

**MAXI AUTO INDEXING SYSTEM
BASIC OPERATION
8/2017**

INDEXING AND ACTIVATING THE PRESS

Your machine is equipped with an automatic-foot pedal activated load table indexing system. This system allows the operator to simply press momentarily a foot pedal to index the table into the machine. Once the pressing cycle is completed, the table will index back out for un-loading and reloading.

This system also has a unique “**STAND BY**” mode that allows the operator/s to load the 2nd table while the first table is being pressed, press the 2nd table’s foot pedal and the system will put the 2nd table on “**STAND BY**” mode. Once the 1st load table is completed and has returned back out to the loading position, the 2nd table will automatically index in for pressing. This unique feature allows the operator to focus on the un-loading and loading of the load tables without the concern waiting for when to activate the foot pedal to index.

For safety, any time there are any movements of either the 1st or 2nd loading tables, an audible alarm will sound to announce a load table will be moving. This will be helpful for the operators to know that a load table will be moving either into or out of the pressing station during the process without the need to have visual confirmation.

FRONT DISPLAY SCREEN DURING STANDARD OPERATION



DISPLAY INDICATES BOTH STATIONS ARE IN THE (LOADING) OR (HOME) POSITIONS AND ARE READY FOR LOADING.

The status block for the RIGHT and the LEFT stations indicate the current status of each loading table.

- **GREEN = HOME**
- **YELLOW = INDEXING**
- **BLUE = PRESSING**
- **RED = E-STOPPED**

By simply looking at the color of the status block of a certain loading table, you will know what the current status is of each loading table.



**START UP SCREEN
BOTH STATIONS ARE AT HOME**



**RIGHT SIDE FOOT-PEDAL PRESSED
RIGHT TABLE INDEXING INWARD**



RIGHT SIDE INDEXED INTO PRESSING STATION AND PRESSING

STAND BY MODE

To activate the **STAND BY** feature that will put a loaded table ready for pressing in the qu. Simply press the foot pedal of the station that is loaded and ready to go in. The word **STAND BY** will appear above the status block of the side that will be put into the qu.

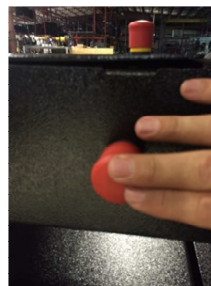
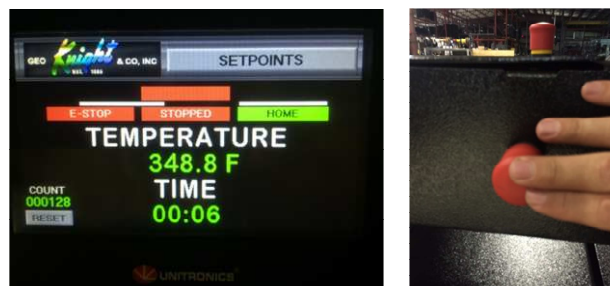


In this example, the **RIGHT** table has just completed its pressing and is releasing. On the **LEFT** table, the operator has loaded and pressed the **LEFT** foot pedal to put the **LEFT** table into **STAND BY** mode. Once the **RIGHT** table has indexed out and back to the HOME position, the **LEFT** table will automatically start to index inward for pressing without the operator needing to press the foot pedal again.

Under ideal conditions, the **STAND BY** mode will be used on a regular basis. This will reduce operating times and increase production. By not needing to stay “watch” of the tables, the operator will be free to perform other tasks in the process without concern.

E-STOP CONDITION

The machine is equipped with three separate **E-STOP** red push buttons located on the top control console. In the event that the operator wishes to **STOP** indexing of both tables or pressing, then the operator simply needs to press only one of the three **E-STOP** push buttons to do so. Once the **E-STOP** push button is pressed, all functions will stop and or release until the **E-STOP** button that was pressed has been reset. The operator will then need to press the foot pedal of the table that was in process when the **E-STOP** button was pressed. This will confirm that whatever was the reason to activate the **E-STOP**, the operator has confirmed and cleared the issue.



IN THIS EXAMPLE, LEFT LABEL WAS INDEXING WHEN THE E-STOP PUSH BUTTON WAS PRESSED. THE LEFT'S STATUS BAR INDICATING THE E-STOP CONDITION.



THE E-STOP BUTTON THAT WAS PRESSED IS RESETTED.



OPERATOR PRESSES THE LEFT TABLE FOOT PEDAL

**THIS WILL RE-ACTIVATE THE LEFT TABLE AND WILL CONTINUE WITH ITS
CYCLE WHEN THE E-STOP WAS PRESSED.
IN THE EVENT OF POWER LOSS**

In the event that there is a power loss while the machine is indexing or pressing, the indexing will stop and if there was a table being pressed, the press will release. IF the front panel on/off power switch is left in the **ON** position when the power is restored, the machine will send both the **LEFT** and **RIGHT** tables back to their **HOME** position automatically. For safety , the **MAIN** circuit breaker power in the back of the press along with the front panel power switch should be switched to the **OFF** position. This will also prevent any potential damage caused by spikes that sometimes occur when power is restored after a black out.

STOP AND CONTINUE

EXAMPLE: The operator loads the **RIGHT** table and presses the **RIGHT** foot pedal to have it index into the machine. The operator notices while the table is indexing in that he/she has left a pair of scissors along with the work being pressed on the **RIGHT** table.

PROPER SOLUTION:

1. Operator presses the **E-STOP** button to halt the indexing.
2. Operator removes the pair of scissors.
3. Operator then resets the **E-STOP** button he/she pressed.
4. Operator then presses again the **RIGHT** foot pedal to continue with the complete indexing-pressing cycle.

STOP AND RETREAT

EXAMPLE: The operator loads the **RIGHT** table and presses the **RIGHT** foot pedal to have it index into the machine. The operator notices while the table is indexing in that he/she has placed the heat transfer on the wrong location or is upside down. He / She wishes to NOT have the machine press the current set-up on the table.

PROPER SOLUTION:

1. Operator presses the **E-STOP** button to halt the indexing or pressing.
2. Operator turns the front panel power switch to the **OFF** position.
3. Operator confirms that it is safe to have the tables' index outward.
4. Operator resets the **E-STOP** button that he/she had pressed.
5. Operator turns back **ON** the front panel power switch to the **ON** position.
6. The machine will index both tables back to the **HOME** (loading) position.
7. Operator then safely removes or fixes materials.

ANYTIME THE FRONT PANEL POWER SWITCH IS SWITCHED TO THE OFF POSITION, THEN SWITCHED BACK ON...THE MACHINE WILL AUTOMATICALLY SEND BOTH THE LEFT AND RIGHT TABLES BACK TO THEIR HOME POSITIONS IF THEY ARE CURRENTLY NOT.

TEMPERATURE CONTROL

The machine is equipped with a PID temperature control. This precision control will maintain the temperature of the heater block within **+/- 5 deg.F.** while under normal operations.

The front display will indicate what the current temperature is of the heater block. The temperature will indicate on the display in various colors to indicate where the temperature is in reference to the **SET POINT** temperature. This unique active color indication gives the operator a fast temperature reference.

SET POINT TEMPERATURE WAS SET FOR 365 DEG. F



BLUE = COLDER THAN SET POINT BY MORE THAN 5 DEGREES

NORMAL DURING HEAT UP



GREEN = WITH IN +/- 5 DEGREES

NORMAL ONCE AT HEAT



YELLOW = 5 + DEGRESS HIGHER

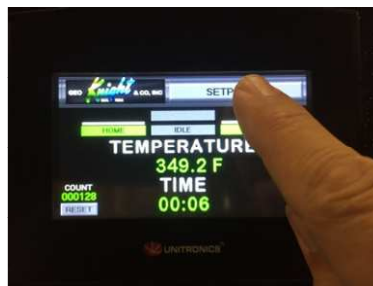


RED = 10 + DEGREES HIGHER

SETTING THE TIME & TEMPERATURE

To set the operating temperature or the pressing time of the press, you simply press the SETPOINTS button on the display and both the Temperature SP and Press Timer SP will appear on the screen.

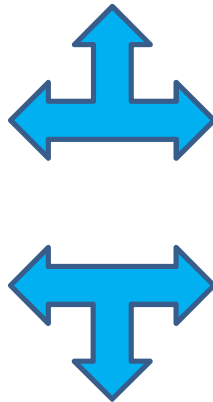
Press what value you wish to adjust, and then the display will switch to a keyboard style display where you can increase or decrease the values. Once either the time or temperature you wish appears in the heightened area, press the return key to enter it. The value will now be changed to the new value. Then press the RUN SCREEN to return to the normal display screen.



PRESS "SETPOINTS"



TEMPERATURE SP



PRESS TIMER SP



**ADJUST VALUE BY
TYPING IN DESIRED VALUE**



**PRESS THE ENTER RETURN KEY
TO ENTER VALUE**



**CONFIRM CHANGE IS RIGHT
THEN
PRESS THE "RUN SCREEN"**



**RETURNED TO THE NORMAL
RUN SCREEN**

**NOTE: Do not change the PRESSING TIME while the machine is pressing.
This value MUST be changed before activating the table to index.**

MAINTENANCE

The machine has been designed to operate for many years. In order to insure long life, the following maintenance is recommended. When using a lubricant, we recommend a product made by PERMATEX called SUPER LUBE. The following areas require lubrication every month of heavy use.

- Aluminum table shoulder bolts that attach the aluminum table to the lower glide truck brackets (4 locations/table)
- Large blue airbag die springs and inner guide pipes (4) locations

Use a very lite lubricant spray such as WD40 on the glide rollers themselves. Remove any dripping excess lubricant with a clean cloth.

KEEP WD40 and any other LUBRICANT AWAY from the indexing aluminum square bars as well as the DRIVE ROLLERS. This area must stay clean and dry of any lubricants.

INSPECTIONS

The following areas should be inspected at least every month or as work conditions require.

- Use a clean dry rag to wipe the entire length of the glide "C" channel to remove any collected lint or debris.
- Inspect the DRIVE ROLLERS to insure the rubber is in good condition and is not cracked or damaged.
- Check all table shoulder bolts and confirm they are tight and properly greased.
- Check the locking set screws in the DRIVE ROLLERS to insure they are tight.

MAJOR REPLACEMENT PARTS

HEATING RELATED:

- | | |
|-------------------------|----------------------|
| • HEATER RELAY (1) | ELN-RLY02602 |
| • MICA HEATER PANEL (2) | ELN-MX1540 (32 X 42) |
| (4) | ELN-MX1544 (44 X 64) |
| • THERMOCOUPLE (1) | ELN-BAYKTC120 |

AIR RELATED:

- | | |
|------------------------------|--------------|
| • MAC VALVE (1) | ARN-55B240 |
| • QUICK EXHAUST VALVE | ARN-NAQ3KN03 |
| • ADJUSTABLE EXHAUST CONTROL | ARN-4ZJ86 |
| • AIR BAG | ARN-1B14365 |
| • AIR REGULATOR | ARN-R184F0 |
| • AIR FILTER | ARN-F1804SL |

DRIVE MOTOR RELATED:

- DRIVE MOTOR/GEAR BOX (2)
- DRIVE ROLLER (2)
- MOTOR DRIVE INVERTER (2)
- DRIVE POWER RELAY (1)
- DRIVE FUSES (4)

ELN-GEARNTR
MEN-NEO2WHL
ELN-i51AINVERT
ELN-ELN-4A064
ELN-ATM5

PLC CONTROL CIRCUIT RELATED:

- MAIN PLC DISPLAY UNIT (1)
- LEVER ROLLER SWITCHES (4)
- 24VDC OUTPUT RELAY (2)

ELN-UNISM43PLC
ELN-MINIRSW
ELN-1EGY6

**PLEASE CONTACT GEO. KNIGHT CO. IF YOU HAVE ANY QUESTIONS OR
TECHNICAL ISSUES WITH THIS PRESS.**

1-800-525-6766