


Linking lean production and design for sustainability on the issue of waste reduction

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Abstract: The present paper aims to establish a connection between lean production and design for sustainability on the issue of waste reduction. Initially it presents the meaning of waste within the lean production and design for sustainability fields and the correspondent heuristic approaches used in both fields to reduce waste. Finally, it presents a case study carried out within an Audi/VW Plant in Brazil that illustrates the implications of putting together lean and sustainable design principles. The overall conclusion is that dealing with waste using solely the lean production theory is not enough and, likewise, better results are likely to be achieved on production systems by integrating sustainable design practices.

Keywords: design for sustainability, lean production, sustainable manufacturing.

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