Process Minerals

Global TPM Transformation Deployment in the Industrial Components sector



Background

This global manufacturer processes minerals to produce great volumes of product used all over the world supplying high specification material to the automotive, marine, energy and renewables sectors. A vital factor to stay ahead of the competition is to maximise the return on capital associated with over twenty factories spread across all regions of the globe. Key to their success is the reliability and maintainability of the equipment as well as the commitment and motivation of its workforce.

The Challenge

The processing equipment operates in a high temperature and highly abrasive environment, so reliability and resilience is a key differentiator. There were additional challenges due to a range of technologies across the globe and also huge cultural differences, rates of acceptance and uptake by the workforce.

The Objective

The clear need was to develop a programme that maximised the performance and life of the equipment. It was recognised that this would need an approach that involved not only the equipment designers and maintainers but the whole organisation within plants and also to have consistent application across the regions.

To meet this end a Total Productive Maintenance approach was deployed in line with the JIPM model for a proven effective implementation.



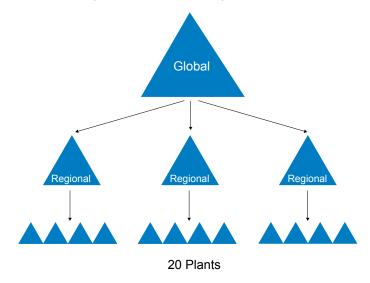
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The Industry Forum Solution Phase 1

In 2010 an approach was designed to develop pilot improvement areas in a well-considered and selection of pilot factories in just one of the regions. The model followed the JIPM approach with an initial assessment and awareness of TPM for the leadership teams, followed by the development of a master plan. This focussed on the first four pillars of Focussed Improvement, Autonomous Maintenance, Planned Maintenance and Training and Education. Pilot areas of equipment were selected on a chosen criteria based on chronic need, the opportunity to engage and learn, and also whether or not they could be completed in an appropriate time frame.

Phase 2

Following the evaluation of the Phase 1 findings and the initial success of this phase the approach was expanded to engage all regions in similar programmes following the same approach. As the network grew there were additional work streams to develop Pillar specific expertise and knowledge sharing. At the same time the original pilot plants continued their deployment to include more areas, engage more people and learned how to implement the advance pillars.



Phase 3

As the factories and regions developed traction the programme moved into a third phase where certain global strategic imperatives were pursued to move faster and deeper on areas of global concern. This included a series of technical and process areas that were of concern. Here a selected plant would develop the solution using Focussed Improvement, then deploy across other plants and regions.

Also in this phase other global pillars were launched on additional global projects, these included Finance, Supply Chain and the building of new and refurbished factories around the world.

The programme continues to develop and gain increased momentum, engaging more people and depth of application. Leadership now identify with TPM as "the way we run our business".

After three years of deployment the return on investment is over 4:1, and the initial first leading factories are getting ready for the first TPM award from JIPM.

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