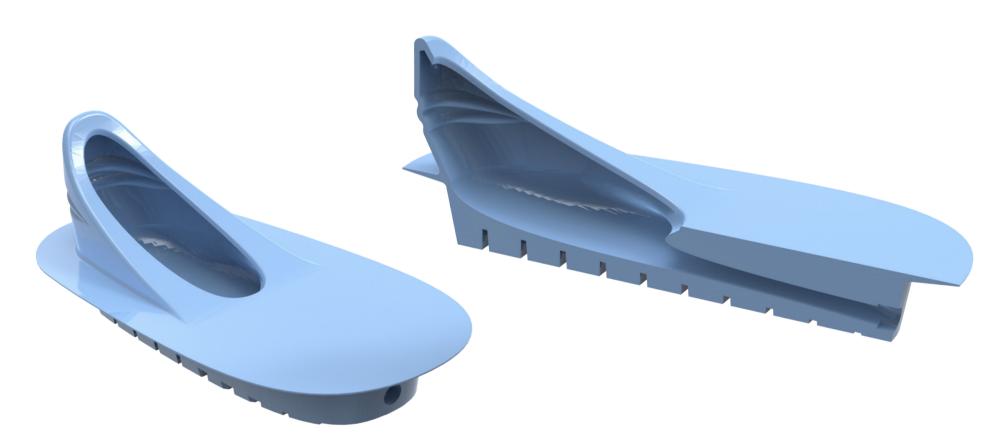
The LooWee

Making urinating pain free

Urination is something we all do every day without much thought. However, urination is not a thoughtless act for everyone. For female electric wheelchair users, going to the toilet is not a simple task, because most do not have enough strength to make the transfer to the toilet. They become reliant on tools or people to help them with this "simple" task. They have two options to choose from: a catheter or wearing an adult diaper. Both are medical solutions for problems the users do not have, like incontinence, making them medically unnecessary. In addition, these solutions also have multiple drawbacks. They are uncomfortable and painful in some cases; they are limiting the mobility of the user; they harm the quality of life.



The LooWee is a urination tool that is incorporated into a wheelchair orthosis. It requires minimal alterations to the function part of the seat, the ergonomic shape which determines the performance of the orthosis. The LooWoo is a five-part product. It uses the tilted orientation of the orthosis to drain the urine to the rear of the wheelchair. A silicone product with a curved top will capture the urine directly at the source. This will prevent spillage onto the seat surface. The drained urine is gathered inside a catheter bag. This will limit the amount of waste, compared to diapers. Because the bag is stored at the backside of the wheelchair, there is enough room for a large capacity bag that will last an entire day. Therefore the user does not need to leave their chair during the day. The product is covered with a 3D spacer mesh fabric, that will cover the edges and opening. Providing a soft and sweat-free experience.

Jorinde Smits
A toileting solution for female electric powered wheelchair users
30-04-2020
Integrated Product Design

Committee

Ir. I.A. Ruiter
Ir. C.P.J.M. Kroon
Marie-Jose Calkhoven

