

## **MIECO launches a new QCSMS!**

### **What is the QCSMS?**

The QCSMS is a handheld microtome. Its name stands for Quick Cross Section Microscope Slide. These devices are both quick and practical to use but also durable and of high quality.

- Allows for cross-sectioning different materials quickly and easily with any sharp razor blade
- Sized less than a microscope slide allows for direct microscope observation of cross-sections
- Used properly one will have a lifetime of cross-sectioning
- Made from high-quality stainless steel
- Made in the USA

### **Presenting the new QCSMS Microtome**



The new M2020L, is a high-quality stainless steel device 2.7" (68 mm) x 1.0" (25 mm). Therefore, it fits any sample holder of a microscope stage.

This device has a thickness of only 0.02" (or 0.5 mm)! It has the most narrow slot of all the QCSMS microtomes I've built so far. Therefore, the M2020L is also practical for observing cross-sections under transmitted light.

The cross-sectioning area of the M2020L is minimal. It has a very narrow slot width (only 0.5 mm) and a slot length of 3 mm, ideal when only a limited sample is available for cross-sectioning. Therefore the new QCSMS is very good for forensic applications.

The M2020L now replaces the M2524L, and the cross-sections prepared with the new M2020L is 20% thinner and the slot width is 16% less.

What MIECO's customers say:

*"I'm a forensic fiber examiner and have used MIECO's QCSMS microtome to prepare cross-sections of reference fibers from clothing. This practical microtome allows me to check quickly which different fiber types are present in fiber yarn. I can highly recommend it for forensic fiber examinations.*

*(Good luck with this press release!)"*

Kris De Wael, forensic scientist and author of "Microscopy in forensic fiber examinations. A practical photo atlas and training tool.

*"The MIECO microtomes that we purchased were of high quality and great craftsmanship. Due to the thin nature of the fixtures, it can be challenging to fabricate such devices. For fiber cross-sections it is best to have the slice as thin as possible for light transmission. We searched for a couple years to find one that was suitable. Many machine shops were willing to try, but none of them had much knowledge of the use of the final product. The fixtures they made were generally too thick and the slot too wide. They were rudimentary at best.*

*When I talked to Jay at MIECO, he recommended one of his fixtures. I asked if he could make it thinner. He was reluctant but gave it a shot. He sent them both but warned that the thinner one was unlikely to hold up. It has been 5 years since the two fixtures were put in use at our central lab. Both still look and work great. It is a tribute to Jay's craftsmanship and knowledge of the end use. It is also worth noting that technicians that are skilled at doing cross-sections are a contributing factor in the longevity of the fixtures."*

Former Microscopy lab manager Jeff Bowen



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Jose Nunez · 1st  
Textile Engineer at TexInnovate Inc.

Very good tool for fiber cross sectioning, I have used it and works very well. 👍👍👍

Like · 🗨️ 1 | Reply

*"Unifi Manufacturing, Inc. has used Miecoco microtomes in our fabric analysis labs for more than 10 years. Miecoco's products continue to perform as well today as the day we received them. The microtomes hold fine denier multifilament yarns, securely guaranteeing clean cuts with clear images. Miecoco offers a wide range of microtome sizes so we can cross section from 10 denier up to 1000 denier."*

## Customers of MIECO

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### The history of MIECO's QCSMS microtomes

My name is Jay Mills, and I've been designing and manufacturing handheld microtomes for decades. My microtomes are practical devices for cross-sectioning textile yarns, carpet fiber tufts, plastics, and biological samples. I'm the owner of MIECO, a small company in Wilmington, Delaware. Initially, I manufactured and sold Quick Cross Section Plates, also known as Hardy Plates, until 2010. Then I improved the design and introduced the QCSMS in 2015.

Over the years, I've designed different types of microtomes useful for specific applications. My customers are pleased with my handy microtomes but do not spread the news enough. At the beginning of 2021, I stopped selling my handheld microtome since my business wasn't viable. But then, some people wanted to buy the QCSMS, which gave me the boost to redesign the M2524L to the new QCSMS M2020L microtome.

*I would greatly appreciate it if QCSMS users would send me shareable photos, videos, posts, comments to my email or join my social media sites and share there.*

*Share your knowledge and help others to discover this great tool!*

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