CLIENT: OPTIKON
PRODUCT NAME: KERATRON NOVA

Optikon boasts more than 40 years of R & D experience meeting ophthalmologists' needs, with the latest in technology and engineering skills. Result of cooperation with Creanova is a new topography system, which is the only portable topography system, able to capture and process images, process maps on board and which has an internal patient database.

MAIN CHALLENGES

• To assemble internal components and develop a design taking into account with an already developed mechanical structure and internal components with certain possible position
• Create the appearance of an integrated shape between topography system and its base platform
• Integrate in the design concept various external technical elements that are typical for optical medical devices, at the same time achieving high aesthetics and a patient friendly look
• Mold making of the complex shape
User centered approach ensures high functionality, smooth and friendly look and outstanding array of ergonomic features.
Whereas engineering and production expertise of Creanova has resulted in efficient interaction between internal electronic and housing parts and high quality molds of this complex shape.

**PATIENT FRIENDLY, INTEGRATED DESIGN**
- The area of external technical elements is specially designed to achieve a smooth and patient friendly appearance
- Special design of the ventilation area combines functionality with strong aesthetics
- The elements of the base are specially designed to create a common appearance between the base platform and device

**ERGONOMICS**
- User centered design strongly focusing on fulfilling requirements of medical personnel
- The handle has an opened shape to ensure a suitable dimension for handling of the small device - the open shape handle is suitable for different dimensions of the operator’s hands
- The handle combines two functions - portability of the device and integrated function to capture images while holding the device
- The functional button is specially placed in the position which is most suitable for different dimensions of the operator’s hands
- The maximum comfort and efficiency of the handle and functional button was achieved thanks to the extensive studies of end users
- Ergonomic position of the screen ensures it’s full visibility during the procedure
- The open shape of the handle in the bottom part ensures maximum security - during the movement of the device there is no risk of the hand sliding

**CLEANING AND MAINTENANCE**
- Smooth angles of topography system and it’s base platform ensures easy cleanability

**HIGH QUALITY ENGINEERING AND MOLD MAKING**
- Support in implementing preliminary mechanical testing of the device, to ensure the maximum strength of the open shape handle
- Good quality and tolerances of the molded parts were achieved thanks to special attention in the engineering process to the challenges of molding the complex shape of the main housing
- During the engineering process, a special internal component was developed to support internal parts and to ensure efficient assembly and interaction between internal electronic and housing parts