

HS Hi-R NEO 900

For first class surgery





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 feed-back 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 anterior or posterior eye's 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.

* Pending FDA approval. Not for sale in the US.



HS MIOS 4



M.DIS

Halogen or LED light source

iOCT

- » Individual configuration exactly for your needs
- » Impressive optical image quality
- » Extraordinary movability, precise positioning
- » Highly economical due to modular design

Floor stand FS 2-25



Outstanding visualization



» HS HI-R NEO 900A

offers the assistant full stereoscopic vision. The 0° assistant scope with its 12.5 x 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.

» ZERO BEAM 900

The microscope's integrated red reflex enhancer is especially designed to clearly show all details during polishing 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

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

EQUIPMENT



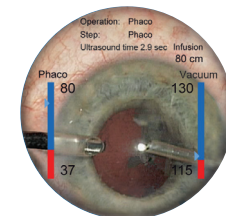
» TOCULAR

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**

(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.

For best visualization we recommend our HAAG-STREIT camera C.MOR HD as well as the monitor C.MON HD.

Various camera attachment systems like light Routers and especially the Beam Splitter T are available.



» **HS MIOS 4**

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 sticks, 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.

The slit illumination (integrated into the HS Hi-R NEO 900) 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

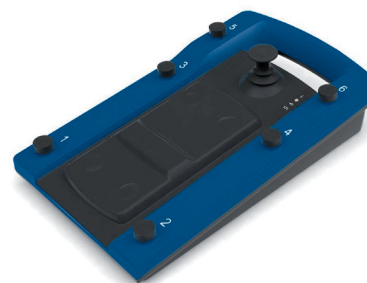


HS Hi-R NEO 900
with M.DIS on floor stand
FS 2-11 / FS 2-15

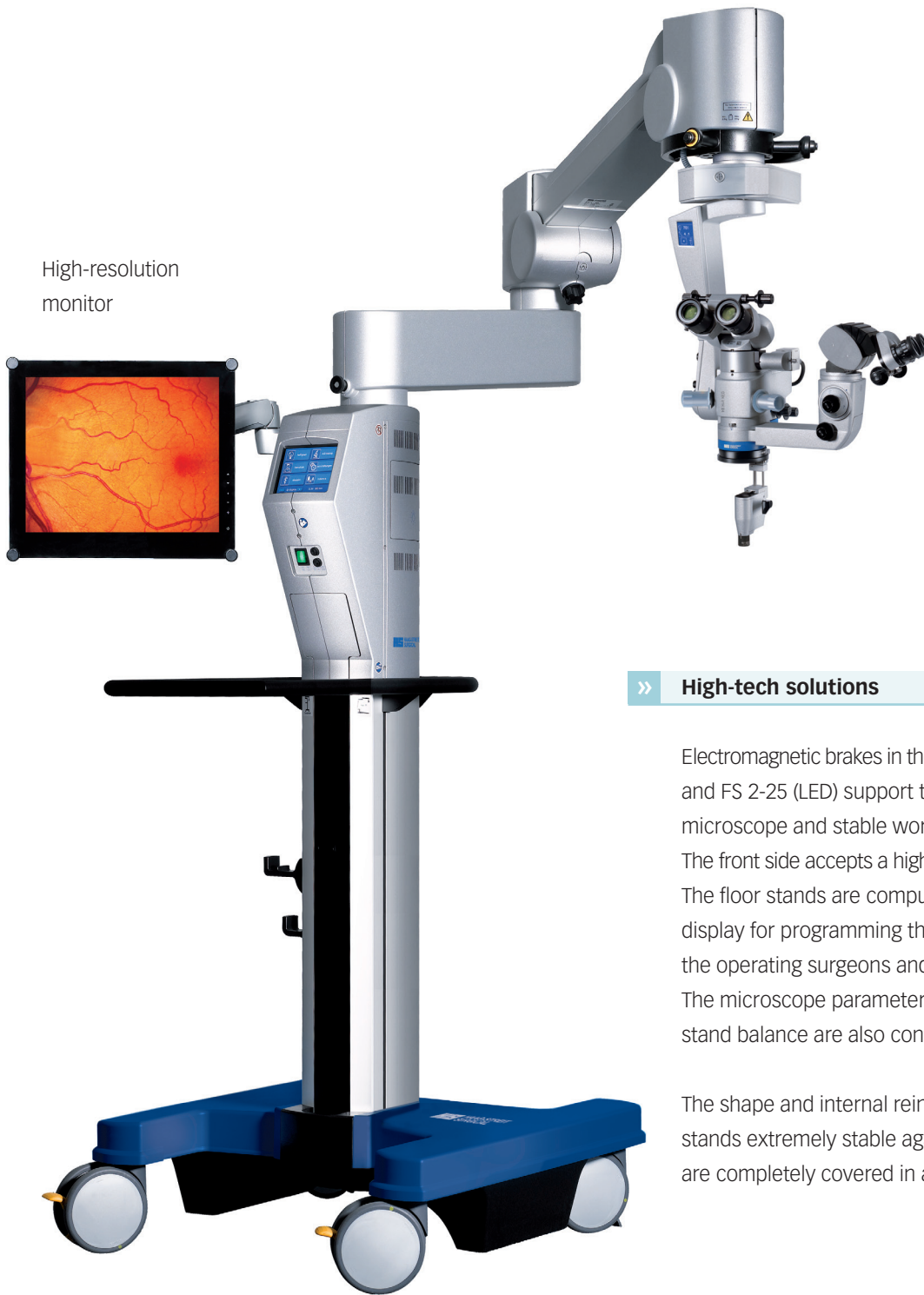
» Mechanical solutions

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.

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 the microscope and stable working positioning. 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 floor stand balance 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.



Graphic display



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Tradition and Innovation



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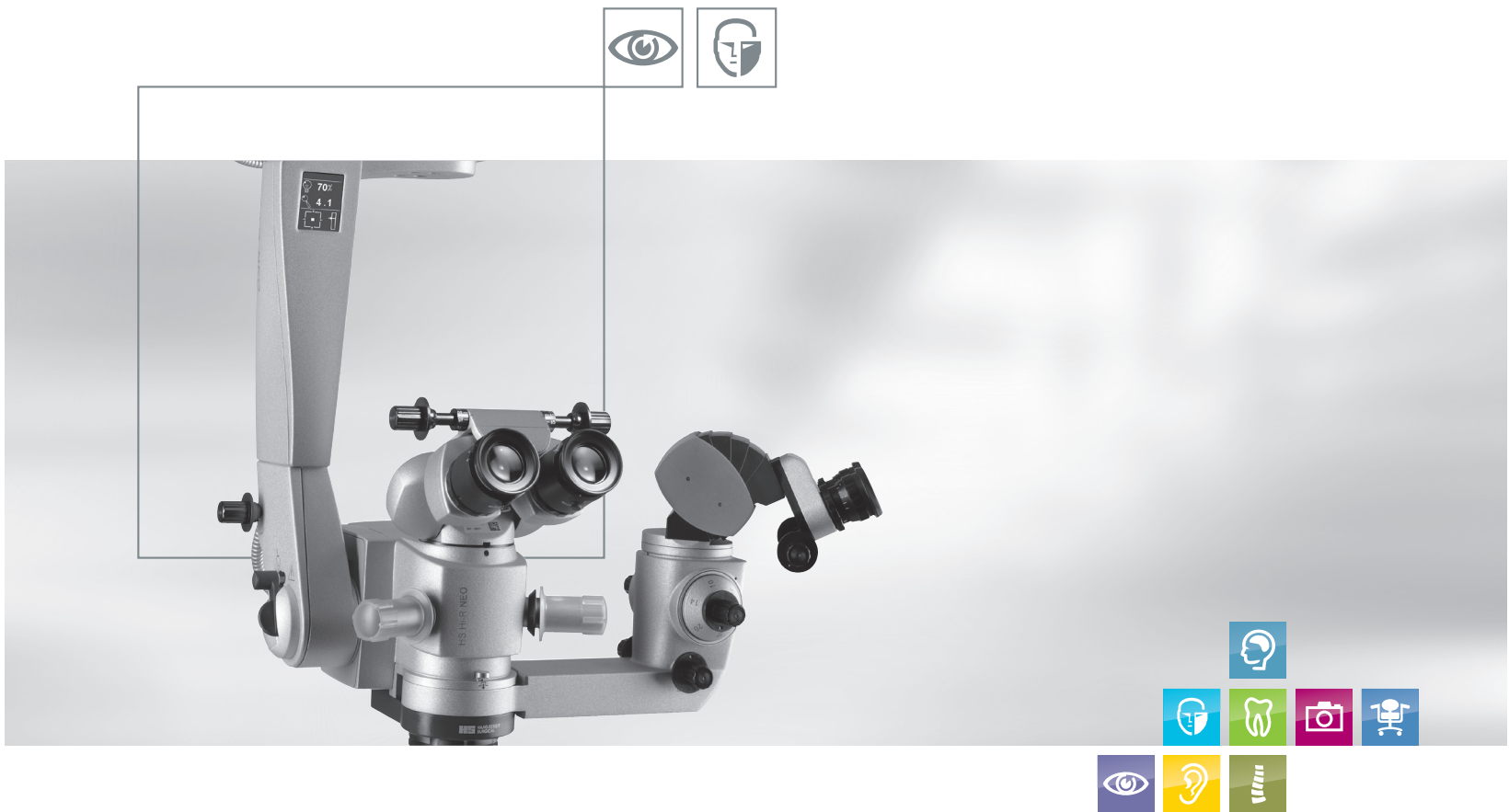
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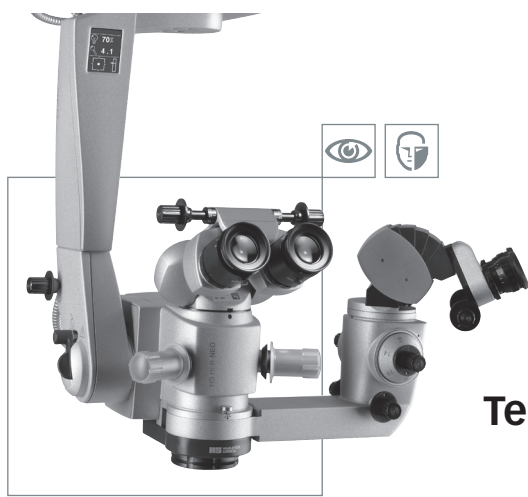
Tradition and Innovation

HAAG-STREIT SURGICAL distributes products manufactured by MÖLLER-WEDEL through dedicated representatives as well as national sister companies globally. You can find their contact addresses under www.haag-streit-surgical.com.

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. While all certifications are ongoing for HAAG-STREIT-SURGICAL, MÖLLER-WEDEL maintains a Quality Management System for Medical Products according to ISO 13485, certified by TÜV. All products are CE-labeled.

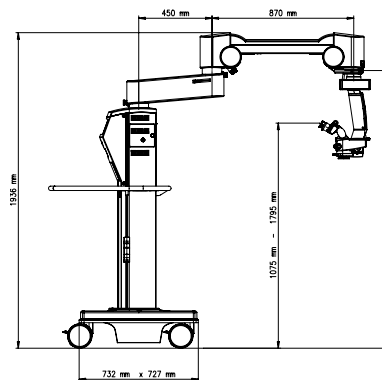
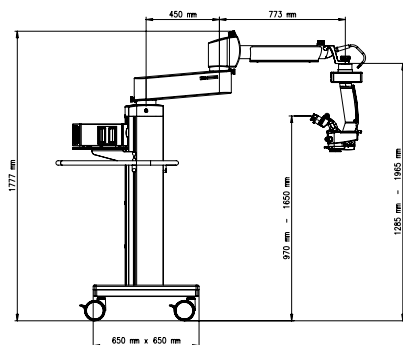


Technical Data HS Hi-R NEO 900



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Operating microscope	HS Hi-R NEO 900	HS Hi-R NEO 900A	HS Hi-R NEO 900A NIR
Optics	apochromatic with correction of residual aberration	apochromatic	apochromatic, optimized for Near Infra Red (NIR)
Stereo base	25 mm		
Working distance (standard, exchangeable)	200 mm	175 mm	175 mm
Magnification (mot. zoom 1:6)	3.9 x to 23.2 x	4.4 x to 26.6 x	4.4 x to 26.6 x
Focus (mot.)	+17 mm to -13 mm		
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	7.9 mm to 47.4 mm
Illuminated field	31 mm to 59 mm	27 mm to 51 mm	27 mm to 51 mm
Eyepiece head, inclinable	200°	surgeon 200°, assistant 160°	surgeon 200°, assistant 160°
Diopter setting	+5 D to -8 D		
Oculars	10 x	surgeon 10 x, assistant 12.5 x	surgeon 10 x, assistant 12.5 x
Rotation	540°, electromagnetic		
Inclination	coarse -70° to +90°, fine +/- 10°		
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	FS 2-21	FS 2-25
Door height	1777 mm		1936 mm	
Maximal arm reach	1223 mm		1320 mm	
Swivel area	2 x 300°		2 x 270°	
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
Permanent filters	UV, IR			
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			
Optional equipment	trays with transformers, monitor arms			

Ceiling units on request. Subject to alterations