The use of Lean Manufacturing Practices in Cleaner Production: A Systematic Review

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Abstract

Lean manufacturing aims to eliminate waste in the production chain for cost reduction, quality improvement, delivery time, i.e. it seeks to make the most efficient production process. The Cleaner Production (CP) aims at environmental improvement of production processes, adopting a precautionary approach and seeking to reduce environmental waste and waste generation. Several studies have indicated that when applying the Lean companies can reduce environmental impacts. Given this context, the objective of this research is to investigate, through a Systematic Literature Review, which ones and how the Lean practices and tools are being used for improvements in environmental performance. The results show that the literature indicates a strong synergy between Lean and Cleaner Production and that many Lean tools can contribute positively to environmental sustainability.

Keywords: Lean Manufacturing, Cleaner Production, practices, tools.