



Lean Six Sigma Green Belt Project Storyboard



Project Name: Improve OEE	Start Date: 3/10/2016
Project Leader: AN Other	End Date: 27/3/2017
Project Type: OEE Improvement	Industry: Manufacturing

DEFINE: PROBLEM / BASELINE / GOAL

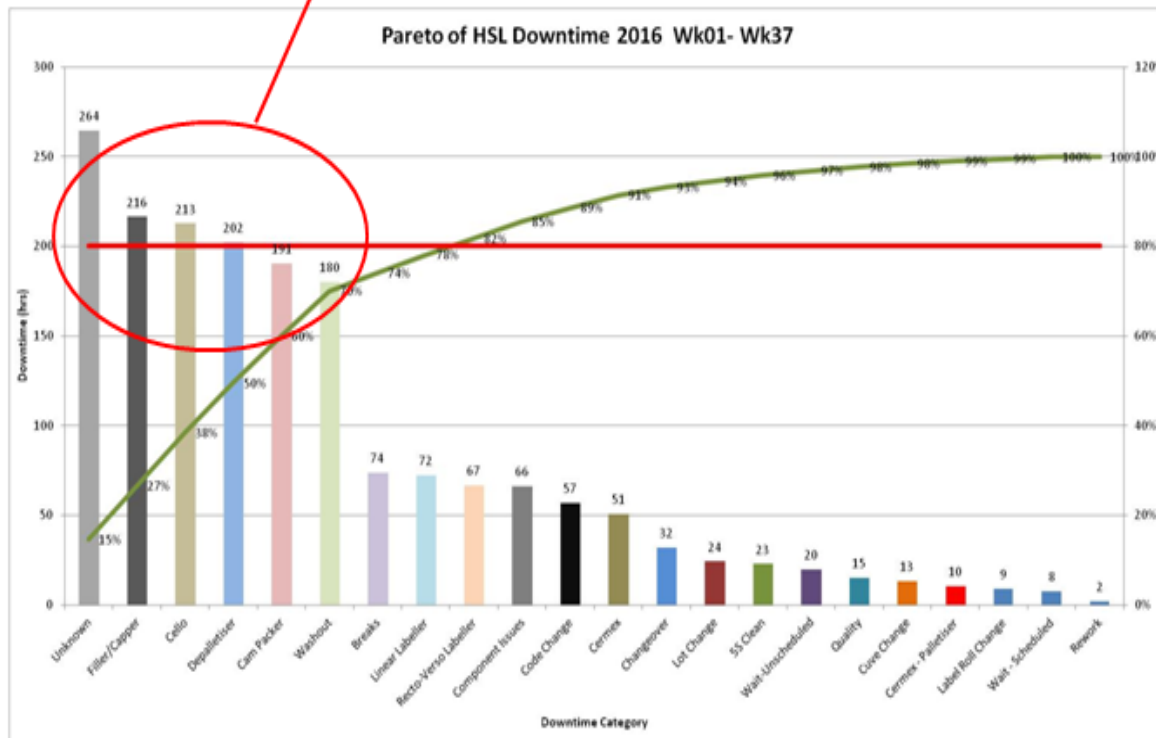
Problem Statement: The OEE (Overall Equipment Effectiveness) of the High Speed Line (HSL) in the Packaging Department is below target @ 45% YTD versus the 60% Target resulting in approx. €67k annual over-cost and reduction in capacity on a key growth line.

Baseline: An increase in 1% OEE will generate savings of approx. €4,500 p.a.

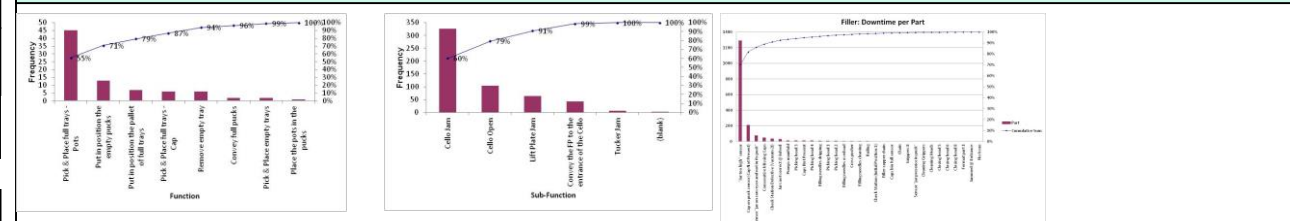
Goal: Achieve OEE of 55% on High Speed Line before end Feb 2017 without adversely impacting Finished Product Quality

MEASURE: PROCESS / EXPERT KNOWLEDGE / DATA

Pareto of main sources of downtime indicate that 15% of sources are unknown. Of the known sources the Filler/Capper (11.9%), Cello (11.7%), Depallitiser (11.1%), CAM (10.5%) & Washouts (9.9%) are the primary sources of downtime



ANALYZE: DRIVERS / ROOT CAUSES / VITAL FEW



Detailed data tracking & analysis showed 4 primary causes of Line Downtime;

- Pick & Place Full Trays Pots
- Put in position full pallet
- Jar too High
- Cello Jam

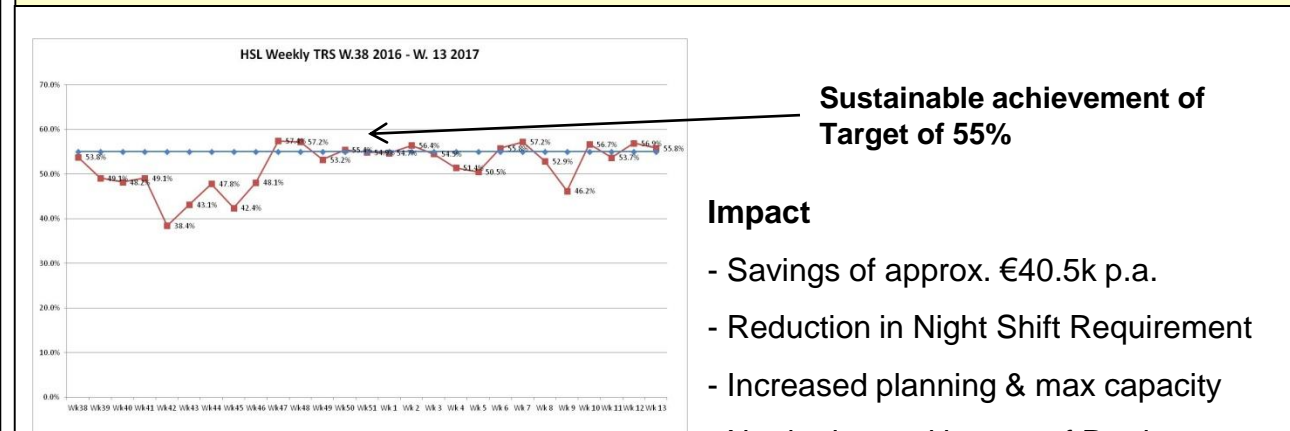
5-Why & Corrective/Preventative Actions implemented

IMPROVE: INNOVATION / IMPLEMENTATION PLANNING

HSL OEE Improvement Follow-Up Table							Occurrences (per shift)																	
Failure Mode	5Y	Action n.	Action description	Owner	Expected date	Actual date																		
							1	2	3	4	5	6	7	8	9	10	11	12						
Pallet Position	Y	1	Procedure for Safe Depal Entry	AG	W, 9																			
		2	Put barriers around Sensors	EB	W, 9																			
		3	Create DPL to control work near sensors	DH	W, 9																			
		4	Create DPL for Machine settings check after major crash	DH	W, 10																			
		5	Create SMED Settings for Product feeder and include in SDS	EB	W, 10																			
		6	Include all new DPL's in training manual for all operators and complete flip chart training	DH	W, 12																			
Cello Jam	Y	1	Create DPL for procedure to clear jam	NO	W, 9																			
		2	Design new reject station on cermex belt	HT	W, 7																			
		3	Install new reject station on cermex belt	HT	W, 12																			
Jar Too High		1	Change JTH sensor assembly to quick release with two fixed settings for 50 & 75 ml	DH	W, 6																			
		2	Create new C/O manual showing all settings for 50 & 75 ml	DH	W, 10																			
		3	Train all FTEs on new C/O Manual	DH	W, 12																			
		4	Update line C/O, lot change & Code Change procedures using new format from	SB	W, 10																			

Main Actions included a SMED Kaizen, optimisation of machine settings, new reject station, coding changes, new designed sensors, enhanced feed mechanism and a more robust guiderail design

CONTROL: RESULTS / SUSTAINING



Sustainable achievement of Target of 55%

Impact

- Savings of approx. €40.5k p.a.
- Reduction in Night Shift Requirement
- Increased planning & max capacity
- No detrimental impact of Product Quality

Please note that storyboards may be distributed or included in training materials as examples. Therefore do not include confidential data or information that may identify your organisation if you wish to remain anonymous. If you do not want this storyboard to be used for purposes other than assessment please notify SQT Training.