

Crimping Line

Mobile Micrograph Laboratory **Mobile Lab ML 3030**

Mobile Crimp Cross Section Laboratory to prepare microsections



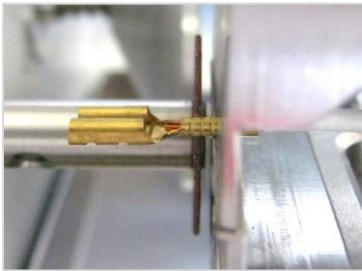
The **Mobile Lab ML 3030** has been designed to meet the requirements of a fast and accurate production of microsections in the shop floor area. Due to the mobile design and battery operation, the Mobile Lab ML 3030 can be flexibly used anywhere in the production area. A quality check by microsection due to material or tool change can be done on the spot within a few minutes. If the result of the sample check is "ok" then production can continue in the certainty that all quality criteria are met.

The quality check of the "teach-in"-crimps by microsection is important for the release of crimping tools and terminals. The recording of the microsections can be used as proof of quality in case of any complaint. The acquisition cost for the laboratory will therefore amortize within no time at all.

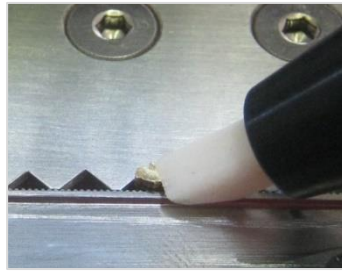
Performance features

- Complete mobile **laboratory on wheels**
- **Mobile use** by battery operation
- Suitable for **contact sizes from 0.1 to 4 mm²**
- Short processing time between 3-5 minutes per micrograph
- **No deformation** of clamp and cable due to the cutting process
- Proven zoom objective with **4 optical zoom steps**
- **Digital colour camera** USB 3.0 with CMOS sensor and a resolution of 2592x1944 pixels
- Long-life LED illumination at the microscope
- Standard terminal holder for **cross sections up to 4 mm²**
- Appropriate tool set for the sample preparation
- Polishing of the cross section with **acid free electrolyte**
- Comfortable **analysis software X-Scan**
- Calibration base with measuring scale incl. calibration certificate
- Lockable safety cover
- Integrated charger
- Battery operating time c. 8 hours (for continuous operation)

Crimping Line



Precise adjustment of the cutting position



Fine polishing with pen (acid-free)

Functional principle

The specimen is clamped in the sample holder and goes through the steps "cutting, grinding and fine polishing".

Fine polishing is carried out using the electrolysis process. In the case of problematic contacts, chemical polishing can be used as an alternative. During both polishing methods the sample remains clamped in the sample holder placed under the microscope. The polishing process of the cross section can be viewed on the monitor.

The micrographs can now be measured, evaluated and documented using the X-Scan analysis software.



Zoom lens with snap-in function



Documentation of the microsection according to DIN EN ISO 1463 by analysis software X-Scan

Technical specification

• Type	ML 3030
• Power supply	230 V / 50 Hz (charging process)
• Battery operation	12 V / 24 Ah
• Smallest extension (15" monitor)	32x
• Largest extension (15" monitor)	120x
• Smallest crimp height for a full screen	1.8 mm
• Largest crimp height for a full screen	7.0 mm
• Measurement resolution μm per pixel	2.7 μm , 2.1 μm , 1.4 μm , 1.0 μm , 0.8 μm , 0.7 μm
• Optical zoom grades	0.75 – 1.0 – 1.5 – 2.0 – 2.5 – 3.0
• Camera resolution	2592x1944 pixels
• Camera connection	USB 3.0 port
• Object illumination	Long-life LED ring light for true to colour pictures
• Fine polishing	Electrochemical
• Cross section sizes	0,1mm ² - 4mm ²
• Recommended temperature	22°C +/- 5°
• Dimensions (W x D x H)	520 x 800 x 1340 mm
• Weight	62 kg