Dryer Unloading

A comprehensive guidebook to being a proficient, safe, and efficient dryer unloader.

Table of Contents

Crane Operation

The controller for the crane has 4 buttons, from top to bottom:

- **Top** raises the crane to the top position, allowing bags to be sent away
- **Centre** aligns the crane to the index position, so empty bags can be loaded
- **Down** lowers the crane, allowing loaded bins to be hooked and raised
- **Index** unlocks the safety stopper, deploying an empty bag

Warnings:

- When raising or lowering the crane from top or centre, **ensure hooks are fully loaded** and secure, to prevent hooks from falling off the rails and causing injury

- When indexing a bag, **ensure the hook fully loads** onto the crane, before moving it

- When raising the crane, after hooking up a loaded bin, **ensure all four loops are attached**, ensuring the bag does not fall off the hook, or cause additional strain on the straps, leading to potential injury or damage

- When lowering the crane, **ensure no one is underneath it**, in the yellow-marked danger zone, to prevent head injury

- When the crane is lowered, be sure to keep an eye on it, when moving bins, as it is very easy to hit with the head, when not paying attention to it.

Notes:

When moving bins

- **securing the paper with the customer code**, by placing a loop on top of it, prevents wind or other factors from causing it to be lost
- **placing all loops in the centre** of the bin, together, makes it easier to hook up the bag, when it gets to the crane
- **slowly rotating** the bin, as opposed to pushing it straight, makes it easier to manoeuvre

When hooking up bags

- **checking knots** on the bag strings ensures loads do not fall prematurely, preventing injury and hassle
- **lowering the crane as soon as possible**, without waiting to position the bin underneath it, will speed up the process of replacing the bin
- **keeping one hand on the crane** controls to lower the crane, **while collecting the hooks** on one finger**,** significantly speeds things up

Additional Information:

- The crane is powered by air hydraulics, so electricity is not a factor

Rails/Lines

The rails/lines are the paths the bags travel, to go where they need to be sent. Certain materials are normally sent to specific lines, as follows:

1) **for sheets** going anywhere *except* ironer 1
2) **for sheets** going *directly* to **ironer 1**
3) **for towels** of any kind
4) for manually folded materials (**robes, bath rugs, duvets/blankets, etc**)
5) for use when rail 4 is occupied
6) **for storage**, when all other lines are full
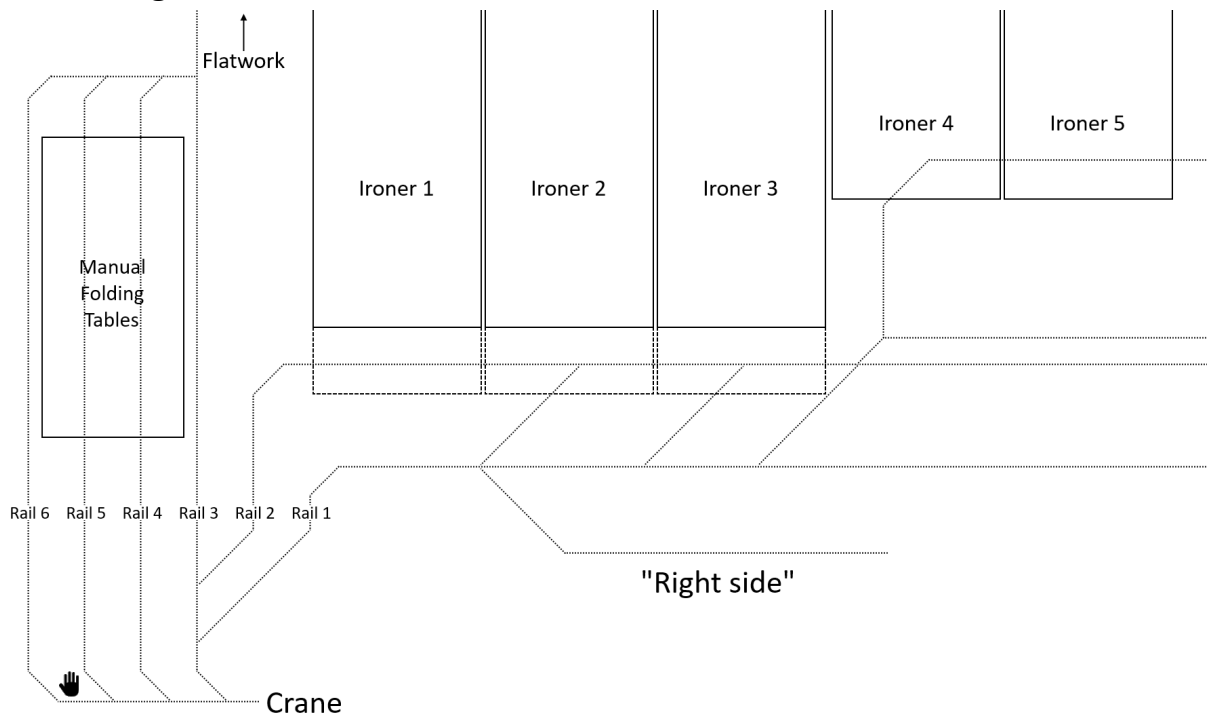
Warnings:

- **Wait until bag has passed all switches and safety stoppers**, before changing the line or moving the crane, *especially after indexing a bag*, as hooks may fall and cause injury
- **Ensure hook does not hit closed switch**, as the safety stoppers may fail, causing hooks to fall and cause injury

Notes:

- For **rail 1,** the switches leading to the "right side", and ironers 2, 3, and beyond, are manual, and must be physically pulled via hanging strings
- For **rails 5 and 6**, the controller has a button only for 6, and switching between them is also manual
- The rails are numbered 1 to 6, going counter-clockwise, starting from the crane
  - ➢ **rail 1** goes across the production floor
  - ➢ **rail 2** goes directly to ironer 1

- ➢ **rail 3** goes directly behind the ironers, to the flatwork area
- ➢ **rails 4 and 5** go directly over the folding tables, where materials are manually folded
- ➢ **rails 6 through 3** all converge at the end, leading to the flatwork area, so exceptions are occasionally made, regarding which materials go where

Codes and Machine Display

The customer codes must be converted to three-letter codes, for other workers to interpret. This is usually done on small sheets of paper next to the computer screens.

Looking at the screens, the codes are displayed as follows:
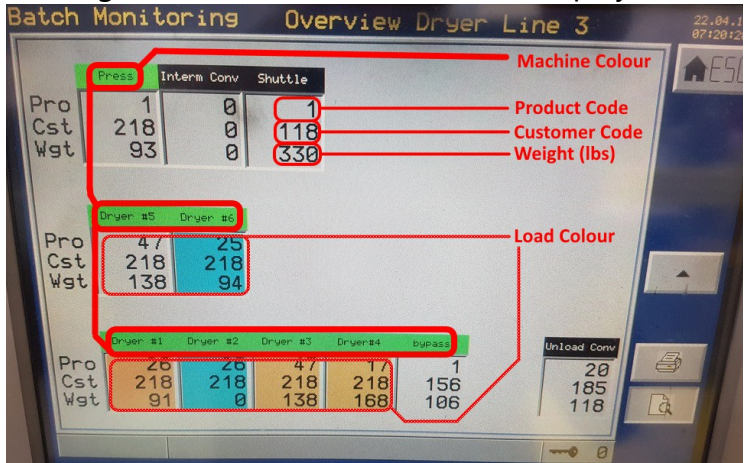
- • Product Code (Pro)   The material type
- • Customer Code (Cst)   The customer
- • Weight (Wgt)   The weight in pounds

the dryer colours can be

- • Green   Dryer is empty
- • White   Dryer is currently loading or unloading
- • Orange   Dryer is running
- • Blue   Dryer is cooling down
- • Yellow   Dryer is ready to unload
- • Grey   Dryer unloading door is opening/closing

and the colours for the machines themselves can be

- • Black   Machine is off
- • Green   Machine is on
- • Red   Machine has a fault/error which must be manually cleared

Warnings:

- • If a load is discharging to an occupied bin, or no bin at all, is at the conveyor belt, **press the red emergency stop button**, to avoid mixing products or spilling loads onto the ground

- The bypass field is for the sheets that skip the dryers, and is updated **after the load has discharged**, so be sure to write down the code *after* it has changed

Notes:

- The unload conv field is the unloading conveyor belt, and can be used, if the dryer field has cleared before the code has been written down

- It is best practice to write down as many codes as possible, and properly label the dryer numbers, to ensure minimal confusion, during busy periods

Going to the top-level menu displays the tunnel (washer), and all the loads within.

The loads are isolated within their own sections inside the tunnel, and discharge one-by-one to the press.

They are then transported by the shuttle to either the bypass (sheets), or the next empty dryer (everything else), therefore this information can be used to write down codes in advance.

Product & Customer Code Exceptions

As of March, 2018, there have been several inconsistencies in the computer systems, leading to a number of product/customer names being printed incorrectly, or not at all, and must be properly labelled, before being sent.

The following is a table listing all known exceptions:

Product Code	Must write
4	**PC** (pillow case)
5	**(1)**
8	**(2)**
42, 44, 47, 48, 52	**TC** (table cloth)

Customer Code	Must write
1	Test Wash
88	
88	[REDACTED]
113	[REDACTED]
119	[REDACTED]
126	[REDACTED]
137	[REDACTED]
155	[REDACTED]
218	[REDACTED]
914	[REDACTED]

Warnings:

- [REDACTED] (245), [REDACTED] (88), and Test Wash (1, 88), as well as [REDACTED] (126) and [REDACTED] (137), **must not be mistaken** for one another, as they are all different customers

- The database for washer 3 as of March, 2018, is **not functioning properly**, and displays incorrect information. However, the information displayed by the press onward is correct

Notes:

- [REDACTED] are all customers under [REDACTED], and are the same

- [REDACTED] blankets and duvets, and [REDACTED] (yellow) and [REDACTED] (green) coloured towels do not require written codes, as they are uniquely identifiable materials

Machine Faults/Errors

There are several faults which do not require repair parts, and as dryer unloaders are closest to the machines, it is more efficient to know how to fix them, rather than to wait for mechanics who may be busy with other tasks.

Warnings:

At all times, when in the machine areas, **listen and look out for dangers**, such as **shuttles**, and other automatic machines, as they can crush.

- Shuttle 1 beeps, when in motion

- Shuttle 2 is near silent, so you must always check, before moving through its path

- Shuttle 3 makes a loud sound, when in motion

Shuttle 1   *Shuttle 2*   *Shuttle 3*

Also, when cleaning dryer lint, **display the lint cleaning sign**, in front of the screen, to prevent another employee from activating the dryer, while you are cleaning.
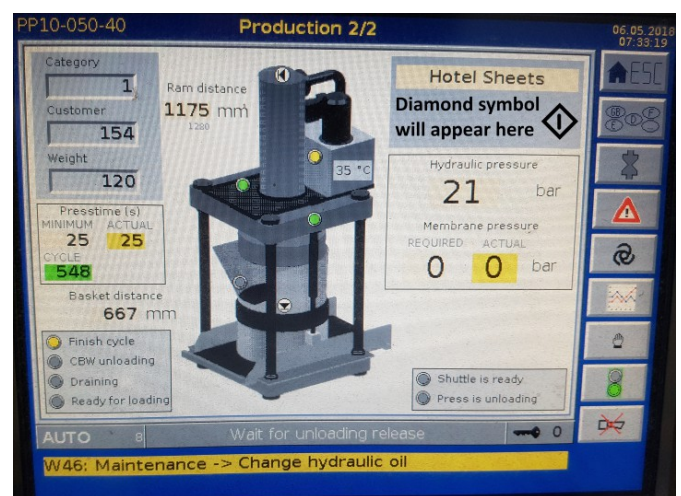
The following is a table of the most to least common issues with machines, and how to fix them:

Press:

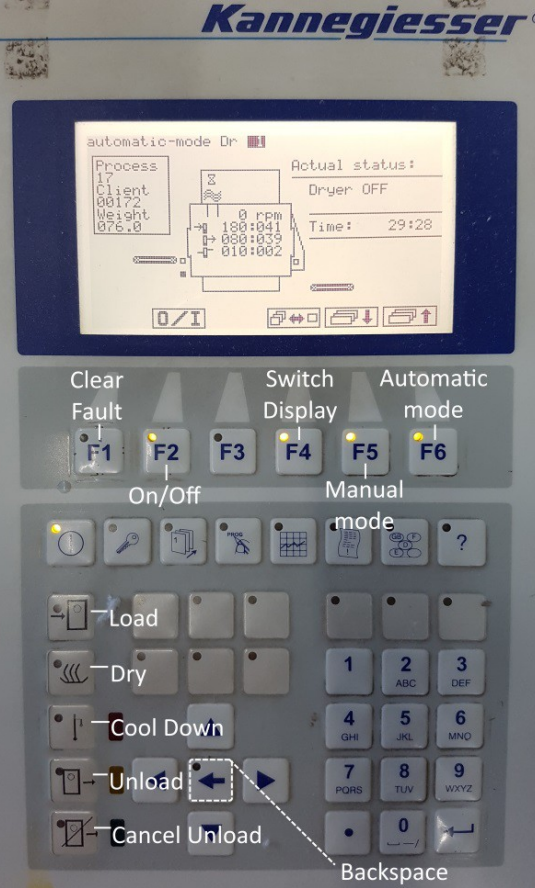|	
Table not free	Clear fault, then press flashing icon *(diamond)*
Pressure not 30 bar	Clear fault, wait for ram to raise to 270mm, then click flashing icon
Loading chute occupied	1. Open press door cover 2. Clear loading chute with rod **(Do not use hands).** 3. Clear fault 4. Click flashing icon

Press 2 Control

Press 3 Control

Dryer:

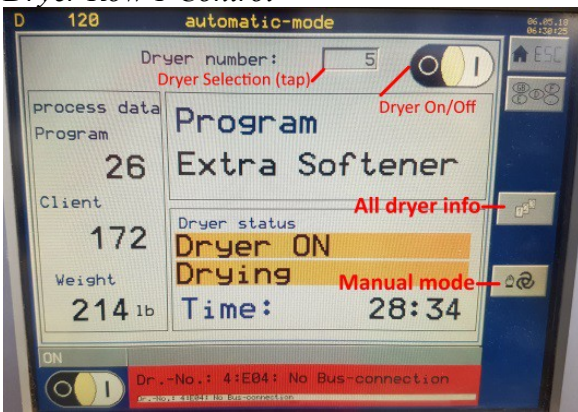|	
Lint filter Underpressure air Pre-purge	**For row 2:** 1) Select dryer number *(right-side screen)* 2) Open loading door *(ESC to main menu > service > manual function > LoadingD)* 3) Clean lint *(beware of shuttle)* 4) Ensure load has not fallen to the floor, and loading door is not blocked 5) Clear fault *(bottom right corner)* 6) Return to production *(ESC x3)* ↻ **For row 3:** 1) select dryer 2) clear fault *(F1)* 3) turn off dryer *(F2)* 4) clean lint *(beware of shuttle)* 5) turn on dryer *(F2)*

Loading door not closed	1) Select dryer number 2) Open loading door 3) Clear door, and place load back inside 4) Clear fault 5) Return to production ⊘
Drum standstill	Clear fault, then open and close loading door. If fault persists beyond 3 attempts, call mechanic
Gas control	Clear fault, and if problem persists beyond 3 times, call mechanic

Dryer Row 1 Control

Dryer Row 2 Control

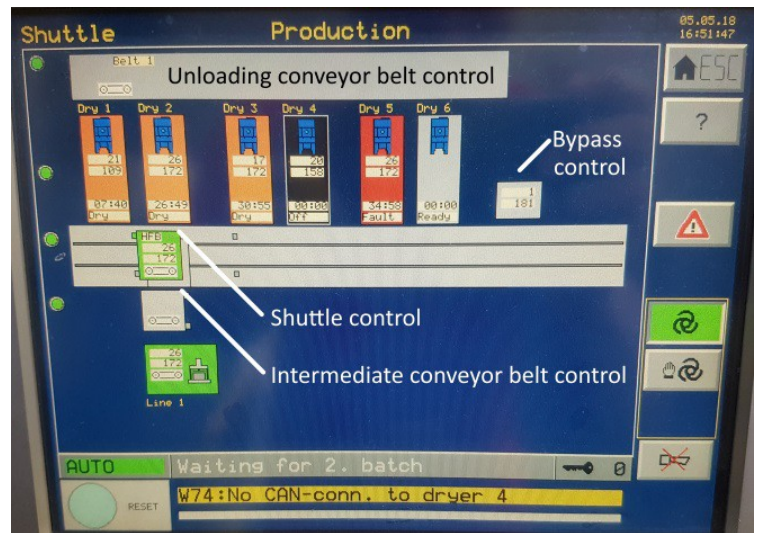*Dryer Row 3 Control*

Shuttle:

Prevent movement	1) Select shuttle icon *(left monitor)* 2) Switch to manual control *(hand icon)* 3) Check front sensor of shuttle belt for blockage, and clear it if found 4) Move belt, to bring cake forward, until it automatically stops 5) Return to automatic ⊘
Conveyor	Clear conveyor belt sensor of blockage, then clear fault *(left monitor)*

Costa	1) Clear fault from costa controls *(yellow button on wall beside shuttle and dryer 11)*
	2) Click next, to send all default values, until screen says "Waiting for loading"
	3) Go to dryer row 1 controls *(behind costa)*, and press signal cancel, for the shuttle
	4) **If successful**, send all cake data forward *(automatically pops up)*
	5) **If unsuccessful**, climb ladder to check for sensor blockage, clear sensors, and repeat step 3
	6) If blockage is difficult to clear, go to shuttle, set to manual *(top dial)*, and move belt forward, until cake(s) are pushed to the front, then set back to automatic, return to the controls, click shuttle, and click skip to enable the shuttle, then repeat step 3
Shuttle 1	Follow costa procedure from step 3

Costa Control

Shuttle 2 Control

This section is reprinted on the back page, for ease of access.

Product & Customer Code Exceptions

Product Code	Must write
4	**PC** (pillow case)
5	**(1)**
8	**(2)**
42, 44, 47, 48, 52	**TC** (table cloth)

Customer Code	Must write
1 88	Test Wash
88	[REDACTED]
113	[REDACTED]
119	[REDACTED]
126	[REDACTED]
137	[REDACTED]
155	[REDACTED]
218	[REDACTED]
914	[REDACTED]