

Implementation of Lean Manufacturing in Some Companies in Colombia: A Case Study

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Abstract : Continuous improvement tools are the result of a set of studies that developed theories and methodologies. These methodologies enable organizations to increase their levels of efficiency, effectiveness, and productivity. Based on these methodologies, lean manufacturing philosophy, which is based on the optimization of resources, waste disposal, and generation of value to products and services, was developed. Lean application has been massive globally, but Colombian companies have been made it incipiently. Therefore, the purpose of this article is to identify the impacts generated by the implementation of lean manufacturing tools in five companies located in Colombia and Medellín metropolitan area. It also seeks to make a comparison of the results obtained from the implementation of lean philosophy and Theory of Constraints. The methodology is qualitative and quantitative, is based on the case study interview from dialogue with the leaders of the processes that used lean tools. The most used tools by research companies are 5's with 100% and TPM with 80%. The less used tool is the synchronous production with 20%. The main reason for the implementation of lean was supply chain management with 83.3%. For the application of lean and TOC, we did not find significant differences between the impact, in terms of methodology, areas of application, staff initiatives, supply chain management, planning, and training.

Keywords : business strategy, lean manufacturing, theory of constraints, supply chain

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020