**ABSTRACT**

**Objective:** The aim of this paper is to understand a production system of a forging and presses structure of a centenary factory in terms of a cultural change on the management approach.

**Methodology:** The study was focused on many aspects such as the pieces production lead time, a time study of the setups, the Overall Equipment Effectiveness determination for the Computer Numeric Control machinery and an analysis of the production cells operational flow.

**Findings:** For the aspects that were analysed during the study, the problems are identified, and the root causes determined. At the end of the assessment stage Lean tools and concepts for fixing the problems were proposed, like new rules for production planning, setups procedures, 5S toll usage and a Lean implementation plan that is adapted to the company.

**Value Added:** The high industrial competitivity has dictated the development for this sector that – allied with the inconstant and unstable economic environment – makes the companies very vulnerable and highly dependent of the global market. This is a concern of special relevance for the Small and Medium Size companies that are increasingly adopting Lean solutions to continuously improve their operational value chain and the management approach, for a more systemic way of thinking.

**Recommendations:** For some of the solutions an impact study with their implementation was made. An analysis of the success factors proposed in the literature that were verified during the assessment stage of the case study was performed as well.