

CONTINUOUS IMPROVEMENT AS A CENTRAL PART OF CORPORATE POLICY

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**Abstract:** Continuous Improvement Process (CIP) is a business philosophy or a mission statement, which is a long-term oriented and evolving concept of corporate policy. It will meet for the employees both – orientation and motivation functions. CIP aims to create through the continuous improvement of processes, workplaces, safety and the internal and external relations remedy, the individual is paramount. Within Hammerer Aluminium Industries (HAI) problems are not silenced, because they are seen as opportunities to learn from and to initiate improvements. If problems are identified and highlighted, that does not mean having to draw personal consequences. Rather, it provides the opportunity to work together on the target and thus the customer to provide quality products or services. The overall goal is the customer, and the way to get there are the employees in the company – who are living the philosophy of continuous improvement. Within HAI we work according to the principle: “Who stops improving, stops being good!” There are no perfect solutions, and thus there is no reason to rest on the current state! This Paper shows the tools used within HAI to achieve the above. As the results achieved are mainly confidential they cannot be published. Nevertheless some figures that can be made public are shown in the summary and proof the extraordinary results that can be achieved if CIP has become a central part of the corporate policy of a company.

**Keywords:** Continuous Improvement, Employee Involvement, Corporate Policy

**JEL Classification:** L20

1. BACKGROUND AND PROBLEM

Today, companies are constantly on the touchstone - more than ever! The increasing competition from globalization punishes any form of inefficiency. The top management is constantly challenged to get the maximum out of their resources to withstand the pressure of competition and thus to continue to successfully lead the company into the future. Ever since the financial crisis in 2008, it has become clear how fast paced and sometimes unpredictable economic environment has become. Especially in such situations of crisis a company is subjected to a hard test. Owners and / or shareholders call for "austerity" on.

Change management is nowadays daily bread of management. This course also has far-reaching consequences for all company employees. In dealing with the "resource people" there are different approaches. While some companies rigorously "pass through", others choose the path of dialogue with their employees - the impact on the motivation of the employees involved is enormous. Especially in such an emergency employee motivation is a key parameter for the success of the company. Without skilled and motivated employees, it is impossible to radically reduce costs and to sustainably increase the productivity. That motivated employees have a positive impact on productivity, is indeed nothing new. Therefore, scientists, consultants and managers have always been concerned with the question of how they can improve employee morale - of course with the goal of achieving a positive development of the company's success by doing so. A modern company is aware about the fact that the “resource employee” is an important guarantor of success because this ensures the company's success. The people - and thus

the company employees - are what determine success or failure.

Within Hammerer Aluminium Industries we have developed a tailor made Continuous Improvement Process (CIP) as the key tool for employee involvement. CIP is communicated and implemented according to the top-down approach. A clear policy and guidelines are well known and mandatory for a successful CIP culture in order to assure that it becomes a central tool of corporate policy.

2. CONTINUOUS IMPROVEMENT PROCESS – POLICIES AND GUIDELINES

Hammerer Aluminium Industries (HAI) has chosen to implement the Continuous Improvement Process (CIP) is a central part of corporate policy.

CIP is a business philosophy or a mission statement, which is a long-term oriented and evolving concept of corporate policy. It will meet for the employees of both orientation and motivation functions. The basic idea of CIP comes from the Japanese "Kaizen" and is composed of the two words KAI ("change") and ZEN ("for the better"). With respect to the company's strategy to continuously improve in all areas involving all employees - meaning directors, officers and employees.

CIP aims to create through the continuous improvement of processes, workplaces, workplace safety and the internal and external relations remedy, the individual is paramount. Within HAI problems are not silenced, because they are seen as opportunities to learn from and to initiate improvements. If problems are identified and highlighted, that does not mean having to draw personal consequences. Rather, it provides the opportunity to work together and aim for improvement in order to provide higher quality products or services to the customers. The overall goal is the customer, and the way there are the employees in the

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company who are committed to the philosophy of continuous improvement.

Within HAI we work according to the principle: "Who stops getting better stops being good." There are no perfect solutions, and thus there is no reason to rest on the current state.

Leadership values, standards and goals for entrepreneurial behavior changes must be lived.

As the most important tasks of the management of HAI to the realization of the CIP will be added:

- vision and develop corporate strategy set
- create positive climate for innovation and ensure consistent communication
- Processes, methods and techniques for implementing CIP
- CIP develop awareness among the entire workforce
- Motivating CIP aims to assign the divisions
- Target performance continuously monitors and provides feedback

The requirements for HAI-Management to realize CIP are summarized as follows:

- Active antecedents and convince
- Ensuring compliance with standards defined by organizational and motivational measures
- Supporting and Empowering staff
- promote communication and cooperation between employees
- Provision of support for the optimization of processes
- agree on the objectives and implementation of need-based training

HAI requires staff with the right attitude to CIP, which is as follows:

- Responsibility for the workplace and operating environment including good and safety, quality and environmental
- Observance and the development of standards
- Active design and optimization of working processes
- Submission of proposals for improvement
- Arrangements participation in group work
- Continued development and application of CIP instruments

The management of HAI is committed to continuous improvement!

### 3. METHODS AND TOOLS USED WITHIN HAMMERER ALUMINIUM INDUSTRIES

For a successful enterprise-wide implementation of CIP-defined standards are necessary, which are available to staff to work on their problems are available. This section describes the methods and tools are now presented which can be used in the HAI to achieve these goals.

#### 3.1 6 S (workplace organization)

The basis of a quality product or service quality is a clean and tidy workplace. The instrument of workplace organization or 6S forms the basis of the continuous improvement process and makes the working environment of the employees in a safe, clean, uncluttered and ergonomic condition. The tool can be used both in production areas as well as in administration. By involving employees the problems and weaknesses can be identified and implemented improvements sustainable. Defined

standards and their visualization in the workplace allow rapid detection of deviations and ensure that the target state is maintained.

The 6S-action turns out to be kick-off event in conjunction with the waste looking to be very effective because the workforce experienced immediate improvements in their daily work. This contributes to the motivation for further CIP activities.

#### 3.2 Visualization

The visualization is used to inform the employees about the CIP activities in general and the related objectives and measures. At the heart of the presentation of the standards as well as the demonstration of set and actual values are in relation to the objectives. It provides all the relevant information for the workforce with the help of various indicators. The concept of visualization is consequently understood the pictorial representation of pathways, processes, resources, tools, work processes, information and data. With this method, all managers and employees can quickly get an overview of all important processes on site and where appropriate, take corrective action. The most important information (productivity, waste, costs, accident rate, number of suggestions for improvement, etc.) of an area are shown on a CIP info wall, which therefore is the center of information exchange.

"Visual management is successful when even an outsider who has no information about the company can identify the essential tasks, processes, goals and needs of each team."

#### 3.3 Standardization

The rules formulated in writing of the daily work life are referred to as standards. They apply for the purposes of the CIP as a general guiding principle, which is to show the workers the way for an efficient, goal-oriented way of working. Standards are aligned to processes and not functions, maintaining and securing high-quality is paramount. Only they will ensure that the best method to accomplish something is also used by all employees. If standards are not adequately communicated, there is a risk that only a small part of the employee to comply with the standards and thus the basis for further improvements is withdrawn. Therefore, it is necessary that supervisors respond immediately to non-compliance with the standards and they do not suffer in silence.

We must constantly challenge existing standards and continue to improve. This one falls back on the developed of Deming PDCA cycle (**P**lan **D**o **C**heck **A**ct). After the four phases are complete, the process can start over again with the planning phase. Thus, the PDCA cycle is an instrument that holds the specified standards and continuously optimized. As shown in the figure below, the standardization also serves to secure the improvement measures for all employees.

#### 3.4 Problem-solving techniques

Problem-solving techniques are systematic approaches to capture and manage common problems in a team or losses. The individual problem solving steps are divided as follows:

- Identify and select problem (team composition)

- The issues: Facts and figures on the detection of the actual situation
- Target setting
- Root cause analysis using analysis sheets
- Develop and plan the solution: brainstorming of alternatives, evaluation of proposals, Action Plan - Who? What? When?
- Solution verification: Display results visually using figures
- Standardization to avoid a repeat problem

When teams go through the problem solving process in this form, the above objectives can be achieved with high probability. The prerequisite is that all team members are behind the measures defined and are sufficiently motivated to implement them.

### 3.5 Teamwork

Collaborate with others, is part of daily life in the business environment. Specialists and managers at all levels of organizations have teams can perform to achieve success. It is crucial for the success of the company that teams be managed constructively. It is to awaken in the team building the interest and motivation of each participant in a fruitful collaboration to form a team from a group. "A team is a group of people who work together constructively and solve problems together in order to achieve the mutually agreed objectives. The close relations that connect the individual team members together contribute significantly to the provision of excellence. However, this sets a limit on the number of members to max. 10 people expected. "

The team organization assumes that all employees of a company are assigned to a team. The organization within a team is basically left to the team itself, but certain guidelines must be adhered to. Thus, the team is responsible to distribute tasks in the group and accordingly deny the actions to be taken with other teams. Through teamwork, the collaboration between colleagues is encouraged improvements are identified and then processed together. Furthermore, the creativity of employees is increased because they benefit from the experience and knowledge of other team members. Finally it should be mentioned that the participation of employees in the improvement process is being accelerated by a more comprehensive insight into the performance process.

### 3.6 Employee Suggestion Scheme (ESS)

The suggestion scheme is aimed at individuals or groups of individuals and has an extensive employee involvement and resulting increased work ethic to the target. The ESS is looking for creative people who are interested in their work and the company and thereby prove this by think and share their knowledge, their experiences and their ideas to the company. It is an essential component of CIP, and thus the basis for the introduction of this corporate philosophy necessary.

### 3.7 Technology & Production Cooperation (TPC)

Within HAI TPC is the comprehensive preventive maintenance. It's introduced increasingly in manufacturing operations and is geared specifically to the improvements of equipment and machinery. By building a preventive maintenance system, the system efficiency is to be maximized over the life of the equipment away. The risk of loss of production and the associated failure costs due to

the higher degree of chaining devices has increased. Ensuring high availability of systems is thus in the course of this development becomes an increasingly important challenge in maintaining the economic performance of the company. TPC is a method for optimizing the use of production involving all employees. The goal of TPC is to know the condition of the existing facilities using all the resources given continuously to a higher level of performance.

TPC is so far regarded as a holistic method to maximize the effectiveness of the equipment, as it explicitly involves the interaction between the otherwise often considered isolated from each individual human systems, production facility and environment.

### 3.8 Indicators and targets

For sustainable success of the continuous improvement process and ongoing information to employees and management on performance, outcomes and results of CIP activities is essential. For only he who has the necessary information to take responsibility and keep the desired goals in mind. This is achieved by a HAI-wide standardized performance measurement system. It provides easily understandable and meaningful information about the course of CIP activities of all divisions. In HAI CIP steering team for the most important parameters to evaluate the CIP success be defined in order to then set the CIP goals of all companies together on an annual basis can. The focus is on the demonstration of the monthly target and actual deviations with regard to the objectives and the measures introduced to improve. Are derived from the company targets beyond the enterprise defines the metrics for each department and CIP groups. It is also considered that the employees of the CIP groups are incorporated accordingly in the formulation of objectives, so that they identify with the objectives derived also.

The objective is to identify the best practices and solutions within the enterprise in terms of internal benchmarking and to transfer them to the other areas in the company. The benchmarks internally collected provide an ideal base for a subsequent external benchmarking. As a result, benchmarking aims to continuously improve the effectiveness and efficiency of business activities.

The achievement of the CIP groups is reported to the Vice President and Managing Director monthly. This integrated system controlling these components of success provides a feedback from all CIP activities and shows improvement potentials, which form the basis for a continuous, holistic increasing the efficiency of all business processes.

### 3.9 Office CIP

Due to the increasing services and the increased demands on administration and management, it is important that the processes are more efficient and customer-friendly. Office CIP offers the possibility of problems in the administrative area in the CIP-style editing. The objectives in the administrative area are inter alia:

- Reduction of cycle times
- Avoidance of wastes (e.g. waiting and search times, costs)
- Reduction of the interfaces in the process
- Increase availability of office supplies

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- Increase employee productivity

To address these objectives, the improvements will be implemented in several steps (Office 5-stage model): order and cleanliness standards in the office organization, improvement of processes and procedures, self-control and self-discipline as well as joint actions / improvement of teamwork and communication.

### 3.10 Value Chain Management

The value chain management aims to eliminate all non-value added activities and thus to create a lean and flexible production system that meets the customer's requirements. It is supported by concepts such as process mapping, pull production, Kanban, One-piece flow and reduce set-up times. Only through the continuous application of CIP, it is possible to limit all non-value added work and thus to realize an ideal production system.

### 3.11 Audit system

The implementation of regular CIP audits for employees and managers is important for holding CIP's permanently momentum. The audit serves as a monitoring tool for the long-term security of processes, standards and documentation. For this it is necessary to edit the work area according to specific criteria to identify vulnerabilities and determine implementation measures. As a tool available to employees and executives audit questionnaires are available to ensure a standardized approach. To ensure continuity, a quarterly audit will be conducted by the CIP Coordinator attended by the department manager.

The results are used in a radar chart to allow the visualization of success for the employees is ensured. Other priorities for the CIP group are derived from the results set. As a result, through this system vulnerabilities in the application of various methods and tools are discussed, and the development of a department over a defined period ensured.

### 3.12 Information and Communication

The implementation of CIP is inter alia of a continuous communication to the workforce and living on benefits, events and accomplishments to inform dependent. Only informed employees know if they are right with their actions. Furthermore, it is also important that CIP is company-wide marketed appropriately to convince both employees and management effectiveness. For this, the following means of communication are used in the HAI:

- Continuous improvement in HAI Intranet

Required information in a public forum for all employees will be provided such as Contact, Training offer indicators, checklists.

- CIP-News

With the news, the KVP workforce is informed quarterly of the CIP activities and priorities for action in the respective societies.

- CIP information boards

In all areas of the site is placed on a transparent reporting system value. By the relevant person in charge, the current indicators, protocols, information etc. are brought closer with the help of the CIP information boards the employees in each department.

- CIP promotions

For a defined period of time (between 4-8 weeks) Employees are encouraged to develop proposals for a specific topic in a team. Topics include inter alia Improve the quality, safety or conservation of energy. The best groups will be awarded in connection with tangible rewards.

- CIP Info Day

CIP information meeting with team presentations, honors, special awards, entertainment music and raffle for employees and their family members complete the activities in the field of communications / marketing.

### 3.13 Recognition and appreciation

The employees can be motivated by meaningful financial incentive systems, as well as personal recognition to a larger labor. However, such an incentive system should not be the focus but rather to serve as a supplement of all activities. Key criteria for the individual remuneration are the performance and motivation of the employees that will be discussed at an annual appraisal interview. The performance-related remuneration in addition to intangible measures CIP provides a supportive action for the continuous performance of employees'.

Another not to be underestimated motivation factor is the recognition by superiors. You should use and reward employee performance by bringing their appreciation expressed in a personal conversation. A meeting with all employees would further encourage the workforce to identify with CIP and also makes also fun for all involved.

### 3.14 Prevention of losses

The product goes through during the manufacturing process, several individual steps (storage, transport, processing, etc.), which is only a small part of the actual value. A lot of the processes related to activities that do not contribute to the increase in value. However, since the customer is willing to pay only for the actual value, the wastes (Japanese "muda") must be sought and largely eliminated. It will seek to focus on preventing the wastes that affect the cost, lead time and quality of the products. For this, a process-oriented waste search is necessary, which focuses on the following seven types of waste: overproduction, transportation (circulation) Holdings, unnecessary movements, production, and time spent waiting and rework / error.

Each step in the process raises the question of whether it contributes to the value of the product or service. Non-value-added activities are optimized or eliminated, so that you do not work harder but more efficient means of improvement activities in hindsight. The reduction or elimination of wastes, therefore, serves to maintain and enhance the competitiveness and does not contribute negligibly to secure jobs.

### 3.15 Total Quality Management (TQM)

TQM should not be seen merely as a comprehensive quality control, but as an internal system to support the management in their quest for higher competitiveness and increased profitability. The main task is to evaluate the process based on the results. The evaluation, however, is the basis for the improvement of the process and not a cause for criticism.

### 3.16 Instruction and Training

Sustainable CIP success and reduces business success requires motivated, educated and innovative workforce. The promotion of employees through targeted training and development is therefore unchanged attached great importance. Master Academy, leadership workshops, CIP training and further education and training in the disciplines offered regularly in the HAI.

Not only in the workplace, continuing education is required, but also training in the CIP is the guarantee that the available methodologies, tools and working papers to be used efficiently. All courses are tailored to the individual CIP officials. In close coordination with the direct managers of the training needs of employees is ascertained. Subsequently, the dates will be set and divided by the CIP Coordinator. Every year many people take part in both internal and external CIP training and develop their technical, methodological and social competencies.

The training materials to achieve high efficiency at low cost are centrally provided and the training is conducted by the CIP coordinators in their own classrooms within HAI. Annually the training of executives is performed by an external consultant from KAIZEN Institute. The main target is not to provide as much information as possible, but phase-and problem-specific knowledge.

"Education and training of all employees of a company are crucial for successful deployment and implementation of CIP. This provides an opportunity to respond to criticism and resistant attitudes of the staff and convince the meaning and purpose of the CIP. "The training therefore not only form the basis for employee development, but also contribute significantly to a positive working environment and last but not least to the company's positive development.

## 4. RESULTS AND SUMMARY

Terms such as corporate culture, identification and corporate representation gaining importance and have become key success factors. The ability to make intellectual, usable potential for the company's entire stock of knowledge available and applicable, determines the future. It is not a "learning organization", you can just be careful to be able to learn and to stay. Not only the changes in the environment require the state of the company, but the

knowledge of the customized behavior in business-critical situations determines the future of the company. Organizations have to implement self-responsibility, self-development, training and creativity to the relevant operational events.

It is important not to jump on various management methods and join them to demonstrate the interest and openness to the new. Old insights and meaningful experiences for a wish list to sacrifice are not necessary for a company. You have to have the will to work on and really improve the status quo with the resources provided. It also requires a degree of foresight and insight.

Within HAI we have been able to significantly increase employee satisfaction by implementing the CIP principles. This is proofed by our annual employee survey. In our survey from 2008 we only 38% of employees stated that the working environment within the company is "good" or "very good". After implementing our new CIP approach in 2009 we have been able to constantly improve resulting in a 72% score for the same question in our 2011 survey! Besides that the numbers of proposals from our employees has been tripled in the same period. The net benefit generated out of those proposals account for a six digit number of savings for the company.

The continuous improvement process is to be regarded as a business philosophy, which represents the consideration of the employee as a valuable potential to improve the company's situation. The constant development should be done from the perspective of continuous learning and development ability. The development of employee-oriented company culture and improvement, collaborative leadership, enterprise-wide emphasis on effective communication and team activities are known to accelerate the cross-sector cooperation as priorities. Constant changes and adjustments therefore cause a medium to long-term change in behavior of all organizational members.

Nevertheless, it is important to know that CIP is no universal recipe that can be easily copied by other companies to survive the changing economic situation successfully. You have to adapt such a concept to the company-specific circumstances of each company. The principle of "every day is to improve" should serve as a top priority for all employees.

## REFERENCES

- [1] Hammerer Aluminium Industries internal guidelines for CIP (2009)

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