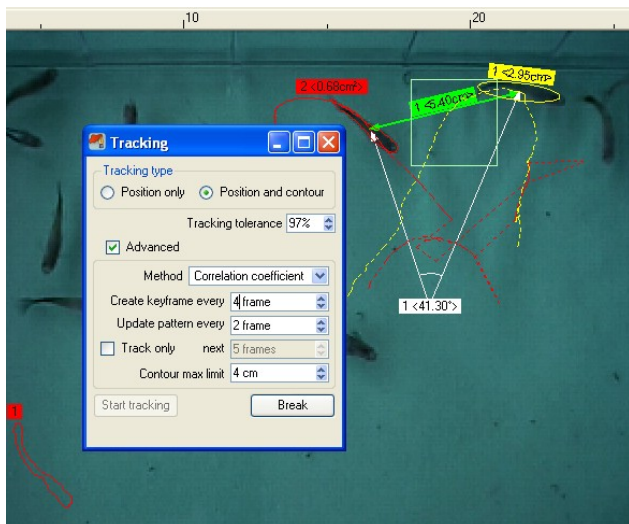
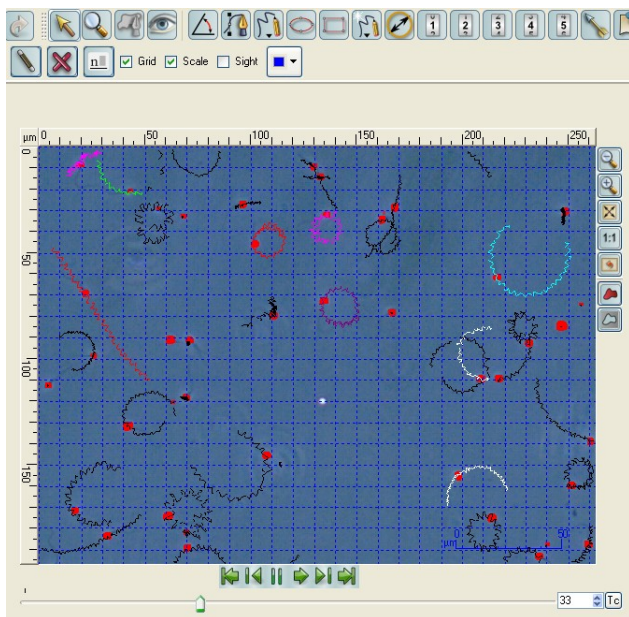


Video processing with annotation & measurement

Works with video!



- **Video material in AVI or MPG files is natively supported**

Video files can be directly opened. No need to import/convert video into image sequences.

- **Input material is not changed in any way**

All measurement/annotation objects with animations and image processing parameters are stored as metadata besides the video material. Video can be opened, processed, filled with data and saved many times, but original material remains untouched, No part of video is duplicated or copied.

- **Measurement and annotation objects are animated**

This allows features on video to be dynamically measured and annotated in motion. Animation paths from one object can be copied to another object or to an element of another object. E.g two motion paths can be applied to both ends of a dimension vector or angle object which automatically creates a dynamic measurement of a distance or an angle value.

- **Image filters are animated**

Different parts of a video material can be differently segmented/processed. Uneven lightning conditions or colour cast variations in a recorded video can be smoothly corrected.

- **Video export**

Video loaded from a file or recorded by a camera can be exported to a separate AVI file. Exported video can have all image processing applied and include all annotation and measurements objects together with their animations. Exported video can be rescaled and recompressed.

Image objects detection and tracking

Advanced motion paths finder

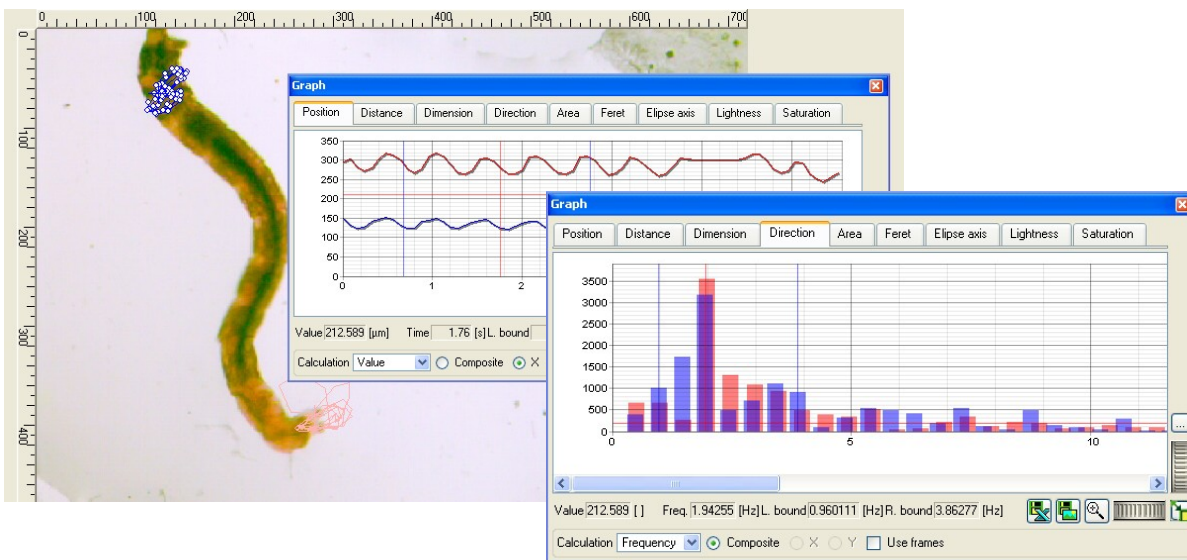
- Template and shape based tracking. Manual or automated.
- Tracking data can be applied to measurement/annotation objects as animation paths.

Additional multi-object tracking modules

- **Simple multi cell tracking**
Cell detection and tracking on video material.
- **Multi cell tracking and analysis**
Cell detection and tracking on video material.
Automatic measurement of many motion parameters.
Automatic classification of objects based on user defined criteria.
- **Advanced classification and statistics module**
Automatic calculations of user defined parameters by custom macros.
Automatic classification of objects based on user defined criteria and calculated values.

Statistics and presentation of motion data

- Measured values can be shown on graphs or exported to a spreadsheet
Parameters changing in time can be presented as direct value or speed (amount of value change) in time or frequency domain (spectrum).



Micrographica editions

	Photo and video camera acquisition	Loading, saving and exporting still image formats	Measurements & annotations	Layered image processing	Loading, saving and exporting video image formats	Animated annotations and measurements	Layered and animated video processing	Object tracking	CASA sperm motility module (SEMEN)
Standard Edition	•	•	•	•					
Video Edition	•	•	•	•	•	•	•	•	
CASA Edition	•	•	•	•	•	•	•	•	•