



# HS ALLEGRA 300

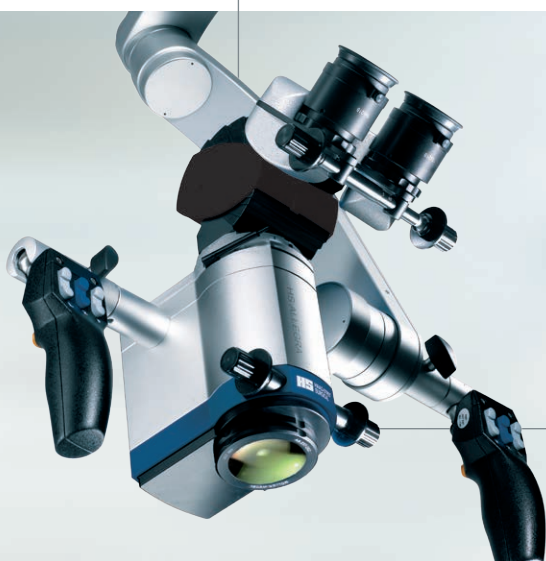
Setting the pace



**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

# Enjoy Microsurgery



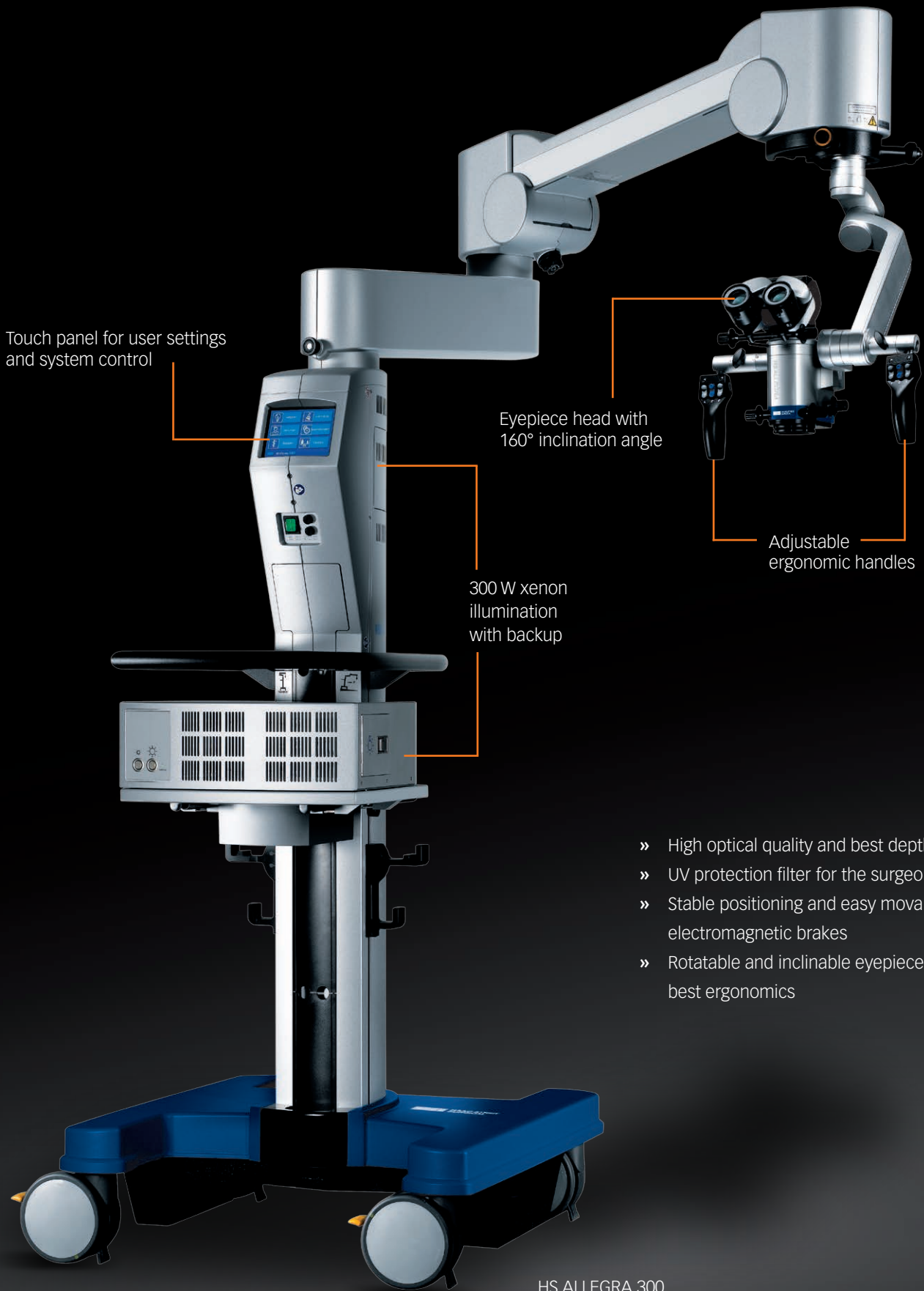
## OUR HIGHLIGHTS:

HS ALLEGRA 300 is optimized for oral cavity and plastic reconstructive procedures. With the support of two ergonomic handles the microscope rotates cardanically around its center of gravity, thus providing optimal movement in all directions. This construction keeps the microscope permanently in balance.

The microscope's large stereo base of 25 mm results in an exceptional depth perception. The optics provides high color fidelity, strong contrast, and high resolution.

Factory-preadjusted mechanical soft-glide brakes allow extremely high movability of the microscope and safe stability in the working position. The HS ALLEGRA 300 contains a 1:6 zoom and a fine focus adjustment.





Touch panel for user settings and system control

Eyepiece head with 160° inclination angle

300 W xenon illumination with backup

Adjustable ergonomic handles

- » High optical quality and best depth perception
- » UV protection filter for the surgeon's eyes
- » Stable positioning and easy movability due to electromagnetic brakes
- » Rotatable and inclinable eyepiece head for best ergonomics

HS ALLEGRA 300  
on floor stand FS 2-23



## Movability, light & accessories

For better access of the assistant on the left, the microscope arm is mounted at the right side. The inclination angles of  $-55^{\circ}$  to  $+95^{\circ}$  and the lateral tilt of  $45^{\circ}$  provide optimal illumination for recognition of deep cavities and small canals.

The inclinable  $160^{\circ}$  eyepiece head can be mounted to the VERTISCOPE, a  $60^{\circ}$  adapter, to allow extreme retrograde viewing. This adapter contains a rotatable ring to move the oculars into a horizontal position even when the microscope is tilted sideways.

For coobservation the high-resolution monitor M.DIS can be mounted to the microscope arm, where it will not affect the balance. M.DIS allows intraoperative viewing and controlling of video recordings and snapshots.

Optionally, an integrated video camera (1 CCD) can be delivered. This reduces the length of the microscope and makes cleaning easier. Attachments for small digital cameras are also available.



### INTRAOPERATIVE LIGHT MANAGEMENT

HS ALLEGRA 300 contains a filter disk for daylight, soft-light, UV protection (yellow filter), blue light (excitation of fluorescence), and green light (better recognition of blood vessels). In addition, two spot diaphragms are integrated against glare.

An additional UV filter may be switched in to protect the surgeon's eyes during UV hardening of filling material.



Turning knob for the filter disk



# Image Management

## HS MIOS

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 flash drive, and external USB hard disk drive or transmitted to the hospital PACS via DICOM.



## C.MOR HD

C.MOR HD is a full HD color video camera designed for the HAAG-STREIT SURGICAL microscope. Its ultra-compact camera head houses a 1/3" CMOS sensor that meets very high standards. With a resolution of 900 TV lines and an S/N ratio of 500 dB images are crisp and sharp. Different user settings allow for individual adjustments.



## C.MON HD

With its flat design and the size of 21.5" the brilliant HD monitor C.MON HD can easily be attached to the microscope's floor stand. Its touch function can be operated even with medical gloves. Due to the planar screen and glass surface it can be disinfected easily. For the safety of the system C.MON HD is fully approved for medical use.





## Floor stand solutions



### HIGH-TECH SOLUTIONS

Electromagnetic brakes in the floor stands FS 2-21 (halogen), FS 2-23 (xenon), and FS 2-25 (LED) support the smooth movements of the microscope. 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).

All versions are computer-controlled with a touch screen for programming of the individual start settings of the surgeons and the surgical procedures.

The shape and internal reinforcements of the column make the floor stands extremely stable against vibrations. The cables are completely covered in easily accessible cable ducts. The design already meets future standards.

HS ALLEGRA 300  
on floor stand FS 2-23



## MECHANICAL SOLUTIONS

The floor stands FS 2-11 (halogen) and FS 2-15 (LED) are equipped with newly designed mechanical brakes, which are factory-preadjusted for free-floating movements and stable working positions. The light source is mounted externally for easy access.

If only little space is available, the floor stand FS 1-12 with mechanical brakes, a 150 W halogen light source, and switchable backup lamp is recommended.



HS ALLEGRA 300  
on floor stand  
FS 2-11/FS 2-15



HS ALLEGRA 300  
on floor stand FS 1-12

**HAAG-STREIT SURGICAL GmbH**

Rosengarten 10  
 D-22880 Wedel, Germany  
 Telephone +49-4103-709 04  
 Fax +49-4103-709 355  
 info@haag-streit-surgical.com  
 www.haag-streit-surgical.com

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



HAAG-STREIT-SURGICAL as well as MÖLLER-WEDEL maintain 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.

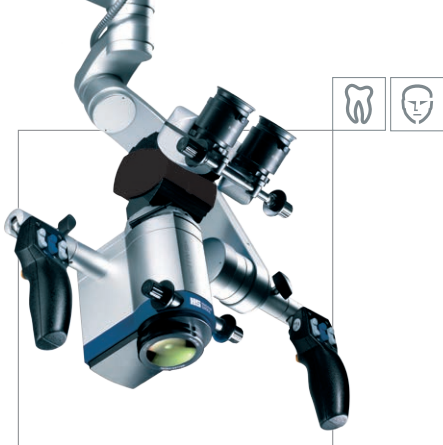




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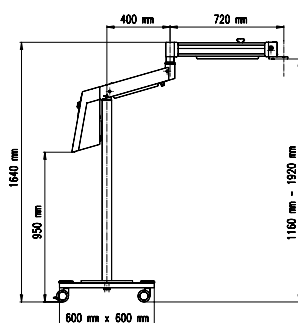
Technical Data



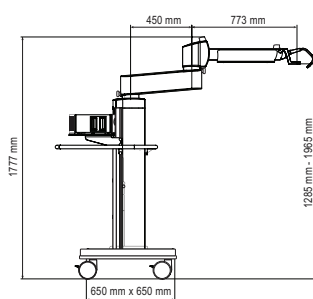


## Technical Data HS ALLEGRA 300

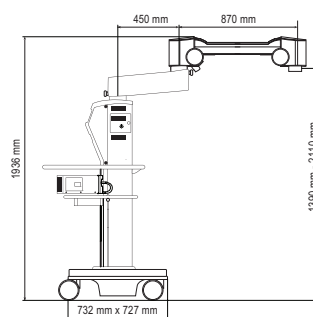
Operating microscope	HS ALLEGRA 300
Stereo base	25 mm
Working distance	237 mm to 263 mm (manual fine focus)
Magnification (Motorized zoom 1:6)	2.8x to 18x
Diameter of visual field	11.7 mm to 74 mm
Illuminated field	4 mm to 90 mm
Inclinable eyepiece head (10x wide angle oculars)	160°
Diopter setting	-8 D to +5 D
Inclination angles	-55° to +95°
Lateral tilt	+/-45°
Rotation	338°
Brakes	electromagnetic
Filter disk	2 diaphragms, 5 color filters
Surg. protection filter	UV
Weight (including eyepiece head)	6.3 kg



FS 1-12



FS 2-11/FS 2-15



FS 2-21/FS 2-23/FS 2-25

Floor stands	FS 1-12	FS 2-11/FS 2-15	FS 2-21/FS 2-23/FS 2-25
Arm reach (max.)	1120 mm	1223 mm	1320 mm
Swivel area	2 x 360°	2 x 300°	2 x 270°
Door height	1640 mm	1777 mm	1936 mm
Floor stand carriage	600 mm x 600 mm	650 mm x 650 mm	732 mm x 727 mm
Carrying capacity	4.5 kg to 9.0 kg	4.0 kg to 15.0 kg	5.5 kg to 17.0 kg
Brakes	mechanical	mechanical, preset	electromagnetic
Balancing	mechanical		mechanical, sensor-aided
Vertical travel at oculars	901 mm to 1661 mm	1026 mm to 1706 mm	1131 mm to 1851 mm
Illumination	2 x 150 W halogen	2 x 150 W halogen/ 2 x 50 W LED	2 x 150 W halogen/ 1 x 300 W xenon/2 x 50 W LED
Protection filter	UV, IR		
Operating voltage	100 VAC, 115 VAC, 230 VAC, 240 VAC; 50/60 Hz; selectable		
Max. power consumption	400 VA	600 VA/450 VA	1200 VA/1000 VA/1000 VA
Weight	80 kg	198 kg	240 kg/250 kg/240 kg
Foot switch	14 functions		

Ceiling units on request. Subject to alterations.