

Antenna band for the myTemp system

This graduation project aimed to redesign the antenna band of the myTemp system.

The myTemp system is a high accuracy core temperature measuring device, that uses an indigestible measuring pill and an antenna band to measure the temperature inside the intestines.

In this project the main objective was to improve comfort of the antenna belt, fit the belt to people with different bodysizes, increase reliability of the antenna-pill connection and increase the user experience.

Antenna

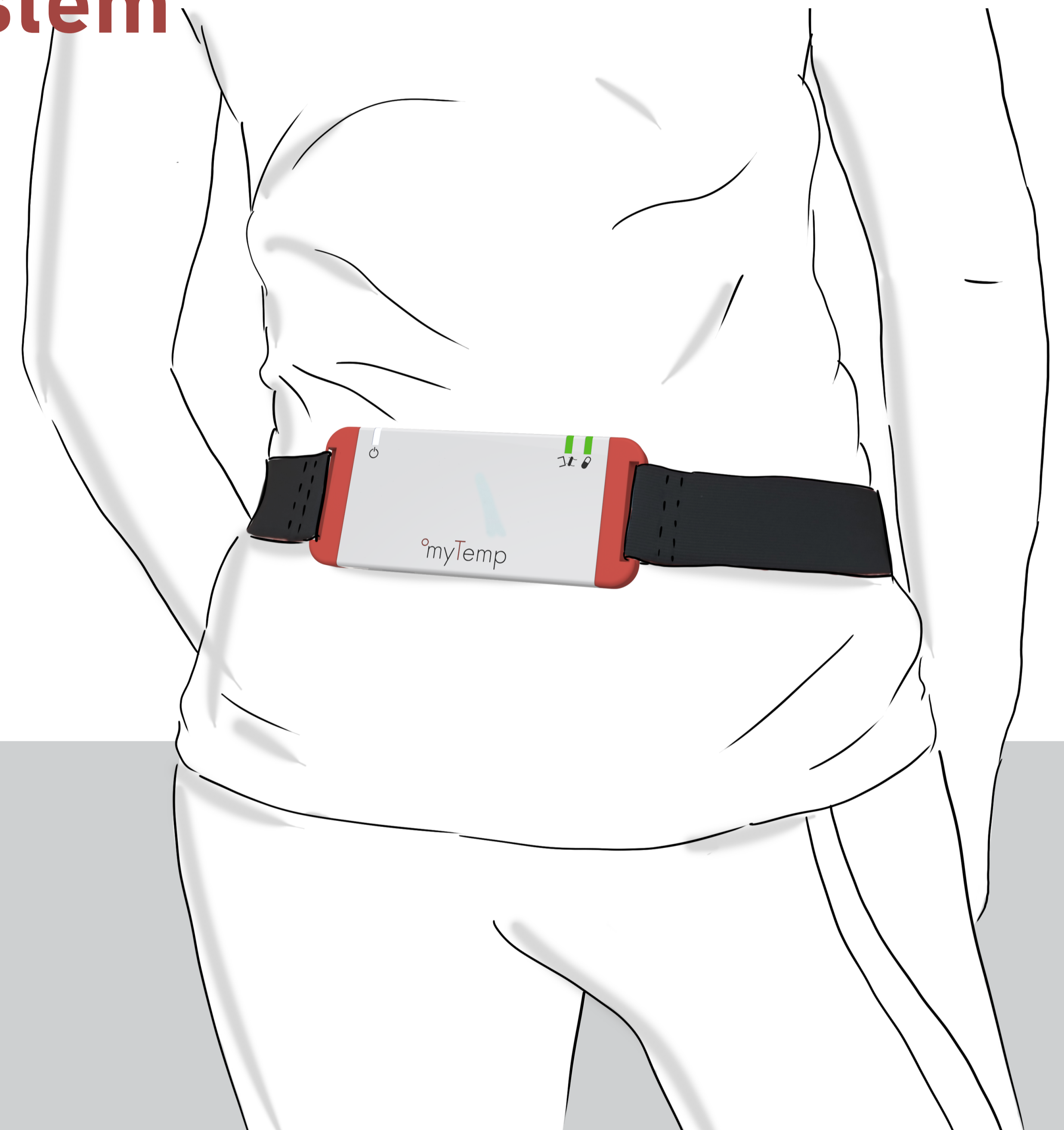
The antenna band uses a AMOHR band, a stretchy band with 4 rows of copper wire.

The stretchy antenna seems like a good alternative, with only a 7% decrease in performance compared to the original cable wire. As it has multiple extra benefits like fitting people with different body sizes and forming around the body, this antenna is recommended as an alternative for a cable antenna

General design

The design can be divided into 3 parts; the main housing and the two side pieces. The AHMOHR band is accompanied with extra elastic for increased stability

The side pieces allow the user to remove the antenna band and the extra elastic to be cleaned or to be replaced.



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Designing an antenna band for the myTemp system
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Integrated Product Design

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