

Project Note

Ultrasonic Instrument for Eye Operations

The re-engineering for an ultrasonic handheld phaco-unit covered the complete process of development. The costs of production were reduced by over 35%. After design study and production the instrument was launched at the customer's.

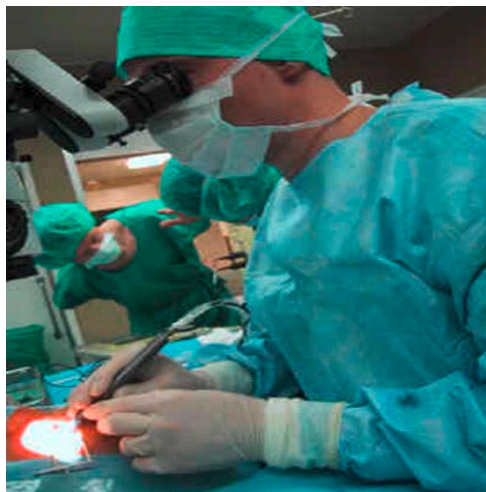
Task

The task was to replace an ultrasonic handheld phaco-unit for (gray) cataract operations, which had been produced for 10 years, with a new product generation. In the process, any technical shortcomings were to be eliminated, the production costs reduced, and the user friendliness optimised (ergonomics, weight and design). The handheld unit had to be completely compatible with the existing control devices.

Implementation

This reengineering project covered the complete product development process, from the design study to the production launch at the customer's:

- Cost reduction analysis
- Complete reengineering
- Design optimised for production and assembly
- Simulation-assisted dimensioning of the ultrasonic generator
- Reduction of the number of components
- Maximum use of standard components



Customer benefits

- Production costs reduced by over 35%
- Optimum ergonomics and the world's lightest ultrasonic handheld unit
- Pure titanium model "oertli TITANO"
- 100% compatible with preceding model
- Trouble-free conversion of production operations to new product

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