

Featured FreeForm® Modeling Plus™ Customer: Industrial, Stuttgart, Germany

INDUSTRIAL

Industrial reduced their product development time, and gained new business and a competitive time advantage by integrating the FreeForm® Modeling Plus™ system into their design process.

COMPANY OVERVIEW

Industrial is a product development company of 10 designers and a network of freelance specialists and suppliers in Germany as well as Hong Kong and China. They offer a wide spectrum of products, but the two main areas are the design of sports glasses and toy design. The Industrial team oversees the product development process from the initial concept to mass production. Their facility is equipped with ten CAD stations, two CNC milling machines, and vacuum forming equipment. www.industrial.li



Industrial designs sports glasses and goggles for famous brands in Europe such as UVEX.

Design of Sports Glasses – Industrial designs sports glasses and goggles for famous brands in Europe. In cooperation with the Chinese glasses manufacturer Tony Optical, Industrial designs in coordination with the brands and subsequently creates the data for tool making. Entire annual collections for UVEX have already been designed.



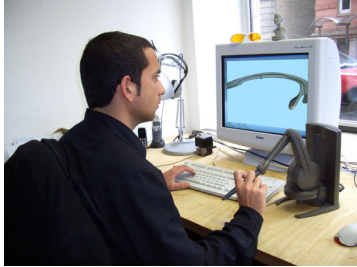
Industrial designs a medieval toy world for the renowned German toy manufacturer SCHLEICH.

Toy Design – Industrial specializes in sculpting a medieval knight world consisting of horses, knights and knight's castles for the renowned German toy manufacturer SCHLEICH. In order to ease the work in surface modeling, especially in the case of the knight's castle, principal designer and CEO Stefan Lippert, turned to the FreeForm Modeling Plus system. "We use new technologies in order to perform our tasks", says Stefan. According to Axel Blattner, one of the designers at Industrial, working with the FreeForm Modeling Plus system provides good results in few steps and little time. Blattner adds, "It is great to work totally free of strict regimentations and with little background knowledge about 3D modeling." The models originated initially from a computer animation, were converted and then imported into the FreeForm Modeling Plus system. A real medieval toy world is created from virtual data, so to speak.

THE DIGITAL PRODUCTION PROCESS

Stefan Lippert and his team advise customers in the design and development of new types of glasses, either sun or sports glasses. Working on different models of glasses is one good example to show the phenomenal results after introducing the FreeForm Modeling Plus system into the workflow.

The FreeForm Modeling Plus system allows the designers at Industrial to completely transform the



Isik Özkan designs sports glasses using the FreeForm Modeling Plus system.



Designs for sports glasses and goggles by Industrial.



way they develop products. By providing a touch-enabled interface to a 3D digital modeling tool, the FreeForm Modeling Plus system enables designers to very quickly create complex forms. These digital forms are then used directly in standard, downstream prototyping, tooling design, and CNC machining, allowing the company to dramatically reduce time-to-market. An additional advantage of working with the FreeForm Modeling Plus system is the possibility to make an RP and show it to the client. Completed models are exported from the FreeForm system as .stl files for prototyping, which provide a valuable tool for client discussions and approval meetings.

Isik Oezkan, one of the designers at Industrial, stresses the flexibility to design objects quickly and estimates the time saved in working with the FreeForm Modeling Plus system. "It's real fun to work with the FreeForm Modeling Plus system and nowadays I can design glasses in 2 days instead of 3 weeks." One of the difficulties of glasses design lies in the minor changes with the frame and earpieces, which have to fit perfectly. This is not an issue anymore since Industrial began using the Freeform Modeling Plus system. In addition, Isik is more than happy not having to memorize hundreds of commands and understands the working process much faster. He emphasizes that while working with the FreeForm system one feels that they are working more on the form or product than on the construction per se.

THE RESULTS

By incorporating the FreeForm Modeling Plus system into their workflow Stefan Lippert and the team at Industrial significantly reduce their overall development time. Industrial gained a lot of new ideas, therefore expanding their work in the fields of bicycle accessories, medicine and care, among others.

Stefan Lippert is excited about the speed and the competitive advantage in working with the SensAble FreeForm Modeling Plus system. In addition, he states that the expenses amortize very fast and stresses the fact that being able to produce 3D models so quickly enables the Industrial team to evaluate designs much earlier in the design process.