

WASTE MEASUREMENT - IDENTIFYING AREAS TO IMPROVE WASTE





Essentials (especially if large facility)

- The group target on food waste:
Food Waste – reduce food waste by 20 % by 2028 from a 2022 baseline.
- Benchmarks! – Budget – for every line / for Bakery
- Very motivated to participate with EPA's Food Waste Charter
- Currently information requested by customers (Manufacture 2030, Tesco wrap etc.)
- Origin Green, ISO14001 and Circuleire – committed members – learn a lot!



Essentials

- Review and synopsis data – by shift, by day, by line, by week by month etc.
- Involve all staff where possible – get good ideas and buy in.
- Dashboards and daily 9.30 review
- Prevent problems happening (start-up checks, Specification adherence)
- PM's critical
- Availability for CAPEX (Senior Mgt. buy-in)
- Breakdown action plans (maybe create gaps / escalation)



Overview

- Ensure Process flow diagram accurate from Goods in – to Dispatch
- Ensure to log waste (weight) at various parts of the process
 - e.g. Goods in (damages, end Shelf life)
 - Process (Bakery: mixing, divider, moulder, oven, selective dumping, packing, picking, distribution)
 - Log waste that is specific to breakdowns by area (Oven)
 - Log selective dumping by reason (shape, weight, colour, length etc.)
- Essential to monitor capability of staff (by Shift), operator errors, and speediness of breakdown repairs
- Preventative Maintenance critical – in Bakeries, some breakdowns result in losing the full line (4 – 10 hrs production).



LINE SHIFT REPORT

PO number	SKU	Cases Produced	Start time	End time	Efficiency	Waste	Unaccounted	Bread waste	Dough Waste
32366340	450004A	2695	07:00	19:00	94%	2.2%	-6	495	156
Total		2,695					-6	495	156

Efficiency	Waste
94%	2.2%

Line Shutdown										
Problem or Symptom	D/T	Bread	Dough	Reason	Area	Duration (Packing)	Identified Root Cause	Actions	SKU	PO
moulder b tray depositing cam chain keep losing position dough keep falling between trays	11	295	57	TECH	Moulder		maitenance unknow just pushing reset buton	dumping doubles and bad shape maitenance adjust depositing chain sensor and tight depositing chain	450004A	32366340
every 1st filler skipped on every tray, dirty under product	25			OPER	Proofer		unknow still investigating	fillet skipped on tray	450004A	32366340
selective dumping of misshape product	6	200		QUALITY	Moulder		variation on moulder presure boards	dump affected product on depanner	450004A	32366340
Dividers and cutting boards clean	10		99	PLANNED	In process Cleaning		cleaning	Stop clean and restart	450004A	32366340




Line or Bakery PCS review

3/8/23

S							Q																
1		2		3			1	2		3	1	2		3	4	5	6	7	8	9	10	11	12
Safety Incidents (FA; RI; LTI)		Good Saves (US / NM)		Risk Activities (planned and active)			QC Hold Blocked product	Foreign Matter Incidents (FM)		GMP	Material Losses L1A (Dough + Product + Overweight)	Material Losses L1B (Dough + Product + Overweight)		Material Losses L2 (Dough + Product + Overweight)	Material Losses L3 (Dough + Product + Overweight)	Material Losses L4 (Dough + Product + Overweight)	Material Losses Total (Dough + Product + Overweight)	Unplanned Downtime Total (breakdown + supply failure + short stops)	OEE Line 1A	OEE Line 1B	OEE Line 2	OEE Line 3	
#	#	#	#	Pallets	#	%	kgs	kgs	kgs	kgs	kgs	kgs	kgs	kgs	kgs	mins	%	%	%	%			
Sunday	0	0	1	0	0	94	1288	6721	2453	840					11302	1252	92	40	97	87			
Monday	0	1	1	0	1	96	1918	1412	938	640								83	99	61			
Tuesday				0	0	94	-	1996	1011	531					3538	160	110	88	66	92			
Wednesday																							
Thursday																							
Friday																							
Saturday																							

ACTIONS BOARD AFTER PCS REVIEW

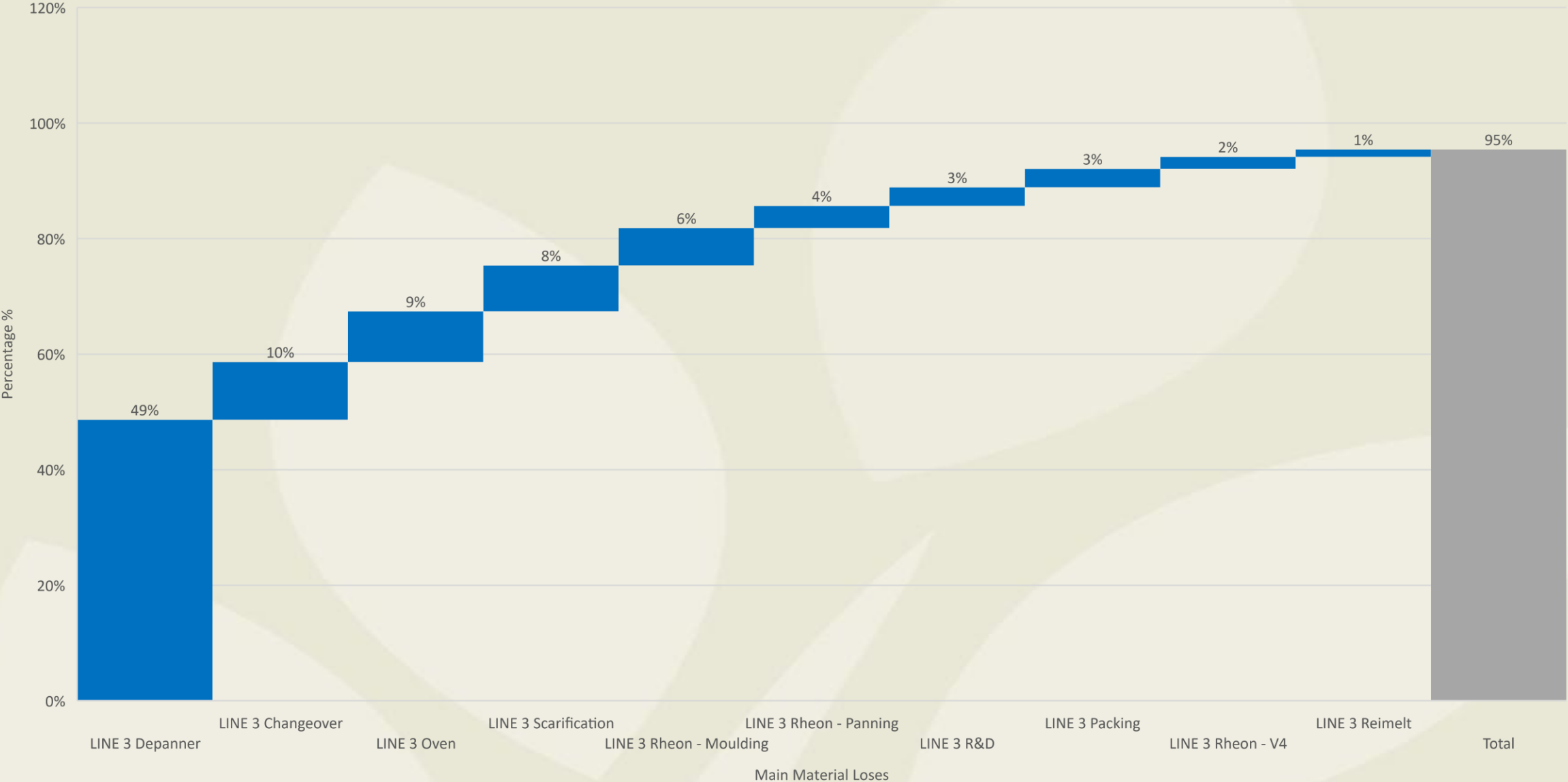
 Passion for good food		Action Board	
Priorities of the Day		Priorities & Actions	
1. Starter - Detached & mixed 2. Cell 1 entry L1B (Doubt To 3. Line 3 Mark Belt		Process Confirmation in Priority Areas	
Date	Deviation	(Root) Cause	Corrective Action
<u>L1A</u>	Proofer - Air Lines clogged Cutting boards - wing nuts falling off		
	Packing cones - no light Trolley Table Height adjust - PM		
	Catch tray under schubert valve L1A VMI Exit conveyor NOISY		
<u>L1B</u>	AFFELDT - Repeat Retraction Belt issues Small belt exit freezer	Over Cell 3 - Side Guide	too tight }



Preventative maintenance

PM	02.10.2023	08.11.2023	Shutdown	111669368	(C) Mecatherm Molder	L1A Moulder 2 Weekly Checks	(C) Mecatherm Molder	L1A Moulding	5
	02.10.2023		PM Sch Adherence	111669379	Wax Printer S/N 08201	L1A Wax Printer Monthly Check	Wax Printer S/N 08201	L1A Packing	
	09.10.2023		PM Sch Adherence	111669859	Schubert Depanner	Remove Vacuum Block And Clean See Tasks	Schubert Depanner	L1A Depanning	
	30.10.2023		Shutdown	111672688	Schubert Depanner	L1A Schubert Depanner Monthly Checks	Schubert Depanner	L1A Depanning	
	30.10.2023		PM can be Late	111672695	Pattyn Decuffer Machine	L1A Pattyn Decuffer Monthly Checks	Pattyn Decuffer Machine	L1A Packing	
	30.10.2023		PM Sch Adherence	111672696	Pattyn Loma Box Metal Detector	Case Metal Detector Monthly Check	Pattyn Loma Box Metal Detector	L1A Packing	
	30.10.2023		Shutdown	111672698	Full Line	Electrical Panels Insp Up To Proofer	Full Line	L1A Packing	
PM									
MR	13.10.2023	08.11.2023	3-Medium	160655013	Conveyor Q13/Q33 after scarification uni	Conveyor Q13/Q33 after scarification uni	Mecatherm Scarifier	L1A Cutting	5
	13.10.2023		3-Medium	160655024	Replace contactor Q35 and Q36	Replace contactor Q35 and Q36	Mecatherm Tray Stacker	L1A Cooling	
	24.07.2023		2-High	160660609	Reconnect top tray security sensor & rep	Reconnect top tray security sensor	Mecatherm Oven Cell 2	L1A Baking	
MR									
PM	23.10.2023	08.11.2023	Shutdown	111672091	VMI Horizontal Augur	Horizontal And Vertical Auger Check	VMI Horizontal Augur	L1A Dosing & Mixing	
	23.10.2023		Shutdown	111672096	Mecatherm Scarifier	Scarifier 2 Weekly Checks	Mecatherm Scarifier	L1A Cutting	
	23.10.2023		Shutdown	111672104	Full Line	Tray Conveyor Checks	Full Line	L1A Packing	
	30.10.2023		PM Sch Adherence	111672681	VMI Horizontal Augur	Replace Shear Pin - 1St Section Of Auger	VMI Horizontal Augur	L1A Dosing & Mixing	
	30.10.2023		Shutdown	111672682	VMI Water	Water Hopper Checks	VMI Water	L1A Dosing & Mixing	
	30.10.2023		Shutdown	111672684	VMI Pre Mixer	Premixer 2 Weekly Checks	VMI Pre Mixer	L1A Dosing & Mixing	
	30.10.2023		Shutdown	111672685	VMI Main Mixer	Main Mixer Two Weekly Checks	VMI Main Mixer	L1A Dosing & Mixing	
	30.10.2023		PM Sch Adherence	111672686	VMI Mixer Guillotine	L1A Vmi Guillotine 2 Weekly Checks	VMI Mixer Guillotine	L1A Dosing & Mixing	

Waste Waterfall





Essentials

- Production planning
 - Minimise C/O's
 - Shelf life – balance between shorts / product going out of date
 - Timing – difficult product on weekdays
- Process control / QA - ensure CA when out of spec.
- Specifications – try to ensure not too tight
- Preventative maintenance
- Daily Reviews – Pareto / fix major issues – relentless attention to detail...