



Users Feedback of former design

The whole project starts from the analysis and the observation of using original tool, by which we can better understand the questions like what kind of people like to use this tool and why, what problems it mainly has and how can we solve these problems.

WINE CORKSCREW DESIGN | Case Study

Recently, I cooperate with BOSCH company and participate in a project of wine's corkscrew design. As the chief designer in the group, my work is to redesign the former corkscrew of Bosch and to cooperate with engineers for seeking a better structure of the product. The new product will be sold 340,000 sets in every LOWE'S store in America during Christmas this year.





Lack of Integrity

Holding and Fixing Problems

Sum-up of the problems

Based on using experience we have listed three main problems. First, the screw and the housing of original tool are separated, which makes it unstable and unsafe. Second, the straight handle below leads an uncomfortable position to users and the last one is as the tool can not fix the bottle well, when the drill start to work the bottle will rotate at the same time.



The First Scheme

Based on those problems, I start the design of 1.0 version, which shape imitates the top part of a wine bottle, as this shape is simple and, to some extent, could indicate the function of this



Comparison

Compare with the original Bosch's corkscrew I try to make the new one more integrated, functional and high-quality.



Detailed Design

The integrated design of the top part combine the screw and the housing together, which makes the whole product more stable and quality.



front

front

back



The Second Scheme

Considering the shape of the product needs to cooperate with the style of the (RD) drill, the marketing manager could not completely approve the first version, so I started to use and develop the second version.

The second scheme is a more integrated scheme than the first one, which intend to put corkscrew, foil cutter and stopper together. The shape bases on some modifications of the former Bosch's corkscrew.



Process





Prototype

Final the marketing manager was pleased with the second scheme. As we basically intended to end up with this version, we started prototype phase immediately.

The components of the prototype were supplied by different suppliers. Once we have determined the final scheme, we will connect the relevant suppliers for mass production.



Before we sent the prototype to America we did some work on appearance and try to simulate the effect of final products. Then we sent them and waited for the feedback from marketing.

Modifications bases on feedback

Comments about the prototype from marketing.

- "The industrial design is very intuitive we all like the design under a consensus can be made compact."
- "From a performance stand point The cork still tone. We will video tape the next time we try this. It was not an easy removal of the cork, we still struggled quite a bit."
- "Since we tried opening the bottle on glass counter top, due to lack of friction between bottle and countertop, the bottle spun. So we are thinking of adding in a mat within the accessories. More specs on the material to come."



Soon we sent the second prototype to the marketing, which is far more functional than the first, they were satisfied with it. Then after engineers do some modification on details, the products are going to be mass produced.