

Industrial Machines - Case study PAMMINGER Verpackungstechnik Ges.m.b.H



PAMMINGER PACKAGING TECHNOLOGIES, located in Linz in Austria, offers the construction of customized machines of all sizes and is specialized on the development and production of packaging machines. With its 140 employees the company also focuses on environmental developments and standards, with one eye on shareholder value and one set on the environmental legacy left to future generations.

The company had no experience with LCA or Ecodesign prior to the training by the Vienna University of Technology (VUT). The LCA to go tool was applied to a Raptor 2650 packaging machine together with the ECODESIGN Group at the Vienna University of Technology. A Raptor consists of a steel construction combined with multiple electrical and pneumatical parts. It is the fastest stretch wrapping machine of its kind on the planet and over 100 machines have been built to date.

The result of the environmental analyses showed that the energy consumption needed for the four drives in the use phase is dominant (Figure 1.). Surprisingly the use phase was responsible for 99% of the total environmental impact over the full product life cycle. The materials, manufacture and distribution of the 4 tonnes product account for 2% of the total environmental impact of the machine over its lifetime.

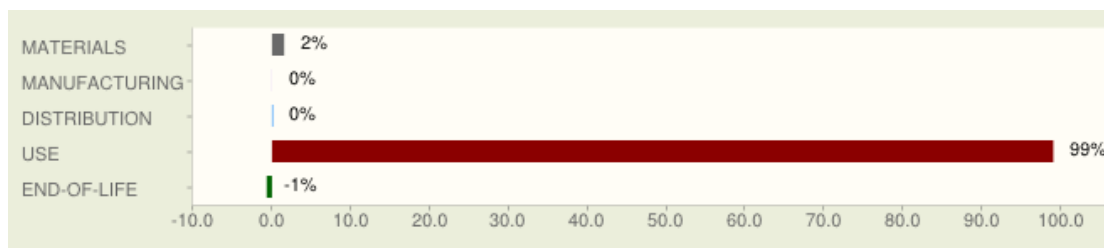


Figure 1. Cumulative Energy Demand of the Raptor.

The result was thought-provoking for Pamminger and especially the overwhelming dominance of the Use phase was very interesting for the company. Pamminger is already putting these first results to use in the further development of their machine and plan to continue using the tool to assess the impacts of planned measures.

"We are convinced that more and more customers are looking for suppliers that think and live the way they are living themselves. That is one side to improve revenues and gain market share. But on the other hand we know now how to contribute environmental protection without losing any quality!" – Stefan Matschiner, Pamminger Verpackungstechnik Ges.m.b.H

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