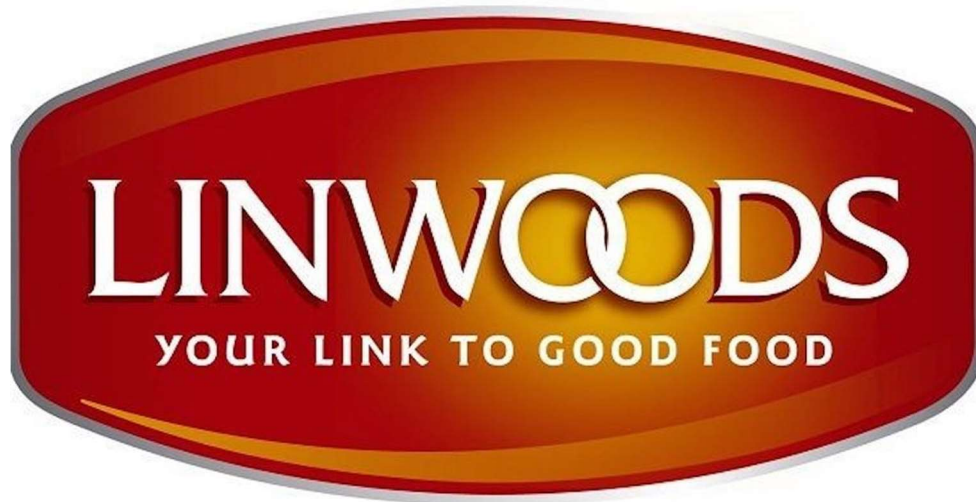


Maintenance action plan



- Line concerned: 14-0274
- Date: 13/06/2024
- Auditor: URBAIN Léo



ACTION PLAN OBJECTIVE

The purpose of this action plan is to:

- Define the maintenance actions to be carried out on a production line.
- Draw up a list of the anomalies which have been detected but not resolved by criticality index.
- Identify the components and parts to be replaced on each item of examined equipment.

Reading the action plan

The following colour code is used to make the report easier to read.

 : Machine which is operating correctly.

 : Machine for which urgent actions are required or which requires regular monitoring.

 : Machine which requires medium-term action.

 : Machine which requires urgent action.

LIST OF AUDITED EQUIPMENT

- **Line 14-0274**

SERIAL NUMBER	DETAILS
14-0274	Oven FDA

GENERAL OBSERVATIONS

The general condition of the oven is correct, but we recommend a special attention of the wear of the conveyor to prevent unplanned shutdowns and maintain a good product quality.

The audit during production wasn't possible due to the actual situation of plant (no production).

The steam system of the oven was not inspected (no boiler in the plant).

All the heat chambers of the oven are in good condition.

We identified a lack of cleaning of the oven, this can result in a fire or can damage certain parts of the oven.

We noticed that the SIEMENS HMI and the OMRON regulators installed are obsolete. They can be upgraded by the new generation systems (RETROFIT).

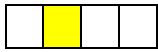
- **Work to be carried out as priority to maintain the line in condition:**

➤ Oven FDA:

- Monitor the wear of the belt
- Monitor the wear of the driving shafts and the return shafts
- Clean the oven
- Identify the cause of the malfunction and replace the concerned parts of the automatic top setting system



OVEN FDA



: Machine for which urgent actions are required or which requires regular monitoring.

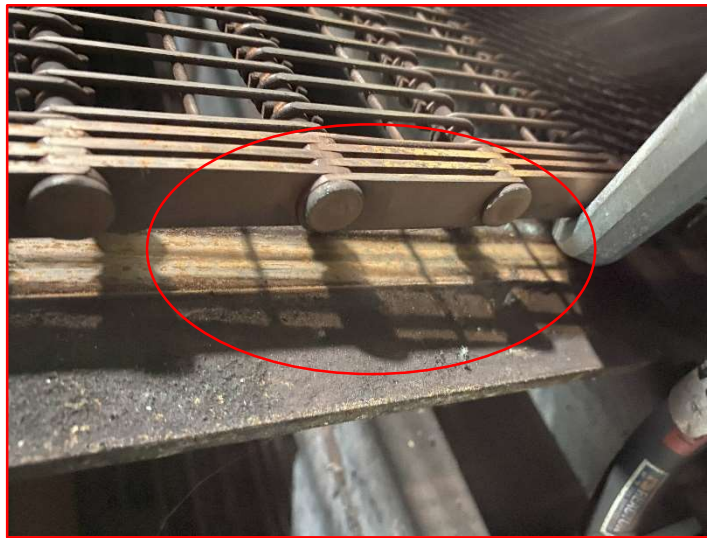
➤ List of elements inspected:

	OK	To be monitored	To be replaced
Conveyor			
Entry chair conveying sliding paths condition			
Convoeig sliding paths condition			
Exit chair conveying sliding paths condition			
Driving motor condition			
Driving and return shafts condition			
Entry chair bearings condition			
Exit chair bearings condition			
Centering rollers condition			
Belt condition			
Belt tension			
Condition of the return sliding paths			
Verification of the oven base			
Covering/Insulation			
General condition of the covering pannels			
Insulation between cell condition			
Entry extractor condition			
Entry curtain condition			
Exit extractor condition			
Exit curtain condition			
Acces hatches condition (roof)			
Interzone curtain condition			
Windows condition			

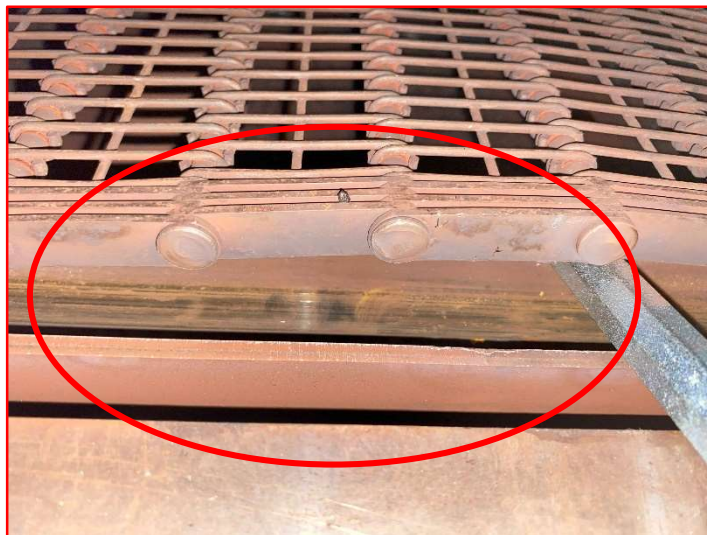
	OK	To be monitored	To be replaced
Aeraulic circuit			
Burner cone condition	OK		
Burner condition	OK		
Burner air intake fan condition	OK		
Heat chamber condition	OK		
Automatic adjustment system condition			To be replaced
Chimney condition	OK		
Temperature sensor condition	OK		
Fan condition	OK		
Extractor fan condition	OK		
Steam system			
Steam circuit seal			
Steam quality (pressure 0.3bar>0.5bar /temperature 102<103°C)			
Steam valve condition			
Steam ramp condition			
Steam system condition			

➤ Details of the defects found:

Sub-assembly	Component	Fault observed	Corrective action
Entry chair	Sliding path	The wear of the sliding path is normal	We recommend to replace the sliding path of the entry chair when replacing the belt



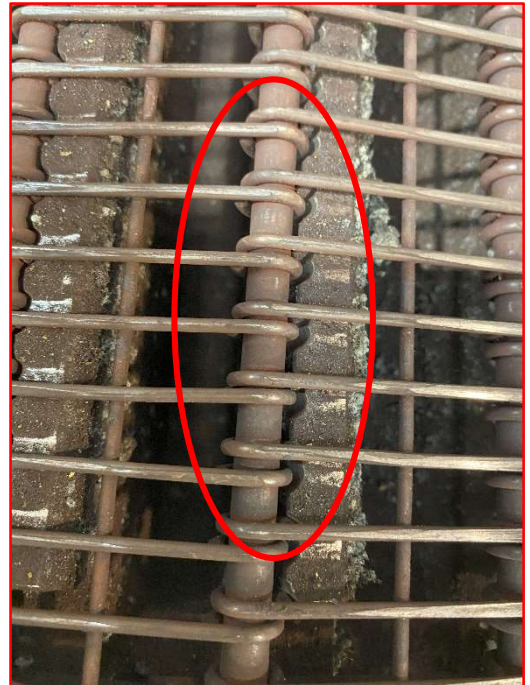
Oven conveyor	Sliding path	The wear of the sliding paths are normal	We recommend to replace the sliding path of the conveyor when replacing the belt
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Exit chair	Sliding path	The wear of the sliding path is normal	We recommend to replace the sliding path of the exit chair when replacing the belt
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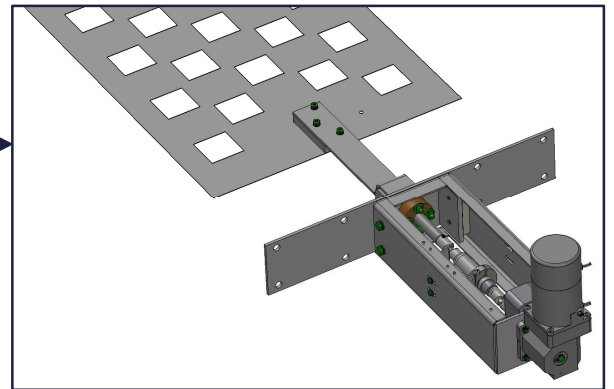
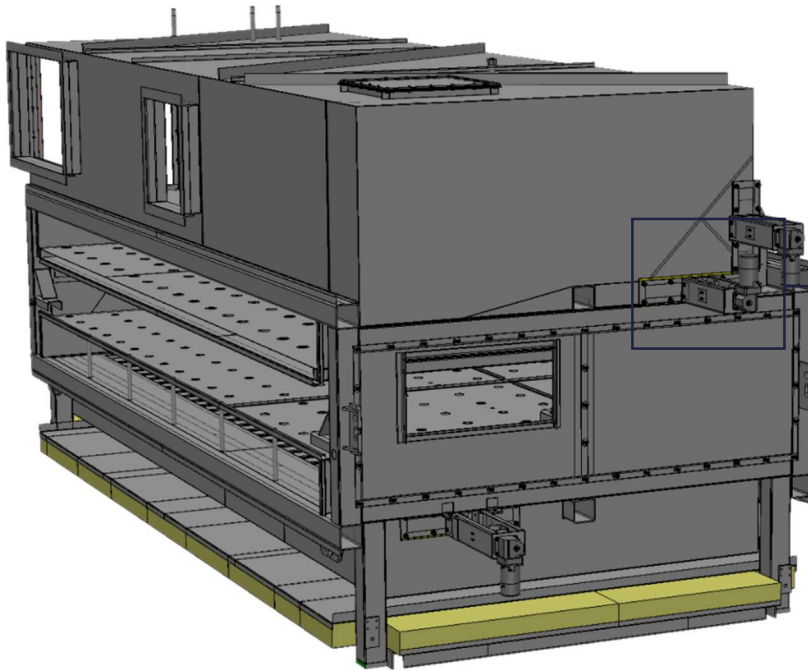
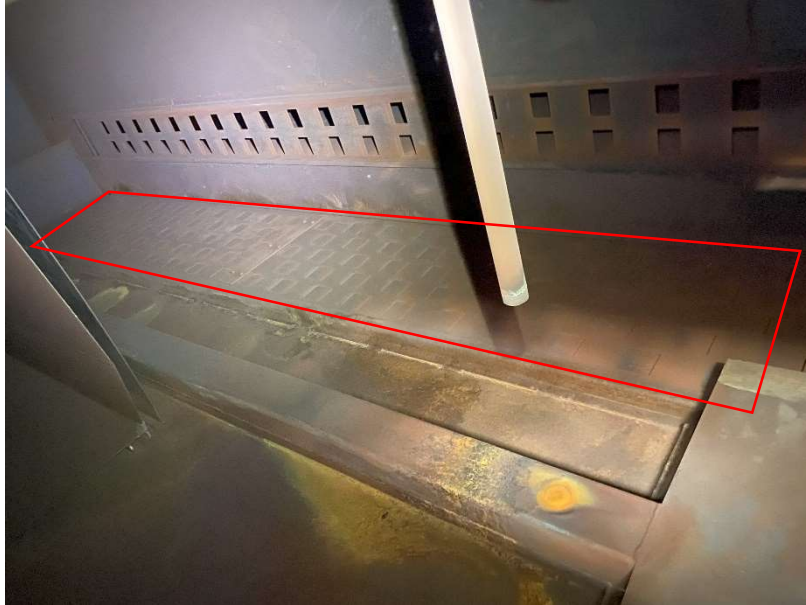


Conveyor	Driving shaft and return shafts	All shafts show wear marks	We recommend to replace the all shafts when replacing the belt
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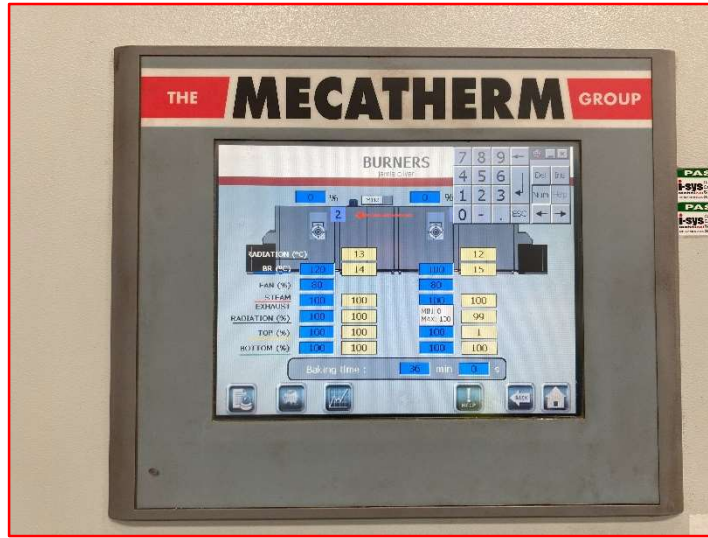


<p>Conveyor</p>	<p>Belt</p>	<p>The belt shows a wear but can still work like this. There is no risk of breakage</p>	<p>Monitor the wear of the belt and plan its replacement. It become urgent to replace the belt when holes appear</p>
			

<p>Aeraulic circuit first heating zone</p>	<p>Top automatic setting adjustment</p>	<p>The top automatic setting adjustment is block on close position. It's not moving when changing the settings on the HMI</p>	<p>Identify the cause of the malfunction and replace the concerned parts of the automatic setting system</p>
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Oven	Oven HMI	The actual HMI of the oven is obsolete	We recommend to replace the actual HMI by an actual one
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Oven program	Heat regulation system	The OMRON regulators are obsolete	We recommend to replace the OMRON regulators with a CPU controlled regulation (RETROFIT)
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