

Axillary Crutch

**The union of numerous experiences with design has generated a new level of simplicity, well being and efficiency in affordable assistive products.**

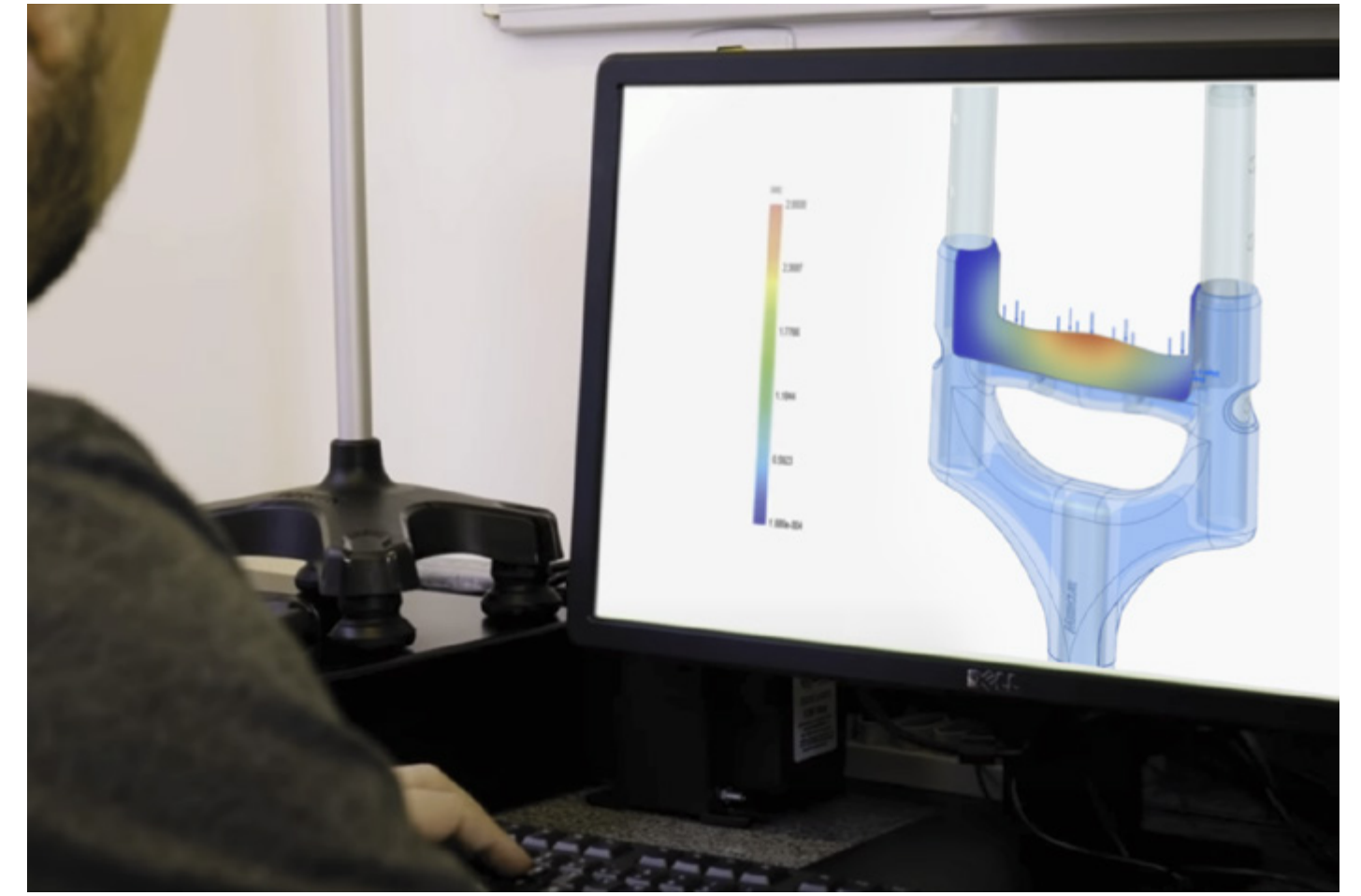




# Co-creation Method

Products **co-created** through **hundreds of hours** of effort, bringing **together users and professionals** from different areas. **Certifying laboratories** were used to validate every detail to ensure responsible **innovation**.

We brought everyone together to be part of the development process.



The briefing was to develop a crutch based on **people's real needs**.

**But how could we find solutions?**

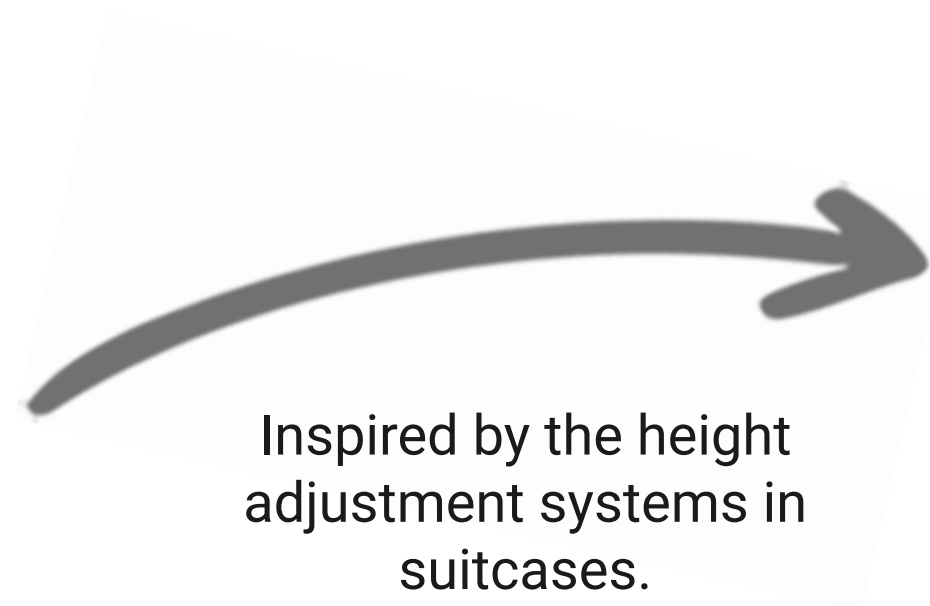
We heard people to find out what they expect from the crutch. How it might better serve **their daily needs**. Conversation circles were held to get to **know the the users context** (sensations / experiences / needs / difficulties).

Below is a link to understand the history and mission of the company Mercur and understand the reasons for remodeling the cane and the tip.  
(Just turn on subtitles with simultaneous translation into English on Youtube.)

[https://www.youtube.com/watch?v=nT\\_xk0Pmjpg8](https://www.youtube.com/watch?v=nT_xk0Pmjpg8)







Inspired by the height adjustment systems in suitcases.



## Practicality in one hand

*It has 6 levels of height adjustment to better adapt to the user's anatomy. With **telescopic adjustment** that allows **practical adjustment** with **just one hand** and makes it **easy to compact** for storage and transportation.*



## Ergonomics is everything

The ergonomic shape of hand support allows a **better distribution of palm pressure**, providing a **safer and more comfortable** support.

We were able to **reduce pressure on the hands by 20%** and also find the correct angle that **reduces calorie burning while walking**.

Removable part:  
It can be replaced  
when necessary



## Every little detail matters

*Small details that make a difference. Many users feel **embarrassed** to enter rooms because of the **noise** normal crutches make.*

*The **Adjustable Bottom Ring** is a threaded piece that the user can tighten whenever possible to ensure **greater firmness and reduce noise**.*







## 360° View

*Be seen by everyone around you and  
**walk safely at any time of day.***

*The axillary Crutch has a **360°  
reflective** tape that provides peace of  
mind when walking at night.*



# New Tip and the invisible problem

*During the various conversations we had, we realized that one of the most critical issues for those using a crutch is the fall. Rainy days, slippery floors, create panic in these people.*

*We talked to users about what happens in these situations. And part of the problem could be caused by a discreet piece of the crutch, which has a vital role in this issue, the tip.*

*The final result was a the new Articulated Tip from Mercur, Made of **natural rubber**, has in its composition silica of **vegetable** origin, **generated by rice husk ash**, which makes it about **60% renewable** and meets the company's direction of **prioritizing renewable** inputs in its products.*



Inspiration in the tyre cavities to avoid slipping on wet floors

## Development

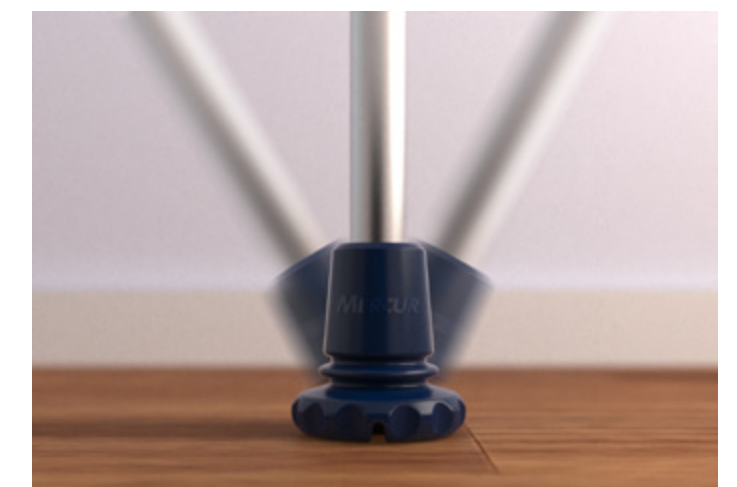
*Several shapes were tested in order to combine the best grip with ease mold extraction.*

*Taking advantage of the rubber factory's expertise, a compound with good grip and wear resistance was developed.*

*The design, moreover, needed to provide strength for users to feel really safe.*

*Below is a link to the specific video about the tips. (Just turn on subtitles with simultaneous translation into English on Youtube.)*

[https://www.youtube.com/watch?v=B04j7LV\\_Qww](https://www.youtube.com/watch?v=B04j7LV_Qww)



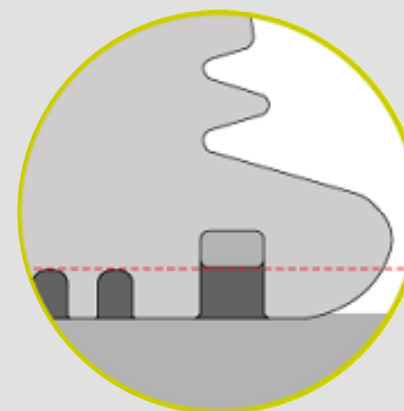
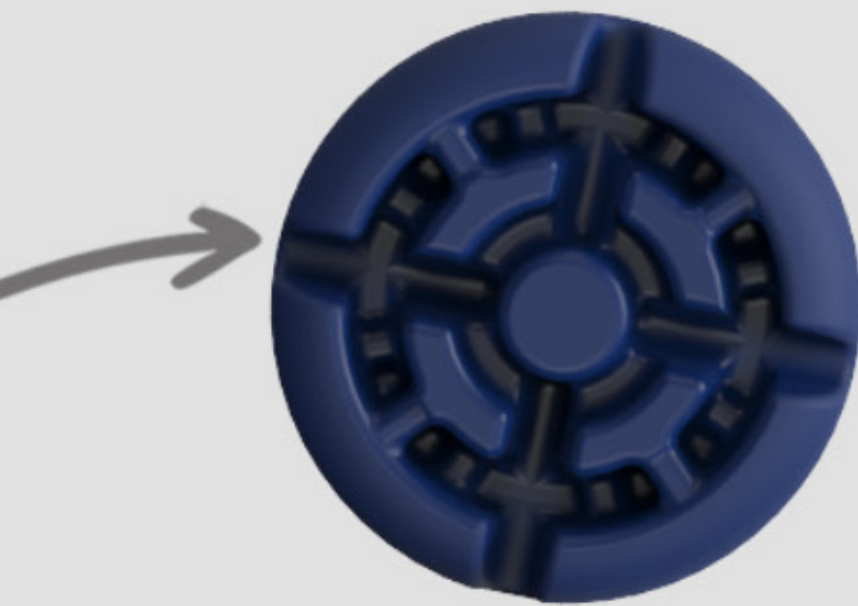


One of the **biggest fears** of an injured or elderly person **is to fall**.

For these reasons, a **special rubber compound** was developed for this product, with greater adhesion to different types of floors. Laboratory tests were carried out to assess its performance, **increasing safety**.



Paths for **water drainage**



**Replacement indicators:** signal the correct time to replace the tip.



**Flexibility:** while the user strides, the base stays in contact with the ground, increasing safety and stability.





## Humanization with colors

*Each product's mission is to make **life easier and better for everyone.** Showing that through it we will **gain quality of life.***

*We have seen the need for people to make their products more **humanized.** In addition to the more distinctive shapes, the materials, finishes and **colors transform the product.***

*We wanted to show that despite the difficulties, **people want to feel happy, comfortable and beautiful.***



