

Steeling Improvement Opportunities



Steel Manufacture! It's a heavy duty industry where the majority of the 'value adding' work is performed by machines. So where is the benefit of introducing process improvement practices to machinery which is already achieving high performance outcomes? OneSteel's Australian Tube Mill in Acacia Ridge in Brisbane, Australia has just recently discovered the answer. They have completed their first improvement project as part of the nationally recognised qualification of "Certificate IV in Competitive Manufacturing" delivered by Excellence Coach Peter McGregor of The Improve Group.

Australian Tube Mills are manufacturers of structural steel hollow sections and DuraGal® Profiles. Steel pipes, tubes and other products produced to strict Australian Standards for the

Australian, New Zealand, South Pacific and South East Asian markets and are manufactured at their Australian facilities in Brisbane, Newcastle and Melbourne.

The focus of the Competitive Manufacturing project was the improvement of 'Quick Changeover' times across five different mill processes. The changeover of mill components for different steel tube products can take between thirty minutes and four hours. Australian Tube Mills saw enormous value in undertaking the Quick Changeover training to improve their processes and recover any lost downtime that occurred during their ten-ton-per-hour steel production process.

Five project teams were let loose with the Improve Group's Peter McGregor at the helm. Their charter was simple – to identify a changeover opportunity that was achievable within six weeks and would reduce the changeover time by thirty percent. Five areas were identified - the coil slitter, turks head change, saw blade change, paint



station and the zinc-plate size change. The first improvement process focused on the coil slitter. At Australian Tube Mills' Acacia Ridge operation, up to six coil slitters can be changed in a single shift. Under Peter's guidance and coaching, the team planned and improved changeover time by 40% and are aiming to reduce the process even further. A single ten minute improvement in this area equates to Australian Tube Mills' production of over 15,000 extra tons of slit coil each year.

The Turks Head change process yielded similar exciting results for the steel tube manufacturer and for the Improve Group. A benchmark of fifty percent reduction time was set and once the project was completed, not only was this achieved but it also created an extra capacity of six tons of steel each week!



Peter McGregor

Peter McGregor said "By documenting and analysing the current production processes, the course participants were able to capture the presence of process waste and therefore reduce process times. Staff became excited about the changes and became more passionate about the processes. The project planning, analysing and the results they got opened their eyes to what can be done, what can be improved and what it means to the organisation and ultimately to their livelihood."

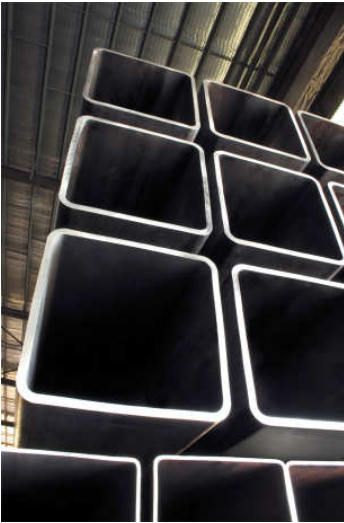
Australian Tube Mills' results were better than expected. They were able to demonstrate that a 50% reduction of changeover time was easily achieved by the new processes – an enormous saving in all areas! With this success story, continuous improvement in changeover practices is now a key business objective of all mill teams at Australian Tube Mills, with some already setting a target of 'world class' by achieving SMED standards of less than 10 minutes for the changeover.

Australian Tube Mills Technical Training Officer, Albert Baker led his team through this improvement project and has seen the results first hand. Albert said "The shop floor operations team is so enthusiastic about the benefits they can see from the coaching received. The training has given them a clear line of sight. They've seen first-hand how it reduces their time and effort and ultimately makes their job easier.

They crews have become more confident and have been spreading the competitive manufacturing word to other teams within the company. From a company point of view, it's really exciting as we've just started the road to increasing our profits further thanks to this project. The more time we can gain and not waste is more time we can put into production. We will see



significant changes and benefits within the first six months. It's been a fantastic opportunity for us all. ”



Australian Tube Mills has a proud history of product and technology innovation and it's this history that is a main driver in the areas of continual process improvement and impels the business to move further towards lean manufacturing goals. The Improve Group provides world-class improvement services such as those provided successfully to Australian Tube Mills. They include government funded programs in both Australian and New Zealand for Competitive Manufacturing, Manufacturing Technology Training, Lean Manufacturing Implementation Support, Lean Supply Chain Implementation Support, Total Productive Maintenance, Lean Metrics

Development, Rapid Improvement Programs, Continuous Improvement Programs , Sales & Operations Planning Implementation, Inventory Management Implementation, Lean Office & Administration, Coaching and Mentoring, Lean Toolkit, 5S (Sort, Set-to-Order, Shine, Standardize, Sustain), Kaizen, Kanban, Six Sigma, Value Stream Mapping, Waste Audits & Waste Minimization, SMED / Quick Changeovers, Poka-Yoke (Mistake Proofing), Takt-Time etc. For more information, visit www.improvegroup.co.nz. Improvement Tools.com, a subsidiary company, provides resources such as books, videos and DVD's via our website www.improvegroup.com.au which can be used as a starting point to a lean manufacturing program or as an additional resource to lean coaching.