## SAWMICROTOME



## RMS-16G3



www.sawmicrotome.nl

www.rehatech.nl info@rehatech.nl The **REHA-tech RMS-16G3** is a new Tabletop Saw Microtome and is specially developed to prepare slices of hard materials (eg. bone, teeth, minerals or artificial biomaterial devices) without decalcifying or destroying the morphology of the tissue specimen. The sections do not require further grinding or other processing steps, it can immediately after sectioning be used for light microscopical investigation. The section thickness is set manually with a digital device on top of the object arm, and section thicknesses of approximately 30 microns can be achieved under optimal conditions.

The updated easy-to-use control panel makes working with the Saw Microtome straightforward while obtaining optimal results. The speed of the specimen advance can be adjusted precisely, with a controlled electrical drive. A higher or lower speed can simply be selected depending on the material to be sliced. A built-in control unit prevents an overly high feed rate and thus avoids damage to the saw blade or sample.



Control panel

The **REHA-tech RMS-16G3** operating principle is based on a specimen holder which is guided extremely slowly against the rotating cutting edge of a diamond coated inner-hole saw. The sample can be embedded in resin, and subsequently is cut by a diamond-coated inner-hole saw blade. The thickness of this blade is just 270 microns, which means that there is little waste of the specimen. Thus, usually multiple serial sections can be made from one single tissue specimen. The speed of the object holder can be adjusted according to the specimen conditions. Compared to the sectioning principle, the sawing method causes less compression.



The speed of the rotating blade is approximately 600 rpm. During the sawing process, a constant flow of cooling agent is adjusted to land directly on the edge of the saw blade, and thus prevents overheating. For the preparation of thin sections, first a glass cover slip is glued onto the trimmed surface of the specimen block, after which the Saw Microtome is started. After the section is prepared, it is removed from the saw blade and placed onto a microscopy slide.





Digital height adjustment

Adjustable sample fixation

The specimen holder can be easy exchanged by the new adjustable gripper system. A vertical clamping block makes it possible to change a holder with glued specimen and a guiding plate helps you to set the specimen in a good position. This clamping block can also be used in combination with a gripper.

## NEW

We have developed an gripper system with which you can clamp a sample in a very simple way and set it in the right cutting position. This will help you to cut the optimal section from the sample. The clamping blocks on the top of the holder can be placed in different positions, so that many shapes can be clamped.

This gripper system in combination with the sledge can also be used on all known sawing microtome systems.



Besides safety enforced by law, the Sawmicrotome shall be uncompromisingly safe to operators and maintenance staff. Protection against accidents is ensured by proper design and construction. Damage caused by malfunction is avoided by means of robust and safe design. The machine is designed and built by REHA-tech engineering and that means European laws and regulations are applicable.

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REHA-Tech engineering B.V. is a design agency, with more then 25 years of experience. We were involved in the development of several generations of the saw microtome since 1991. So far 4 series of the Sawmicrotome were produced and marketed. For each subsequent generation we have aimed to apply state-of-the-art techniques , and we are confident that this newest series reflects our long expertise.

## Specifications

Type: RMS-16G3 Saw speed 600 rpm Electronic movable arm speed with control function Digital height adjustment Control panel Adjustable sample fixation Gripper system (optional) Cooling tank with pump (optional) Dimensions ( L x W x H) 43 cm x 48 cm x 50 cm AC input: 100-240 VAC 50-60 Hz

