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**Lean Ramp-up: Ein Organisationsmodell
für das Anlaufmanagement**

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„Lean Ramp-up: An organization model for ramp-up management“

As a result of the dynamic sales market, the number of production ramp-ups has increased. These ramp-ups also represent an unstable state of production. Therefore, holistic ramp-up management is more important than before. It is used to control the ramp-up and regulate the transfer from the development to a stable manufacturing. The goal is to achieve a high level of effectiveness and efficiency.

Against this background, many large enterprises focus more on their own core competences and shift development, as well as value-added processes, to their suppliers. These suppliers are often small and medium-sized enterprises, which consequently have an organizational problem with ramp-up management. New tasks and new requirements during production ramp-up, as well as the increasing number of occurrences, must be managed.

The existing organizational solutions, also called organization models, are not sufficiently developed for this problem. That means these organization models do not fully meet the requirements of small and medium-sized enterprises as well as the requirements of a holistic ramp-up management. Consequently, there is a demand for a holistic organization model for the ramp-up management, which could be used in small and medium-sized enterprises, thereby improving the effectiveness and efficiency of production ramp-ups.

In order to react quickly and efficiently to this continuous dynamic, the implementation of a Lean Production System (LPS) has been successful in many companies. It represents the current state-of-the-art method for comprehensive and integrated design of company processes. But the scope of the LPS still often focuses on the stable state of production. However, the goal is to develop the LPS further and to expand it across the whole company.

In this thesis, a transfer of the Lean Production System to the production ramp-up is accomplished. Linking these two fields of research results in the new approach “Lean Ramp-up”, which describes the implementation of LPS during production ramp-up. For this purpose, the elements to be transferred from the LPS to the ramp-up are analyzed and further developed according to the requirements of small and medium-sized enterprises. Therefore, the development of a Lean Ramp-up Organization Model is the core of this thesis.

For a successful operation of the Lean Ramp-up Organization Model, a company-specific design is necessary. This is why a procedure is developed, which describes ten design steps with demonstrative examples (like a guideline). For this purpose, the method Quality Function Deployment (QFD) is adapted to create a target-oriented link between all elements.

The evaluation of the Lean Ramp-up approach is based on a practical example in a medium-sized manufacturer of agricultural machinery. Here, an improvement of effectiveness and efficiency is demonstrated. In addition to that, the reproducibility to other small and medium-sized enterprises is demonstrated, based on a short study.