



# Leica EM KMR2

Glass Knifemaker for EM and LM Applications

*Leica*  
MICROSYSTEMS

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## Perfect Sections Begin With a Perfect Glass Knife

For resin sections you need a sharp, strong and stable knife edge. For cryo sections (Tokuyasu samples) an extremely sharp knife edge is required.

Thanks to the Leica EM KMR2 and the balanced break method, you can produce perfect glass knives fulfilling the highest requirements for many applications.



## The Balanced Break Concept

The secret of producing a straight, controlled break in a strip of scientific-quality glass is to apply equal weight and pressure to each side of the score. Only when the mass of the glass is balanced are perpendicular edges produced during the break and this is a prerequisite for perfect glass knives.

The balanced-break technique enables you to start out with a standard 400 mm long strip of glass in any of the three thicknesses 6.4, 8 or 10 mm and continuously break the strip into equal halves. You will then have a set of flat-sided squares perfect for making 45° glass knives that measure up to your most stringent requirements.

## Easy to Use

All the precision mechanics are factory set and built into the instrument. All alignments are pre-set for you – just score and break.

- No skill necessary to produce glass knives.
- Moveable end stops for easy and accurate positioning of the glass strip.
- Break-adjust can be set at the desired pressure to achieve a slow break – critical for good quality knives.

## Perfect and Reproducible Glass Knives

The Leica EM KMR2 introduces two new scoring positions, enabling optimal corner to corner breaks.

The longer score is used for scoring the strips before breaking into squares. It can then subsequently be used for scoring the squares to make the knife pairs.

- Preferable for room temperature sectioning.

The shorter score is an option for those preferring a longer “free-break”.

- Glass knives with the longest useable knife edge.
- Real knife angle close to 45°
- Preferable for cryo sectioning

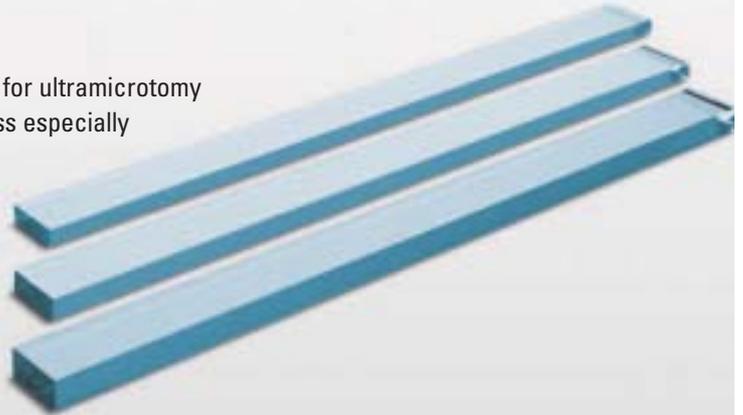


## Superior Quality Glass

Leica Microsystems has been supplying glass for ultramicrotomy for over 40 years. The strips are made from glass especially selected for Leica for its

- Uniformity
- Minimal inherent stress
- Mineral composition
- Breaking characteristics

With improved manufacturing techniques -the glass of today from Leica Microsystems is even better than ever. Tolerances within strips and batches are exceptional. Each strip is checked for the quality of the scored and broken edge – the manufacturer's edge – and thickness.



## Breaks Thick Glass

Thicker glass forms a longer useable cutting edge essential for many of today's applications. In histology, for example, a longer knife edge is indispensable for the preparation of semithin resin embedded sections. Also, for cryo sectioning (Tokuyasu method), a long useable knife edge is required to produce as many sections as possible without changing the knife. An 8 mm knife has a useable edge 30 % longer than the standard 6.4 mm knife and this increases to 60 % more for a 10 mm knife.

The EM KMR2 has been developed to break thicker glass far easier than ever before. This is aided by the new design scoring wheel with integrated cartridge, which ensures a precise score prior to the break.



## Knifebox

The newly designed Leica Knifebox is ideal for storing and safely transporting your 6.4 and 8 mm glass knives, with and without Leica Trufs.



## Leica EM MP Multiplate

With the multi-heating plate, Trufs can be easily mounted onto glass knives using dental wax which is melted in the specially designed wax bath. In addition, semi-thin sections on glass slides can be dried and stained on two different temperature platforms. The Leica EM MP, indispensable for every EM and LM laboratory.



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Leica Microsystems' mission is to be the world's first-choice provider of innovative solutions to our customers' needs for vision, measurement, lithography and analysis of microstructures.

Leica, the leading brand for microscopes and scientific instruments, developed from five brand names, all with a long tradition: Wild, Leitz, Reichert, Jung and Cambridge Instruments. Yet Leica symbolizes innovation as well as tradition.

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