

Ostomy Interfaces

A reusable wafer for any stoma shape, eliminating leaks in two-piece Ostomy Pouches

About Odapt

Odapt is a specialized company in design, engineering, and healthcare, driven by sustainability, innovation, and technology. They prioritize collaboration with patients and healthcare professionals, incorporating diverse perspectives for sustainable and innovative solutions.



The Product

Odapt is the first 3D printed silicone wafer designed to avoid leaks. Thanks to 3D printing technology, the design of the wafer is adapted to any shape of stoma and to any pouch existing in the market, consequently eliminating the problem of leaks. By eliminating leaks, it is also reduced the problem of skin irritation.



Currently, ostomates need to measure their stoma, cut the wafer manually and remove the adhesive strips. This process can take around **20 minutes** for regular users and can be very overwhelming especially for the elderly.

Odapt proposes a simpler way of using the wafer, which is already cut to the perfect shape of stoma and that doesn't need to manually remove strips.



Thanks to using digital and additive manufacturing tools, is able to create a brand new medical device that is custom made from a patient's stoma 3D scan. This allows to design a **precise customized wafer** for each patient, **eliminating the need for manual adjustments** and adhesive strips, which had been a time-consuming and overwhelming process for many users. It also presents many other improvements such as **leaks elimination** and **improved comfort**.

Reusing the wafer not only improved patient comfort by avoiding skin irritation, but also promoted **sustainability** by reducing plastic waste.



3D Printer

 Lynxter LYNXTER - S300X

Post-Processings

Designed & Engineered by

 LEITAT

Material

 Elkem Silicone 85A

Software

 Materialise - Magics

Supported by

 3D Incubator



Solution

IAM3DHUB utilized 3D printing to bring Odapt's vision to life. This allowed for the creation of customized, re-usable wafers that fit various stoma shapes with precision. By employing medical-grade silicone, IAM3DHUB ensured biocompatibility, flexibility, and ease of cleaning – all key attributes for optimal patient care. The power of 3D printing enabled to rapidly iterate and perfect the design, offering a tangible solution that addressed discomfort, leaks, and plastic waste.

Odapt in Numbers

Individuals with ostomy bags experienced a new level of comfort, confidence, and sustainability. Leaks were eradicated, fostering a sense of freedom and improved well-being. With traditional options often being single-use, Odapt's re-usable wafer stood as a beacon of environmental responsibility, reducing plastic waste and lowering ecological footprints. This resonated deeply with conscious medical centers who sought not just better healthcare, but also a more sustainable future.