



# Case Studies



Factory Improvement Programme

## Workplace Cooperation and Competitiveness Boosting Communication and Relations at SEICO

SEICO is still a relatively new joint stock company, founded in 2003, that produces pre-engineered steel structures for industrial buildings. The company employs 150 workers in the factory, 30 workers in the construction team and 10 in the head office in Hanoi.

When the company heard of the Factory Improvement Programme (FIP), management signed up with the goal of improving their own performance and learning from others. The application was strongly supported by the Chairman and General Director.



### INITIAL SITUATION

Although this factory is quite new, the company was not managing its factory space effectively in terms of allocating specific sites for raw materials, semi-finished and finished products and waste.

While in the process of establishing a Quality Management System in accordance with ISO 9001:2000, there is still a great deal of work to do to ensure that the policies and procedures are detailed for each individual topic and followed closely. Systems are not yet in place to collect and analyse key performance indicators that support management decision making.

The workforce in this factory is very young and there are very few fully qualified workers and staff, resulting in higher than normal defect rates and raw material wastage. The factory had been hiring workers from the local area but, because of the low starting wage rates, could not hire experienced workers.

As a new company, there was great focus in winning business, with all managers receiving bonuses for bringing contracts. This meant that sales and marketing were the primary focus, with less attention being paid to the design, drawing and engineering of building components. This too contributed to higher than expected levels of defects.

Senior management and some administrative functions are based at the corporate headquarters in Hanoi City. This makes communication both difficult and slow as both the factory and the management are busy fulfilling their own tasks and the senior management did not visit the factory on a regular basis. Workers were updated as required, by loud speaker, by post, and occasional face to face meetings with team leaders. There was no information board in the company.

There were no joint problem-solving initiatives and no clear guidelines as to how workers can address improvement suggestions to higher management. No policy encouraged workers to do so. Workplace cooperation was, therefore, quite basic.

The workers earned a base salary plus allowances for such things as attendance, productivity and other bonuses. However there was no standard process to evaluate performance. The factory tended to divide the bonus fund into small parts distributed to all employees rather than rewarding workers who were particularly efficient or good at their jobs.

### RECOMMENDATIONS BY THE FIP TEAM

Prior to the programme the company thought that there was a wide variety of management issues, many relating to workplace relations. These and other issues were examined by the FIP experts and the Factory Improvement Team and many recommendations were made for improvement.

These recommendations included:

- Installing a notice board and ensuring relevant and up-to-date information is displayed for the workers;
- The introduction of a short (5 to 10 minute) meeting among supervisors / team leaders and workers on a daily / shift basis;
- Weekly meetings between CEO and supervisors / team leaders while ensuring that senior management are more visible on factory floor;
- The introduction of joint problem-solving techniques to assist with solving problems of communication, and working conditions;
- Changing the design of some technical documentation;
- Changing the way in which defects are dealt with;
- Implementing a 5S clean-up day for the factory;
- Introducing a suggestion box;
- Using visual factory improvement tools to highlight the potential for change. This includes photographs taken before and after the 5S clean-up day as well as 'visual tools' such as fishbone analysis and Pareto charts.

### ACTIONS TAKEN BY FACTORY

The Factory Improvement Team acted on all the recommendations, including a suggestion box. Management made quick, positive responses to the first two suggestions made by workers. These were the creation of improved (covered) parking facilities for the workers' motorbikes and improving the canteen facilities. With regard to the latter, some improvements have been made to the existing facilities but the company has also commenced building a new canteen.

The introduction of joint problem solving techniques resulted in the Factory Improvement Team and groups of workers analysing problem areas using fishbone analysis. The output from this exercise was then displayed on the newly installed notice board

so that all workers could see the root causes of problems that had been identified – and some of the solutions.

The Factory Improvement Team not only introduced but also expanded the role of the short daily meetings so that the groups not only talk about the current / next shift but they also pick a specific topic from the fishbone analysis for discussion and how they may implement solutions.

The factory manager has been taking a greater role in terms of two-way communications with the workers and management and is much more visible and approachable.

Management have also instituted a review of employee terms and conditions, resulting in higher direct wages for all workers.

Prior to FIP, the technical documentation relating to the cutting of steel components was only descriptive, containing the measurements of the pieces. The company introduced new forms that contained the description and measurements on one half of the page and an illustration on the other, making reading / comprehending much easier for the workers.

Changes were made to the way defects are dealt with. The new system is designed so that the defects are rectified by the worker that caused the defect rather than the worker that identified the defect. This results in fewer defects getting through to the customer and helps the workers understand what they are doing wrong and become more competent.

The Factory Improvement Team also introduced a 30 minute on the job training session on technical topics, taking place every Tuesday. These training sessions have included: welding, communications, use of fishbone analysis, how to read technical drawings and more.

### IMPACT OF CHANGES

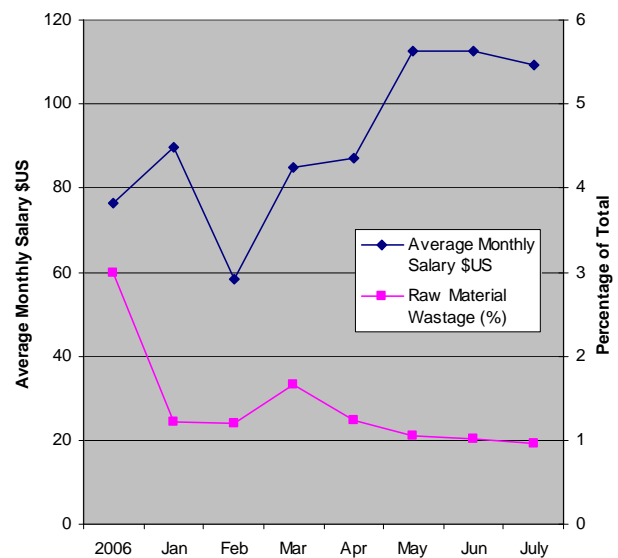
The company was not accustomed to applying tools and techniques to measure performance indicators / changes in performance. Indeed, it is always challenging to identify measurable impacts from improved workplace cooperation. However, the management and staff consider that almost immediately after the first FIP module – on workplace cooperation, establishing the Factory Improvement Team - they could sense improvements in terms of:

- Employee / management attitude and behaviour;
- A healthier, less stressful, working environment;
- Changes to the mindset at all levels. This really means that workers and management became more open and receptive to change. This has, in the view of management, resulted in greater motivation and a more effective workforce;
- A recognition / understanding that changes do not need to be big to have significant impact;
- Much improved communication – people are keen to talk, voice their opinion and listen;
- Worker participation in finding solutions to problems;
- A greater level of improvement initiatives throughout the factory – department teams increasingly acting to make things better.

Although the changes above are difficult to measure or attribute directly to the workplace cooperation initiatives of FIP, the company is quite clear that the quantifiable results listed below would not have been possible if the workers and management had not gone through the Workplace Cooperation module first.

The indicators that they have managed to measure show how well this holistic approach to change has impacted upon the factory:

### Pay Goes Up, Waste Down



- Average monthly **salaries increased** by approximately **40%** during the nine month period of the programme;
- Average **raw material wastage** per month has reduced by approximately 61% against the 2006 base line figure;
- **On time deliveries** have, on average, **improved by 24.75%** over the 2006 baseline figure;
- Average **actual output** as a percentage of target output per month has **increased by 36.75%** against the 2006 baseline; and
- Average monthly **end-of-line defects** have **reduced by 58%** against the 2006 baseline.