

Better Process Capability through Standardised Work

Buildex[®]

At **Buildex** in Moorabin, Victoria they make high quality roof fasteners for the building industry, screws in laymen's terms. The screws are formed from coils of wire, plated with special alloys and then painted at a high temperature to ensure they survive in the harshest of weather conditions. It may seem like a simple process on the surface however it becomes very complex when broken down to the level of each specialised operator.

Buildex had implemented a number of continuous improvement teams throughout 2011 with the aim to achieve 'step' improvement in their production process. These teams were tasked with identifying and fixing the main equipment and process problems and thereby improving capacity within the plant. From the good results achieved, one key finding stood out – 'variation'. It was discovered that some of the key processes were being performed with a high degree of variation.

Figure 1: 'Aspire' Area Team



L to R: Brian D'Silva, Darren Bailey, Chris Madden and Mark Woolcock

The Site Leadership Team at Buildex led by their Operations Manager Colin Bosomworth and Continuous Improvement Coordinator, Chris Madden, decided to focus on reducing this variation.

Teams were formed in 2 areas, the front-end 'Aspire' area (Team Members shown in Figure 1) and at the end of the process 'Finishing' area. They each identified their most critical process and set about confirming the best way to perform that process. This involved consulting with Operators, Leading Hands and Technical Specialists. Each process was examined and broken down into its key steps. This 'process of discovery' uncovered many issues:

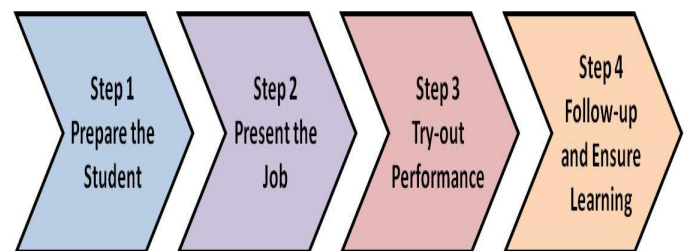
- The existing SOPs (standard operating procedures) were more like technical manuals and could not be easily understood or used to train a new Operator;
- There had been a number of changes to the process since the SOPs were last reviewed making the SOPs not completely relevant;
- Some Operators were performing 'work-arounds' due to equipment issues which had led to these becoming part of their own standardised work;
- The time to perform these processes varied greatly from Operator to Operator leading to variability in output; and
- The method of training involved more word of mouth style training rather than a repeatable and consistent process based on a relevant and clear standard.

From their investigation the improvement teams then set about addressing these issues by ensuring the SOP reflected the 'best way'. The revised SOP was then simplified, replacing unnecessary words with photos (where relevant). The Leading Hands when coached each Operator through the SOP explaining each step and clarifying any misunderstandings. The Operator was then provided with a follow-up and further coaching to close any skill gaps identified.

What the teams now have in place is a process to investigate, standardise and improve all their processes within their production line. Importantly the teams are seeing the benefits of sharing knowledge and identifying the current best way to do the job. They understand that as the workplace is a dynamic environment this 'best way' will change with time.

The fundamental concepts Buildex are using is not new. It is based on an adult learning process (as shown in Figure 2) called "Training Within Industry" which was first used by the United States during World War II and was since adopted by Toyota in its global development programs.

Figure 2: Training Within Industry process



This process of learning, much like painting the Sydney Harbour Bridge, will be an ongoing process. The benefit to ITW Buildex will be to continually improve their process capability and thereby keep them at the top of a very competitive market-place.

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