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## Decreasing Environmental Impact in Printed Circuit Board Manufacturing Process

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### Abstract

Due to the huge technological development and globalization phenomenon, Brazilian society has been pushed towards searching for new alternatives, in order to maintain competitiveness on a global market. One possible alternative is the use of standardization, especially ISO 9000, ISO 14000 and IEC standards. However, in the Brazilian market, a large number of manufacturers are far from the international scenario reality and that causes several losses on local and global market share. Nonetheless, this situation can be reverted by the adoption of Quality as a tool, and by providing small changes in the entrepreneurship attitudes. Therefore, that is the most important characteristic of standardization. This report shows preliminary results regarding the benefits acquired with the standardization for process, project, product, service, etc., if the target is not only economical benefits but also environmental protection. The methodology used was the case study. The process evaluated was Printed circuit board, single-face. The improvements achieved with this case study showed: a) significant environmental impact reduction, with less water and energy consumption; b) process efficiency increase; c) less raw material losses; d) less waste formation. Thus, a standardized process is useful for several stakeholders; it is a way to increase security for stockbrokers, clients and society in general. It is clearly a way to increase revenues because it is a way to diminish costs, to improve technological skills and to decrease environmental impact.

**Keywords:** *circuit, PCB, environmental, standards and process.*

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