

# MÖLLER Hi-R 900

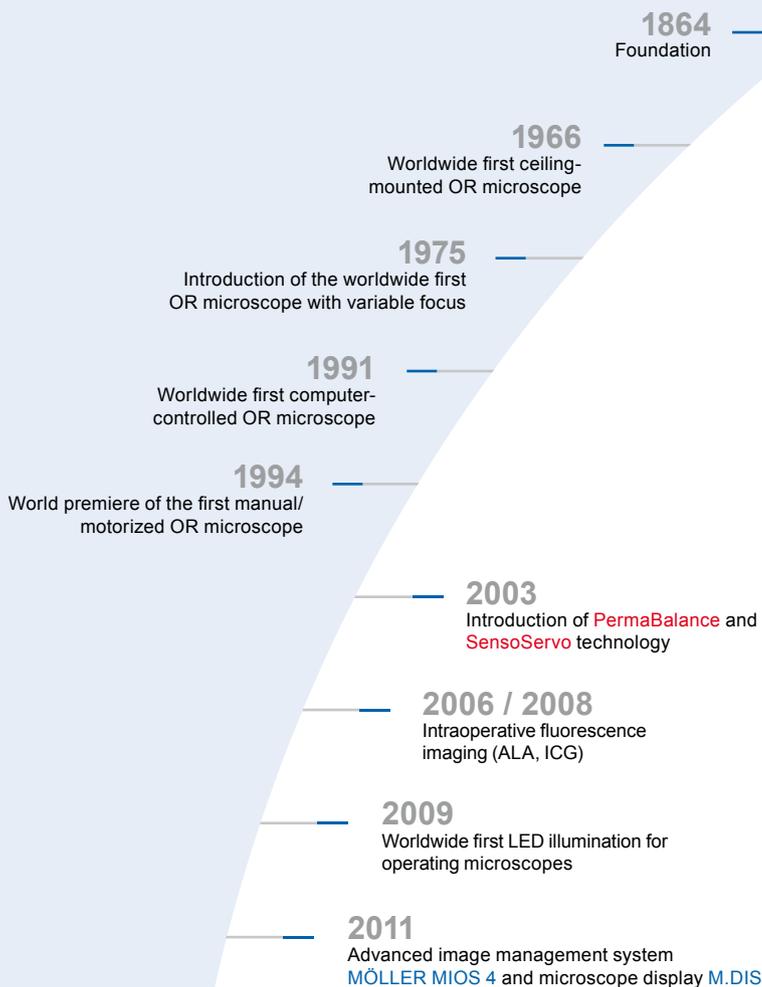
For first class surgery



**HS** MÖLLER-WEDEL  
INTERNATIONAL

Tradition and Innovation

# Professional experience since 1864



## Welcome

to the world of Möller-Wedel's operating microscopes. Since 1864 we have been pioneers in the development of high precision optical systems for medicine and science.

The trendsetting developments originate from intensive interchange of ideas with international physicians. Our experienced research and production teams transform innovative ideas into our top class operating microscopes 'Made in Germany'.

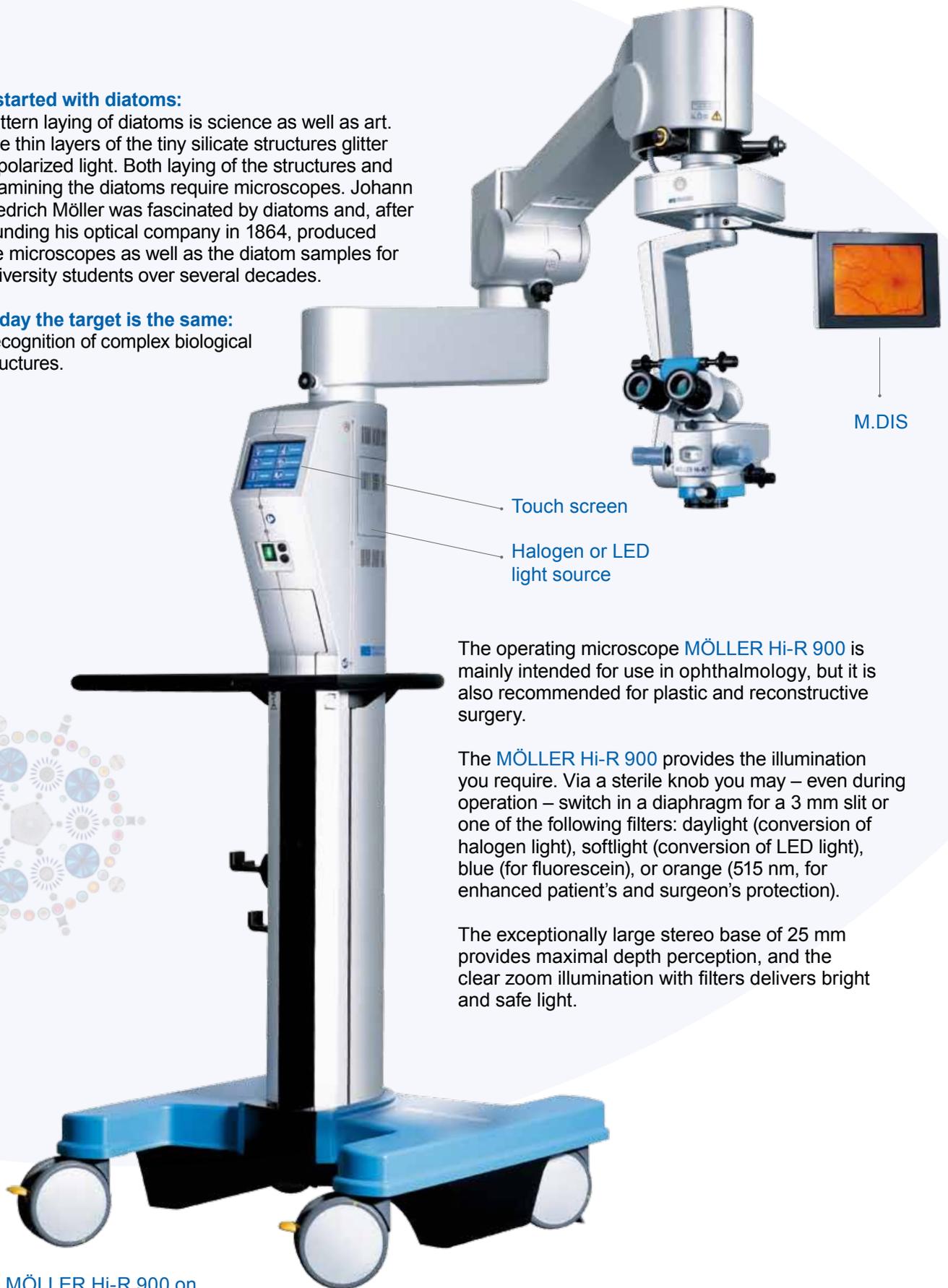
Möller-Wedel maintains a Quality Management System for Medical Products according to ISO 13485 and an Environmental Management System according to ISO 14001, certified by TÜV.

### It started with diatoms:

Pattern laying of diatoms is science as well as art. The thin layers of the tiny silicate structures glitter in polarized light. Both laying of the structures and examining the diatoms require microscopes. Johann Diedrich Möller was fascinated by diatoms and, after founding his optical company in 1864, produced the microscopes as well as the diatom samples for university students over several decades.

### Today the target is the same:

Recognition of complex biological structures.



The operating microscope **MÖLLER Hi-R 900** is mainly intended for use in ophthalmology, but it is also recommended for plastic and reconstructive surgery.

The **MÖLLER Hi-R 900** provides the illumination you require. Via a sterile knob you may – even during operation – switch in a diaphragm for a 3 mm slit or one of the following filters: daylight (conversion of halogen light), softlight (conversion of LED light), blue (for fluorescein), or orange (515 nm, for enhanced patient's and surgeon's protection).

The exceptionally large stereo base of 25 mm provides maximal depth perception, and the clear zoom illumination with filters delivers bright and safe light.

MÖLLER Hi-R 900 on floor stand FS 2-21 / FS 2-25

# Optimal equipment

## TOCULAR

Rotatable ocular with reticle for alignment of toric IOLs.



## KERATOSCOPE

For examination of the cornea.



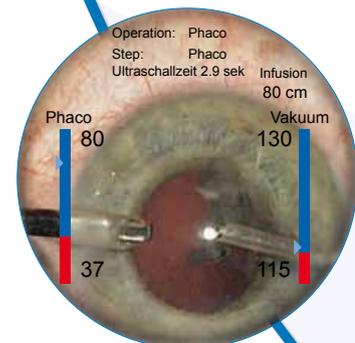
## Light router LR 1000

For facing surgeons in hand surgery.



## Light router LR 1000i

Image injection with LR 1000i for phaco operation parameters (Geuder Megatron S4).





### MÖLLER Hi-R 900A

offers the assistant full stereoscopic vision. The 0° assistant scope with its 12.5x oculars has its own magnification changer (5 steps) and focusing device allowing both surgeons independently to select the focal plane and magnification. It easily swivels laterally, and, for relaxed working, the eyepiece head may be inclined and rotated into the most comfortable position.



MÖLLER MIOS 4



M.DIS

### MÖLLER Hi-R 900 with EIBOS 2

Important for vitreoretinal surgery is the non-contact wide angle ophthalmoscope **EIBOS 2**, which is rotatable around the front lens. **EIBOS 2**, covered with a sterile drape, is flipped down for the operation. The focus mechanism and the inverter are integrated.

The slit illumination can be applied very effectively through the **EIBOS 2** in the starting phase of a vitrectomy for better vision of the vitreus.

### MÖLLER MIOS 4

**MIOS** stands for **M**icroscope **I**maging and **O**peration **S**ystem. Its prime functions are recording of operation scenes, capturing and recording of snapshots, together with proper identification of patients and hospital data. Images and video streams can be stored on DVD-R/-RW, HDD, USB sticks, and external USB hard disks or transmitted to the hospital PACS via DICOM.

### M.DIS

(**M**icroscope **D**isplay) turns the operating microscope into a microsurgical image control center. The high-resolution screen, mounted next to the oculars, provides images or data for the surgeon which she/he may see by momentarily looking up from the oculars. The touch screen allows control of numerous functions.



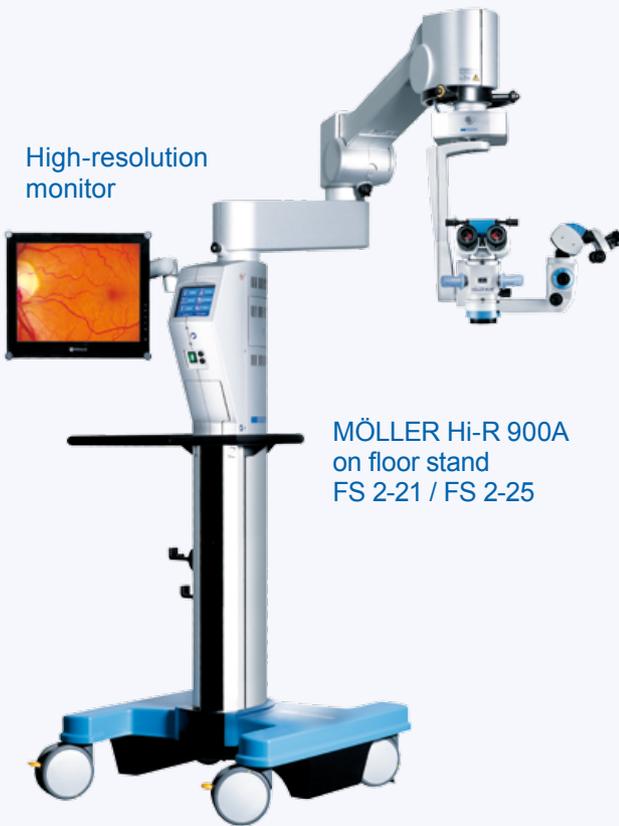
EIBOS 2

# Halogen or LED



Graphic display

High-resolution monitor



MÖLLER Hi-R 900A  
on floor stand  
FS 2-21 / FS 2-25

## High-tech solutions

Electromagnetic brakes in the floor stands **FS 2-21** (halogen) and **FS 2-25** (LED) support the smooth movements of the microscope. Trays (with transformers) for camera control units or other equipment can be mounted directly to the column. The front side accepts a high-resolution monitor (optional).

The floor stands are computer-controlled with a graphic display for programming the individual start settings of the operating surgeons and the surgical procedures. The microscope parameters, brightness, and the carrying weight of the articulated arm are also controlled on the graphic display.

The shape and internal reinforcements make the floor stands extremely stable against vibrations. The cables are completely covered in a cable duct. A plastic cover protects the base of the floor stand against corrosive liquids. The design, including the double castors with brakes, already meets future standards.

## Mechanical solutions

The floor stands **FS 2-11** (halogen) and **FS 2-15** (LED) are equipped with newly designed mechanical brakes, which are preadjusted in the factory for free-floating movements as well as for stable working positions. The light source is mounted externally for easy access. A tray (with transformer) to carry a camera control unit may be attached to the column.

Möller recommends its newly designed foot switches. While **EF 5000** is connected to the floor stand via cable, **EF 5001** controls 14 functions of the microscope wireless via bluetooth.



MÖLLER Hi-R 900  
with M.DIS on floor stand  
FS 2-11 / FS 2-15

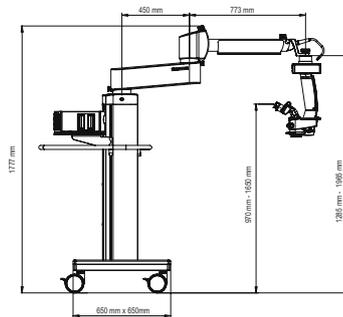


Foot switches EF 5000 /  
EF 5001 with 14 functions

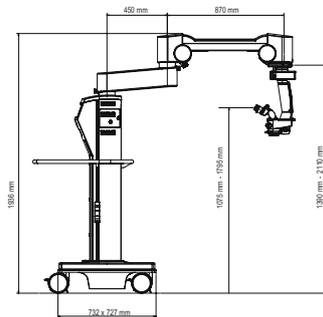
# Technical Data

Operating microscope	MÖLLER Hi-R 900	MÖLLER Hi-R 900A
Optics	apochromatic with correction of residual aberration	
Working distance	200 mm	175 mm
Magnification (mot. zoom 1:6)	3.9x to 23.2x	4.4x to 26.6x
X-Y coupling	60 mm x 60 mm	
Diameter visual field	9.0 mm to 54.2 mm	7.9 mm to 47.4 mm
Eyepiece head, inclinable	200°	surgeon 200°, assistant 160°
Stereo base	25 mm	
Weight (without accessories)	9.2 kg	11.5 kg
Oculars	10x	surgeon 10x, assistant 12.5x

## Floor stands FS 2-11 / FS 2-15



## Floor stands FS 2-21 / FS 2-25



Floor stands	FS 2-11	FS 2-15	FS 2-21	FS 2-25
Door height	1777 mm		1936 mm	
Maximal arm reach	1223 mm		1320 mm	
Height at oculars	970 mm to 1650 mm		1075 mm to 1795 mm	
Carrying capacity	4.5 kg to 15.0 kg		5.5 kg to 17.0 kg	
Weight	198 kg		240 kg	
Light source including backup	2 x 150 W halogen	2 x 50 W LED	2 x 150 W halogen	2 x 50 W LED
Operating voltage	100 VAC to 240 VAC			
Max. power consumption	600 VA	450 VA	1200 VA	1000 VA
Brakes	preset, manual		electromagnetic	
Foot switch	14 functions			

Ceiling units on request

Subject to alteration

# Tradition and Innovation – Worldwide

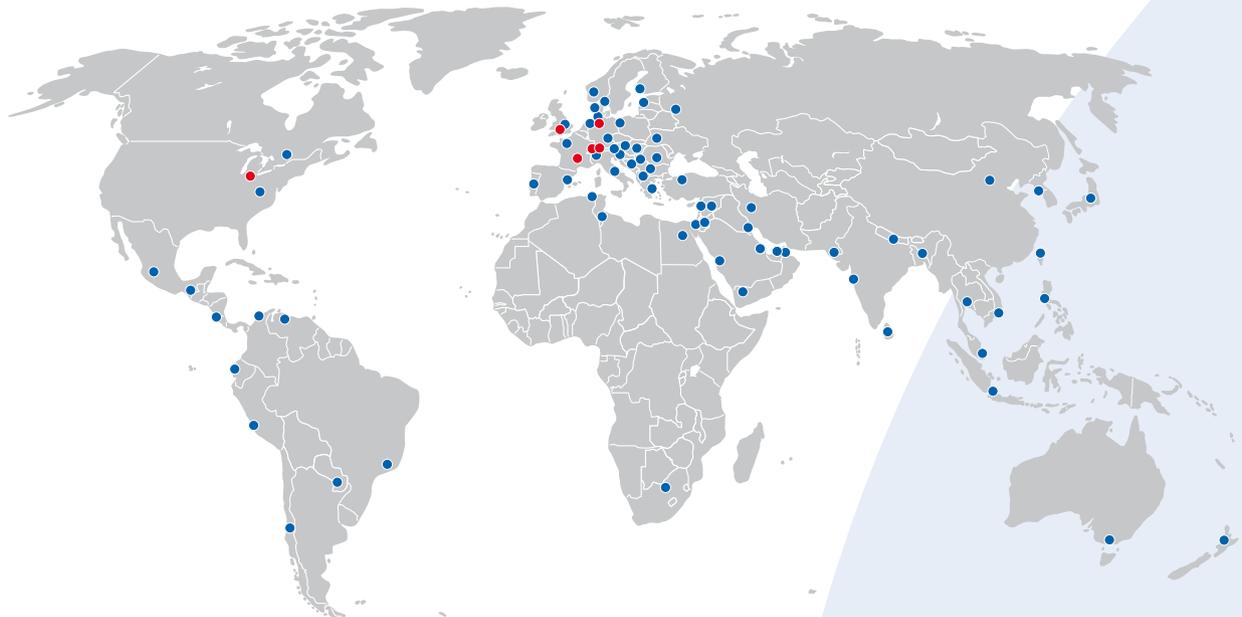
Responsibility for human beings and the environment

## HAAG-STREIT Group

Haag-Streit, founded 1858 in Switzerland, with its headquarters in Bern, has a top position internationally in the industry of medical products, particularly for ophthalmology. The group of companies, characterized by the motto 'Tradition and Innovation', consists of economically and technologically strong partners. Möller-Wedel is proud to be part of this group, which gives a strong foundation for the future development of operating

microscopes. Möller products are available in most countries through dedicated distributors who also provide competent service and support. You will find the contact addresses of the local Möller-Wedel representatives under [www.moeller-wedel.com](http://www.moeller-wedel.com).

- HAAG-STREIT companies
- MÖLLER-WEDEL representatives



Tradition and Innovation

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