

INTEGRATED MANAGEMENT SYSTEM FOR A SOCIETY FROM INDUSTRY OF MACHINERY AND EQUIPMENT

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Abstract: *In this paper shows the importance that it has SMI in a society of the industry of machinery and equipment. An integrated management system is the mode to design, implement and certify two or more management systems: Quality - Environment, Quality -Environment - Safety and Occupational Health. By implementing the system, the society themselves hires in the development and continuous improvement of the system in accordance with the ones three standards and with objective of activity of the society. Also, in the paper themselves presents the advantages and disadvantages of implementing this integrated system.*

Keywords: quality, integrated management system

1. INTRODUCTION

In a continuous development, societies of industry of machinery and equipment, but not only, pass from one level of development to another due to new technologies and new concepts of quality, which open the way to new challenges for management concerned companies. For as the management on the highest level of a company to have successful it is necessary to fulfill certain conditions relating to the systematic approach of the processes and activities of the company. These conditions can be carried out by implementing an Integrated Management System in interested companies.

2. GENERAL CONSIDERATIONS OF INTEGRATED MANAGEMENT SYSTEM

Integrated word means induced, embedded in a whole. Used as an adjective next to the words the management and system, it can have a much broader meaning. For this reason, in the literature of specialty are found many definitions of the Integrated Management System.

The group Chartered Quality Institute CQI defines quality management system as representing understanding and the actual direction of every aspect of an organization so that the needs and expectations of all stakeholders to be satisfied equitably through optimum utilization of all resources. The Organisation, Prestige Management of Romania defines Integrated Management System as representing a logical and systematic management approach that allows strategic and operational decisions which take into account all the essential aspects that lead to the effective functioning of an organization from the point of view of quality, environmental, health and operational security.

So we can say that the integrated management of a company means the activity to gather, to encompass, to harmonize all internal management practices into a unique system, generally which aims at achieving the objectives set by the company.

Any activity to implement an integrated management system of a company is based on PDCA cycle, Figure 1. A continuous improvement of IMS is done by repeatability Deming's cycle, but each time society must to be on a higher level. From the presented definitions above, all subsystems integrated management system must be interconnected such that the boundaries between them to be difficult to observe and why not imperceptible.

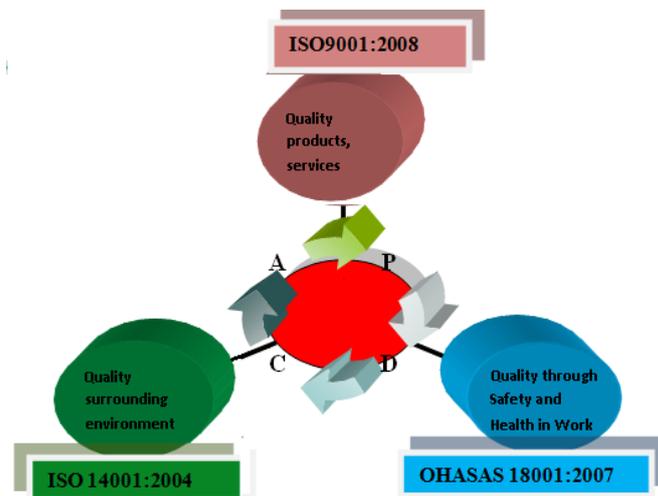


Fig. 1. Integrated Management System and its elements

This is highlighted in Figure 2 where is shown the interconnection between the three standards. Real interconnection of a company is shown in Figure 2a; and in Figure 2.b is shown interconnection of a society toward which in after the efforts made continuously improve IMS.

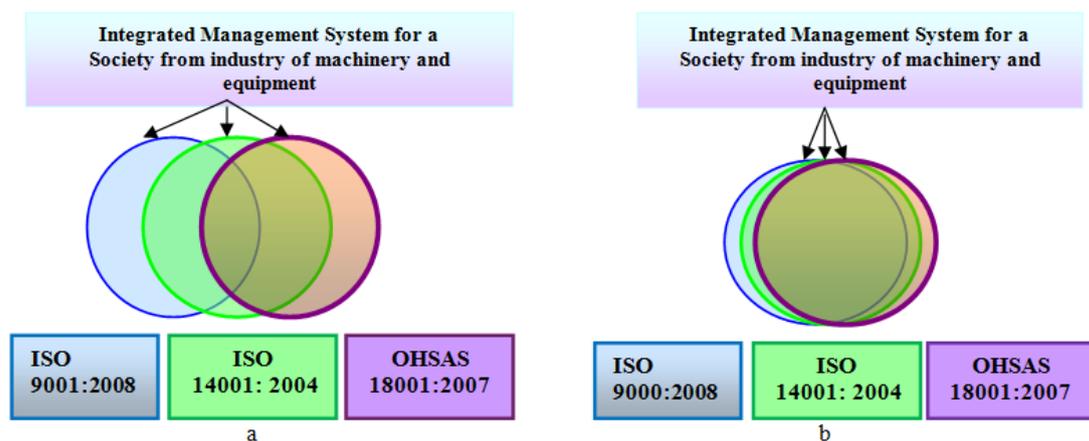


Fig. 2. Interconnection the three systems in a comprehensive system: Integrated Management System.

For a company with profile mechanical, the engagement of implementation of IMS is taken by leading to ensure clients that all services / products provided to their should to be complying with their requirements in order to ensure that the services / products made don't have a significant impact on the environment and that they comply with the laws and regulations in force, without endangering the life or health of persons involved in the handling and use thereof. Society must engage in the development and continuous improvement of integrated management system implemented in accordance with the three standards but and with objective of activity of the organization. It also must ensure appropriate working conditions for every employeea in view to participating in the continuous improvement of product and service quality, of the efficiency IMS, of the technologies through at highlighting individual aptitudes, aptitudes doubled by the collective force of the teams they belong.

3. MODULAR STRUCTURE OF THE INTEGRATED MANAGEMENT SYSTEM

An integrated management system must have a modular structure so that they allow penetration the new elements into the existing system. An integrated management system includes: The Quality Management System, Environmental Management and Health Management System and Safety.

A1. The Quality Management System

In a commercial company of machinery and equipment is necessary as the general objective of SMC to be the satisfaction in the highest degree of customer requirements. Here, it is noted that ISO 9001:2008 promotes a approach on process. Applying this standard helps to: customer identification and analysis of their requirements; defining the processes which lead to the achievement of products that can be acceptable by the customer; keep under control of these processes; increasing the probability fulfilling imposed requirements of customer and implicitly the increase the its satisfaction regarding the product / service; providing a framework for continuous improvement of the company's activities; increase customer confidence in the ability of society.

For example, Sony Corporation is based on a strong bond between the company and client in order to continuously improve of the quality of its products and services in a timely manner.

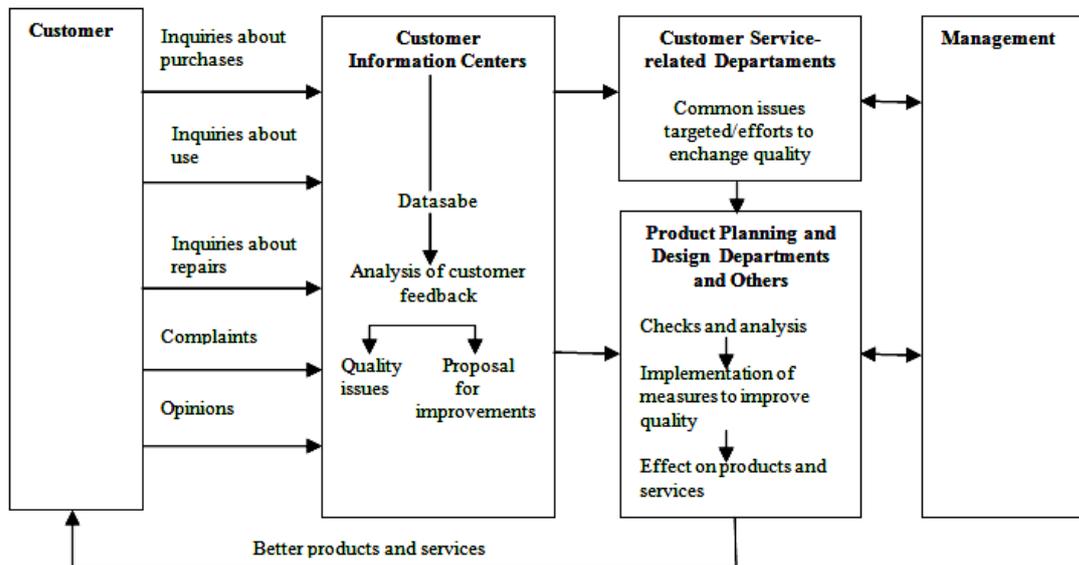


Fig. 3. Feedback between the customer and the society - Sony Corporation.

In this mode contribute the efforts made to increase power of products and services. Scheme of the feedback between the customer and the company is shown in Figure 3.

A2. Environmental Management System. Environmental Management System a company in machinery and equipments impose: establishing an environmental policy corresponding; identification of environmental aspects which resulting from activities, products or its services, so that it can evaluate its impact on the environment; keeping under the control and reducing negative environmental impacts generated by the operation of the company, to prevent all possible risks of pollution. ISO 14001 imposing the establishment through a initial environmental review of environmental aspects, determine the objectives and the elaborating environmental management programs.

A3. Occupational Health And Safety the Management System. Occupational health and safety the management system represent ensemble on the elements with character informational, motivational, organizational and decisional, within a company, through which are exercise those processes which aim obtaining the desired level of health and safety at work.

The general objectives of OHSMS are keep under the control of the risks to occupational health and safety and improving performance in this area. OHSAS 18001:2007 impose hazard identification, the risk assessment and control of health and safety, setting documented objectives and elaborating programs of management for health and safety at work.

To implement the IMS in a society of the domain of industrial engineering is recommended to go through several stages: initiation, initiation process, the initial diagnostic analysis, system design, training management team, elaboration of the documentation of the Mangement System, designed IMS implementation, the hearing and final certification.

4. ADVANTAGES AND DISADVANTAGES OF AN INTEGRATED MANAGEMENT SYSTEM

In a society of machinery and equipment, integrated system management is a way to design and implement, certify that two or more management systems: Quality-Environment, Quality- Environment-Safety and Occupational Health.

Implementing an Integrated Management System has both advantages and disadvantages. Among the advantages of IMS of a society from industry of machinery and equipments, we can highlight:

- establishment of a unique framework for continuous improvement of all the standards;
 - defining a policy quality, environmental, occupational health and safety;
 - establishing the processes, environmental problems and health and employment security which resulting from activities, products to ensure product quality and to determine the outcome had on the environment, occupational health and safety;
 - reducing the number of procedures and audits and implicitly reducing the efforts of employees with the writing and the auditing of processes;
 - increasing efficiency and effectiveness in attracting new customers;
 - improve communication both inside and outside the organization its with suppliers and customers;
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- enables unitary training of staff employed on quality problems, environmental protection, occupational health and safety;
 - opportunity to all employees and departments within the company of having free access to documents the Integrated Management System;
 - allows a unified vision on the future development of society..

Among the disadvantages of Integrated System of Management of a company in industry of machinery and equipment, we can point out:

- the different techniques approached undifferentiated;
- a risk management more difficult because each component of the system has the its own indicators;
- more difficult achieving of external audits on one of the three areas (it is a disadvantage for external auditors because they have to make a greater effort to separate the domain issues that interest them, of aspects the other domain).

5. CONCLUSIONS

On the basis of those confirmed, the management of companies, from the industry of machinery and equipment, is aware that the implementation of the Integrated Management System ensures continued improvement of products and services through customer satisfaction, by reducing costs, by keeping under controlling and reducing negative environmental impacts, by keeping under control the risks to occupational health and safety.

All this leads, in the end, at the increase credibility of the organization, to keeping customers and implicitly to finding of new customers. Quality Management, Environmental Management and Occupational Health and Safety Management are incorporated in an general system what belonging strategy a company from the industry of machinery and equipment for the achieving and distribution of products, and providing the necessary resources for the implementation and continuous improvement of the system is a decision taken by the top management.

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