

Employees Drive Productivity @



Most businesses would see an increase in productivity as a win, however **Parchem Construction Supplies** based in Brunswick, Victoria achieved an even bigger win by engaging their employees to drive the improvement.

Parchem, a part of the Dulux Group, manufactures and distributes materials and equipment used in the commercial and residential building industry throughout Australia and New Zealand. Their **National Manufacturing Manager**, Gareth Watson and their **Plant Manager**, Dominic Aloe decided to introduce an improvement process called Value Stream Mapping to educate and engage their employees on the flow of material and information across the entire supply chain.

In March this year, 15 staff at all levels of the business were taken through a one-day education process of Value Stream Mapping which involved a workplace simulation. The simulation demonstrated the benefits of operating a true 'pull' type system where stock holding is minimised, quality is built-in and production is able to react rapidly to changing market demand. For many at this workshop the 'light bulb turned on' regarding their own work practices.

The next step was to select a focus area, put together a team, which were known as the Flex Shaft Improvement Team, and give them the power to create change.

They focused on the Flex-Shaft Line which is their highest volume area. They analysed the process by breaking it down into each step and identifying 'value-add' steps, where they were actually creating value for the customer

and 'non value-add' steps where they were not.

The team found that one of the ways to reduce non value-add steps was to redesign the way the product flowed along each work station. The initial concept they had for the 'Ideal state' was modified a number of times to eventually come up with the most efficient flow.

Figure 1 – The Flex Shaft Improvement Team



Back Row (L to R): Alesh Skrivanek (Production Planner), Alex Adriano (CNC Operator), Dumindu Samaranayake (Operator), Aluthwalage Silva (Operator)
Front Row (L to R): Tony Tarzia (Production Supervisor), Dominic Aloe (Plant Manager), and Neil Morrison (Factory Stores Supervisor)

The team also focused on supplying the right quantity of parts at the right time to the Operators as well as standardising the tasks of each Operator. They implemented the changes and measured the output, which lead to results of dramatic proportions.

The tangible results they achieved included:

- **Improved capacity of the line by 56%;**
- **Reduced Non-Value Add activity by 15%;** and
- Great **reduction in manual handling risk.**

The intangible results included:

- **Improved teamwork** between operators as well as between stores and production;
- Ability to **embrace change** from the rest of the workers in the area, as they see the result of the improvements made so far which will help them to engage in future improvement activities; and
- **Vision** for further improvements identified by the Flex Shaft Team, such as reducing the time of the current bottleneck process and improving the up-stream sub assembly area to keep pace with newly created capacity of the Flex-Shaft Line.

Along with these incredible results, the team expressed a number of great learnings from their time involved in the improvement process. The learnings included:

“We learned to never stop questioning what we do”;

“A lot of brainstorming and much debating in the last 8 weeks gave us the best outcome”; and

“After spending quite a bit of time in the analysis stage, finally implementing the chosen line layout was extremely satisfying”

Figure 2 – Some of the Parchem products



Figure 3 – Standard Pump Unit produced by the Flex Shaft Line



Parchem have not only focused on operational improvement through their Value Stream Mapping process but have also focused on creating new markets and expanding existing markets for their products. The new capacity that the Flex Shaft Improvement Team has created will now be utilised via the ‘pull’ of more customer demand.

We congratulate the Flex Shaft Improvement Team and all others who were involved in this process over the last 4 months.

For further information please contact:



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