

## Industrial Machines

### Case study KRAUSE & MAUSER GmbH

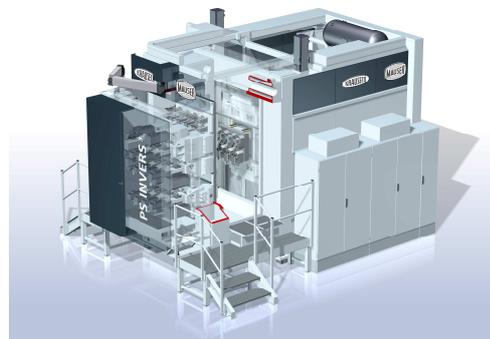


KRAUSE&MAUSER GmbH, with business premises in Vienna and Oberndorf am Neckar (Germany), develops and produces special-purpose machine tools and modular machining systems for automotive components. As a provider of customised turn key solutions, KRAUSE&MAUSER is a proven partner to the global automobile industry and established as technological driver for laser applications, cracking systems and precise machining. Energy efficiency, especially for large-scale production is a significant field of R&D and intensively pursued by a specialized team.

Within the scope of continuous innovation, KRAUSE&MAUSER takes a proactive approach for future Ecodesign legislation and energy efficiency in manufacturing equipment. Ongoing efforts to minimize energy consumption and environmental impact are made.

In applying the “LCA to go” software tool to conduct an environmental assessment of a machine one step is taken to address this target. The first contact to the “LCA to go” Project was established at the EMO in Hannover in September 2013.

The “LCA to go” tool was applied to the highly productive hybrid machining module PS INVERS<sup>3</sup>. The results show that most energy is consumed during machining (chipping) phase.



The result of detailed evaluation is that biggest potential for energy saving measures is the auxiliary energy flow, namely the consumption of compressed air.

The analysis of the PS INVERS<sup>3</sup> with the “LCA to go” software tool as well as the consultation with the Ecodesign Team from the Vienna University of Technology validated the ongoing research and development efforts, focussed on continuously improving the energy efficiency of KRAUSE&MAUSER machines.

KRAUSE&MAUSER furthermore plans to use the software tool internally to identify components with the highest improvement potential over the lifetime. Due to gathering more product specific data for the software tools product model, KRAUSE&MAUSER could include the results in its external environmental report.

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