



AI Analysis

Fiber Composition Analyzer

The AI Analysis Fiber Composition Analyzer is a device for testing textile fibers. It uses AI and deep learning technology. It uses smart algorithms and image recognition tech to test fiber slices automatically. This includes specialty wool, cotton-linen blends, cotton, and regenerated cellulose fibers. It measures both composition and proportion. As well as quantitative analysis of more specialty blended materials, such as aramid 1313, 1414, etc. It can also test fiber fineness. It replaces manual visual inspections in textile testing with smart equipment. This boosts testing efficiency by 10 times and cuts labor costs by 50%.

This AI-powered fiber composition analyzer has several main parts:

- An image acquisition module

- An image recognition module

- An AI algorithm module

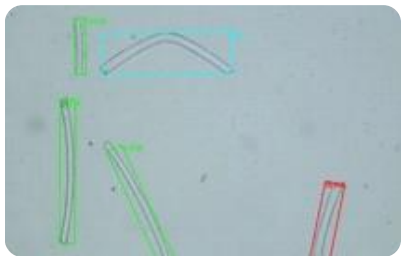
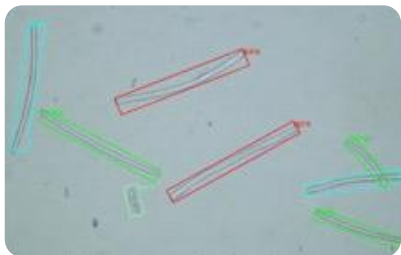
- A mechanical control module

- A backend management platform.

It allows smart testing and gathers data. With one click, you can create fiber composition analysis reports.

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- Smart testing, more accurate**
AI algorithms replace manual microscopic observation, significantly reducing human error. As the number of test samples increases, the test accuracy will be improved.
- Make the test 10 times faster**
Testing time is reduced to 6-12 minutes per item, while in conventional test, you need at least 60 minutes. And this AI-powered fiber composition analyzer is more suitable for large-scale testing.
- Cost savings of 50%**
Only one operator is required, whereas conventional testing requires at least two.
- No need to destroy samples**
Unlike chemical dissolution methods, samples are not damaged. Additionally, the process is highly intuitive, you can directly observe the fiber morphological characteristics.



Power
220V 50/60Hz



Weight
11kg



Dimension
480*300*460 mm(D*W*H)

Item	Test Personnel Required	Testing Time per Unit (minutes)	Labor Cost per Month	Average Charge of Test per Unit
Conventional Test	2	60-120	Nearly 2000 USD	28 USD
AI Test	1	6-12	Nearly 1000 USD	2.8-7 USD
Clarifying & Conclusion	Textile materials include cotton, linen, wool (sheep, rabbit), silk, polyester, viscose, spandex, nylon, and more. All textiles listed for sale are legally required to undergo composition testing and be attached a test report. The cost of a single textile composition test report ranges from 14 to 70 USD per item, with an average price of around 28 USD. Using AI Analysis Fiber Composition Analyzer to boost efficiency by 10 times. And Save 50% of labor costs for the fiber testing department.			