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Operator Guide

Drynet™ Dryer/Shuttle Controller



Contents

1 Controls	3
1.1 Controls on Shuttles Including Those in a Drynet™ Network	3
1.1.1 Machine-mounted Controls	3
1.1.1.1 Emergency Stop Kick Plates	3
1.1.1.2 Motor Disconnect Switch	4
1.1.1.3 Emergency Stop Switch (locking push button)	4
1.1.2 Manual Operation Controls	5
1.1.2.1 Automatic/Manual switch (A)	6
1.1.2.2 Manual Controls Group (M)	6
1.1.2.3 About Taut Chain Conditions	7
1.1.2.4 Taut Chain Recovery Controls (T)	7
1.1.3 Controls on the Dryer/Shuttle Controller (Drynet™) Console	8
1.1.4 Shuttle Machine Functions Available to the Operator on Drynet™	9
1.2 Controls on Dryers, Conditioners, and Shakers Including Those in a Drynet™ Network	10
1.2.1 Machine-mounted Controls	10
1.2.1.1 Emergency Stop Switch (locking push button)	11
1.2.1.2 Door and Jog Controls	11
1.2.2 Machine-mounted Status Lights—Gas Dryers	12
1.2.3 Machine-mounted Status Lights—Steam and Thermal Oil Dryers and Condi- tioners and All Shakers	15
1.2.4 Controls Mounted on the Dryer-Shuttle Controller (Drynet™) Console	16
1.2.5 Machine Functions Available to the Operator on Drynet™	17
2 Normal Machine Operation	19
2.1 Dryer Operating Instructions for Plant Personnel	19
2.1.1 Start Here for Safety	19
2.1.2 Check Switch Settings	19
2.1.3 Loading the Machine	20
2.1.4 Initiate Automatic Operations	20
2.1.5 What Does the Display Tell Me?	20
2.1.5.1 Drycode and Step Information for Gas-fired Dryers	20
2.1.5.2 Drycode and Step Information for Steam Dryers	21
2.1.6 Unloading the Machine	22
3 Signals and Errors	23
3.1 Shuttle Error Messages	23
3.1.1 About “THREE WIRE DISABLED PUSH START TO GO”	23
3.1.2 Resuming Automatic Operation After Error Correction	24
3.1.3 Time Limit Errors	24
3.1.4 Level Encoder Counting Errors	25
3.1.5 Position Errors	25
3.1.6 Transfer Errors	27
3.1.7 Errors That Should Be Reported to Management or Maintenance Personnel	28
3.2 Dryer Error Messages	29
3.2.1 About the “THREE WIRE DISABLED” Message	30
3.2.2 Overheat Errors	30

3.2.3 Load Door Advisories31
3.2.4 Other Automatic Operation Errors32
3.2.5 Messages That Should Be Reported to Management or Maintenance
 Personnel33

Figures

Figure 1 Shuttle Kick Plate3
Figure 2 Motor Disconnect Switch4
Figure 3 **Emergency Stop** Switch4
Figure 4 Manual Control Panel5
Figure 5 Drynet™-mounted Controls8
Figure 6 Drynet™ Windows Used by the Operator9
Figure 7 Emergency Stop Switch11
Figure 8 Door and Jog Controls11
Figure 9 Gas Dryer Status Lights13
Figure 10 Steam Dryer Status Lights15
Figure 11 Drynet™-mounted Controls16
Figure 12 Drynet™ Windows Used by the Operator17

Tables

1 Controls

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1.1 Controls on Shuttles Including Those in a Drynet™ Network

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This document describes the physical controls provided with the various shuttle models as well as a few Drynet™ operating functions which serve in place of physical controls when the shuttle is part of a Drynet™ (Dryer/Shuttle Controller) network. The shuttle will have only those controls needed for the type of movements it can perform. Certain controls are always located on the shuttle itself. Generally, on shuttles that traverse a rail, the manual operation controls are located on the free-standing shuttle control box, while on shuttles that do not traverse, they are on the shuttle itself. If the shuttle is part of a Drynet™ network, certain physical controls are located at the Drynet™ Console. This is also where machine functions are available via the Drynet™ software.

1.1.1 Machine-mounted Controls

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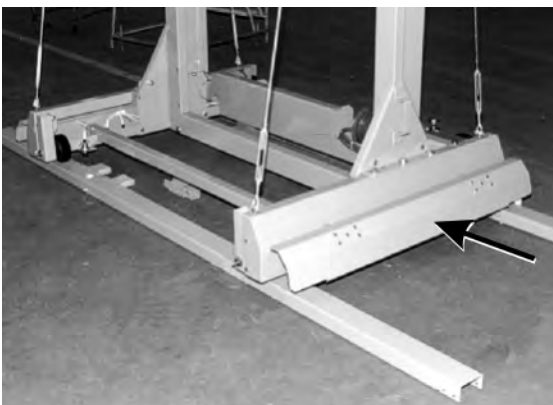
These include one or more emergency stop switches as described in [Section 1.1.1.3 : Emergency Stop Switch \(locking push button\)](#), page 4 and the other controls described under this section.

1.1.1.1 Emergency Stop Kick Plates

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Shuttles are supplied with hinged kick plates (pictured below) on both sides of the machine in the traversing directions. When a kick plate pivots sufficiently, a switch actuates and stops the machine.

Figure 1. Shuttle Kick Plate



1.1.1.2 Motor Disconnect Switch

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This switch (SHMD) affects power for the shuttle motors, as follows:

0 OFF Motor power is not available. The shuttle will not move.

1 ON Motor power is available. **When 1 ON is selected, the machine can move immediately.**

Figure 2. Motor Disconnect Switch



NOTICE: Always disconnect motor power from the shuttle before anyone performs maintenance on the machine.

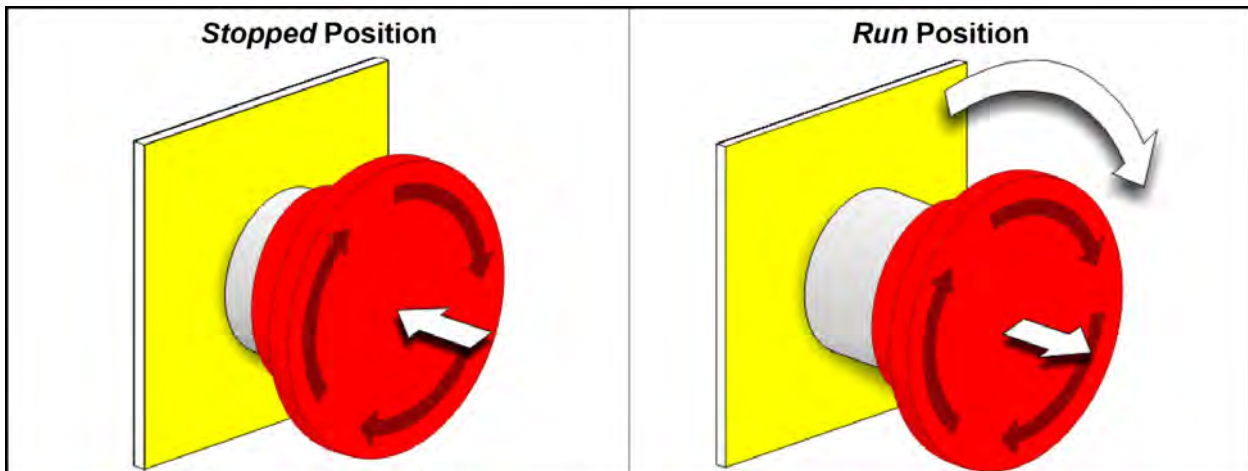
1.1.1.3 Emergency Stop Switch (locking push button)

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One or more emergency stop switches are provided on the device. Activate an emergency stop switch to remove power from the machine controls and stop the machine. There are two types of emergency stop switches:

- Locking Push Button (pictured below): Push the locking push button to activate it. The button will lock in the depressed position (switch actuated, machine stopped) after it is pushed. When safe to do so, turn the button clockwise to unlock the switch.
- Emergency Trip Wire: Pull the emergency trip wire to remove power from the machine controls and stop the machine.

Figure 3. Emergency Stop Switch



To resume operation, perform the device's normal startup procedure.



NOTICE: Activate an emergency stop switch immediately in an emergency situation.

Display or Action

Explanation



This symbol represents the emergency stop switch in Milnor® documents other than electrical wiring diagrams.

1.1.2 Manual Operation Controls

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The figure below illustrates the control panel used on shuttles for cakes and loose goods. Only those controls corresponding to the shuttle's motion capability are provided on a given shuttle.

Figure 4. Manual Control Panel

	<p>Legend</p> <p>A . . . Automatic/Manual switch (SHMO)</p> <p>M . . . Manual controls group, as follows</p> <p>M1 . . . Manual Mode indicator light (ELM)</p> <p>M2 . . . Travel left/right switch (SHLR)</p> <p>M3 . . . Belts up/down switch (SHUD)</p> <p>M4 . . . Belt 0 Extend/Retract to Receive switch (SHR)</p> <p>M5 . . . Belt 0 Extend/Retract to Discharge switch (SHE)</p> <p>M6 . . . Belt Fully Retracted indicator light (ELRTL)</p> <p>M7 . . . Belt 0 Fully Extended to Receive indicator light (ELEYL)</p> <p>M8 . . . Belt 0 Fully Extended to Discharge indicator light (ELEXL)</p> <p>M9 . . . Belt 0 Forward/Reverse switch (SHB0)</p> <p>M10 . . . Belt 1 Forward/Reverse switch (SHB1)</p> <p>M11 . . . Belt 2 Forward/Reverse switch (SHB2)</p> <p>M12 . . . Belt 3 Forward/Reverse switch (SHB3)</p> <p>T . . . Taut chain controls group as follows:</p> <p>T1 . . . Taut Chain indicator light (ELT)</p> <p>T2 . . . Enable Down/Up keyswitch (SKMD)</p> <p>T3 . . . Move Down switch (SHMD), not shown, or Move Down/Up switch (SHMDU), shown</p>
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1.1.2.1 Automatic/Manual switch (A)

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This switch (SHMO) determines what controls machine movement, as follows:



The machine is controlled by the switches in the manual controls group.



The machine moves under automatic control. **The machine can immediately move.**

1.1.2.2 Manual Controls Group (M)

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Manual Mode indicator light (M1) — The **Manual Mode** indicator light (ELM) illuminates when manual mode is enabled, indicating that the manual control switches are active.

Travel left/right switch (M2) — Hold this center-off switch (SHLR) in one of the momentary positions to cause the shuttle to traverse the rail, as follows:



(momentary counter-clockwise) The shuttle moves left along the rail, relative to the flow of goods.



(momentary clockwise) The shuttle moves right along the rail.

This switch electromechanically locks when a belt is extended to receive or discharge, to prevent the shuttle from traversing.

Belts up/down switch (M3) — Hold this center-off switch (SHUD) in one of the momentary positions to cause the bed(s) to move as follows:



(momentary counter-clockwise) The hoist runs and the bed(s) rise.



(momentary clockwise) The hoist runs and the bed(s) descend.

Belt 0 Extend/Retract to Receive switch (M4) — Hold this center-off switch (SHR) in one of the momentary positions to cause the belt 0 (topmost) bed to move as follows when it receives a load:



(momentary counter-clockwise) The bed extends toward the device it will receive the goods from.



(momentary clockwise) The belt retracts from the receive position.

Belt 0 Extend/Retract to Discharge switch (M5) — Hold this center-off switch (SHE) in one of the momentary positions to move the belt 0 (topmost) bed as follows when it discharges a load:



(momentary counter-clockwise) The bed extends toward the device it will discharge the goods to.



(momentary clockwise) The belt retracts from the discharge position.

Belt Fully Retracted indicator light (M6) — This light (ELRTL) illuminates when the Belt 0 (topmost) bed is fully retracted, to indicate that the shuttle is permitted to traverse the rail.

Belt 0 Fully Extended to Receive indicator light (M7) — This light (ELEYL) illuminates when the Belt 0 (topmost) bed is fully extended to receive a load from another device.

Belt 0 Fully Extended to Discharge indicator light (M8) — This light (ELEXL) illuminates when the Belt 0 (topmost) bed is fully extended to discharge a load to another device.

Belt [0-3] Forward/Reverse switch (M9 through M12) — Hold this center-off switch (SHB0) in one of the momentary positions to cause the selected belt to run as follows:



(momentary counter-clockwise) The selected belt runs forward, toward the device which normally receives goods from the belt.



(momentary clockwise) The selected belt runs in reverse, toward the device which normally discharges goods to the belt.

1.1.2.3 About Taut Chain Conditions

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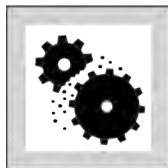
From the standpoint of the type of hoist, shuttles fall into three categories:

top-mounted hoist motor This shuttle type has a hoist motor that is rigidly mounted to the top frame member. The hoist motor drives a roller chain with one free end. This type is susceptible to the taut chain condition that occurs if the controller does not sense the topmost position when the bed is rising, causing it to reach its upper mechanical limit.

side-mounted hoist motor (low clearance shuttle) This type uses a hoist motor reducer that is rigidly mounted near the top of a side frame member. The hoist motor drives a roller chain that forms a loop and connects to the bed assembly both above and below. This type is susceptible to the same condition as above and the condition that occurs if the controller does not sense the bottom-most position when the bed is descending, causing it to reach its lower mechanical limit.



CAUTION: Risk of Damage — Forcing the bed assembly against a mechanical stop by improper use of the taut chain or other manual controls may cause shuttle components to bend or break, or the hoist motor to burn out.



► Ensure that you do not hold a control in a direction the bed assembly cannot move.

Hook-mounted hoist (light frame shuttle) This type uses a non-Milnor® (typically Demag) hoist suspended from the top frame member that drives an anchor chain. This type is not susceptible to the taut chain condition.

1.1.2.4 Taut Chain Recovery Controls (T)

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
These controls function with all except shuttles that use the Demag hoist.

Taut Chain indicator light (T1)

This light (ELT) illuminates to indicate that a taut chain error has occurred.




Enable Up/Down keyswitch (T2)

This keyswitch (SKMD) determines what controls vertical movement of the shuttle bed(s), as follows:

-  The bed(s) can be manually lowered with the **Move Down** switch or manually lowered or raised with the **Move Down/Up** switch, whichever is provided.
-  Shuttle movements are controlled automatically.

Move Down switch or Move Down/Up switch (T3)

If armed as described in the above section, the counter-clockwise-off, **Move Down** switch (SHMD) provided on shuttles with a top-mounted hoist motor, or the center-off, **Move Down/Up** switch (SHMDU) provided on shuttles with a side-mounted hoist motor, causes the hoist to move as follows:

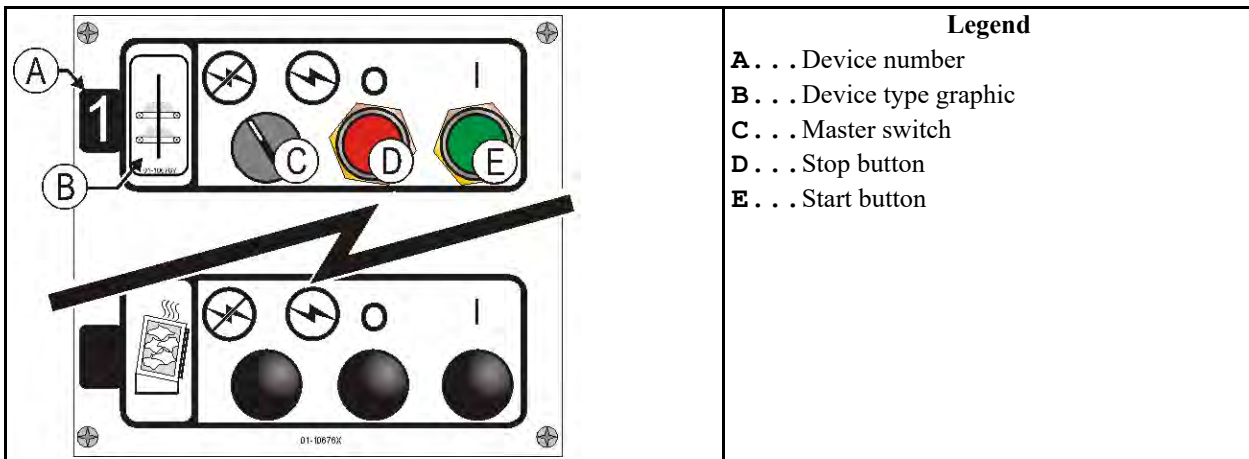
-  (momentary clockwise) The bed(s) descend while this position is held.
-  **NOTE:** Older models use a **Move Down** button. The bed(s) descend while this button is held.
-  (momentary counter-clockwise, if provided) The bed(s) rise while this position is held.

1.1.3 Controls on the Dryer/Shuttle Controller (Drynet™) Console

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Usually, the shuttle and all other machines in the Drynet™ network are powered on and off one by one at this location. Shuttles that are not part of a Drynet™ network will have corresponding controls mounted on the shuttle itself, or the free-standing shuttle control box.

Figure 5. Drynet™-mounted Controls



Master Switch (C) — The **Master switch** controls single-phase control circuit power to the machine and the DC power supply for the microprocessor and its components, as follows:

- ⚡ The circuit is energized, which permits operation
- ⊗ The circuit is de-energized, which stops or prevents operation.

Stop Button (D) — Press this button to open the three-wire circuit and stop the machine immediately. The Emergency Stop button performs the same function.

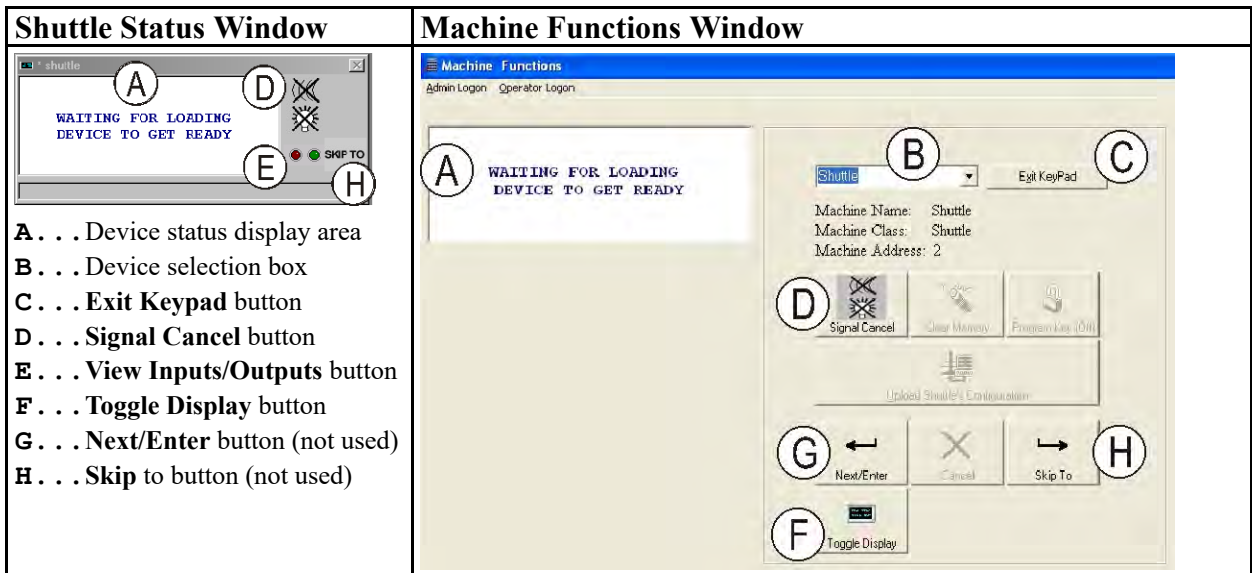
Start Button (E) — Press this button to enable machine operation if all safety considerations are met. When operation is enabled, the machine will operate in manual or automatic mode.

1.1.4 Shuttle Machine Functions Available to the Operator on Drynet™

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Usually, the Drynet™ CRT displays a small **Device Status** window for every machine (dryer and shuttle) on the Drynet™ network. If you click on the window itself, this displays the **Machine Functions** window for the selected machine. Both windows contain buttons available to the operator. Some buttons are repeated on both windows. Only certain buttons are available depending on whether and how the user is logged in to the system. Click a button with the mouse to actuate the function. These windows and buttons are shown in the figure below and explained.

Figure 6. Drynet™ Windows Used by the Operator



Device status display (A) — The controller uses this area to display messages relevant to the active device selected.

Device selection box (B)

Click the mouse on the arrowhead at the right end of this box to see a list of all devices controlled by this Dryer/Shuttle controller. Click on one of the devices in the list to make it the active device.

Exit Keypad button (C)

Click the mouse on this button to return to the machine display screen to monitor all devices.

Signal Cancel button (D)

If an error caused the operator signal (flashing lights and/or audible buzzer), click on this button to silence the operator signal. If the signal began when a valid formula was selected, the signal will end automatically when the formula is started.

View Inputs/Outputs button (E)

Click this button to display the **Dryer I/O** window, which shows the on/off status of each micro-processor input and output for the selected machine.

Toggle Display button (F)

For use by service personnel. Click this button repeatedly to toggle through various displays on the Shuttle Status window. These displays show cake information, inputs, outputs, counting horizontal targets as the shuttle traverses the rail, and counting vertical targets as the shuttle bed(s) elevate and descend.

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1.2 Controls on Dryers, Conditioners, and Shakers Including Those in a Drynet™ Network

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This document describes the physical controls provided with dryers, conditioners, and shakers as well as a few Drynet™ operating functions which serve in place of physical controls when the machine is part of a Drynet™ (Dryer/Shuttle Controller) network. The physical controls include manual intervention controls and status lights mounted on the machine, and power controls mounted on the Drynet™ console or to the remote-mounted electric box. Drynet™ operating functions are performed at the Drynet™ console.

1.2.1 Machine-mounted Controls

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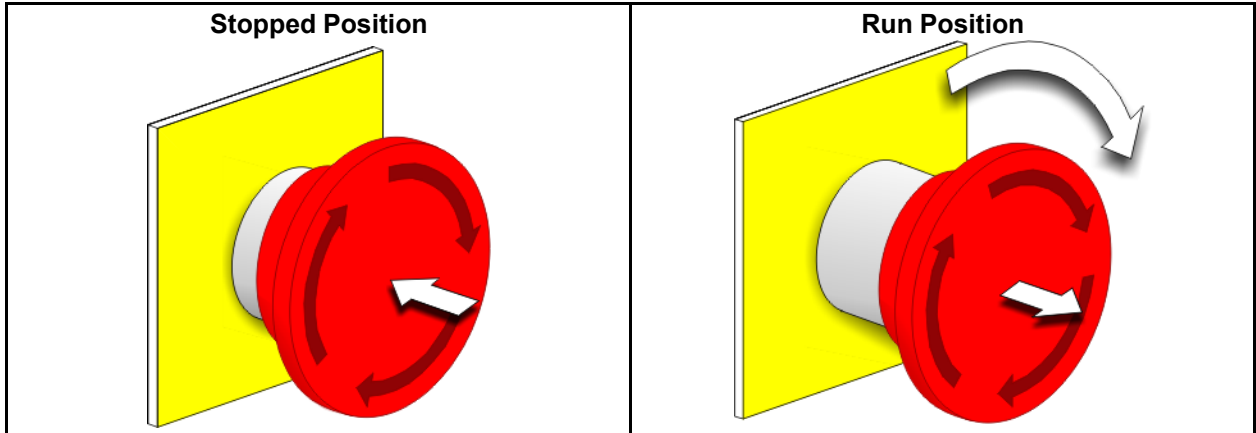
Controls mounted on the machine include one or more emergency stop switches ([Section 1.2.1.1 : Emergency Stop Switch \(locking push button\), page 11](#)) and the controls necessary to manually unload the dryer ([Section 1.2.1.2 : Door and Jog Controls, page 11](#)).

1.2.1.1 Emergency Stop Switch (locking push button)

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One or more **emergency stop** switches (pictured below) may be provided on the device. When pressed, any **emergency stop** switch removes power from the machine controls, stops the machine, and locks in the depressed (switch actuated, machine stopped) position. When safe to do so, turn the button clockwise to unlock the switch. To resume operation, perform the device’s normal startup procedure.

Figure 7. Emergency Stop Switch



NOTICE: Press the **emergency stop** switch immediately in an emergency situation.

Display or Action



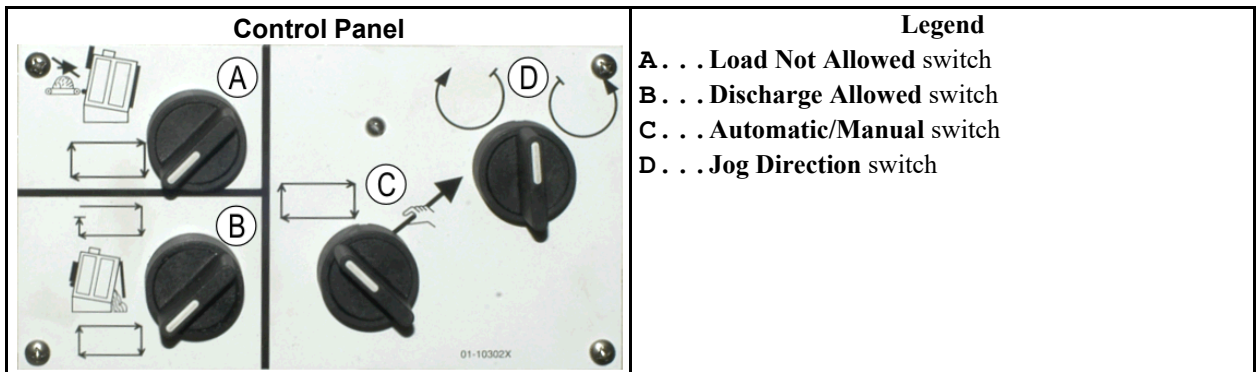
Explanation

This symbol represents the **emergency stop** switch in Milnor® documents other than electrical wiring diagrams.

1.2.1.2 Door and Jog Controls

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Figure 8. Door and Jog Controls



Load Not Allowed switch (A) — This switch determines whether the machine will request (accept) a new load automatically, as follows:



The machine will not request a load.



The machine will request a new load after discharging the current load (required for normal, automatic operation).

Discharge Allowed switch (B) — This switch determines how the machine will discharge, as follows:



The machine automatically discharges each load when the dry code is finished, without regard for the ready status of the receiving device. For example, if a cart is supposed to be in position, but it is not, the goods will discharge onto the floor.



This position prevents the machine from discharging unless it receives a signal from the Miltrac™ controller to discharge. Hence, this position has two uses: 1) It is required for normal operation if the machine is unloaded via Miltrac™, and 2) it may be used to prevent automatic discharge if the machine is not unloaded via Miltrac™.



If the machine is ready to discharge, turning the switch to this momentary position briefly will initiate the discharge process.

Automatic/Manual Rotation switch (C) — This switch determines what controls basket rotation, as follows:



Automatic operation is suspended, the discharge door opens and basket rotation is controlled by the **Jog Direction** switch.



The basket rotates automatically.

Jog Direction switch (D) — Used for unloading. When rotation is set to manual, this center-off switch causes the basket to rotate as follows, except as explained in the Note below:



(momentary, clockwise) rotates the basket clockwise (when viewing the machine from the front) while the switch is held.



(momentary, counter-clockwise) rotates the basket counterclockwise while the switch is held.



NOTE: 6458Txxx and 7244Txxx models can have blowers either on the left or the right. Machines with lefthand blowers function exactly as stated above. Those with righthand blowers function opposite that stated above. For example, holding the switch at the clockwise position will cause the basket to rotate counter-clockwise when viewed from the front of the machine. This is the direction the basket turns during automatic unloading, to help prevent plastering of the goods.

1.2.2 Machine-mounted Status Lights—Gas Dryers

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Gas-fired dryers have several amber status lights on the front panel used to monitor the dryer doors and heating system. Some of these lights are operated by the machine controller and some are operated by the fire control unit (Fireye® or Landis+Gyr). When an error condition causes a light to either illuminate or extinguish, an error message is displayed. For lights operated by the fire control unit, the error message will say “CHECK ERROR LIGHTS.”

Figure 9. Gas Dryer Status Lights

Status Lights Panel	Legend
	<p>A . . . Load door closed (ELLDC)</p>
	<p>B . . . Load door open (ELLDO)</p>
	<p>C . . . Discharge door closed (ELDDC)</p>
	<p>D . . . Pilot valve enabled (ELPG)</p>
	<p>E . . . Main gas enabled (ELMT)</p>
	<p>F . . . Ignition enabled (ELMI)</p>
	<p>G . . . Burner box pressure high (ELBB). 6458TG1x and 7272TG1x models only.</p>
	<p>H . . . Combustion air low (ELCA)</p>
	<p>I . . . Main air low (ELMA)</p>
	<p>J . . . Gas pressure low (ELGL)</p>
	<p>K . . . Gas pressure high (ELGH)</p>
	<p>L . . . Fireeye tripped (ELFET)</p>
	<p>M . . . Fire control unit locked out (EL-CLO). Landis+Gyr fire control only.</p>

Load Door Closed — This light (ELLDC) indicates that the load door is fully closed. If the load door is not fully closed 15 seconds after the dryer receives the **Loaded** signal, the **Load Door Open** message is displayed.

Load Door Open — This light (ELLDO) indicates that the load door is fully open. If the load door does not open fully within 15 seconds of the “open load door” command from the micro-processor, **Load Door Not Open** is displayed.

Discharge Door Closed — This light (ELDDC) indicates that the discharge door is completely closed. If the controller does not detect the discharge door closed, it will permit the load door to open for loading, but it will not signal the loading device to begin loading and the message **Discharge Door Open** will be displayed.

Pilot Valve Enabled — This light (ELPG) indicates that the flame control unit has energized the pilot valve.

Main Gas Enabled — This light (ELMT) indicates that the flame control unit has energized the modulating gas valve and the main gas valve.

Ignition Enabled — This light (ELMI) indicates that the flame control unit is attempting to ignite the flame.

Burner Box Pressure High — This light (ELBB) indicates that the permissible burner box pressure has been exceeded. This is an error condition.

Combustion Air Low — This light (ELCA) indicates that combustion air flow delivered to the dryer is too low for proper operation.

Main Air Low — This light (ELMA) indicates that main air flow delivered to the dryer is too low for proper operation.

Gas Pressure Low — This light (ELGL) indicates that the gas pressure delivered to the dryer is too low for proper operation, or the gas regulator is damaged.

Gas Pressure High — This light (ELGH) indicates that the gas pressure delivered to the dryer is too high for proper operation, or the gas regulator is damaged.

Fireye Tripped — If the machine is equipped with a Fireye fire control unit, this light (ELFET) indicates that the flame rod signaled the flame control unit that neither the pilot nor the burner is lit.

This light is sometimes provided when the machine is equipped with a Landis & Gyr fire control unit. If so, it has the same meaning as the **Fire Controller Locked Out** status light below.

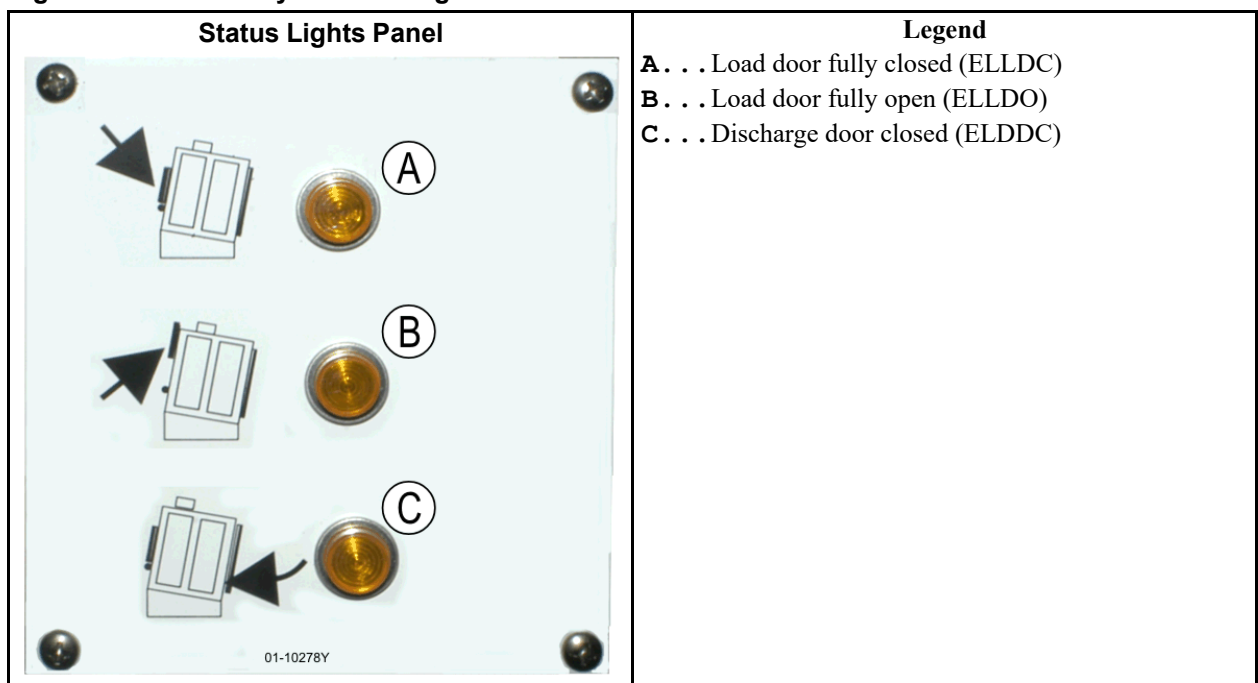
Fire Controller Locked Out — If the machine is equipped with a Landis+Gyr fire control unit, this light (ELCLO) indicates that the microprocessor requested fire, but the flame control unit was disabled because one of the conditions required by the safety reset circuit was not satisfied.

1.2.3 Machine-mounted Status Lights—Steam and Thermal Oil Dryers and Conditioners and All Shakers

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Dryers and conditioners heated by steam or thermal oil, as well as all shakers (non-heated units) have three amber status lights on the front panel to monitor the doors.

Figure 10. Steam Dryer Status Lights



Load Door Closed — This light (ELLDC) indicates that the load door is fully closed. If the load door is not fully closed 15 seconds after the dryer receives the **Loaded** signal, the **Load Door Open** message is displayed.

Load Door Open — This light (ELLDO) indicates that the load door is fully open. If the load door does not open fully within 15 seconds of the “open load door” command from the micro-processor, **Load Door Not Open** is displayed.

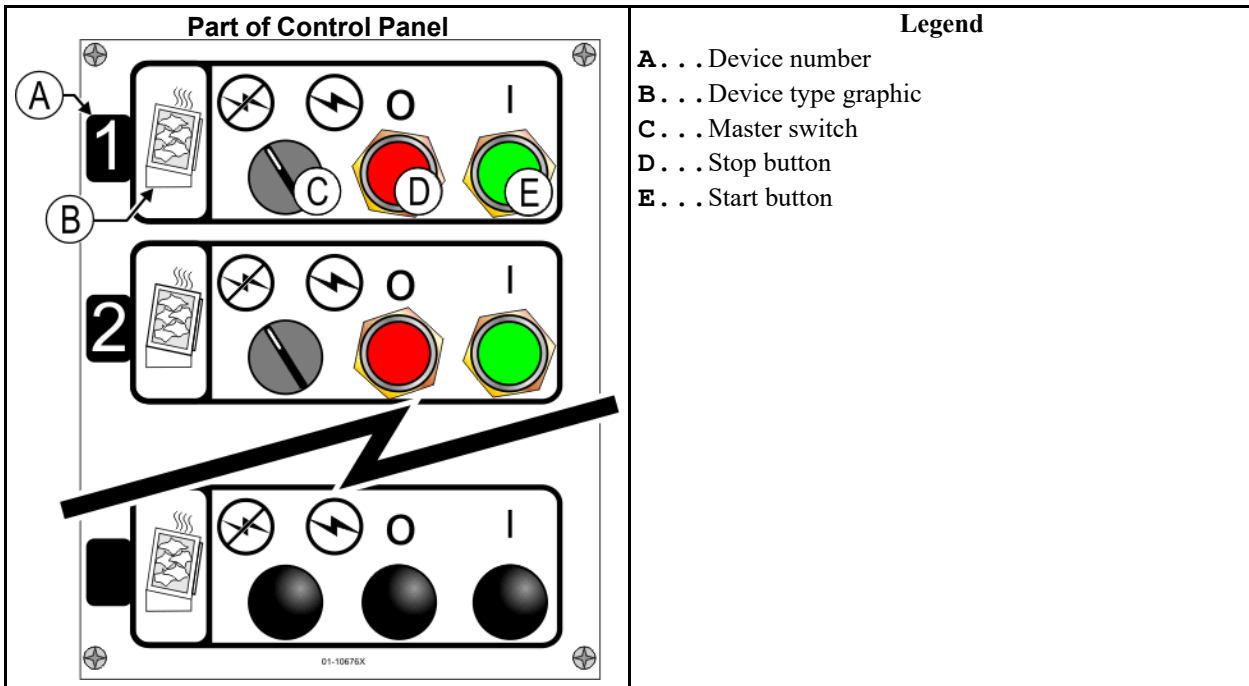
Discharge Door Closed — This light (ELDDC) indicates that the discharge door is completely closed. If the controller does not detect the discharge door closed, it will permit the load door to open for loading, but it will not signal the loading device to begin loading and the message **Discharge Door Open** will be displayed.

1.2.4 Controls Mounted on the Dryer-Shuttle Controller (Drynet™) Console

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In normal operation, all machines in the Drynet™ network are individually powered on and off at this location. On machines that are not part of a Drynet™ network, corresponding controls are mounted on a separate dryer control box.

Figure 11. Drynet™-mounted Controls



Master Switch (C) — The **Master switch** controls single-phase control circuit power to the machine and the DC power supply for the microprocessor and its components, as follows:

- ⚡ The circuit is energized, permitting operation.
- ⊗ The circuit is de-energized, stopping or preventing operation.

Stop Button (D) — Pressing this button stops the machine immediately by opening the three-wire circuit. The Emergency Stop button performs the same function.

Start Button (E) — Pressing this button enables machine operation if all safety considerations are met. When operation is enabled, the machine will operate in manual or automatic mode.

1.2.5 Machine Functions Available to the Operator on Drynet™

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During normal operation, the Drynet™ CRT will display a small **Device Status** window for every machine (dryer and shuttle) on the Drynet™ network. If you click on the window itself, this displays the **Machine Functions** window for the selected machine. Both windows contain buttons available to the operator. Some buttons are repeated on both windows. Only certain buttons are available depending on whether and how the user is logged in to the system. Click a button with the mouse to actuate the function. These windows and buttons are shown and explained below.

Figure 12. Drynet™ Windows Used by the Operator

Dryer Status Window

WAITING FOR LOAD
LOADING NOT ALLOWED

Machine Functions Window

Machine Name: Gas Dryer #1
Machine Class: Dryer (Gas)
Machine Address: 2

Manually loading a Dryer

00 - REDRY

0 - Full Load

Optional Batch Data

Select Formulas

Select Destination

Select Customer

Select Goods Code

Enter Weight

Manual Drycode Modifications

Legend:

- A . . . Device status display area
- B . . . Device selection box
- C . . . Exit Keypad button
- D . . . Signal Cancel button
- E . . . Next/Enter button
- F . . . Cancel button
- G . . . Skip to button
- H . . . Basket 2-way button
- I . . . Extend Time button
- J . . . Load Allowed/Not Allowed button
- K . . . View Inputs/Outputs button
- L . . . View Graph button

Device status display (A) — The controller uses this area to display messages relevant to the active device selected according to the section below.

Device selection box (B) — Click the mouse on the arrowhead at the right end of this box to see a list of all devices controlled by this Dryer/Shuttle controller. Click on one of the devices in the list to make it the active device.

Exit Keypad button (C) — Click the mouse on this button to return to the machine display screen to monitor all devices.

Signal Cancel button (D) — If an error caused the operator signal (flashing lights and/or audible buzzer), click on this button to silence the signal. If the signal began when a valid formula was selected, the signal will end automatically when the formula is started.

Next/Enter button (E) — This button is enabled only when an administrator or an operator is logged in at the controller.

Cancel button (F) — Click the mouse on this button to cancel the current drycode step.

Skip to button (G) — This button is enabled only when an administrator or an operator is logged in at the controller.

Basket 2-way button (H) — Click the mouse on this button to toggle basket rotation between one-way and two-way.

Extend Time button (I) — Click the mouse on this button to add one minute to the time of the current step. Each additional click adds another minute.

Load Allowed/Not Allowed button (J) — Performs the same function as the **Load Not Allowed** switch on the machine. Click this button to take the selected machine “off-line” (Not Allowed) or return it on-line (Load Allowed). While off-line, the machine will not request a load and the shuttle will not deliver cakes to this machine.

View Inputs/Outputs button (K) — Click this button to display the **Dryer I/O** window, which shows the on/off status of each microprocessor input and output for the selected machine.

View Graph button (L) — Click this button to display the **Temperature Profile** window for this machine, which shows a real-time graph of temperature and related information for the selected machine.

2 Normal Machine Operation

BNDUUO01 / 2018283

BNDUUO01 0000189679 D.4 1/2/20 1:40 PM Released

2.1 Dryer Operating Instructions for Plant Personnel

BNDUUO01.C01 0000189678 B.6 D.4 1/2/20 1:40 PM Released

2.1.1 Start Here for Safety

BNDUUO01.C02 0000189677 B.6 D.4 C.4 1/2/20 1:40 PM Released

This document is meant to remind you, the person operating this dryer, of what is required to operate this machine. Do not attempt to operate this machine before an experienced, trained operator explains the details to you.



DANGER: Multiple Hazards— Careless operator actions can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.



DANGER: Electrocutation and Electrical Burn Hazards — Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.



- ▶ Know the location of the main machine disconnect and use it in an emergency to remove all electric power from the machine.
- ▶ Do not attempt unauthorized servicing, repairs, or modification.
- ▶ Do not unlock or open electric box doors.

2.1.2 Check Switch Settings

BNDUUO01.T01 0000189676 B.6 D.4 1/2/20 1:40 PM Released

Display or Action

Explanation



Verify that the **Run/Program** keyswitch is at 




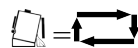
All emergency stop buttons must be unlatched and in the **ready** position to allow machine operation.




Verify that the master switch is at 




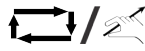
Verify that the **Load Not Allowed** switch is at  to allow automatic loading.




Verify that the **Discharge Allowed** switch is at  to allow automatic discharging of processed goods.



Verify that the **Local/Remote** switch is set to  to allow network communication.



Verify that the **Automatic/Manual** switch is at  to allow automatic operation.

2.1.3 Loading the Machine

BNDUUO01.C03 0000189675 B.6 D.4 C.4 1/2/20 1:40 PM Released

A Milnor® system controller automatically operates this machine and other machines in the system. If all switches are positioned as described in [Section 2.1.2 : Check Switch Settings, page 19](#), the machine will accept, process, and discharge a load without manual intervention.

At start-up, the machine asks the operator if the machine is loaded. If the machine is not loaded, normal automatic operation begins. If the machine contains a load, the machine controller or Mildata® computer will prompt the operator for the data associated with the load. When the operator enters and confirms all necessary batch data, begins operating in automatic mode.

2.1.4 Initiate Automatic Operations

BNDUUO01.T04 0000190587 B.6 D.4 C.4 1/2/20 1:40 PM Released

Automatic operations initiate when,

1. the dryer switch settings match those in [Section 2.1.2 : , page 19](#)
2. every dryer is powered up, online, and displays “Waiting for Load”
3. the shuttle is powered up and senses no load

2.1.5 What Does the Display Tell Me?

BNDUUO01.C04 0000189674 B.6 D.4 1/2/20 1:40 PM Released

2.1.5.1 Drycode and Step Information for Gas-fired Dryers

BNDUUO01.R01 0000189673 B.6 D.4 1/2/20 1:40 PM Released

Display or Action

Explanation

```
WAITING FOR LOAD
*****
```

Dryer is idle.

```
LOADING
-----
```

Dryer is loading.

```
04F TIF TOF 031 AIR
S01 425D185 012 000
```

04F indicates that the dryer is running drycode 04 for a full load; **04P** would represent a partial load.

S01 is the current step number of the selected drycode.

TIF appears above the inlet temperature in degrees Fahrenheit (425 in this example). **TIC** appears when the dryer is configured for Celsius.

TOF appears above the outlet temperature in degrees Fahrenheit (185 in this example). **TOC** appears when the dryer is configured for Celsius.

D between the inlet and outlet temperatures represents **Desired** temperature. The display alternates to also show the **Actual** temperatures when **A** replaces **D**.

031 represents the minutes and quarter-minutes of total run time (3 minutes and 15 seconds in this example).

012 represents the time remaining in this step (1 minute and 30 seconds in this example).

AIR appears above the damper position (000 in this example, range is 000 through 002). The display alternates to also show the modulating valve position below **VP**.



2.1.5.2 Drycode and Step Information for Steam Dryers

BNDUU001.R02 0000189698 B.6 D.4 1/2/20 1:40 PM Released

Display or Action	Explanation
<pre>WAITING FOR LOAD *****</pre>	Dryer is idle.
<pre>LOADING -----</pre>	Dryer is loading.
<pre>04F TIF TOF 031 AIR S01 ---D--- 012 000</pre>	<p>04F indicates that the dryer is running drycode 04 for a full load; 04P would represent a partial load.</p> <p>S01 is the current step number of the selected drycode.</p> <p>Desired temperatures are not set on steam dryers. Actual temperatures are shown on the bottom line of the display, below TIF (TIC) and TOF (TOC)</p> <p>031 represents the minutes and quarter-minutes of total run time (3 minutes and 15 seconds in this example).</p> <p>012 represents the time remaining in this step (1 minute and 30 seconds in this example).</p> <p>AIR appears above the damper position (000 in this example, range is 000 through 002). The display alternates to also show the steam ratio below SR.</p>

2.1.6 Unloading the Machine

BNDUU001.R03 0000189708 B.6 D.4 1/2/20 1:40 PM Released

In automatic mode, the machine will discharge at the end of each dry cycle. To discharge the goods manually, set the **Discharge Allowed** switch to . Use  to jog the basket.

When the dryer is waiting to discharge or is discharging, the display alternates **WAITING TO DISCHARGE** or **DISCHARGING** with the batch data of the load being discharged.

Display or Action

Explanation

FM	DC	DS	CC	GC	WDT
15	04	02	12	11	123

FM appears above the wash formula number for the load.

DC appears above the drycode number for the load.

DS appears above the destination for the load.

CC appears above the customer code for the load.

GC appears above the goods code for the load.

WDT appears above the elapsed time spent waiting to discharge.

3 Signals and Errors

3.1 Shuttle Error Messages

Most shuttle error messages and the conditions that cause them can be resolved by the operator. In some cases the operator will need to call for maintenance or management assistance. Maintenance assistance is needed in either of the following two circumstances:

- When the machine requires servicing to resolve the error.
- When an error must be resolved from inside the shuttle operating area with power on.

shuttle operating area the area within which the shuttle moves during automatic operation and which must be guarded, as explained in ANSI Standard Z8.1-2006 "American National Standard for Commercial Laundry and Drycleaning Equipment and Operations - Safety Requirements." Personnel who enter the shuttle operating area, whether to resolve an error, or for any other reason, must be properly trained in shuttle safety and abide by the published facility safety precautions.



WARNING: Strike and Crush Hazards — A shuttle moves unpredictably during automatic operation. Anyone within the operating area of the shuttle can be struck or crushed.



- ▶ Operators: Never enter the shuttle operating area unless power is reliably locked out.
- ▶ Maintenance personnel: Always disable automatic operation before entering the shuttle operating area.

From the standpoint of how to resolve the error, shuttle errors are of five types: time limit errors, level encoder counting errors, position errors, transfer errors, and errors that should be reported to management or maintenance personnel. The errors are listed by category and alphabetically within each category. You may need to look through more than one category to find the error you are looking for. The explanations for each category are in three parts:

1. a description of this category of error
2. a list of the errors and their descriptions
3. how to resolve an error of this type

3.1.1 About “THREE WIRE DISABLED PUSH START TO GO”

This message appears and the operator alarm sounds at startup until the **Start** button (①) is pressed. This message and signal will also occur if any emergency stop button is pressed, if a motor overload trips, or if certain other events occur. Although the errors described in this document

do not, by themselves, disable the three-wire circuit, a few may coincide with events that do disable the three wire circuit. For example, if the shuttle traverses far enough to close an oops switch at the end of the rail and trigger a RAIL LIMIT error (see [Section 3.1.5 : Position Errors, page 25](#)), the shuttle foot guard may also hit an object and depress, opening the three wire circuit. In such a case, the THREE WIRE DISABLED message, not the RAIL LIMIT message will appear, requiring the shuttle to be physically moved far enough away from the object to release the foot guard.

3.1.2 Resuming Automatic Operation After Error Correction

BNDDUT01.C03 0000189704 B.6 C.4 1/2/20 1:40 PM Released

The shuttle will initialize as a normal part of recovering from most of the errors described in this document. During this process it will usually traverse to its home station and/or move the elevating bed to the lowest level. If the shuttle contains goods, it may also prompt for cake data. In this event, the operator must be able to accurately enter or confirm the batch codes for the goods on each position of the shuttle.

3.1.3 Time Limit Errors

BNDDUT01.R01 0000189703 B.6 C.4 1/2/20 1:40 PM Released

A time limit error occurs if a shuttle action is not completed within the specified time. It is likely that a temporary condition interfered with shuttle movement. If the specified time is configurable, there is a slight chance that the time value must be adjusted (see the shuttle configuration instructions in the reference manual). Time limit errors stop shuttle motion so that personnel can check for an interfering condition. These errors are as follows:

Display or Action

Explanation

ERROR - CHECK CHAIN
PRESS SIGNAL CANCEL

While initializing, the shuttle bed failed to move to its maximum and minimum positions within the time specified in the "time to reach bottom-top" configure decision.

ERROR - NO CAKE
PRESS SIGNAL CANCEL

During discharge, the discharge-end photo eye was not blocked within the time specified in the "clear belt time" configure decision.

ERR - NOT COUNTING
PRESS SIGNAL CANCEL

More than 45 seconds elapsed between station targets while the shuttle was moving left or right.

ERROR- WAIT TOO LONG
PRESS SIGNAL CANCEL

The receiving device did not acknowledge the machine's discharge within the time specified in the "allied load completed delay" configure decision.

TOO LONG TO DISCH.
PRESS SIGNAL CANCEL

The belt is moving and the discharge-end photo eye is still blocked 30 seconds after the time specified in the "clear belt time" configure decision expires.

2 LONG COUNT LVL
PRESS SIGNAL CANCEL

More than 30 seconds elapsed between level targets while the shuttle elevating bed was moving up or down.

Identify and correct any condition that may have prevented the action from occurring, then press the **Signal Cancel** button (✕) to initialize the shuttle and resume automatic operation. If error recurs, call maintenance personnel.

3.1.4 Level Encoder Counting Errors

BNDDUT01.R02 0000189702 B.6 C.4 1/2/20 1:40 PM Released

The controller for some shuttle models tracks the position of the elevating bed with an encoder that counts targets at each vertical level as the bed passes the target. An error occurs if the level encoder loses count. These errors stop shuttle motion so that the shuttle can be re-initialized. This category of error includes the following:

Display or Action

Explanation

CNTS EXCEEDED MAX
PRESS SIGNAL CANCEL

The count exceeded the maximum value specified in the "number of receive levels" or the "number of discharge levels" configure decision, whichever applies.

CNTS FELL BELOW 0
PRESS SIGNAL CANCEL

The count is at, or about to fall below zero.

SAW SLACK CHAIN
PRESS SIGNAL CANCEL

A slack chain condition occurred while the bed was moving down, but before reaching the desired count.

The condition that caused the encoder error is likely to be momentary and will probably not recur. Press the **Signal Cancel** button (✕) to initialize the shuttle and resume automatic operation. If the error recurs, call maintenance personnel.

3.1.5 Position Errors

BNDDUT01.R03 0000189701 B.6 C.4 1/2/20 1:40 PM Released

This type of error indicates that the controller detects the shuttle or a shuttle component is in the wrong place. Shuttle motion stops so that it can be determined if manual intervention is needed. Manual intervention may involve removing goods that are blocking a photoeye, or repositioning the shuttle using the manual controls.



CAUTION:

Risk of damage — The manual controls override the photo eyes which normally prevent the shuttle from running a cake into an object, or onto the floor.




► Use care and consider the consequences before moving the shuttle manually.

The pertinent manual controls for each error are listed in the error description. This category of error includes the following:

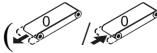


Display or Action

Explanation


CAKE MUST BE
MANUALLY UNLOADED

Applies to shuttles configured not to elevate the second belt to discharge. A cake is on belt 1 but not on belt 0. Pertinent manual controls: **Belt 1 Forward/Reverse** switch. With belt 1 aligned for discharge, hold switch at **Forward** () until cake is discharged.


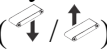
ERROR-NOT RETRACTED
PRESS SIGNAL CANCEL

The shuttle desired to traverse, elevate, or descend, but the shuttle bed is not fully retracted. Pertinent manual controls: **Belt 0 Extend/Retract to Receive** switch () , **Belt 0 Extend/Retract to Discharge** switch () / () , **Belt Fully Retracted** light. Operate the appropriate switch to illuminate the light.


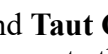
ERROR - RAIL LIMIT
PRESS SIGNAL CANCEL

The shuttle traversed too far right or left, actuated the oops switch, and remained there longer than five seconds. Pertinent manual control: **Travel Left/Right** switch () .

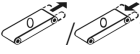
ERROR - SLACK CHAIN
PRESS SIGNAL CANCEL

The shuttle bed either descended onto its lower mechanical stop or met an obstruction while descending. Pertinent manual controls: **Enable Down/Up** key switch, **Move Down** switch () or **Move Down/Up** switch () , as applicable.



ERROR - TAUT CHAIN
PRESS SIGNAL CANCEL

The shuttle bed either struck its upper mechanical stop or met another obstruction while rising. Pertinent manual controls: **Enable Down/Up** key switch, **Move Down** switch () or **Move Down/Up** switch () , as applicable, and **Taut Chain** light. Set the key switch for manual operation and operate the switch. In a taut chain condition, the light is illuminated and goes out when the condition is eliminated.

EXTENDING TOO FAR
ADJUST BELT MANUALLY


The shuttle bed went beyond its fully extended position. Pertinent manual controls: **Belt 0 Extend/Retract to Discharge** switch () , **Belt 0 Fully Extended to Discharge** light. Operate the switch to illuminate the light.

RETRACTING TOO FAR
ADJUST BELT MANUALLY


The shuttle bed went beyond its fully retracted position. Pertinent manual controls: **Belt 0 Extend/Retract to Receive** switch () , **Belt 0 Extend/Retract to Discharge** switch () ,

Belt Fully Retracted light, Operate the appropriate switch until the light illuminates.

Correct a position error as follows:

Display or Action	Explanation
	Set the Automatic/Manual switch to Manual .

Use the appropriate manual controls (explained above) to position the shuttle properly. In the case of a chain error, you will need access to the key-operated **Enable Down/Up** switch. If the shuttle will not respond, call maintenance personnel. If you are able to re-position the shuttle:

Display or Action	Explanation
	Return the Automatic/Manual switch to Automatic .

BARE MANUAL-PRESS
SKIPTO TO EXIT

This message appears when returning to automatic mode after using the manual controls.

SKIP TO

Press the SKIP TO key (keypad) or button (Drynet™ device display) to start shuttle initialization.

3.1.6 Transfer Errors

BNDDUT01.R04 0000189700 B.6 C.4 D.2 5/26/20 4:32 PM Released

An error of this type occurs if, for example, a piece of goods separates from a pressed cake and blocks a photo eye. These errors include the following:

Display or Action	Explanation
<div style="border: 1px solid black; padding: 2px;">ERROR - EYE ERROR 1 PRESS SIGNAL CANCEL</div>	Either the load-end or discharge-end photo eye is blocked on a multi-cake belt when the shuttle desires to move, indicating that a cake may be protruding off of the belt, risking damage. EYE ERROR 2 is similar. Each error applies to specific models.
<div style="border: 1px solid black; padding: 2px;">ERROR - EYE ERROR 3 PRESS SIGNAL CANCEL</div>	The discharge-end photo eye on a multi-cake belt did not block and clear as many times, during discharge, as the controller believes there are cakes; that is, the controller counted too few cakes. This can occur if goods straddle two cakes making them indistinguishable to the controller.
<div style="border: 1px solid black; padding: 2px;">ERROR - EYE ERROR 4 PRESS SIGNAL CANCEL</div>	The discharge-end photo eye on a multi-cake belt blocks during loading, indicating that cake(s) following the first cake, may be missing. When a multi-cake belt is loaded, the last cake should clear the load-end photo eye and stop the belt before the first cake blocks the discharge-end photo-eye. This error can occur if loosely compacted cakes spread apart and take up too much room on the belt.

ERROR - EYE ERROR 5
PRESS SIGNAL CANCEL

The load-end and discharge-end photo eyes are both blocked when the shuttle desires to traverse or lower the bed, indicating that a cake may protrude from the belt, risking damage.

ERROR - EYE ERROR 6
PRESS SIGNAL CANCEL

The overshoot photoeye is blocked when the shuttle desires to traverse or raise/lower the bed, indicating that a cake may protrude from the belt, risking damage.

ERROR - XFER ABORTED
PRESS SIGNAL CANCEL

The Miltrac™ controller cancelled the transfer in progress. For example, one of the photo eye errors described above occurs after the transfer process starts, but before communication with Miltrac™ is completed.

Observing published safety precautions, clear an improperly blocked photoeye by physically removing the goods or by manually running the belt to move the goods, as follows:

Display or Action

Explanation



Set the **Automatic/Manual** switch to **Manual**.

Use the appropriate **Belt x Forward/Reverse** switch (up to four vertically stacked belts, numbered 0 through 3, from bottom to top) to run that belt and complete or correct the transfer.



Return the **Automatic/Manual** switch to **Automatic**.

BARE MANUAL-PRESS
SKIPTO TO EXIT

This message appears when returning to automatic mode after using the manual controls.



Press the SKIP TO key (keypad) or button (Drynet™ device display) to start shuttle initialization and resume automatic operation.

3.1.7 Errors That Should Be Reported to Management or Maintenance Personnel

BNDDUT01.R05 0000189699 B.6 C.4 1/2/20 1:40 PM Released

The following errors have consequences that should be resolved by management personnel. Addressing the consequences resolves the error.

Display or Action

Explanation

CHECK I/O BOARD x
PRESS SIGNAL CANCEL

The controller detects a failed or missing control circuit board. If this error occurred immediately after configure values were programmed, it is probably the result of specifying an optional feature that is not actually present on the machine. If it occurred after adding hardware for an optional feature, it indicates that this feature has not yet been specified in configuration. Otherwise, it probably indicates that a board or related circuitry has failed.

CLEAR MEMORY NOW
PRESS 4 + 5 + 6

Field-programmable data became corrupt. Configure values must be re-programmed as explained in the part of the reference manual on programming.

ERROR – TOO MANY DIR
PRESS SIGNAL CANCEL

The right and left direction inputs from an allied loading device were actuated at the same time. This is a control circuitry malfunction requiring electrical troubleshooting.

PROGRAM 0 MENU
OK TURN KEY TO RUN

The **Run/Program** key has been left in the machine and the switch is in the **Program** position. This key should be removed and placed in a secure location accessible only to management personnel.

BNDUUT01 / 2018283

BNDUUT01 0000189731 C.4 1/2/20 1:40 PM Released

3.2 Dryer Error Messages

BNDUUT01.C01 0000189730 B.6 C.4 1/2/20 1:40 PM Released

Most dryer error messages and the conditions that cause them can be resolved by the operator. In some cases the operator will need to call for maintenance or management assistance. If the dryer is automatically loaded by a shuttle conveyor, do not enter the shuttle operating area to resolve an error unless properly trained in shuttle safety. Abide by the published facility safety precautions.



WARNING: Strike and Crush Hazards — The shuttle conveyor that serves a line of automatically-loaded dryers moves unpredictably during automatic operation. As it traverses, it passes, almost touching the front of each dryer. Anyone at or near the front of a dryer can be struck or crushed.



- ▶ Operators: Never enter the shuttle operating area unless power is reliably locked out.
- ▶ Maintenance personnel: Always disable automatic operation before entering the shuttle operating area.

From the standpoint of how to resolve the error, dryer errors are of four types: overheat errors, load door advisories, other automatic operation errors, and errors that should be reported to management or maintenance personnel. The errors are listed by category and alphabetically within each category. You may need to look through more than one category to find the error you are looking for. The explanations for each category are in three parts:

1. a description of this category of error
2. a list of the errors and their descriptions
3. how to resolve an error of this type

3.2.1 About the “THREE WIRE DISABLED” Message

BNDUUT01.C02 0000189729 B.6 C.4 1/2/20 1:40 PM Released

This message appears and the operator alarm sounds at startup until the **Start** button (①) is pressed. This message and signal will also occur if any emergency stop button is pressed, if a motor overload trips, or if certain other events occur. A few errors described in this document may coincide with events that disable the three-wire circuit. When this occurs, the THREE WIRE DISABLED message, and not the error message, will typically appear on the display. However, two important special cases are explained in [Section 3.2.2 : Overheat Errors, page 30](#).

3.2.2 Overheat Errors

BNDUUT01.R01 0000189728 B.6 C.4 1/2/20 1:40 PM Released

An overheat error occurs if the controller detects an outlet temperature exceeding the permissible value. Although an overheat error can have numerous causes, the controller assumes there is a fire in the basket and takes the following actions:

- opens the three wire circuit, which:
 - shuts off the heat source (e.g., closes the gas valve)
 - shuts off the main air flow
 - stops basket rotation
- actuates the internal sprinkler, which sprays water into the basket

Display or Action

Explanation

OUTLET TEMP EXCEEDED 240dF -POWER DOWN-
--

A redundant safety feature on the dryer will trigger this error if outlet temperature exceeds 240° Fahrenheit (116° Celsius). This event will not occur as a result of an actual temperature rise unless the THREE WIRE DISABLED condition, explained below, fails, perhaps due to a component failure. This error is triggered in software, based on the outlet temperature input. Hence, this error may occur erroneously, due to an electrical component failure such as a failed A/D board. Although the three wire circuit opens when this event occurs, this error message will take precedence over the THREE WIRE DISABLED message.

THREE WIRE DISABLED *****

This message may be the result of the outlet temperature exceeding 225° Fahrenheit (107° Celsius), but it may also have other causes. Whenever this message appears during operation (after the **Start** button is pressed), **immediately check to see if the sprinkler mechanism (mounted on the side of the discharge shroud) is actuated** and if so, resolve this message as an overheat error. This error is triggered by either of two temperature safety switches (Fenwal switches) mounted in the outlet duct.

Resolve an overheat error as follows:

Display or Action

Explanation



1. If the OUTLET TEMP EXCEEDED 240dF error occurred, turn the dryer **Master** switch off, then back on. This is required to reset the Desires Sprinkler output relay. Otherwise it will not be possible to shut off the sprinkler.
 2. If there is no evidence of fire, **pull down the red handle on the sprinkler mechanism until the handle locks in place**, to stop the flow of water into the basket, but continue to observe for evidence of fire and be prepared to re-activate the sprinkler.
- ① Press the dryer **Start** button. If outlet temperature has not cooled below 214° Fahrenheit (101° Celsius), the three wire circuit will not energize. Wait until the dryer has cooled sufficiently.

Once the three wire circuit is energized, use the manual controls to discharge any fire-damaged goods. Use all necessary fire safety precautions when doing so. If a basket fire did occur, the dryer will need to be inspected for damage before returning it to service. Otherwise, with the dryer **Automatic/Manual** switch set to **Automatic**, the dryer should resume automatic operation. If no fire occurred but the error recurs, this indicates a malfunctioning component. Call maintenance personnel.

3.2.3 Load Door Advisories

BNDUUT01.R02 0000189727 B.6 C.4 1/2/20 1:40 PM Released

These messages occur with no accompanying operator alarm if the load door does not open or close within 15 seconds after being commanded to do so. Processing will not proceed until the action occurs, but will resume without any intervention once the appropriate load door input is made.

Display or Action

Explanation

LOAD DOOR NOT OPEN

The load door did not open within the specified time. The door may not have moved to the needed position due to a mechanical problem such as low air pressure. This error could also occur erroneously as a result of a problem such as a failed proximity switch.

LOAD DOOR OPEN

The load door did not close within the specified time. This is most likely due to a piece of goods blocking the door, but it could also be for a similar reason as LOAD DOOR NOT OPEN.

DISCHARGE DOOR OPEN

The discharge door did not close within the specified time, when commanded to do so at loading. This could also be for a similar reason as LOAD DOOR NOT OPEN.

If the condition does not self-correct within a short time, investigate, and correct any condition interfering with load door operation. This will require personnel with the appropriate qualifications

and authority, and compliance with published facility safety precautions. If the condition self-corrects, but recurs, call maintenance personnel.

3.2.4 Other Automatic Operation Errors

BNDUUT01.R03 0000189726 B.6 C.4 1/2/20 1:40 PM Released

The errors in this category are accompanied by the operator signal. Dryer operation stops so that it can be determined if intervention is needed.

Display or Action	Explanation
CHECK ERROR LIGHTS	This error only applies to gas and propane dryers. Numerous conditions must be satisfied before the Fireye or Landis & Gyr brand (as specified) flame control system will ignite the burner or permit it to remain lit. This error indicates that not all conditions are satisfied. The machine controller does not monitor these condition individually, but several conditions are represented by lights on the dryer status (error) light panel. When illuminated, certain lights indicate that a particular condition is satisfied while others indicate an un-met, or error condition. Refer to the description of dryer controls for an explanation of each status light.
DISCHARGE DOOR NOT CLOSED AFTER DISCH.	The discharge door did not close fully after discharge. This may be due to goods blocking the door, to a mechanical problem such as low air pressure, or to an electrical problem such as a failed proximity switch.
ROTATION FAILURE	The basket stopped rotating for more than 8 seconds during a dry cycle. If the basket is actually not rotating properly, some possible causes include goods caught in the basket seals, condensation on the basket support rollers causing the basket to slip, and a malfunctioning inverter. The error can also be caused by a problem that prevents the controller from detecting basket rotation, such as a mis-aligned proximity switch, or a burned out capacitor in the motion sensing circuit.
TRANSFER ABORTED CLEAR SHUTTLE FIRST	The Miltrac™ controller cancelled the transfer in progress. For example, a piece of goods blocked the discharge-end photo eye on the shuttle. Hence this error usually means that the shuttle is stopped in front of this dryer and both devices have errors. The shuttle error must be addressed first. Refer to the instructions on shuttle error messages.

Press the **Signal Cancel** button (✖) to silence the operator alarm. If the error self-corrected, automatic operation should resume. If not, investigate and correct the problem. This will require personnel with the appropriate qualifications and authority and compliance with the published facility safety precautions. If the condition self-corrects, but recurs, call maintenance personnel.

3.2.5 Messages That Should Be Reported to Management or Maintenance Personnel

BNDUUT01.R04 0000189725 B.6 C.4 1/2/20 1:40 PM Released

The following errors have consequences that should be resolved by management or maintenance personnel. Addressing the consequences resolves the error.

Display or Action

Explanation

ERROR IN MEMORY
TURN KEY TO PROGRAM

Field-programmable data (configuration and/or drycodes) became corrupt (unreliable). The correct data must be downloaded or re-programmed, as explained in the part of the reference manual on programming.

ILLEGAL DRYCODE xxx
SEE MANUAL

The dryer controller received a request to run a drycode that is not currently programmed; that is, the drycode is not local. The drycode number, along with other batch codes, originated in the Mentor® or Mildata® computer. It is the responsibility of the person who associates the post-wash codes with the wash formula to ensure that the assigned codes are valid. If goods are permitted to be processed in the dryer using an invalid (illegal) drycode, the dryer will simply discharge the goods wet. The operator may be able to resolve this immediate problem by cancelling the operator signal (✕) then invoking another suitable drycode; however, management personnel will need to ensure that either the specified drycode is programmed in (or downloaded to) the dryer or that a valid drycode number is associated with the wash formula in Mentor programming.

INVALID PASSWORD

This message does not apply to dryers in a Drynet™ (Dryer/Shuttle Controller) network. If the dryer is configured to require a password for manual intervention and the operator does not have one, this will need to be obtained from management personnel.

name BOARD FAILED
PRESS SIGNAL CANCEL

The named peripheral board is not communicating with the micro-processor. This will require electrical troubleshooting.