

A NEW AGE IN QUALITY CONTROL

SPECTRAL Q

***Spectral Quality Control for
Yarn Color Homogeneity***

THEMA SYSTEM

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SPECTRAL Q SOCKS

Spectral Q Socks is an automatic quality control instrument able to:

- Detect the **spectral response** of every section of the sock
- Classify the sock sections by **homogeneous spectral information** (hence color tones), with respect to a reference color and to an inspection recipe.

This system can analyse up to qty 4 socks in the same inspection cycle (**adaptable to the Customer request**), to be manually loaded by the operator.

The system will inspect all the sections across the socks, and multiple sample will be acquired to register the **average spectral information of each section**.

By comparing this information with the spectral answer of the reference section, the system will be able to **classify the entire sock in homogeneous clusters of color tones**.

Thanks to this approach, **reliable** and **repeatable measurements** will be achievable, with also a yarn saving during the sock wefting process.

The final classification of the sock will be **objective** and not any more linked to the human eyes sensitivity.

Specifications

Weight	270 Kg
Dimensions L x H x P	1610 x 1675 x 1335 mm
Max power	2.0 KW
Nominal tension *	220 VAC
Connection	Ph + Pn(N) + PE
Frequency	50/60 Hz
IP	IP54
Communication port	Ethernet
Range	340 - 780 nm
Sock analysis time	Programmable, 230 ms / sample
Inspection area *	4 mm diameter

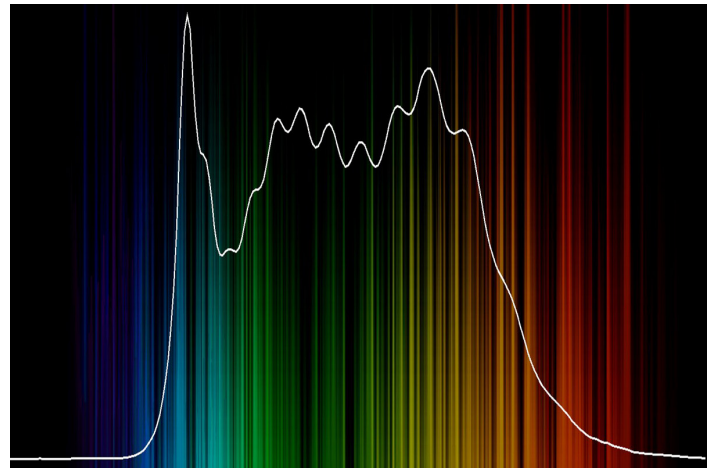
* adaptable to Customer needs and variations upon request



Automatic yarn color inspection and classification

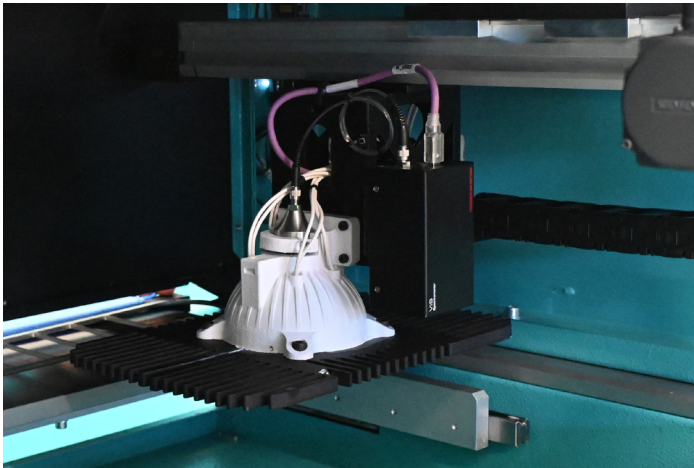
SPECTROMETER

Spectrometer operating on 256 bands starting from the infrared until the UV, across the entire visible spectrum.



DOMELIGHT

Proprietary dome light specifically designed to remove shadows during sock inspection and to achieve the best spectral response of the yarn color.



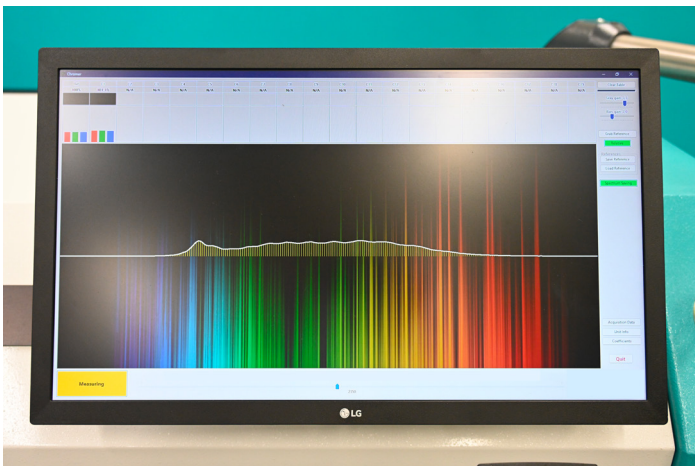
HMI

10" HMI with a 1920 x 1080 resolution, for configuration and settings.

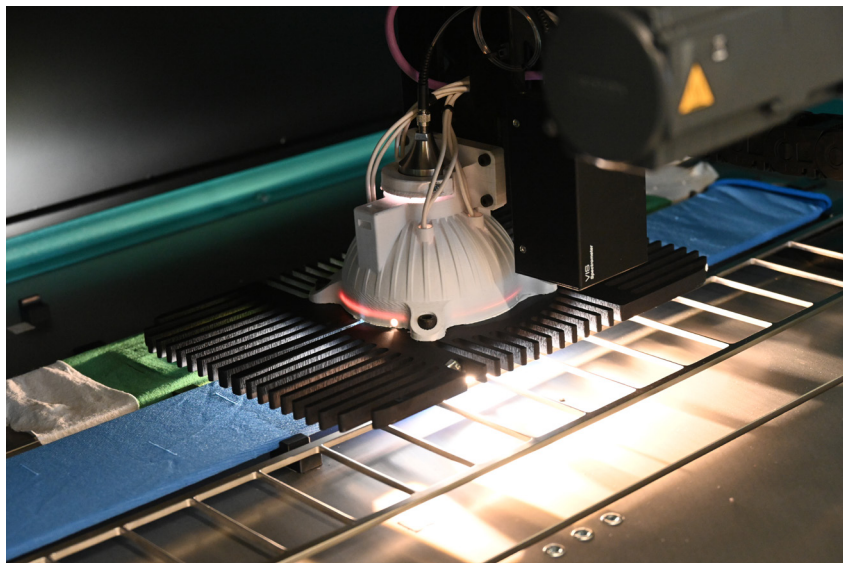


SCREEN

Screen with a 1920 x 1080 resolution, for result inspection and image management.



SPECTRAL Q SOCKS



 **THEMA SYSTEM**
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