



HS Hi-R NEO 900

For first class surgery



Tradition and innovation – Since 1858 visionary thinking and a fascination with technology have guided us to develop innovative products of outstanding reliability: Anticipating trends to improve quality of life.

 **HAAG-STREIT**
SURGICAL

Strong Name – Strong Product



OUR HIGHLIGHTS:

Enjoy high optical visualization with HAAG-STREIT SURGICAL's microscope HS Hi-R NEO 900 for ophthalmology and hand surgery. It allows superior judgment and treatment with best depth perception and 3-dimensional vision due to its 25 mm stereo base.

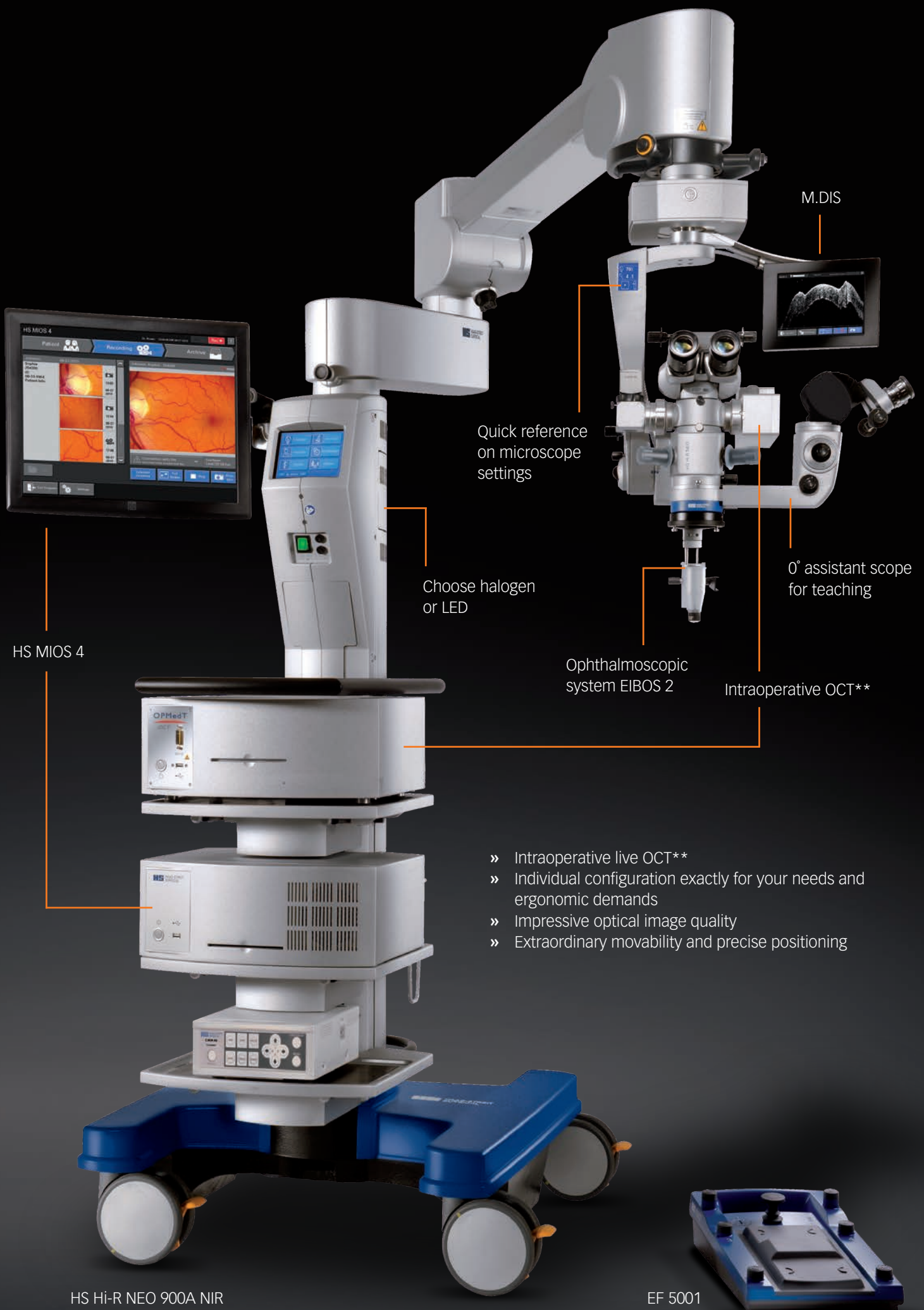
The microscope's integrated display gives instant feedback on all important settings. By a single glance you find information on the positions of focus, zoom, and X-Y coupling as well as the level of illumination. To maximize the freedom of positioning the microscope, an inclination mechanism has been integrated ranging from -70° to $+90^{\circ}$. Fine adjustments can be made in sterile manner during surgery.

In the variation HS Hi-R NEO 900A NIR, the microscope is ready for intraoperative OCT (iOCT)*. Live scans on the eye's anterior or posterior segment support a number of procedures and ensure surgical outcome.

Modularity – this key word describes the accessory structure of the HS Hi-R NEO 900. On demand, the ophthalmoscopic system EIBOS 2 as well as the TOCULAR can be added. Standard accessories are available like observers, cameras, a recording system, a keratoscope, a motorized slit lamp, a depth-of-field diaphragm, and foot switches.

For the carrying system also various options, including the choice of illumination (halogen and LED), arise. Take advantage of this modularity for optimal patient care, cost efficiency and fast return on investment.

* The compatible iOCT is not cleared for use in the US.



HS MIOS 4

M.DIS

Quick reference on microscope settings

Choose halogen or LED

Ophthalmoscopic system EIBOS 2

0° assistant scope for teaching

Intraoperative OCT**

- » Intraoperative live OCT**
- » Individual configuration exactly for your needs and ergonomic demands
- » Impressive optical image quality
- » Extraordinary mobility and precise positioning

HS Hi-R NEO 900A NIR
on floor stand FS 2-21 / FS 2-25

EF 5001

** IOCT by OPMedT is not available for sale in the US.



EQUIPMENT

Outstanding imaging and visualization



ASSISTANT SCOPE FOR TEACHING

HS Hi-R NEO 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.

C.RED 900

The microscope's integrated red reflex enhancer is especially designed to clearly show all details during capsulorhexis and polishing of the capsular bag. For light hazard protection even at low illumination levels a bright reflex is visible. The red reflex enhancer can be individually adjusted to always achieve a perfect red glow as well as switched off for corneal surgery.

DEPTH OF FIELD

Due to the large depth of field achieved by HS Hi-R NEO 900 focusing procedures are limited to a minimum. To increase this effect also in high magnifications our Double Iris Diaphragm can be added.



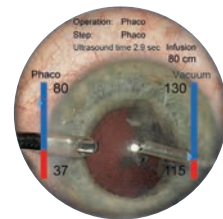
TOCULAR

Rotatable ocular with reticle for alignment of toric IOLs.



KERATOSCOPE

For examination of the cornea.



LIGHT ROUTER LR 1000i

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



LIGHT ROUTER LR 1000

For facing surgeons in hand surgery.



M.DIS

The M.DIS (Microscope Display) 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.

VIDEO SOLUTION

For best visualization we recommend our ultra compact 1/3" CMOS sensor camera C.MOR HD as well as the brilliant 21,5" HD monitor C.MON HD. For an easy mounting various camera attachment systems like light routers and especially the Beam Splitter T are available.



HS MIOS

MIOS stands for Microscope Imaging and Operation System. 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 flash drives, and external USB hard disks or transmitted to the hospital PACS via DICOM.



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.

As a standard HS Hi-R NEO 900 has an integrated slit illumination. It can be applied very effectively through the EIBOS 2 in the starting phase of a vitrectomy for better vision of the vitreus.



Halogen or LED



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

MECHANICAL SOLUTIONS

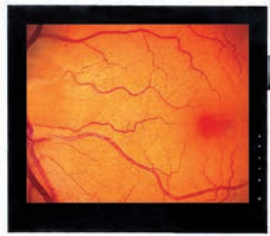
The floor stands FS 2-11 (halogen) and FS 2-15 (LED) are equipped with newly designed mechanical brakes, which are preadjusted in the factory for free-floating movements as well as for stable working positions. The light source is mounted externally for easy access. A tray (with transformer) to carry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

EF 5000 and EF 5001

For most ergonomic control of the microscope HAAG-STREIT SURGICAL recommends its newly designed corrosion-proof foot switches. While EF 5000 is connected to the floor stand via cable, EF 5001 controls 14 functions of the microscope wireless via Bluetooth.



Foot switches
EF 5000 / EF 5001
with 14 functions



High-resolution monitor



HS Hi-R NEO 900A
on floor stand 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 HS Hi-R NEO 900. A holder for a foot switch can be mounted directly to the column as can trays (with transformers) for camera control units or other equipment. The front side accepts a high-resolution monitor (optional).

Both versions 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 adjustable and controlled on the graphic display.

The shape and internal reinforcements of the column make the floor stands extremely stable against vibrations. The cables are inside a cable duct. A plastic surface protects the base of the floor stand against corrosive liquids.

Graphic display



Ceiling units on request. Subject to alterations.

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HAAG-STREIT SURGICAL distributes products manufactured by MÖLLER-WEDEL through dedicated representatives as well as national sister companies globally.



While all certifications are ongoing for HAAG-STREIT-SURGICAL, MÖLLER-WEDEL maintains a Quality Management System for Medical Products according to ISO 13485. MÖLLER-WEDEL is not only developing innovative products but also producing them conscious to the environment. Fulfilling an Environmental Management System according to ISO 14001 is the guide line. Both, the Quality as well as the Environmental Management System, are certified by TÜV.



All products are conform to the EC guidelines and thus CE labeled.



HS Hi-R NEO 900

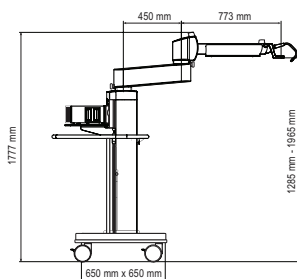
Technical Data



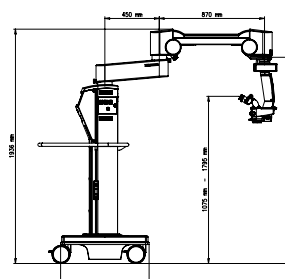


Technical Data HS Hi-R NEO 900

Operating microscope	HS Hi-R NEO 900	HS Hi-R NEO 900A	HS Hi-R NEO 900A NIR
Optics	apochromatic		apochromatic, optimized for Near Infra Red (NIR)
Stereo base	25 mm		
Focusing	+17 mm to -33 mm		
Working distance	200 mm (exchangeable)	175 mm (exchangeable)	175 mm
Magnification (Mot. zoom 1:6)	3.9x to 23.2x	4.4x to 26.6x	4.4x to 26.6x
Diameter visual field	9.0 mm to 54.2 mm	7.9 mm to 47.4 mm	7.9 mm to 47.4 mm
Illuminated field	31 mm to 59 mm	27 mm to 51 mm	27 mm to 51 mm
Inclinable eyepiece head	200° (10x wide angle oculars)	surgeon 200° (10x wide angle oculars) assistant 160° (12.5x oculars)	
Diopter settings	+5 D to -8 D		
Inclination angles	coarse -70° to +90°, fine +/-10°		
Rotation	540°, electromagnetic		
X-Y coupling	60 mm x 60 mm		
Filter	UV, softlight, daylight, blue		
Weight (without accessories)	9.2 kg	11.5 kg	11.5 kg



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
Arm reach (max.)	1223 mm		1320 mm	
Swivel area	2 x 270°			
Door height	1777 mm		1936 mm	
Floor stand carriage	650 mm x 650 mm		732 mm x 727 mm	
Carrying capacity	4.5 kg to 15.0 kg		5.5 kg to 17.0 kg	
Brakes	mechanical, preadjusted		electromagnetic	
Balancing	mechanical		mechanical, sensor-aided	
Height at oculars	964 mm to 1644 mm		1069 mm to 1789 mm	
Illumination	2 x 150 W halogen	2 x 50 W LED	2 x 150 W halogen	2 x 50 W LED
Protection filter	UV, IR		UV, IR	
Operating voltage	100 VAC to 240 VAC		100 VAC to 240 VAC	
Max. power consumption	600 VA	450 VA	1200 VA	1000 VA
Weight	198 kg		240 kg	
Foot switch	14 functions		14 functions	

Ceiling units on request. Subject to alterations.