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## INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

“INTEGRATING CLEANER PRODUCTION INTO SUSTAINABILITY STRATEGIES”

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### **Proposition of Implementation EMS and CP Actions in a Textile Machinery Industry, Curitiba-PR**

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#### **Abstract**

The environmental pollution has intensified its rise in the 80's, 90's and 2000s due to the growth of industries allied to capitalism and consumerism. Along with this growth from environmental degradation, there was a concern with the preservation of this environment, in order to maintain the continuity of human life and the earth. This concern quickly spread to businesses through legal and quality improvements in the environmental performance of organizations for environmental preservation. In this context, emerged the ISO 14000 series of standards and techniques of cleaner production (CP), in view of the enterprise application and this performance improvement. Therefore, this study sought to integrate the quality management system of a company of textile machinery to environmental management system (EMS) based on the model of ISO 14001:2004, and raise possible CP actions in this organization. To permit evaluation of the EMS implementation, the survey was first conducted in component processes of manufacturing, as well as the environmental diagnosis of the organization. Then, analyzes were performed of the quality management system (QMS), which was already implemented and certified in the company studied, and we sought, through the quality of the documents, build bases and integration of EMS systems. Subsequently, the items were developed components of the environmental management system as standard: environmental policy, raising environmental aspects and impacts, legal requirements, goals and objectives, programs and procedures. In addition, a survey was conducted of certification costs. Finally, critical points were verified environmental performance in the company and proposing alternatives for improving indicators of control. According to the results, it was perceived that the organization already contained a well-reasoned, mainly due to the presence of the QMS deployed. For the implementation of the EMS, the main barriers were found to standardize procedures and environmental controls as well as employee training. The main actions to improve environmental performance were the recycling of treated effluent for use in cleaning the metal parts and the fate of metal powder grinding for recycling, eliminating the environmental liabilities of the company regarding this waste and enabling a reduced cost of disposal.

**Keywords:** EMS, CP, Company of textile machinery, Actions

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