off. This can be caused by the die touching a clamp, or grounded to metal, the remote E-stop by the latch bar has been pressed, or the latch bar limit switch has been tripped. Correct the fault, i.e., pull out the E-stop, fix the latch bar, clear the die from touching or being grounded by any metal. To reset, push the foot pedal switch down, pull the foot pedal switch back up, pull the foot pedal limit switch up, then press the Alarm Reset push button. Note that the foot pedal limit switch must be up in order to run the machine. The alarm horn will sound with a Die Safety alarm.

Alarm! Lift davit not in place
Indicates that the lift davit in not placed in it's holder. A lock pin used to lock the lift davit in place, the lock pin trips a limit switch to insure the lift davit is in place. Check to make sure the lift davit and lock pin is in place.

Alarm! Safety window not in place
Indicates that the safety window is open (up). A limit switch is used to sense that the safety window is down. Lower the safety window and reset the alarm.

Alarm! Strip table latch bar not in place
Indicates that the strip latch bar has been moved out of place. The latch bar has a limit switch on it to sense that it's in position. Put the latch bar back into place and reset the alarm.

Servo's moving to the home position
Indicates that the servo motor's are performing the homing sequence.

Servo's moving to position
Indicates that the servo motor's are moving to the next cut position.

Program mode selected on
Indicates that the Program mode selector switch is in the on position. When selected on enables the Cycle Start PB to energize the ram cylinder down for programming purposes. This enables the operator to get the die close to the paper for programming the positions. Note, the table has to be clear of the clamps and over the paper for the ram cylinder to actually come down.

Cut (Ram) cylinder cutting
Indicates that the die is in the process of cutting.

Servo's not at home position to start
Indicates that the servo's were not homed. The servo's must be at the home position to start a cut sequence (program). Home the servo motor's by pressing the Reset Alarm & Cycle Stop push buttons simultaneously.

PC program not set in run mode
Indicates that the start push button was pressed but the touch screen run program screen was not started. To start the PC program press the start button on the run program screen. The stop & go light icon will illuminate green when the PC program is set to run mode.   Note, if any alarm occurs the PC program will be set to stop mode.

Die cutting machine in setup mode
Indicates that the PC (touch screen) program is currently running (on) the main screen that is used for setting up the positions of the die cutting sequence.

Die safety foot pedal limit switch not up to run
Indicates that the start push button was pressed but the die safety foot pedal limit switch was not up. This limit switch needs to be up to run. Make sure the foot pedal is pulled up, pull up the limit switch arm, then reset the alarm.