

THERE'S SO MUCH MORE BEHIND A  DOOR

Night Rollers™

Aug

The Story Continues!



The Team



THERE'S SO MUCH MORE BEHIND A  DOOR

B&D a blast from the past



THERE'S SO MUCH MORE BEHIND A  DOOR

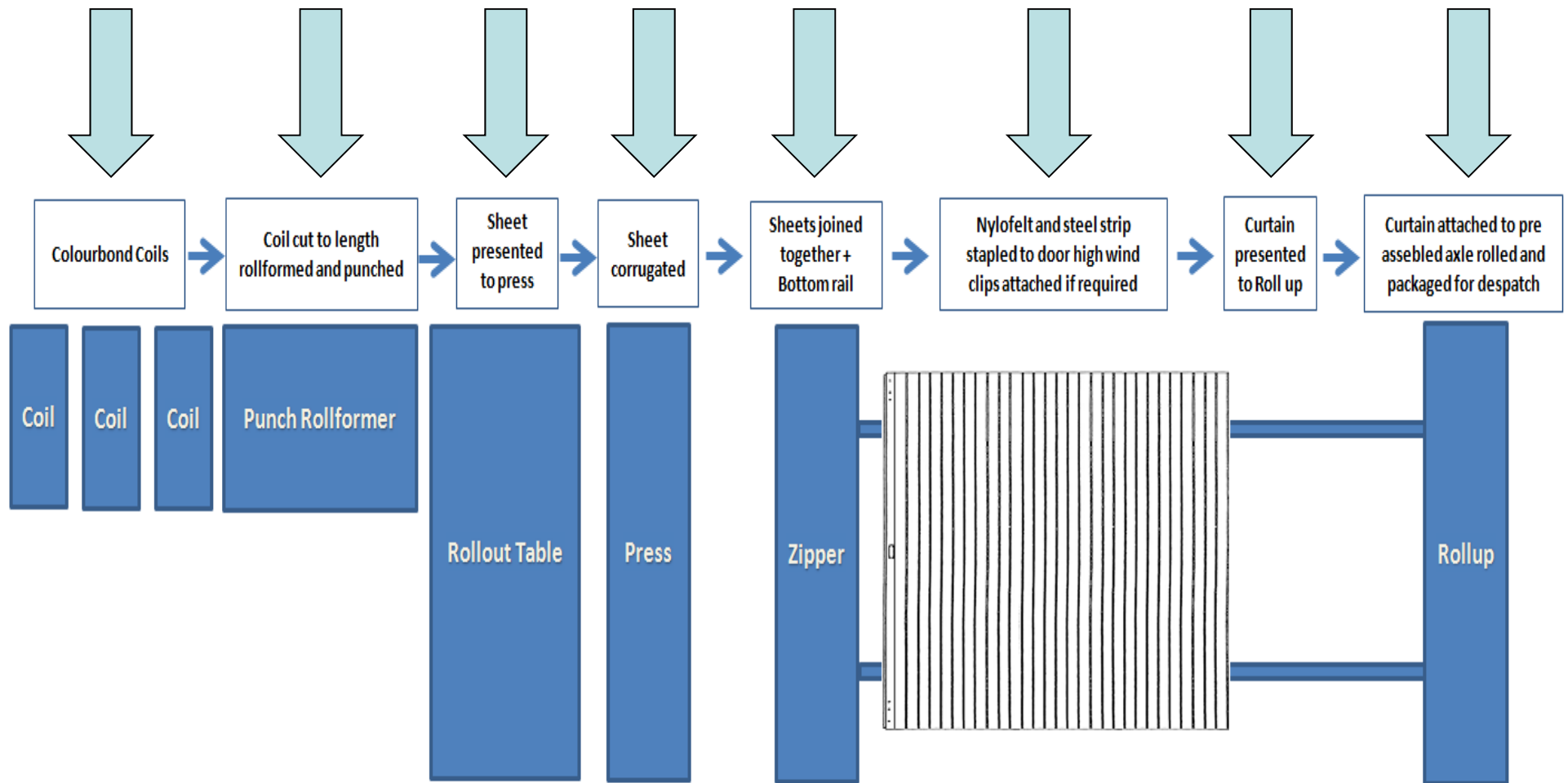
Team Mandate



- Identify and assess all manual handling risks associated with roll up
- Decrease the manual handling risk rating by at least 50% whilst also improving or maintaining the Goal Aligned Performance Measures;
- Ensure any improvements in the roll up procedure are documented in the form of a revised SOP and all operators are trained in the new procedure
- Recommend further improvement initiatives involving Cross-functional Teams (to address technical issues) and Area Based Teams eg WAM/OEM (to address People issues) so as to achieve the 3-year Vision identified above; and
- Complete within 12 weeks

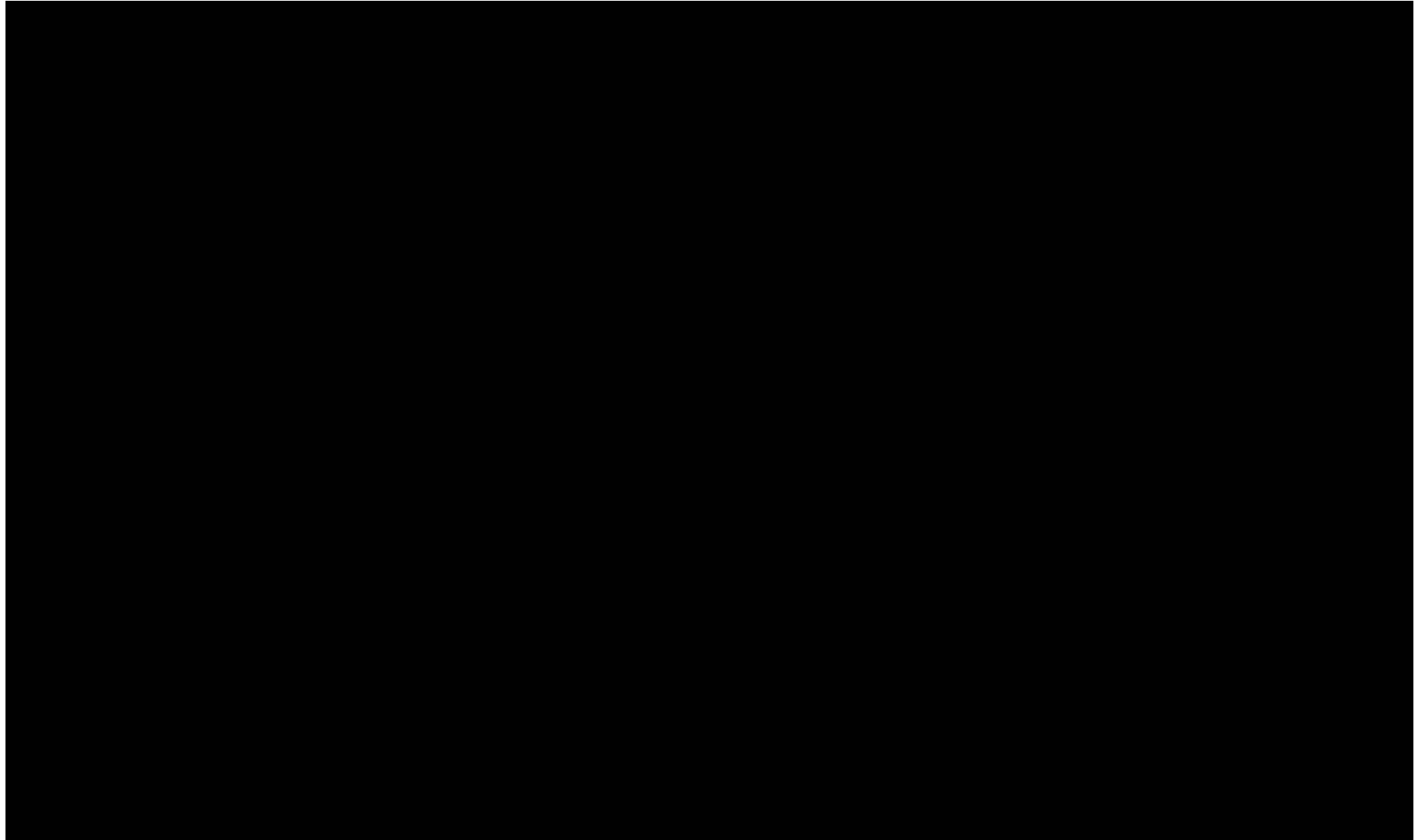
THERE'S SO MUCH MORE BEHIND A  DOOR

Series 2 Process Map



THERE'S SO MUCH MORE BEHIND A  DOOR

Series 2 in action



THERE'S SO MUCH MORE BEHIND A  DOOR



Operator Survey Ratings

Results of Operator Survey Sheet

Defined Production Area: S2 Rollup

Date: 02-April -2014

Number of Respondents: Six (6)

	Rating	Ease of Operation	Reliability	Process Capability	Housekeeping	Safety	Environment	Scrap Performance	Maintenance Practice
	Score:	6.3	5.7	6.7	7.3	5	8.8	7	4
10	Excellence	Very easy to operate 1	Never breaks down 0	Output always within tolerance 1	Very clean and well organised workplace 1	Very safe, no known safety hazards 1	No spills / emissions 5	Zero scrap or rework 0	Weekly maintenance servicing and inspections 1
9									
8		Easy to operate 2	Reliable machine, breakdowns are rare 2	Few problems keeping within tolerance 3	Clean and organised workplace 5	Safe with known safety hazards 0	Environmentally sound 1 (rivet tips waste)	Very little scrap or rework 6	Monthly maintenance servicing and inspections 1
7									
6									
5		Fair to operate 3	Fairly reliable 4	Normally keeps within tolerance 2	Fair workplace 0	Safety hazards are a concern 3	Environmental spills/emissions are rare 0	Average scrap rate 0	Quarterly maintenance servicing and inspections 1
4									
3		Hard to operate 0	Often breaks down, not very reliable 0	Difficult to keep within tolerance 0	Dirty and unorganised workplace 0	Safety hazards are a big concern 2	Environmental risks present 0	High scrap rate 0	Yearly maintenance servicing and inspections 0
2									
1	Innocence	Very hard to operate 0	Always breaking down 0	Cannot hold the required tolerance 0	Very dirty and very unorganised workplace 0	Serious safety hazards present 0	Environmental spills / emissions common 0	Very high scrap rate 0	Maintenance only comes when machine breakdowns 3
0									

Score / 80 = x 1.25 = 63.5 %

Note: Workplace = Work Area and Plant & Equipment (Machines)

THERE'S SO MUCH MORE BEHIND A  DOOR

Operator Survey Ratings - Comments



Comments from Operator Survey Sheet

Defined Production Area: Series 2 - Roll up

Date: 02 April 2014

Number of Respondents: 6

What do you like most about operating this line / equipment / machine?	What do you dislike most operating this line / equipment / machine? Challenges faced.	How can we improve the operation of this line / equipment / machine?
Easy machine to operate	Cardboard/ ducking under conveyer x2	Make roll up keep up with the press store doors along the line
Easy plastic application	Drill tips often going blunt	Operators should not be adjusting the pressure gauge on the plastic wrap- fitters only
Easy to follow and understand	E Stop in bad position- I bump it when reaching for plastic	Interaction with opposite team to see how each other works/ possibly make recommendations
Easy to operate- just press a button	Getting cardboard from stillage	Improve the de-flute cardboard dispensing process
Easy to operate the machine but some other bits are hard	Getting rid of scrap doors	Make gripper process safe
Good for my fitness	Getting rid of scrap doors- manual roll up	
Process is all easy for an experienced operator	How we add cardboard	
Reliable machine	Lots of twisting	
	Placing extra cardboard under bottom rail- still have to hang onto rope while lifting end of door , placing cardboard. (it is still under tension at this stage)	
	Reliance on ropes for safety backup	
	Reloading plastic rolls	
	Replacing plastic rolls	
	Scrap disposal- roll up done manually – very dangerous but happens rarely	
	Stopping doors from coning	
	Swapping sides on machine- change of routine	
	Throwing cardboard	
	Too much manual handling x2	
	Working between conveyers	

THERE'S SO MUCH MORE BEHIND A  DOOR



What do you dislike most operating this line / equipment / machine?

Cardboard / getting under the conveyor
Drill tips often going blunt
How we add cardboard
Lots of twisting
Working between conveyors
Reliance on ropes for safety backup
Emergency stop in poor position (Gets activated by accident)
Reloading plastic rolls

How can we improve the operation of this line / equipment / machine?


Make rollup keep up with the press (Store doors along the line)
Improve the D Flute cardboard dispensing process
Make the gripper safe

Let's work through these one at a time



Drill tips often going blunt

TPM³ Improvement Sheet

Team Name:	Night Rollers TSTSC	Location:	Clontarf Series 2 Rollup	Initiated Date:	May 2014
Initiator:	Trevor	Item:	Drill Tips	Completed Date:	May 2014
Team Leader:	Cory				
1. Problem (Plan)					
Current drill tips are not lasting long enough need replacing every 2 days.					
2. Current Situation (Plan)			3. Proposed Change / Approved Improvement (Do)		
			<p>We are currently running trials on two different angles 135° and 118° to see if one retains its cutting edge longer.</p>		
Improvement Target:		Expected Cost:		Expected Completion Date:	
4. Results: (Check)		Expected Saving:		5. Future Actions: (Act)	
Fantastic result – new drills 135 degree HSS drill tips are lasting two weeks plus per drill	Actual Cost: \$1.15				
	Actual Savings:				
	Approved by:	TL - Shift A	TL - Shift B	TL - Shift C	TL - Shift D
	Discuss with team then sign off acceptance of Proposed Change				
CTPM Australasia					

THERE'S SO MUCH MORE BEHIND A  DOOR



Emergency stop in poor position (Gets activated by accident)

TPM³ Improvement Sheet

Team Name:	Night Rollers TSTSC	Location:	Clontarf Series 2 Rollup	Initiated Date:	May 2014			
Initiator:	Cory	Item:	Re Position Emergency Stop Button	Completed Date:	July 2014			
Team Leader:	Cory							
1. Problem (Plan)								
The positioning of the slavehand E-Stop means it is accidentally hit on occasions shutting the machine down.								
2. Current Situation (Plan)			3. Proposed Change / Approved Improvement (Do)					
								
Improvement Target:	Ensure this is not hit by accident resulting in the line shutting down.		Expected Cost:	\$300	Expected Completion Date:	July 2014	Expected Saving:	Time
4. Results: (Check)			5. Future Actions: (Act)					
Since the move there has been no accidental shut downs.		Actual Cost:	\$300					
		Actual Savings:	Time					
		Approved by:	TL - Shift A	TL - Shift B	TL - Shift C	TL - Shift D	LT Member	
		Discuss with team then sign off acceptance of Proposed Change						

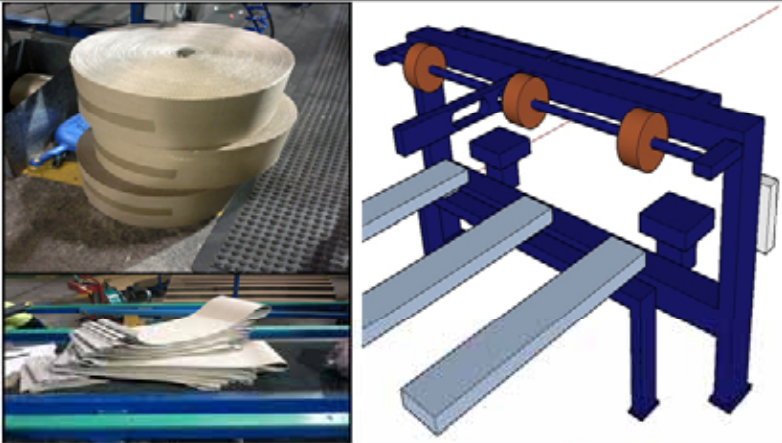
CTPM Australasia

THERE'S SO MUCH MORE BEHIND A  DOOR



Improve the D Flute cardboard dispensing process

TPM³ Improvement Sheet

Team Name:	Night Rollers TSTSC	Location:	Clontarf Series 2 Rollup	Initiated Date:	May 2014
Initiator:		Item:	D-Flute Cardboard Single	Completed Date:	June 2014
Team Leader:	Cory				
1. Problem (Plan)					
Currently we double up the cardboard which takes extra time and rules out a better way of dispensing.					
2. Current Situation (Plan)			3. Proposed Change / Approved Improvement (Do)		
			<p>If nil issues are created with the single cardboard a dispensing system will be incorporated into the upgraded Plastic Film replacement system.</p>		
Improvement Target:	Reduce the quantity of cardboard used and time.		Expected Cost:	Nil	Expected Completion Date:
			Expected Saving:		Time
4. Results: (Check)			5. Future Actions: (Act)		
We are now using temporary dispensers until the plastic loading system is installed		Actual Cost:			
		Actual Savings:			
Approved by:		TL - Shift A	TL - Shift B	TL - Shift C	TL - Shift D
Discuss with team then sign off acceptance of Proposed Change					
CTPM Australasia					

THERE'S SO MUCH MORE BEHIND A  DOOR

D Flute cardboard dispensers



THERE'S SO MUCH MORE BEHIND A  DOOR

Reloading plastic rolls


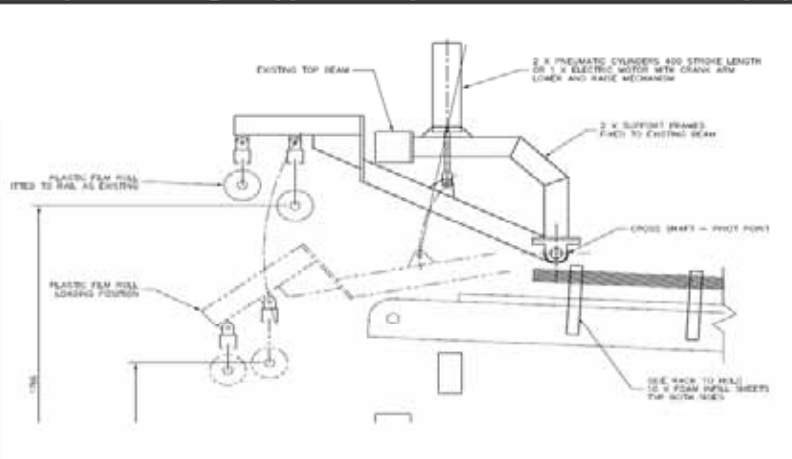


THERE'S SO MUCH MORE BEHIND A  DOOR

Reloading plastic rolls

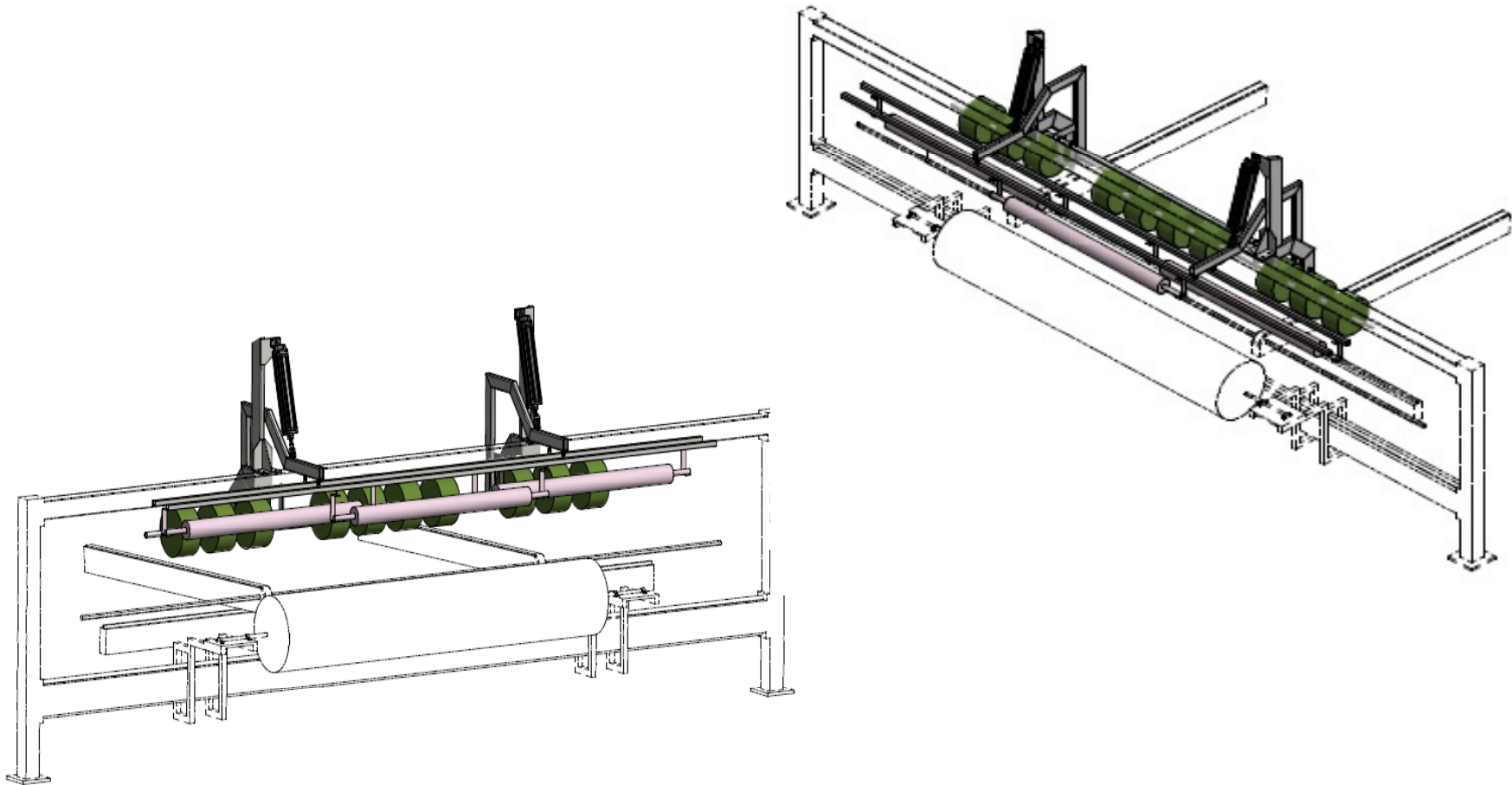


TPM³ Improvement Sheet

Team Name:	Night Rollers TSTSC	Location:	Clontarf Series 2 Rollup	Initiated Date:	May 2014		
Initiator:	The Team	Item:	Lifting Aid For Plastic Film	Completed Date:			
Team Leader:	Cory						
1. Problem (Plan)							
The Plastic Film weight is 36kg and needs to be lifted overhead.							
2. Current Situation (Plan)			3. Proposed Change / Approved Improvement (Do)				
							
Improvement Target:			Expected Cost:	Expected Completion Date:	Expected Saving:		
4. Results: (Check)			5. Future Actions: (Act)				
Drawings have been received and this is on the list of capex's		Actual Cost:					
		Actual Savings:					
CTPM Australasia		Approved by:	TL - Shift A	TL - Shift B	TL - Shift C	TL - Shift D	LT Member
		Discuss with team then sign off acceptance of Proposed Change					

THERE'S SO MUCH MORE BEHIND A  DOOR

Proposed plastic and D flute cardboard dispenser

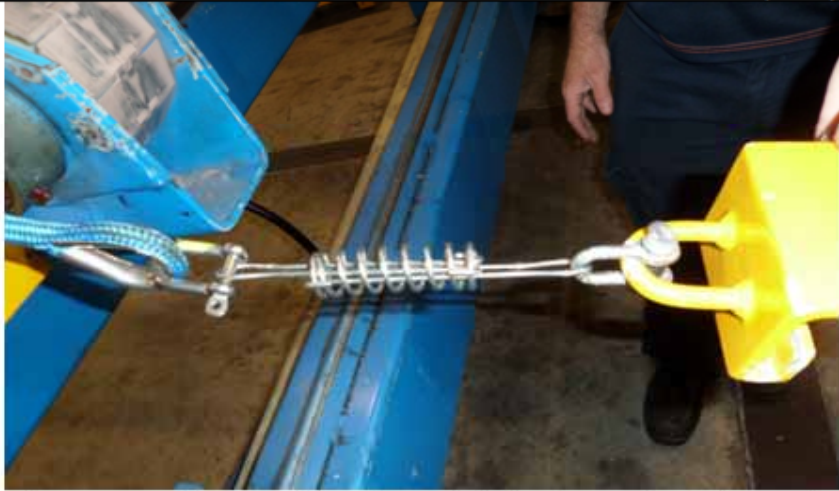
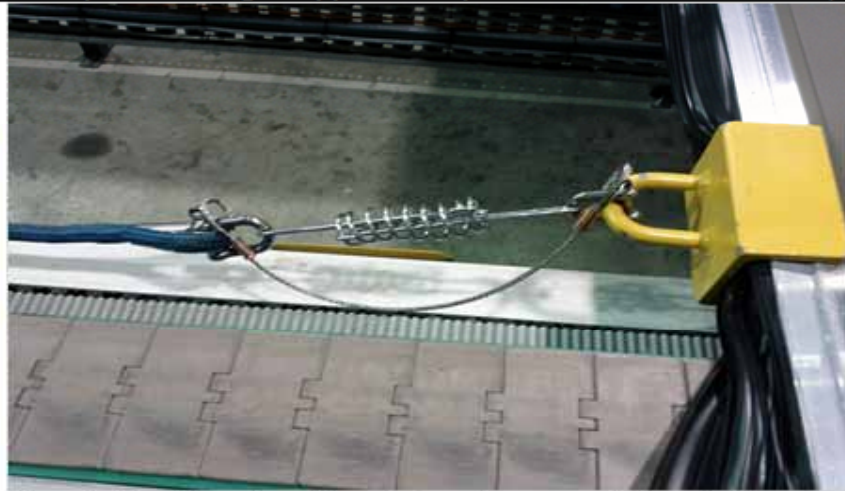


THERE'S SO MUCH MORE BEHIND A  DOOR

Make the gripper safe

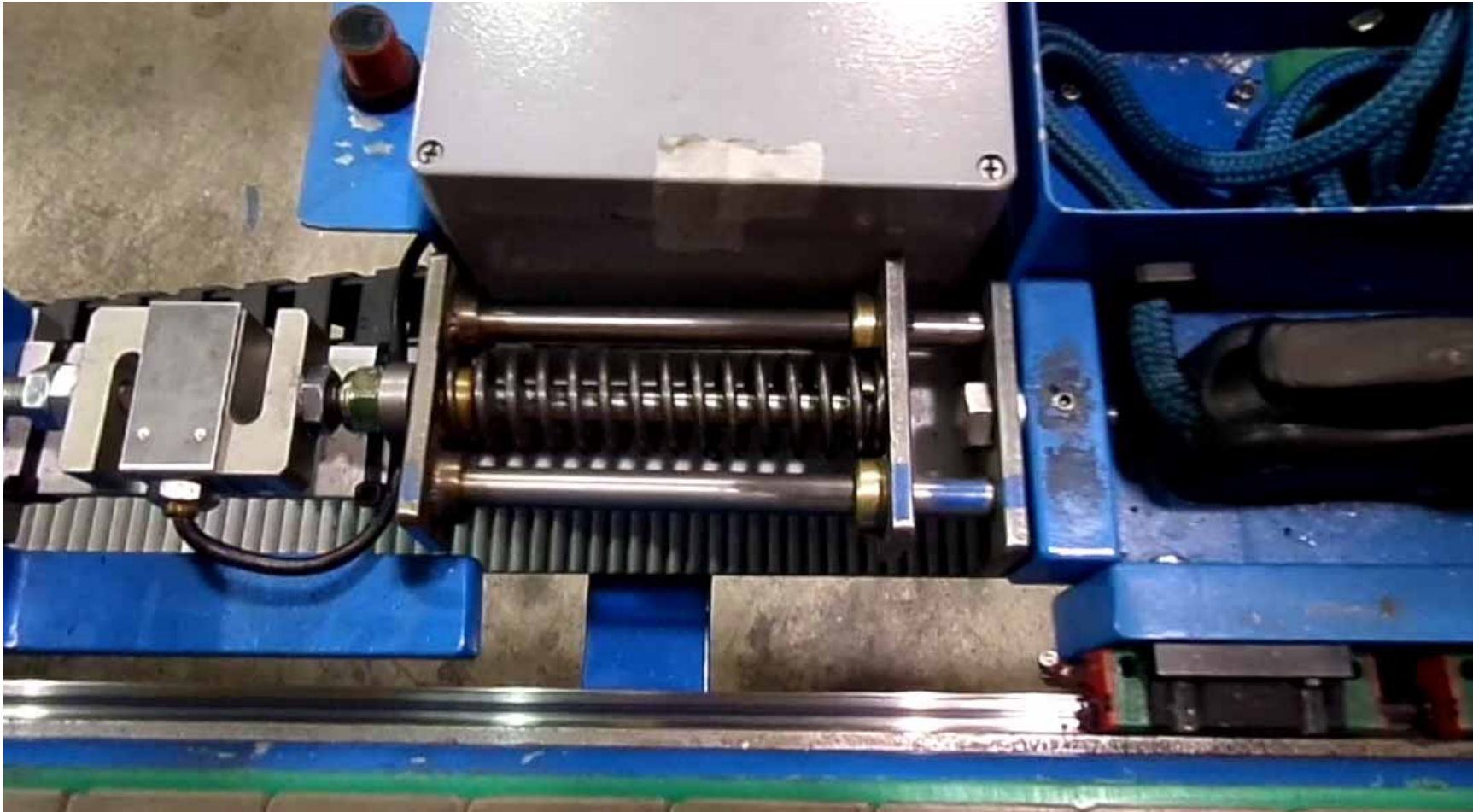


TPM³ Improvement Sheet

Team Name:	Night Rollers TSTSC	Location:	Clontarf Series 2 Rollup	Initiated Date:	May 2014	
Initiator:	Mat	Item:	Bottom Rail Gripper Spring	Completed Date:	May 2014	
Team Leader:	Cory					
1. Problem (Plan)						
There is no fallsafe on bottom rail gripper spring If it falls.						
2. Current Situation (Plan)			3. Proposed Change / Approved Improvement (Do)			
						
Improvement Target:	Ensure there is a safety backup on the Bottom rail gripper.		Expected Cost:	\$20	Expected Completion Date:	
			Expected Saving:			
4. Results: (Check)			5. Future Actions: (Act)			
While effective we were not satisfied with the first solution.		Actual Cost:				
		Actual Savings:				
CTPM Australasia	Approved by:	TL - Shift A	TL - Shift B	TL - Shift C	TL - Shift D	LT Member
	Discuss with team then sign off acceptance of Proposed Change					

THERE'S SO MUCH MORE BEHIND A  DOOR

Version 2 of The Bottom Rail Gripper Spring



THERE'S SO MUCH MORE BEHIND A  DOOR

What do you dislike most operating this line / equipment / machine?



Cardboard / getting under the conveyor

Drill tips often going blunt

How we add cardboard

Lots of twisting

Working between conveyors

Reliance on ropes for safety backup

Emergency stop in poor position (Gets activated by accident)

Reloading plastic rolls

How can we improve the operation of this line / equipment / machine?

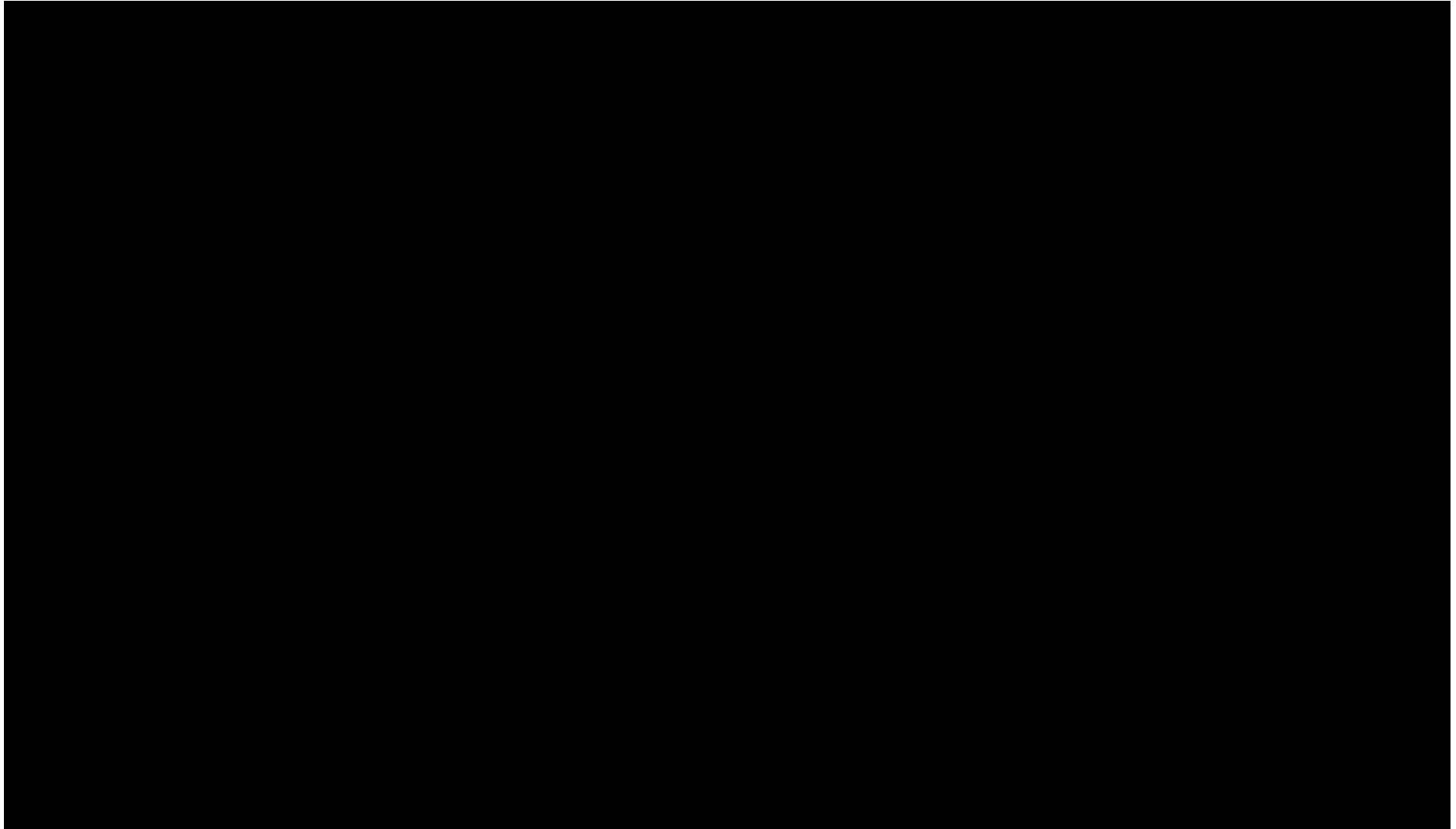
Make rollup keep up with the press (Store doors along the line)

Improve the D Flute cardboard dispensing process

Make the gripper safe

Let's work through these one at a time

Series 2 Old Roll Up Process



THERE'S SO MUCH MORE BEHIND A  DOOR

Series 2 – Roll up Risk Assessment – pre improvements



Exertion - How much force is the person using? – think about starting or stopping quickly				
1 No effort	2	3 Moderate force & speed	4	5 Maximum force or speed

Awkward posture - How awkward is the person's posture?				
1 All postures neutral	2	3 Moderately uncomfortable	4	5 Very uncomfortable

Vibration- How much are the whole body or hand(s) being vibrated?				
1 None	2	3 Moderate	4	5 Extreme

Duration - How long is the action performed for?				
1 < 10 minutes	2 10-30 min	3 30 min – 1 hr	4 1 – 2 hrs	5 > 2 hrs

Repetition- How often are similar actions done?				
1 No repetition	2	3 cycle time < 30 s	4	5 cycle time < 10 s

Body part

● ●

Total score 29

THERE'S SO MUCH MORE BEHIND A DOOR

NSW method of cardboarding



THERE'S SO MUCH MORE BEHIND A  DOOR

Ideas session



We talked about taking the door offline like they do in NSW.

This would present a whole new list of challenges:

- Where would we do this?
- How do we wrap the door with plastic?
- Who would do this as the manning levels are different?

We talked about some way of getting the cardboard behind the plastic.

- Can we mechanise the process?
- Could we slide the cardboard in without getting between the conveyors?
- Could we tie or strap the cardboard and then wrap it in place?

THERE'S SO MUCH MORE BEHIND A  DOOR

Then Darlene asked that famous question



Could we reverse the direction that
we roll up the door?

We all had a laugh and a
few funny comments.

Then we started thinking
and asking the question
“Could we?”

THERE'S SO MUCH MORE BEHIND A  DOOR

Timing and a “can do” attitude made all the difference



Our programmer Barry was on site that afternoon so the question was asked.

The answer was yes and it was not a major modification.

The idea was explained to maintenance and site leadership and approval was given to proceed with a supervised trial.

The trial was successful with a few minor issues:



- Would we be able to reverse the direction of the plastic wrap for this stage?
- The reversing required a lot of manual effort to rotate the door.
- Will this put stress on the springs?

THERE'S SO MUCH MORE BEHIND A  DOOR



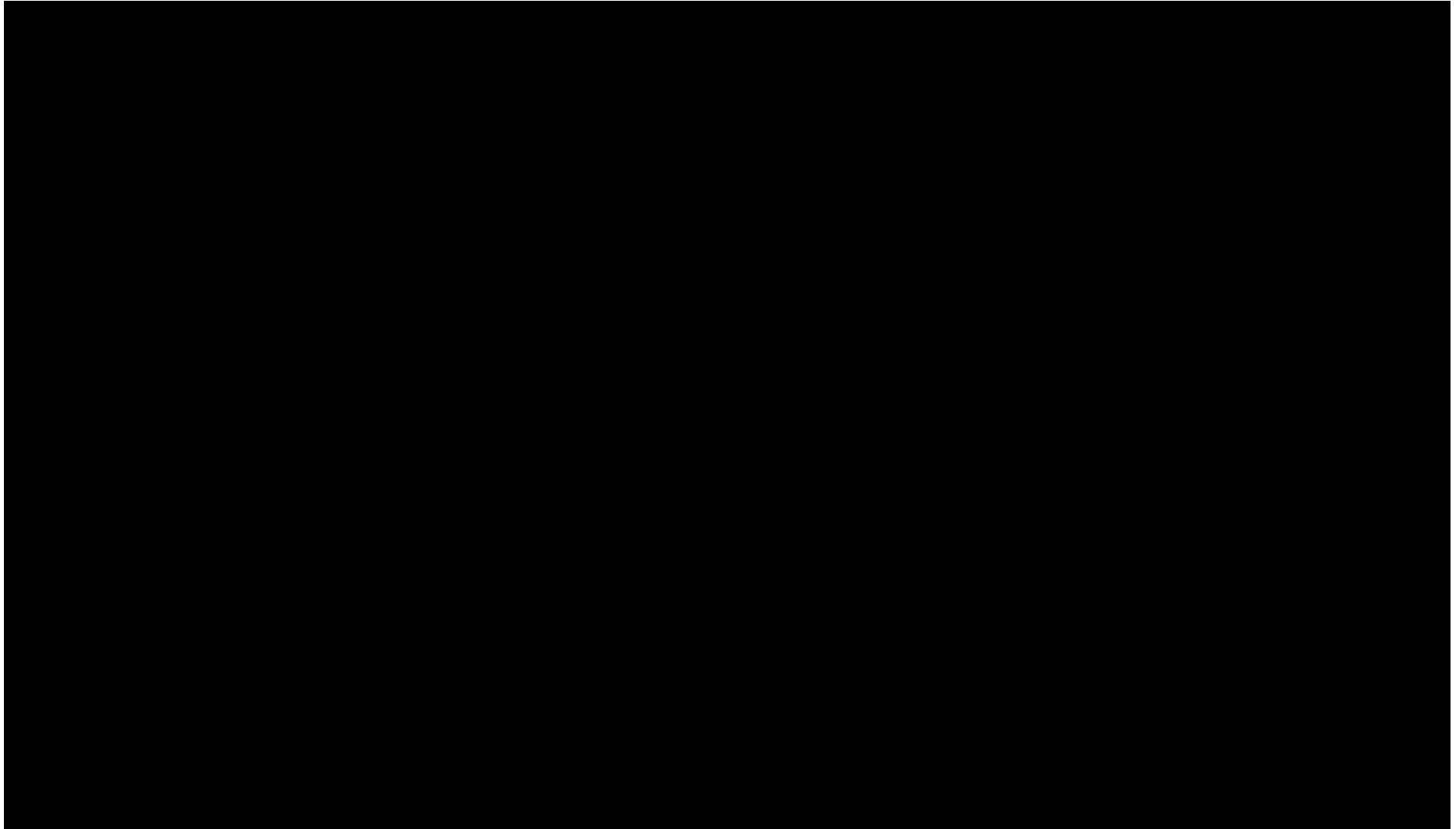
S2 Roll up Improvements

TPM³ Improvement Sheet

Team Name:	Night Rollers The Sequel	Location:	Series 2	Initiated Date:	3/4/2014
Initiator:	Darlene	Item:	Reverse roll up to add cardboard	Completed Date:	8/4/2014
Team Leader:	Cory				
1. Problem (Plan)					
<p>Operators have to crawl under machinery to place packaging cardboard onto curtain in readiness for roll up completion. Quite apart from the fact they are working within an area that was not designed to be a work area so are consequently surrounded by operational machinery this practice presented untold manual handling risks.</p> <p>The team decided to ask Barry if it was possible to reverse the direction of the roll up action for certain parts of the process. This was a relatively simple programming exercise and almost cost neutral as Barry was already on site. This allows operators to place the cardboard on the outside of the curtain whilst continuing the "normal" roll up process.</p>					
2. Current Situation (Plan)			3. Proposed Change / Approved Improvement (Do)		
					
Improvement Target:	Reduce risks presented by the S2 roll up process		Expected Cost:	\$500	Expected Completion Date: 8/4/2014
4. Results: (Check)			Expected Saving:		
<ul style="list-style-type: none"> Reverse roll up has been put in place. No negative feed back as yet but is still a new concept. Reduction in manual task risk 	Actual Cost:		5. Future Actions: (Act)		
	Actual Savings:		Continue to look for way to reduce risks presented by the S2 process. Continue to look for ways to increase S2 productivity.		

THERE'S SO MUCH MORE BEHIND A  DOOR



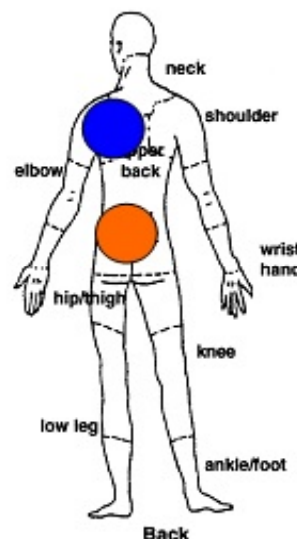





S2 Roll up Improvements



THERE'S SO MUCH MORE BEHIND A  DOOR

Series 2 – Roll up Risk Assessment – post improvements



Exertion - How much force is the person using? – think about starting or stopping quickly					Body part   Total score 24 
1 No effort	2 	3 Moderate force & speed	4	5 Maximum force or speed	
Awkward posture - How awkward is the person's posture?					
1 All postures neutral	2	3 Moderately uncomfortable	4 	5 Very uncomfortable	
Vibration - How much are the whole body or hand(s) being vibrated?					
1 None	2 	3 Moderate	4	5 Extreme	
Duration - How long is the action performed for?					
1 < 10 minutes	2 10-30 min 	3 30 min – 1 hr	4 1 – 2 hrs	5 > 2 hrs	
Repetition - How often are similar actions done?					
1 No repetition	2 	3 cycle time < 30 s	4	5 cycle time < 10 s	

THERE'S SO MUCH MORE BEHIND A  DOOR

S2 Roll up Improved Method Discussion



The idea of reversing the roll up of the doors has created some issues that need to be addressed.

The operators have to wrestle with the door as it is rolled backwards, can something be done to overcome turning the spring in reverse?

Two springs have been damaged this way.




THERE'S SO MUCH MORE BEHIND A  DOOR

Axle Drive Improvement Sheet



TPM³ Improvement Sheet

Team Name:	Night Rollers TSTSC	Location:	Clontarf Series 2 Rollup	Initiated Date:	May 2014
Initiator:	Trevor	Item:	Axle Drive For Reverse Rollup	Completed Date:	
Team Leader:	Cory				
1. Problem (Plan)					
The reversing of the door for applying cardboard does put pressure on the springs.					
2. Current Situation (Plan)			3. Proposed Change / Approved Improvement (Do)		
			<p>Drive the axle with the hub to eliminate the risk of damage to springs and remove the need to manually wrestle the door backwards.</p>		
Improvement Target:		Expected Cost:		Expected Completion Date:	
		Expected Saving:			
4. Results: (Check)			5. Future Actions: (Act)		
		Actual Cost:			
		Actual Savings:			

THERE'S SO MUCH MORE BEHIND A  DOOR

The “Lean” Axle Drive - Creation



THERE'S SO MUCH MORE BEHIND A  DOOR

Axle clamp photos



THERE'S SO MUCH MORE BEHIND A  DOOR

Lean Clamp in Action



THERE'S SO MUCH MORE BEHIND A  DOOR

Series 2 – Roll up Risk Assessment – post improvements



Exertion -How much force is the person using? – think about starting or stopping quickly				
1 No effort	2	3 Moderate force & speed	4	5 Maximum force or speed
Awkward posture - How awkward is the person's posture?				
1 All postures neutral	2	3 Moderately uncomfortable	4	5 Very uncomfortable
Vibration- How much are the whole body or hand(s) being vibrated?				
1 None	2	3 Moderate	4	5 Extreme
Duration - How long is the action performed for?				
1 < 10 minutes	2 10-30 min	3 30 min – 1 hr	4 1 – 2 hrs	5 > 2 hrs
Repetition- How often are similar actions done?				
1 No repetition	2	3 cycle time < 30 s	4	5 cycle time < 10 s

Body part

Total score 22

THERE'S SO MUCH MORE BEHIND A DOOR



Operator Survey Ratings

Results of Operator Survey Sheet

Defined Production Area: S2 Rollup

Date: 02-April -2014

Number of Respondents: Six (6)

Rating	Ease of Operation	Reliability	Process Capability	Housekeeping	Safety	Environment	Scrap Performance	Maintenance Practice
Score:	6.3	5.7	6.7	7.3	5	8.8	7	4
10 9 8 7 6 5 4 3 2 1 0	Excellence Very easy to operate 1	Never breaks down 0	Output always within tolerance 1	Very clean and well organised workplace 1	Very safe, no known safety hazards 1	No spills / emissions 5	Zero scrap or rework 0	Weekly maintenance servicing and inspections 1
	Easy to operate 2	Reliable machine, breakdowns are rare 2	Few problems keeping within tolerance 3	Clean and organised workplace 5	Safe with known safety hazards 0	Environmentally sound 1 (rivet tips waste)	Very little scrap or rework 6	Monthly maintenance servicing and inspections 1
	Fair to operate 3	Fairly reliable 4	Normally keeps within tolerance 2	Fair workplace 0	Safety hazards are a concern 3	Environmental spills/emissions are rare 0	Average scrap rate 0	Quarterly maintenance servicing and inspections 1
	Hard to operate 0	Often breaks down, not very reliable 0	Difficult to keep within tolerance 0	Dirty and unorganised workplace 0	Safety hazards are a big concern 2	Environmental risks present 0	High scrap rate 0	Yearly maintenance servicing and inspections 0
	Very hard to operate 0	Always breaking down 0	Cannot hold the required tolerance 0	Very dirty and very unorganised workplace 0	Serious safety hazards present 0	Environmental spills / emissions common 0	Very high scrap rate 0	Maintenance only comes when machine breakdowns 3

Score / 80 = x 1.25 = 63.5 %

Note: Workplace = Work Area and Plant & Equipment (Machines)

70.1 %

THERE'S SO MUCH MORE BEHIND A  DOOR

Second Challenge



By Mid Point the mandate was well on the way to being achieved.

In addition to a significant reduction in manual handling risk the time to roll up a Series 2 door had decreased from an average 16 minutes to approx 12 minutes.

We asked the SLT for direction

Can we capitalise on the decrease in the time now taken to complete the roll up process? As this was formerly the bottleneck on the line.

THERE'S SO MUCH MORE BEHIND A  DOOR

Series 2 Timings 6 sheet door June 2014



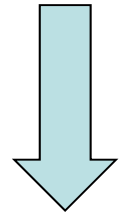
7:34



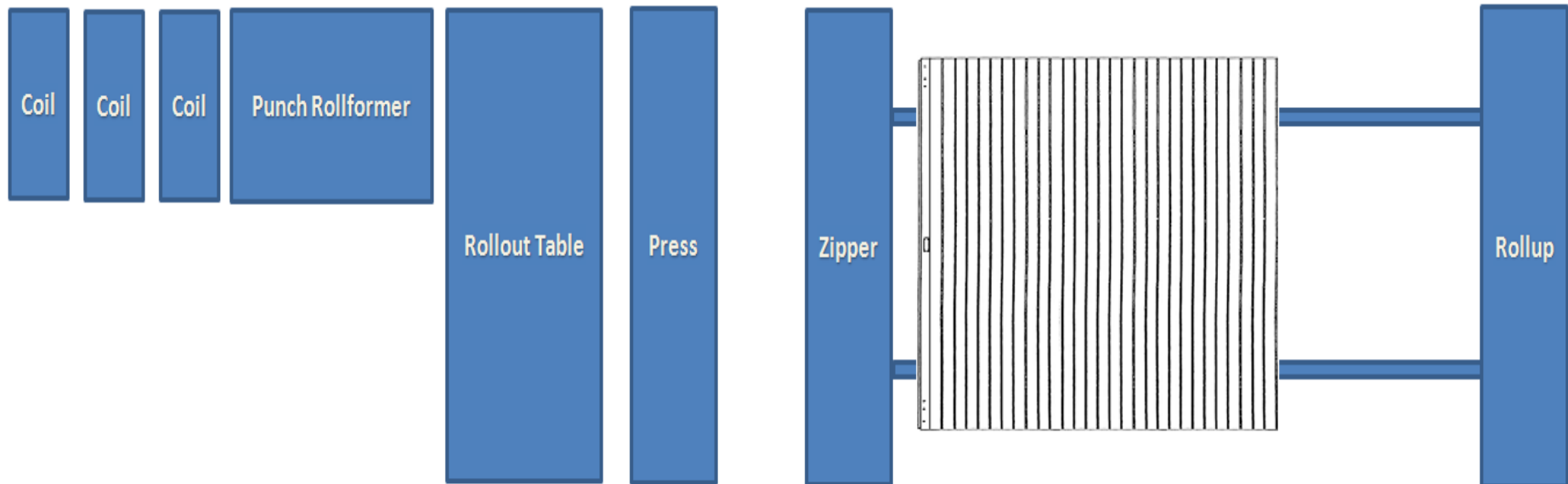
12:04



1:10



12:00

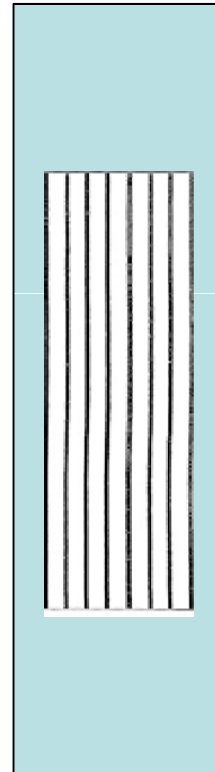
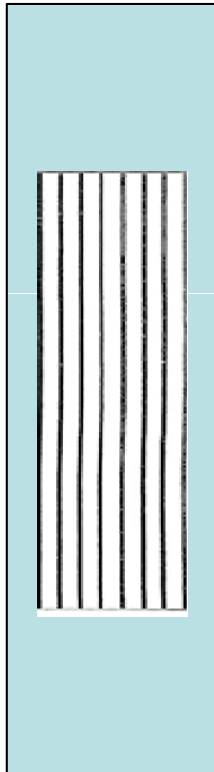


THERE'S SO MUCH MORE BEHIND A  DOOR

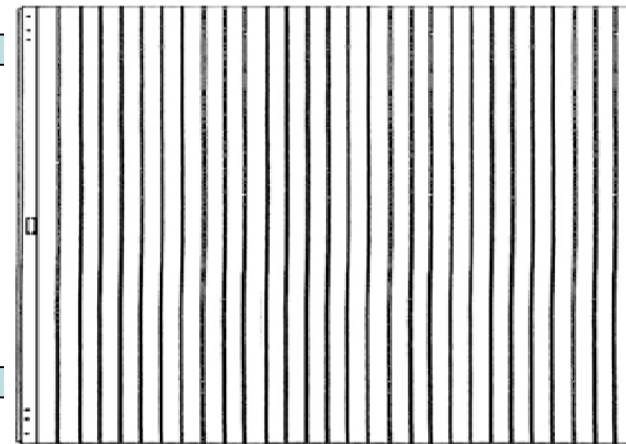


Current method

One sheet takes 75 seconds to press and transfer to the zipper table



Door stapled and clears conveyor before next door is pressed



That is two and a half minutes before these sheets can be joined

THERE'S SO MUCH MORE BEHIND A  DOOR

Can we disconnect the Press from the SPC and Stapling process?

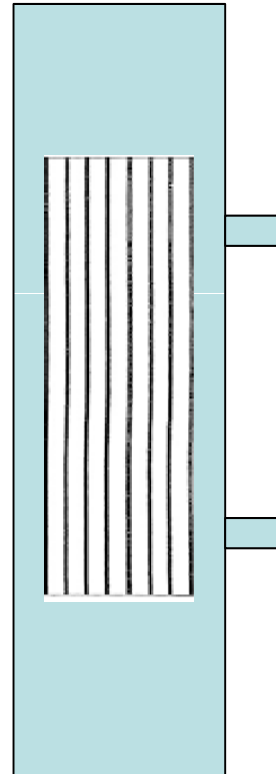
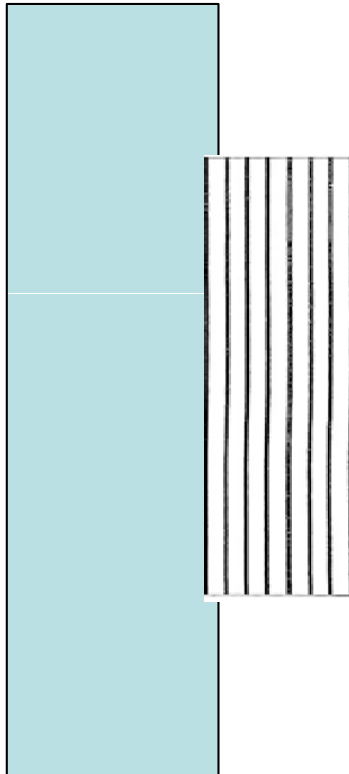


THERE'S SO MUCH MORE BEHIND A  DOOR

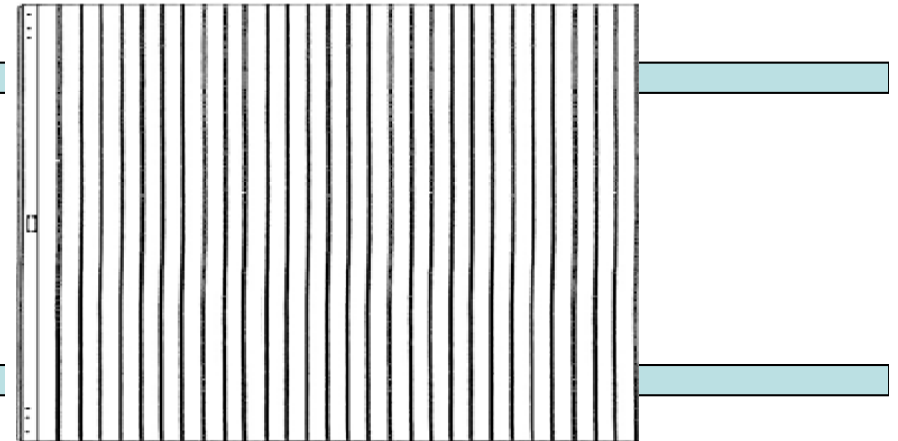
Proposed method



At this stage we are two and a half minutes in front



Sheets can be pressed and accumulated on the extension table while this door is being stapled



On a six sheet door that is a further saving of two minutes

It takes 45 seconds to join each subsequent sheet and 75 seconds to press and transfer if these are already accumulated this is a 30 second saving per sheet

THERE'S SO MUCH MORE BEHIND A  DOOR

Accumulator Trial



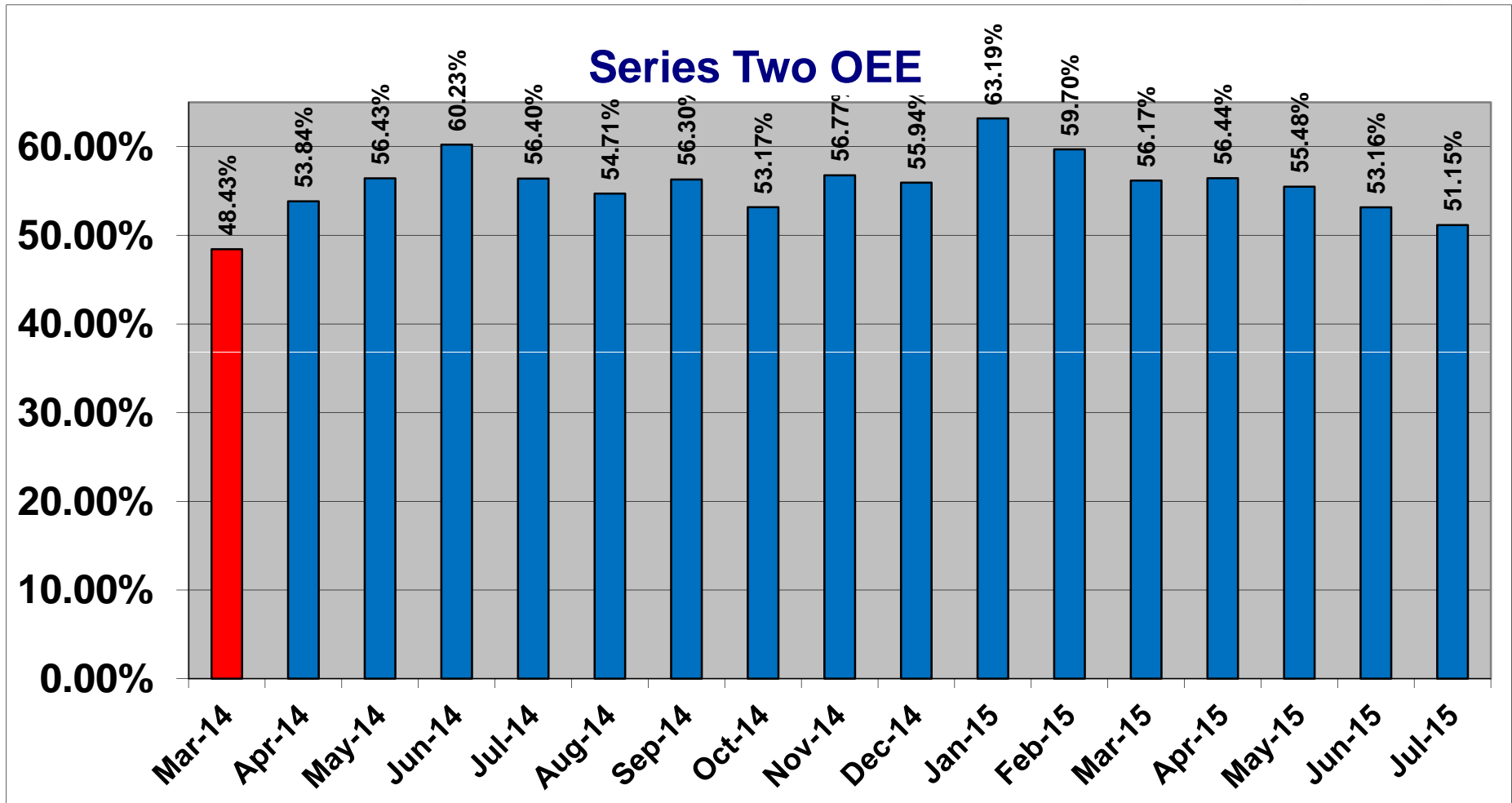
THERE'S SO MUCH MORE BEHIND A  DOOR

Series 2 Accumulator Trial



THERE'S SO MUCH MORE BEHIND A  DOOR

Series 2 OEE



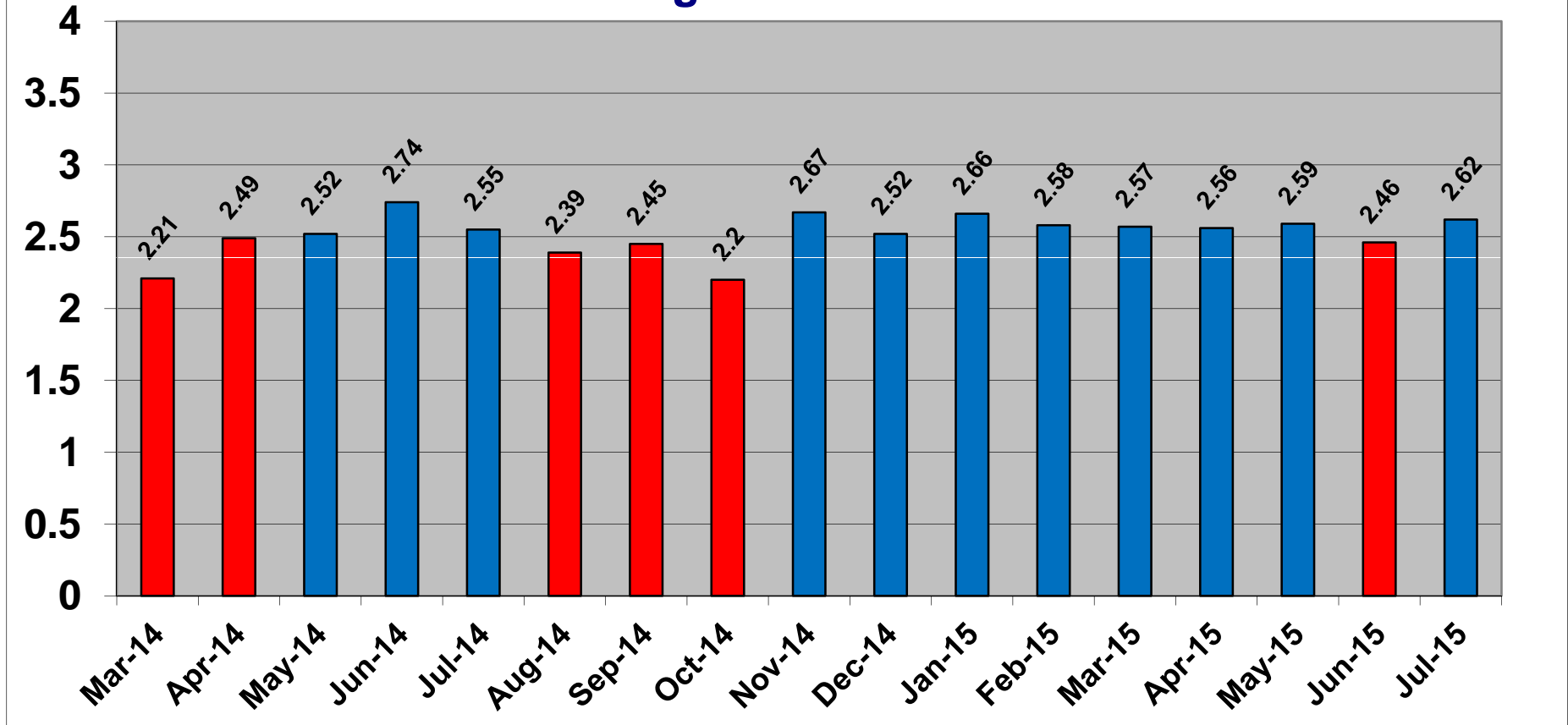
Average of 56.19% since April 2014

THERE'S SO MUCH MORE BEHIND A  DOOR

Series 2 Doors Hour



Series 2 Doors Per Hour Budget 2.5 Per Hour



Average of 2.53 since April 2014

THERE'S SO MUCH MORE BEHIND A  DOOR

What do you dislike most operating this line / equipment / machine?



Cardboard / getting under the conveyor

Lots of twisting

Working between conveyors

How can we improve the operation of this line / equipment / machine?

Make rollup keep up with the press (Store doors along the line)

Let's work through these one at a time

Team Mandate



Mission

Accomplished

THERE'S SO MUCH MORE BEHIND A  DOOR

Key Learning's



- Listen to Darlene.
- Manual handling risk assessment should be included in engineering design.
- Sometimes the best ideas can come from the people furthest removed from the process.
- Unfortunately engineers sometimes overlook how the people using the equipment are going to use it!
- Pro active team work achieves great results.

THERE'S SO MUCH MORE BEHIND A  DOOR

We are done!



This concludes our formal presentation.

Except for the important documentation that was
maintained by the team.

Due to time constraints we have left this to last.

Following are some samples.

We would be happy to answer any questions.

THERE'S SO MUCH MORE BEHIND A  DOOR

Team Mandate



Micro Focused Equipment & Process Improvement Team Information Sheet (Cross-functional Team)

Cycle: 3	Defined Production Area (DPA): Series 2	Section of Defined Production Area: Roll Up
Reason for Selection:- Reduce Manual Handling Risks Associated with the Modified Roll Up Process.		
Mandate:	<ul style="list-style-type: none"> Identify and assess all manual handling risks associated with roll up Identify all equipment & process losses and wastes (including all unplanned interventions) for the section of the DPA; Create a 3-year Vision of 'Could-Be' performance based on documented assumptions using the OEE Improvement Matrix template; NEED AN IMPROVEMENT TARGET Improve agreed losses by at least 50% while also improving or maintaining the Goal Aligned Performance Measures; Recommend further improvement initiatives involving Cross-functional Teams (to address technical issues) and Area Based Teams eg WAM/OEM (to address People issues) so as to achieve the 3-year Vision identified above; and Complete within 12 weeks 	
Boundaries:	Physical:	Within the Defined Production Area
	Technology:	No change to existing technology unless approved
	Team Resources:	Use existing resources in area, any extra resources to be approved by the Leadership Team Time for meetings per week: 1.0 hours; Time for support activities per week: 1.0 hour
	Financial:	All improvement activities must be cost-benefit justified and funded within the company's delegation of authority and the site's current business plan
Starting:	Section of DPA: A = R = Q = DPA OEE:	Target: Section of DPA: A = R = Q = DPA OEE:
Team Members:	Area Supervisor (Leader)	Cory
	Operations	Mat
	Operator	Fou
	Maintenance - Mechanical	Trevor
	Maintenance - Electrical	
	Technical Support Person	
	Technical Support Person	
Facilitation Support:	Leadership Team Member (Mgr)	Darlene
	TPM ³ Co-ordinator	Brett
	CTPM Navigator	Bill
Kick-off Date & Time: Thursday 27 th March 2014		Meeting Day & Time: Thursday 15:00 – 16:30
Mid-way Presentation Date & Time: 16 th May 2014		Final Presentation Date & Time: 27 th June 2014

To be handed to each Team Member in Step 1 / Part 1 of kick-off workshop and displayed on Team's Noticeboard



© Copyright 2011 CTPM Australasia

THERE'S SO MUCH MORE BEHIND A  DOOR

Team Roles Sheet



Team Name: Night Rollers The Sequel, The Story Continues!
Date: 27th March 2014

Roles	Team Member Responsible	Back -up Team Member
Prepare Agenda and Update Task List (Team Leader)	Cory	Mat
Record Team Discussion (Assistant Team Leader)	Mat	Darlene
Update Attendance & Schedule Sheet	Darlene	Trev
Update History Sheet	Trev	Darlene
Update Parking Lot Sheet	Darlene	Fou
Ensure Agreed Measures are up to date	Fou	Trev
Ensure Team Noticeboard is up to date	Trev	Fou
Ensure Team Scoreboard is up to date	Fou	Mat
Ensure TPM ³ Improvement Sheets are up to date	Mat	Cory
Facilitate the Team (TPM ³ Co-ordinator)	Brett	Bill

Notes on Roles:

Dependent upon the number in your team some of the roles can be allocated to more than 1 team member.
 Ensure everyone in the team is responsible for something.



© Copyright 2013 CTPM Australasia

THERE'S SO MUCH MORE BEHIND A  DOOR

Team Agenda



Micro FE&PI Agenda – Night Rollers the Sequel

Date of Meeting: 29th May 2014

Week: 7

Item	Activity	Who	Time
1.	Update Attendance Sheet	T / Leader	1 min
2.	Review Progress to Schedule (any key milestones to note)	T / Leader	1 min
3.	Review Latest Agreed Measures / Scoreboard		2 min
4.	Review Status of Noticeboard		1 min
5.	Review due / Overdue Tasks on Task Sheet	T / Leader	10 min
6.	Review Midpoint Presentation	T / Leader and TPM ³ Co-ordinator	5 min
7.	Review Requirements for Step 6 – Pilot proposed solutions, refine and implement successful solutions <ul style="list-style-type: none"> Review Objectives Generate Improvement Ideas – fill in improvement sheets and develop implementation plans Determine and Allocate Tasks 	CTPM Navigator and Team leader	60 min
8.	Other Issues and / or Concerns requiring attention to achieve our mandate	T / Leader	10 min
9.	Review and update History Sheet and Parking Lot Sheet		2 min
10.	Review Task Sheet and update improvement tasks identified and completed graph	T / Leader	2 min
11.	Confirm accuracy of the Discussion Sheet for this meeting		1 min
		Total	90 min

CTPM Australasia

THERE'S SO MUCH MORE BEHIND A  DOOR

Attendance & Schedule



Micro FE&PI Attendance & Schedule Sheet													
Team Name: <u>Night Rollers The Sequel</u> Kick-off Date: <u>27/03/14</u>													
Attendance	Week												
Team Members (4-8)	0	1	2	3	4	5	6	7	8	9	10	11	12
Mat Hill	A	✓	✓	A	✓	✓	✓	✓	✓	✓	✓	✓	✓
Trevor Edwards	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gary Barnes	✓	✓	A	✓	✓	✓	✓	✓	✓	✓	✓	A	✓
Fou Musu	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	A	✓
Darlene Moore	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Time of meeting:	2pm	3pm	3pm	3pm	2pm	2pm	3pm	3pm	3pm	3pm	3pm	3pm	3pm
Date of meeting:	27-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15
✓ = Attended x = Unnotified Absence A = Notified Absence													
Week 1: <u>3-04-2014</u> Mid-way Presentation: <u>16-05-2014</u> Final Presentation: <u>27-06-2014</u>													
Schedule	Week												
Task	0	1	2	3	4	5	6	7	8	9	10	11	12
0. Half-day kick-off workshop	■												
1. Confirm Mandate & Boundaries	■												
2. Form Team & Scope Activities	■												
3. Analyse Current Situation	■	■	■	■	■								
4. Develop Vision of Improved Performance				■	■	■							
5. Identify Possible Root Causes & Solutions					■	■	■						
5a. Prepare Mid-way Presentation and Present to Leadership Team					■	■	■						
6. Pilot Proposed Solutions, Refine & Implement Successful Solutions							■	■	■				
7. Evaluate Results & Measure Progress								■	■	■			
8. Hold Gains & Define Future Actions										■	■	■	
9. Communicate Results & Share Learning													■
9a. Prepare Final Presentation and Present to Leadership Team													■
Ensure Weekly Briefing to all in Section ■ Kick-off Workshop and Presentations													

THERE'S SO MUCH MORE BEHIND A DOOR

Discussion Sheet



Discussion Sheet			
Team: <u>Night Rollers The Sequel</u>		Date: <u>01-05-14</u>	Start Time: <u>3pm</u> Finish Time: <u>4:30</u>
Item	What was discussed	What was agreed	What Tasks were allocated *
⑦	Timings presented & recorded	New process seems to take a bit longer. Not much old data to compare to, lots of new processes in place. Gripper, cardboard etc.	Trevor
⑧	Drill bits	118° drill bit (regrinded) seem to work best. Bore is a more precise trial should be conducted.	Trevor
⑨	Perform assessment to be completed on both old & new tasks	DM to do post safety day	Declan
⑩	Double vs single cardboard	Meeting to be organised once info is gathered re: NCRs. Involving door that have travelled to see if the second cardboard makes a difference.	
⑪	B&D advertising sheet on doors	Best awaiting quote for costing	
⑫	Plastic or Axel listings	to be investigated further	

* Item numbers on Task Sheet

Recorded By: Declan

Page 1

CTPM Australasia

© Copyright 2013 CTPM Australasia

THERE'S SO MUCH MORE BEHIND A  DOOR

Task Sheet



Task Sheet					
Team: Night Rollers The Sequel			Start date: 27/03/14		
No.	Description of Task Required	Team Member Responsible	Original Target Date	Revised Target Date	% Complete
14	improvement sheets for different drill angle.	Trevor			90% to 19
15	improvement sheets for Anti-Rattle Nets	Matt			100%
16	improvement sheets for B&D title to go under plastic	Ren			50% 100%
17	1/5/14 Weigh 5500 axel	Fon/Cory			100%
18	Get info on Sydney doors sent to Qld north	Brett			100%
19	Do full trial of 135/118 drill tips, week long 118 = Standard 135 = Silver	Cory			100%
20	Team to fill out these improvement sheets	S2 Team			180%
22	Write improvement sheet for gripper safety-link between clamp and spring 8/5/14				100%
23	Drawings of Rollup changes	Trevor			
24	To order 135 drills for drill trial	Matt			100%
25	Improvement sheets	Brett			100%

Note: Rule off after each week and commence new week with the date across the Description Column

CTPM Australasia © Copyright 2010 CTPM Australasia

THERE'S SO MUCH MORE BEHIND A  DOOR



History Sheet

History Sheet

Team Name: Night Rollers Start Date: 1/1
The Squad. The story continues

Major delays/blockages/hassles for the week:


Date	Description

Key achievements for week:

Date	Description
	<u>Tried Drills angles.</u>
	<u>Tried cardboard Reverse Roll.</u>

Lessons Learnt during the week:

Date	Description
	<u>more opportunities have presented themselves for improvements</u>

 © Copyright 2011 CTPM Australia Page 11

THERE'S SO MUCH MORE BEHIND A  DOOR

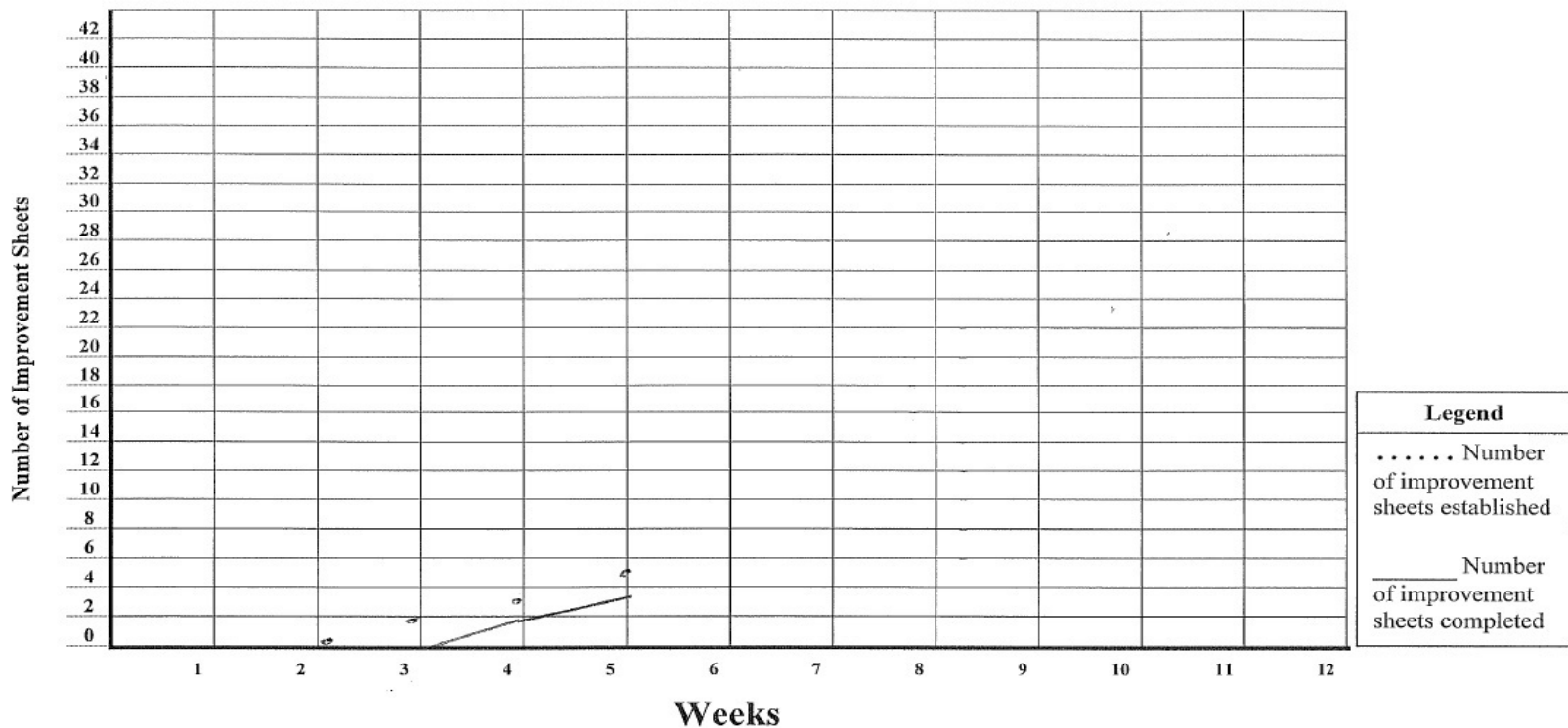
Improvement Sheet Run Chart



Improvement Sheets Run Chart

Team Name: Night Rollers The Sequel Data description: Number of Improvement Sheets Established and Completed

Defined Production Area: Series 2 Rollup Data gathered by: Fou Start date: 27/ 03/2014



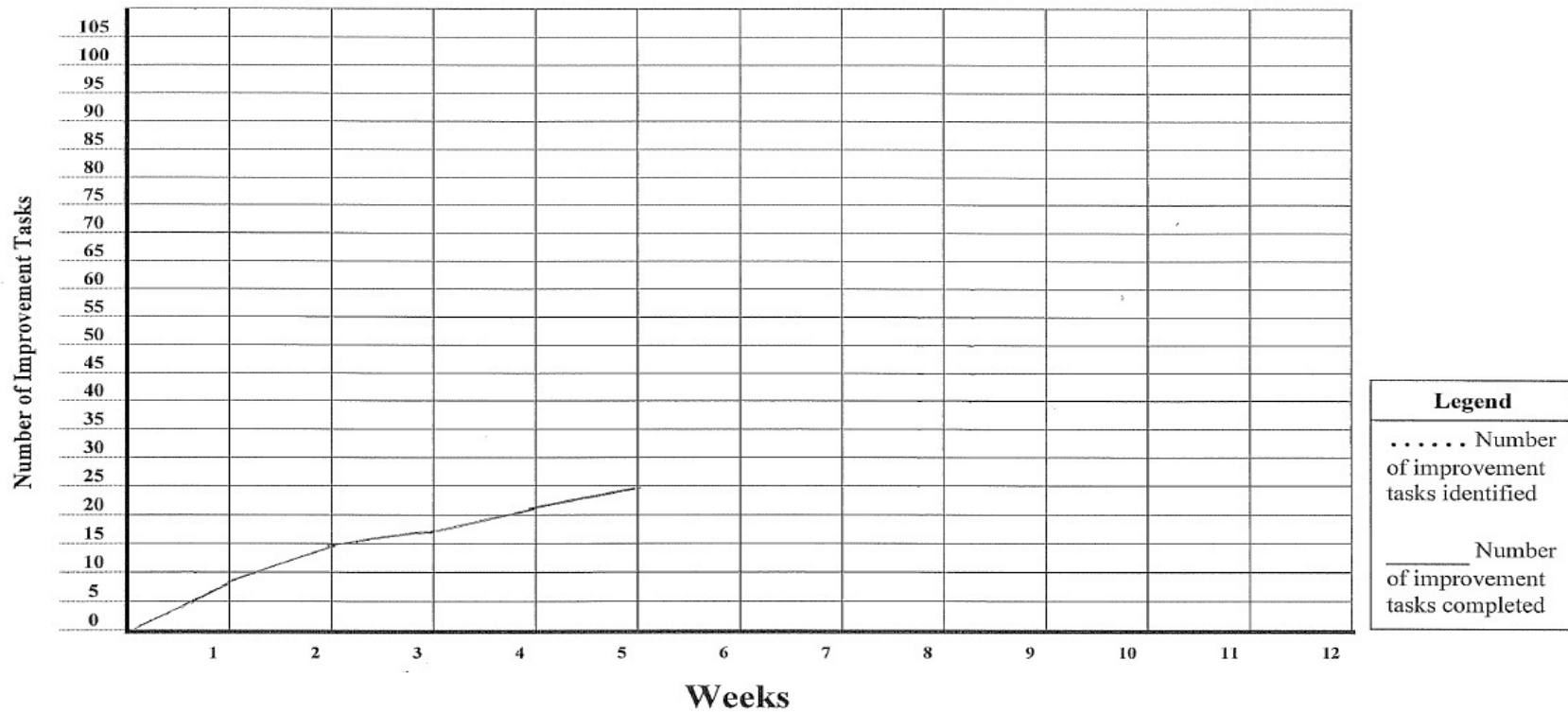
Improvement Task Run Chart



Improvement Tasks Run Chart

Team Name: Night Rollers The Sequel Data description: Number of Improvement Tasks Identified and Completed

Defined Production Area: Series 2 Rollup Data gathered by: Fou Start date: 27 / 03 /2014



© Copyright 2011 CTPM Australasia

THERE'S SO MUCH MORE BEHIND A  DOOR

Parking Lot Sheet



Team Parking Lot Sheet						
Team Name: <u>Night Rollers - The Sequel</u>				Start date: <u>10/10/14</u>		
Defined Production Area: _____						
No.	Date	A	B	C	Description of Issue	Date Actioned
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
1.	10-04				Height of Arch	April 14
2.					Height of plastic rolls	April 14
3.						
4.	01-05				Organise a discussion with all state holders to resolve "why does Super get single cardboard when old roll cardboard required to place double"	May 14
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						
21.						
22.						
23.						
24.						
25.						
26.						
27.						
28.						
29.						
30.						

A ☒: Put on future agenda
 B ☒: To be actioned by team in the near future
 C ☒: To be referred to Leadership Team (outside mandate)

© Copyright 2013 CTPM Australia

THERE'S SO MUCH MORE BEHIND A DOOR

