

## Practice makes Perfect at B&D Doors – Kilsyth!

At B&D Doors & Openers Kilsyth in Victoria, another improvement cycle jam packed with Work Area Management Teams was recently completed with great success. Building on the performance of previous teams, each team in the sites Cycle 9 of improvement activity made major steps to achieving operations excellence.

### **“The Guide Dogs”**

Improving Traffic Management has been an important focus throughout the year at the Kilsyth site. A Work Area Management (WAM) team was formed in the roller door **Guides** Production Area to not only establish **“a place for everything and everything in its place”** but to also eliminate or reduce the amount of pedestrian and mobile plant interaction. Hence the witty team name of **“The Guide Dogs”** was agreed upon.

Made up of Jason Saunders (Team Leader), Cindy Cassidy, Amin Issamael, David Robertson, Geoff Brock and George Boucher, their mandate was to:

- Eliminate all forklift movement with set boundaries, wherever possible;
- Eliminate pedestrian and mobile plant (overhead cranes) intervention wherever possible; and
- Address any Warehouse picking issues.

The Guides production was divided into 3 focus areas to improve both the traffic management and work stations. Some of the improvements identified, completed or to be implemented by the team in each area include:

### **Bottom Rail Fabrication Area:**

- Relocate workbench to allow more clearance at centre walkway;
- Extend legs of the existing workbench to improve the work height; and
- Collate all standard operating procedures, work instructions, drawings and supporting documents into a shared folder.

### **Guides Fabrication Area:**

- Relocate cleaning tools station;
- Remove bulk components at S2 spot welder and set up new area; and
- Reduce the manual handling of bulk stock through introducing a Pallet scissor lift.

### **Finished Goods Store:**

- Change the layout of the finished goods storage area; and
- Align all finished goods in north / south orientation to reduce the amount of movement and eliminate the rotation of finished goods whilst being transported in a sling.

**Figure 1: Finished Goods Storage layout BEFORE photo**



**Figure 2: Finished Goods Storage layout AFTER photo**



The team also made great changes to Traffic Management. Some of the improvements included:

- Improved the layout in the Guides work area to segregate storage of finished goods and assembly areas and thus separating workers from mobile plant; and
- Created space to allow the main pedestrian walkway in the Guides Area, to connect to existing walkways at both north and south ends, as seen in Figure 3 below.

**Figure 3: Guides Area Current and Proposed Walkways**



All the improvements that have not yet been implemented have been listed on project management plan to ensure they completed in a reasonable timeframe.

### **“RAS to Riches!”**

The “RAS to Riches” Area Based Team is a continuation of Work Area Management in the Shutter Production Area that started in Cycle 7 that will complete the transformation of the whole department to improve work flow and productivity of existing and new Industrial Shutters ranging from 0.9 to 14 metres wide.

Made up of Team members Ryan Lawrence (Team Leader), Lucy Sawczyk, Paul Lov, and Leo Colangelo, this team covered 3 of the remaining areas of Bracket Fabrication, Curtain Assembly and Roll Forming. Traditionally the area was known as the Roll-A-Shutter, hence the abbreviation “RAS” in the team name.

Some of the improvements identified, completed or to be implemented by the team in each area include:

#### **Roll Forming Area:**

- Replace existing Roll Former guard with a clear cover, better handles and gas struts to improve visibility, access and eliminate the risk of the guard falling down on operators;
- Replace broken duckboards in front of Roll Former; and
- Establish a home position for spreader bar.

#### **Curtain Assembly Area:**

- Proposed a new layout for Curtain Assembly area to allow easier assembly of 14 metre curtains as seen in Figure 4, by relocating the seldom used “Wicket Gate” fabrication area, gaining 8.0 meters in length;
- Improve storage of components such as wind locks and cardboard rolls; and
- Design a new Roll Stand for dispensing PE foam packing to replace existing makeshift arrangements.

**Figure 4: Current curtain assembly area**



#### **Bracket Fabrication and Paint Booth Area:**

- Removed redundant items and equipment in Bracket Fabrication area, then implemented new layout to reduce footprint and allow for expansion of Curtain assembly;
- Developed a layout for new Dipping Tank area to replace large Paint booth which is no longer required; and
- Procure new pallet racking and pallet jack to reduce the manual handling of large and heavy brackets.

As with previous team all outstanding improvements have been listed on project management plan to ensure they completed in a reasonable timeframe.

## “The Bread & Butter Team”

The third WAM Team for the cycle was conducted on the Series 1 Roller Door Line which is often referred to as the Kilsyth “Bread & Butter” line as most of the site’s volume goes through it.

Made up of team members Hoang Nguyen (Team Leader), Louis Lee, Ho Minh, La Cheng, Lou Ney, Phui Ly and Adam Wyrstek, the team started the process by conducting a Clear-up and tagging of all items that were not needed or to be stored outside the work area. All the items that were tagged to be removed were placed in a quarantine area located close to the line, where they remained for a short time to allow everyone to collect or claim items before they would be disposed of.

The Series 1 Line was divided up amongst the operators to ensure everyone was given an opportunity to participate and suggest improvements, with the sole condition that no improvements could be implemented unless it was agreed to by all operators.

Some of the improvements identified, completed or to be implemented by the team in each area include:

### De-coiler-Sheet Delivery Area

- Cleaning tools station;
- Shadow board for tools; and
- Stand and home position for C-hook.

### Taper Table and Bottom Rail Area

- Visual control for weather seal pallet location;
- Visual control for punch bank slug scrap bins to avoid scrap spilling onto the floor; and
- Mount air dampers onto bottom rail of taper table to remove them off the floor.

### Brake Press Area

- Replace damaged floor mats; and
- Shadow board for tools.

### Stitcher Area

- Implement a WAM standard for stitcher tool station; and
- Designated bins for general rubbish and recyclable waste (e.g. metal, cardboard, plastic etc).

### Roll-up Area

- Racking at West and East of Roll-up station for components; and

- Replace damaged floor mats.

### Axle Assembly Area

- Tray / chute for axle pipe cut off, as seen in Figure 5; and
- Four demountable arm supports for plastic drum wheels as seen in Figure 6.

Figure 5: Axle pipe cut-off Improvement Sheet



Team Name: The Bread & Butter Team	Location: Series 1 Axle Assembly	Initiated Date: 7/10/14
Team Type: WAM	Item: Brobo saw at Axle assembly bench	Completed Date:
Initiator: Lothar N		
<b>1. Problem (Plan)</b> When cutting axle pipe to suit, the offcuts are placed in a steel drum & emptied into Steel recycle bin. The longer offcuts are thrown into the recycle bin from the saw position & could damage the Elec control panel immediately above it.		
<b>2. Current Situation (Plan)</b> Photo: 		
<b>3. Proposed Change / Approved Improvement (Do)</b> <ul style="list-style-type: none"> <li>• Manufacture and fit tray to catch off-cuts</li> <li>• Use a smaller steel recycle bin (approx 1.0mtr high)</li> <li>• Incl an extension support tray for longer off-cuts and ability to be emptied directly into steel bin</li> </ul>		
Improvement Target: Reduced bending & lifting	Cost: <i>Minimum 1000 - 1500 - 2000</i>	Expected Saving: <i>Eliminated risk - avoided shoulder / back injury</i>
4. Results: (Check)	5. Future Actions: (Act)	
Approved by: <i>H. Nguyen</i> <i>G. Boucher</i> <i>V. Tang</i> <i>C. Moss</i> <i>R. Bolt</i> Managers, Supervisors and Leading Hands to sign off acceptance of Proposed Change		

Figure 6: Plastic Drum Wheel Improvement Sheet

Team Name: The Bread & Butter Team	Location: Series 1 Axle Assembly	Initiated Date: 7/10/14
Team Type: WAM	Item: Rollmasta drum wheels	Completed Date:
Initiator: P. Ly & Lothar N		
<b>1. Problem (Plan)</b> Currently a qty of plastic drum wheels are removed from a stock pallet then either placed on top of springs/other drum wheels or slid onto a plastic pipe to support them out of the way – for when needed for axle assembly		
<b>2. Current Situation (Plan)</b> Photo: 		
<b>3. Proposed Change / Approved Improvement (Do)</b> <ul style="list-style-type: none"> <li>• Fit 2 x (pipe) holders at the right height, attached to back of steel cage stand</li> <li>• Make the holders easy to fit when loaded &amp; able to swivel out of way, when necessary</li> </ul>		
Improvement Target: Reduced lifting/bending from hip	Cost: <i>Simple frame - 1000 - 1500</i>	Expected Saving: <i>2-25 hrs of back/bending time saved - 10 mins / hr</i>
4. Results: (Check)	5. Future Actions: (Act)	
Approved by: <i>H. Nguyen</i> <i>G. Boucher</i> <i>V. Tang</i> <i>C. Moss</i> <i>R. Bolt</i> Managers, Supervisors and Leading Hands to sign off acceptance of Proposed Change		

### End of Line Area

- Storage rack and trolley for stock part; and
- Storage racks for labels, cable ties and other consumables to be installed under the EOL table.

Excellently facilitated and supported by Leon Thebus, Continuous Improvement Coordinator at Kilsyth, all teams had great results. CTPM would like to congratulate them on their efforts and we look forward to supporting further teams in 2015.

For further information please contact:



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