

Project Note

Innovation from a single source: waterless urinals

This project involved the development of a new type of siphon system for waterless urinals. Through methodical brainstorming and structured procedures, Zühlke devised completely new principles for addressing the situation.

Task

Geberit wished to launch its own product in the growing market segment of waterless urinals and commissioned Zühlke to develop an innovative siphon system. The product was to have an unbeatable service life and operate without outside energy and chemicals. A high degree of innovation was required to meet the tough requirements regarding ease of use and odour trap reliability.

Implementation

In the initial phase, the project team first clarified the fundamentals, viewed the problem abstractly, and determined the patent situation. It then focused on searching for new innovative ideas. The team carefully scrutinized customer requirements and suggested alternatives. Through methodical brainstorming and structured procedures, the team came up with numerous principles for solving the situation and developed them into designs. Four principles remained following evaluation and selection involving an analysis of usefulness and benchmarking against competing products. In the second phase, the team created functional models in a rapid prototyping procedure and subjected them to intensive practical testing. The third project phase entailed transforming the most promising design into a prototype ready for series production that incorporated the production and assembly requirements and the final design.



Methods and resources

- Brainstorming
- Patent searches
- Usefulness analyses
- Quality function
- Deployment
- TechOptimizer (innovation tool)

Customer benefits

- The innovative solution resulted in a new patent.
- Optimised time-to-market: Efficient creativity phase thanks to a methodical and structured approach.
- The risk management set up in the planning phase afforded maximum protection for the investment.
- Zühlke supplied everything from a single source: idea, design, functional model and the prototype ready for series production. The customer was constantly involved in the process.

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