

Project Note

Injector for intraocular lenses

There is a trend towards disposable medical devices. In this project, Zühlke took responsibility for overall project management and for the development of an injector system, from the feasibility study to series production.

Task

A fast-growing Swiss medical equipment firm active in ophthalmology wanted to develop an injector system for a manufacturer of intraocular lenses in the US. Zühlke took responsibility for project management and for the development of the entire injector system.

Implementation

Zühlke drew up the offer for the manufacturer based on a general feasibility study. The offer on product development and production expansion was successfully presented in the US together with the Swiss customer.

As part of a detailed feasibility study, the requirements were defined and over 800 patents were checked for relevance. Ten possible approaches were proposed and evaluated.

The project group selected three of these approaches and proceeded to develop them into functional models. Development procedures and documentation complied with European and US regulations (EMEA and FDA) from the outset. In a verification process on the functional models, the team zeroed in on the optimum design.

This design was integrated in the housing as part of product implementation. The customer then approved the injector and its design based on samples created in rapid prototyping procedures. After the design was optimised, the product was ready for series production. Zühlke provided competent assistance with the validation and regulatory approval of the product.



Technical Data

GMP-based development

CAD:
Pro Engineer

Simulation:
Plastic Advisor

Customer benefits

- The highly innovative new plastic injector suggested by Zühlke avoided patent conflicts and was easy to use. Its ergonomic and appealing design had a built-in feature to prevent reuse.
- The customer had only minimal in-house costs. Zühlke assisted the customer even at the offer stage. It took responsibility for planning, overall project managements and the realization of the product.

Zühlke Engineering AG
Wiesenstrasse 10a
8952 Schlieren (Zurich)
Switzerland

Phone +41 44 733 6611
Fax +41 44 733 6612
info@zuehlke.com
www.zuehlke.com

© Zühlke