

**A low-cost solution
with numerous applications**

The stretch sensor is a low-cost solution easily accessible for the clinicians. The future prospect is to use and adapt the known technology to other parts of the body e.g. knee, back, shoulder etc.

Product status

A patent application has been filed. The final development of the product is ongoing and is handled by a group of partners with expertise within development, production, clinical trials and sales.



Stretch sensor

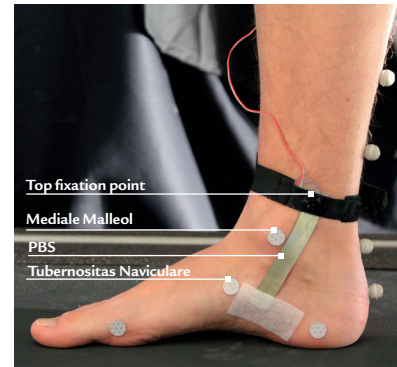
The stretch sensor provides a precise and simple way of measuring an undesirable foot position, abnormal foot movement and/or traction. This gives a fast and correct diagnosis of foot related excessive load injuries.

Background

The foot movement and functionality is essential for the remaining body parts to function well. Because of this it is very important to be able to examine the movement of the foot.

The challenge clinicians face is how to measure the foot's movement in a fast, accurate and easy way. Today the gold standard tool is a visual evaluation of the bare foot while walking and running but as the main part of the population rarely moves barefoot but in shoes, there is a need for a simple and reliable measuring tool capable of measuring how the foot moves inside a pair of normal, everyday shoes.

The same challenge is present when it comes to correcting the abnormal function and/or abnormal movement for example by using arch supports. The arch support has to be comfortable and supportive in the right way without giving too much, neither too little support. Today you can only measure how the shoe moves as well as visually evaluate the position the foot but it is not possible to make a precise measurement of the foot movement inside the shoe and it is not possible to examine how the insole affects the foot. In this case it is hard to know whether the arch support fits the person or whether it should be less or more supportive.



A unique measuring tool with great accuracy

The stretch sensor is the solution to both of the above mentioned problems as it very precisely can measure the foot's movements in everyday life activities and sports while the patient is wearing his or her's normal shoes.

The stretch sensor can support doctors, physiotherapist and other foot therapists in making an evidence-based diagnosis and start a prophylactic or more focused treatment faster – with less pain and discomfort to follow for the patient.

In addition, after the doctor has initiated the treatment, the stretch sensor can be used to determine whether the treatment has the desired effect. With the stretch sensor the therapist get a tool to control the position of the foot as well as to document the treatment.

The stretch sensor continuously measures how much an elastic extensible material is elongated due to the movement of the foot – as an electronic ruler. By mounting the sensor on the foot you can measure a potential abnormal function of the foot which would require some kind of treatment – and by doing this you can prevent serious injuries.

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