

FabriTe_{###}

Fabrics sorting made simple

Post-consumer textiles can come in all sorts of colours, textures, and materials. If you want to recycle textiles efficiently and cheaply, how do you identify and sort them without having to read labels or resort to expensive lab testing?

FabriTell is your small and speedy identification and sorting tool.

Instant identification. Just put your sample over the sensor and the machine will provide you with an answer in less than 1 second!

All common materials supported. FabriTell supports pure materials as well as the 17 most common 2-component blends (contact us for an up-to-date list!).

Full solution. You are buying a highly integrated plug-and-play machine with everything included – no need to have a PhD in chemistry to analyse the data or buy a spectra library.

Keeps your hands free. Unlike other machines, FabriTell is designed to be placed on a table. This keeps your hands free to manipulate the samples and be able to measure more samples quickly.

Optimised for the task. At Matoha, we don't make spectrometers for 20 different applications. We focus on just 2 applications (fabrics and plastics) and get these done.



Optimised for rapid sorting. The combination of the short measurement time (<1 s) and the colour LED indicator lets your workers sort garments very quickly. The LED indicator can be easily configured through our app to show a particular colour for a specific composition (such as blue for 100% cotton in the photo above). Our tests show that sorting with our machine can take as little as 3-4 seconds per item, which at 0.5 kg per item amounts to 3 tonnes sorted per worker per day!

Cloud included. You can use our Cloud to save measurements and access statistics to gain advanced insights into your processes.

App included. Use our free Android and iOS app to save measurements, access cloud data and configure the machine.

Optimised for stream audits. Thanks to our advanced app, you can save all kinds of additional information (garment type, colour, photo, label composition, etc.) about the samples you have just measured and then export the data in an Excel-compatible format (csv)!

Technical specification

Measurement principle

Near-infrared reflectance spectroscopy, operating in a band in the 1-2 μm region. Infrared lamp built-in, expected life >20000h. Instant identification of the measured spectra with our highly sophisticated algorithms.

Materials supported

Cotton, polyester, nylon (polyamide), wool, acrylic, viscose, silk, elastane and acetate.

Blends supported

Most common (17) 2-component blends of the above materials – contact us for details.

Accuracy

Typically, $\pm 5\%$ for pure samples and $\pm 10\%$ for blends for most samples. Can be affected by external factors, such as black pigments in some synthetic fabrics.

Measurement time

< 1 second

Power

Micro-USB power supply (5V/2A) included, along with international power plugs (EU, UK, US). Can be optionally powered by an external battery pack.

Footprint

13x13x9 cm, 0.5 kg

Connectivity

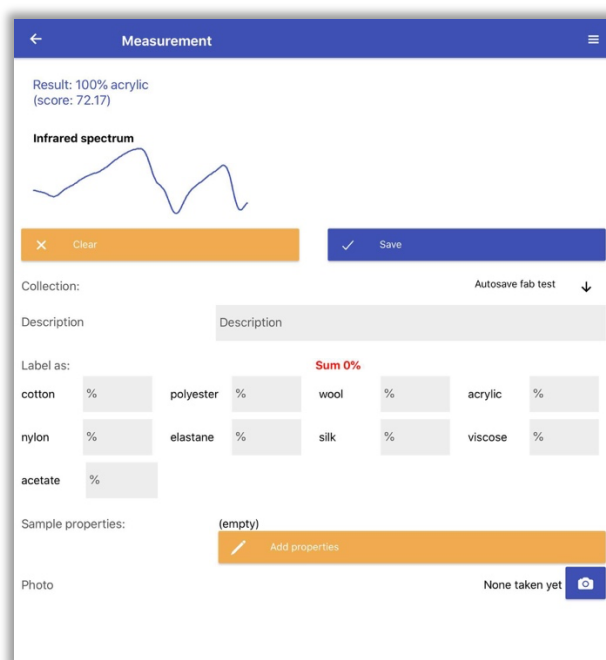
Wi-Fi (2.4 GHz), to receive updates and send data; Bluetooth to connect to a smartphone or a tablet to be used with our app.

Warranty

One-year standard warranty.

Mobile app & Cloud

Our free app for iOS and Android can be used to configure the instrument, and to save and analyse data.



To order your FabriTell, get in touch now at hello@matoha.com!