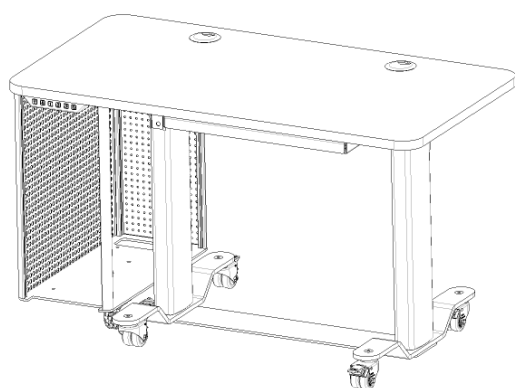
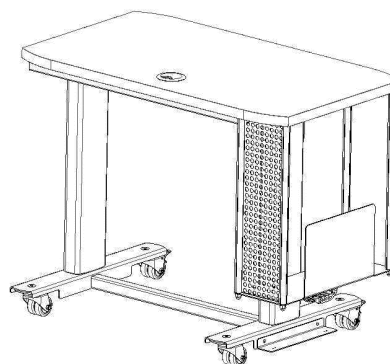


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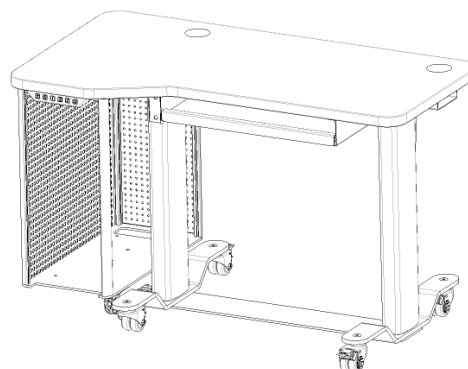
**Instrument tables HT series**



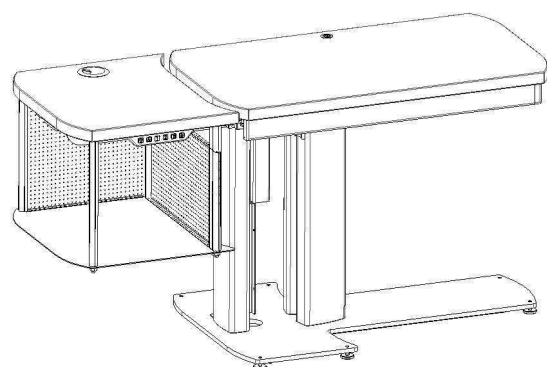
**HT-200**



**HT-100**



**HT-220**



**HT-280**

**Directions for use**

Please, make yourselves before use of the instrument tables with the instructions and the safety regulations close. Read the instructions carefully and obey the tips them the sure contact with the device concern.

**TIP**

We reserve ourselves within the scope of technical advancements changes in the implementation and in the scope of supply.

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## Standards and directives

- The instrument tables HT series were designed considering the standard DIN EN 60601-1. Manufacturing, examination, list, maintenance and repair take place under attention German and international directives.
- All connections with mains voltage standing corresponds with the german VDE directive
- The instrument tables HT series are according to the directive 93 / 42 / EEC about medicine products (MDD) devices of the class I.
- Electromagnetic compatibility
- Observe the relevant regulations on the prevention of accidents according to national legislation.

You find the type sign of the device table on the electric column.

## Warning and informative labels



### Caution, Attention

If you do not consider the information indicated by CAUTION, it can come to moderately severe injuries and/or to damage or changes of the product.



### Mains Voltage

If you do not consider the information given under MAINS VOLTAGE, it can come to the danger by electric current.



### WEEE- marking

Reference on the professional disposal

## Intendend Use

The height adjustable instrument tables serve for the admission of ophthalmological devices as well as from measuring accessories and test accessories. Another application than the given is not allowed.

## Devices and Accessories

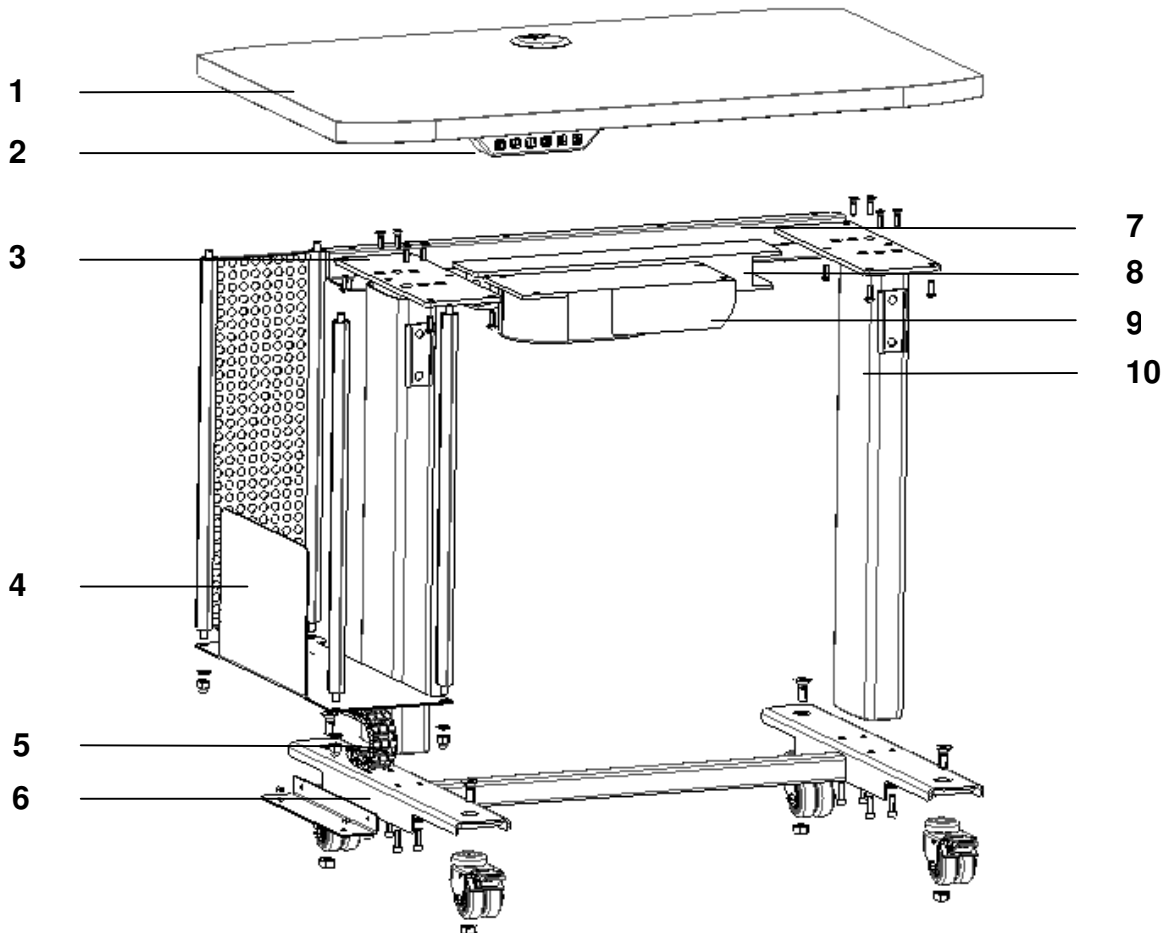
Ophthalmological Devices up to 80kg

## Tip of installation and use

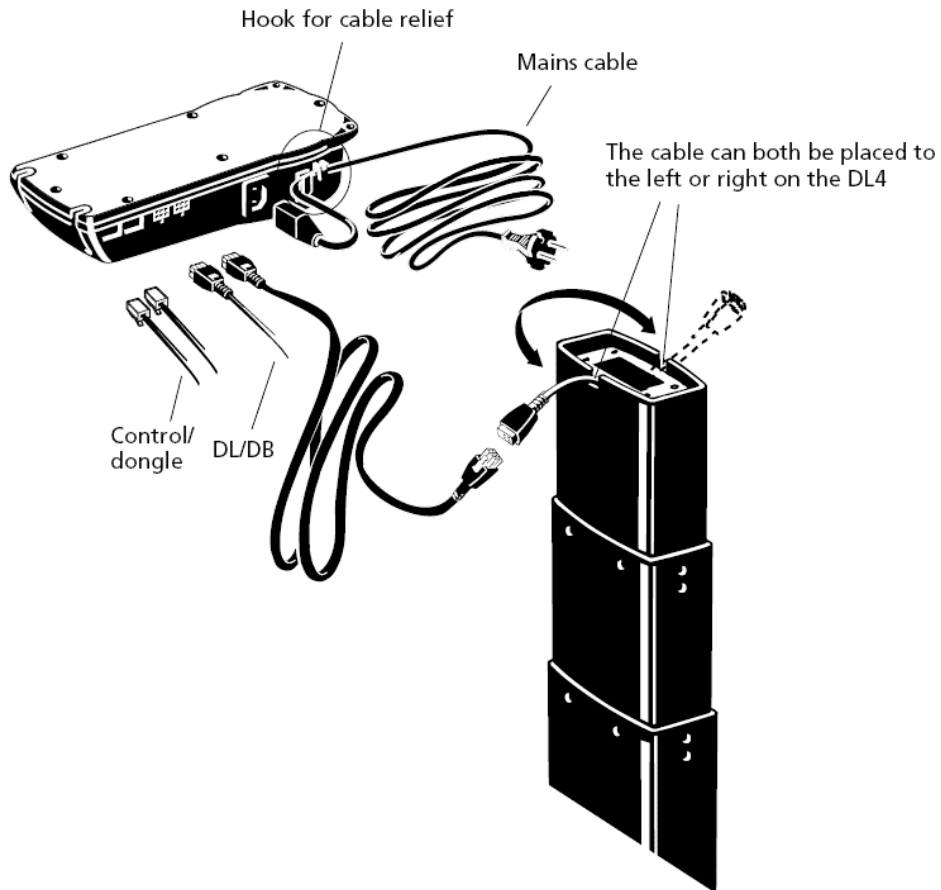
- Keep to the legal accident prevention regulations.
- Compare the information of the type label and the available mains voltage.
- The power supply plug may be attached only to a plug socket with ground contact.
- Never pull at the power cable.
- Do not set up the instrument table in humid rooms. Avoid dripping or splashing water near the instrument table.
- The investigation unity may not be pursued in explosion-threatened surroundings.
- Environmental conditions of the transport and installation
  - temperature: +5 °C... +40 °C
  - humidity: 30%... 75%, no condensation
  - Air pressure: 700hPa... 1060hPa
- The instrument table should be operated only by trained and instructed personnel
- The user should observe the relevant legal regulations on the prevention of accidents.
- The instrument table may be opened only by technicians employed with or authorised persons only.
- Before the first use is to be paid attention to the fact that the stability of the table is guaranteed.
- In any case of problems disconnect the power cable.



## General construction



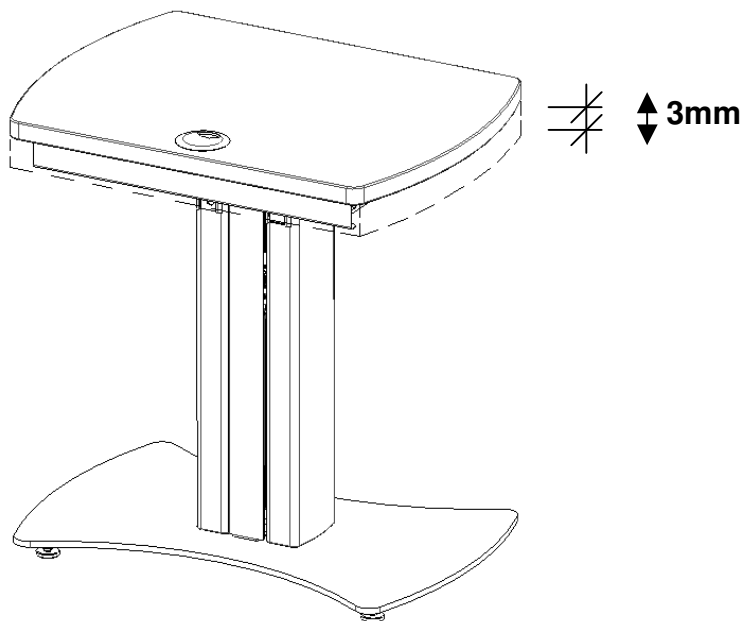
- 1 Table top
- 2 Control panel
- 3 Table top support
- 4 Support of PC or printer
- 5 Drag chain of power cable and network cable
- 6 Foot frame with wheels
- 7 Cable duct
- 8 Switchable power outlet strip
- 9 Control box
- 10 high adjustable electromotive column

**power supply****Initial operation/ adjustable column**

The electromotive column guarantees the vertical adjustment in a big area. Adapt the height with the installed investigation devices to the body height of the patient.



**With maximum lift there is a risk of tilt and instability!**



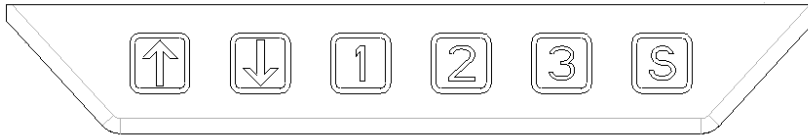
- Produce the mains connection of the instrument table
- Switch the main switch at the power outlet strip
- The instrument tables will be delivered at the lowest position. Put the DOWN button at the control panel a few seconds the an automatic synchronisation of both (or all) columns started. A short movement approx. 3 mm occurs upwards and below. Then the table is to be poised for action

**Caution**

Make sure that no objects or body parts are in the heave area of the tabletop.



## Operation



- To change the high of the instrument table please use the button UP/ DOWN
- You can save three different table height, put the button S and within 2sec any number of 1-3
- To reach again the stored height, you must hold the respective number until the system stopps

## Service and Care

The instrument tables of the series HT are maintenance-free. A security-technical control according to §6 MPBetreibV after VDE 0751 is recommended all 2 years.

### Caution

Separate before every protection change the instrument table from the power supply.

### Attention duty cycle!

The column system of the instrument table is not designed for a continuous operation.

Duty cycle: 10% or 6 minutes per hour or 2 minutes with maximum load

## Care of the instrument tables

All tabletops dispose of a synthetic-coated surface and are resistant accordingly. Only the exterior surfaces of the instrument tables may be cleaned. For the cleaning a not dripping cloth is recommended with mild cleansing solution (f.e. soap).

### Attention!

By the use of solvents (Ether, acetone), acids or trailing cleaning agents discolorations or damages can appear.

**Technical data/ type label**

|                      |  |
|----------------------|--|
| Nominal voltage      | 230V AC $\pm 10\%$   |
| Line frequency       | 50Hz   |
| Protection class     | I  |
| Degree of protection | IP 20  |
| Type of device       | B  |
| Power consumption    | max. 3000VA  |
| Table height min.:   | 625(650)mm   |
| Table height max.:   | 1295(1320)mm   |
| Lift                 | 670mm  |
| Movement time        | 43mm/s   |
| Mass                 | 40kg; 95kg (HT250)   |
| Loading capacity     | 60kg; up to 80kg (HT250)   |
| Manufacturer         | Wagner & Guder<br>UG(haftungsb.)&Co.KG<br>Dorfstraße 57<br>D-99510 Hermstedt |

**Medical Device Directive**

The instrument tables HT series meet the requirements of the EC Medical Device Directive 93/ 42/ EEC and their national equivalent, the German Medical Produkt Act.

Device Class as per MDD: I

UMDNS- No.: 13- 959

## Manufacturer's Declaration - Electromagnetic Emissions

(Tab. 201 according to DIN EN 60601-1-2)

The instrument table HT-series is intended for use in an electromagnetic environment as described below. The customer or user of the instrument table should ensure that the device is used in such an environment.

Warning! The use of longer cable length may cause an increased emission or a reduced interference resistance. The use of other sensors or cables except the ones mentioned above is not allowed.

- Cable length incoming voltage ( 4m )

| <b>Manufacturer's Declaration - Electromagnetic Emissions</b>   |            |   |
|---|------------|---|
| The instrument table HT-series is intended for use in an electromagnetic environment as described below. The customer or user of the instrument table should ensure that the device is used in such an environment. |            |   |
| Emission Measurements   | Accordance | Electromagnetic Environment - Guidelines  |
| HF emissions acc. to CISPR11  | Group 1    | The HT- table uses HF energy exclusively for its internal function. Thus the HF emission is very low and it is unlikely that nearby electronic devices would be disturbed.                            |
| HF emissions acc. to CISPR11  | Class B    | The device is intended for use in all facilities including living quarters and such ones which are connected directly to a public power supply that supplies also buildings used for living purposes. |
| Emission of overtones acc. to IEC61000-3-2  | Class A    |   |
| Emission of voltage fluctuation/flicker acc. to IEC61000-3-3  | agreed     |   |

**Recommended Safety Distances between portable and mobile HF  
Telecommunication Devices and the refraction unit  
(Tab. 206 according to DIN EN 60601-1-2)**


The **instrument table HT-series** is intended for use in an electromagnetic environment with controlled HF disturbances. The user of the device can help to avoid electromagnetic disturbances by keeping the minimum distance between portable and mobile telecommunication devices (transmitters) and the device - depending on the output power of the telecommunication devices as described below.

| Nominal power<br>Of transmitter<br>W | Safety Distance Depending on the Frequency in<br>m |                                   |                                    |
|--------------------------------------|--|-----------------------------------|------------------------------------|
|                                      | 150KHz - 80MHz<br>$d=1,2\sqrt{P}$                  | 80MHz - 800MHz<br>$d=1,2\sqrt{P}$ | 800MHz - 2,5GHz<br>$d=2,3\sqrt{P}$ |
| 0,01                                 | 0,12   | 0,12                              | 0,23                               |
| 0,1                                  | 0,38   | 0,38                              | 0,73                               |
| 1                                    | 1,2  | 1,2                               | 2,3                                |
| 10                                   | 3,8  | 3,8                               | 7,3                                |
| 100                                  | 12   | 12                                | 23                                 |

For transmitters with a maximum nominal power not mentioned above: To detect the recommended safety distance use the equitation in the corresponding column. P is the maximum nominal power of the transmitter in watt (W) according to the specifications of the transmitter manufacturer.

NOTE 1: For 80 Hz and 800 MHz the higher frequency range is valid.

NOTE 2: These guidelines may not be applicable for all cases. The propagation of electromagnetic values is influenced by absorptions and reflections of buildings, objects and people.

| <b>Manufacturer's Declaration - Electromagnetic Interference Resistance</b><br><b>(Tab. 204 according to DIN EN 60601-1-2)</b>  |   |                    |   |
|---|---|--------------------|---|
| The instrument table HT-series is intended for use in an electromagnetic environment as described below. The customer or user of the HT-table should ensure that the device is used in such an environment. |   |                    |   |
| Interference Resistance Test  | IEC 60601-Testing Level                               | Accordance Level   | Electromagnetic Environment - Guidelines  |
| Conducted HF-disturbances Acc. To IEC 61000-4-6<br><br>Radiated HF-disturbances Acc. To IEC 61000-4-3   | 3 Vrms 150kHz bis 80MHz<br><br>3 V/m 80MHz bis 2,5GHz | 3 Vrms<br><br>3V/m | Portable and mobile radio sets should be used in a no less distances to the device including the cables than it is recommended by the equation for the frequency.<br><br>Recommended safety distance:<br>$d=1,2\sqrt{P}$<br><br>$d=1,2\sqrt{P}$ 80MHz – 800MHz<br>$d=2,3\sqrt{P}$ 800MHz – 2,5GHz<br>P is the nominal power of the transmitter in watt (W) according to the specifications of the transmitter manufacturer; d is the recommended safety distance in meters (m).(a)<br><br>The field strength of stationary transmitters should be lower than the accordance level for all frequencies according to a testing on location.(b)<br>Disturbances are possible near devices with the following symbol:  |

NOTE 1: For 80 Hz and 800 MHz the higher frequency range is valid.  
 NOTE 2: These guidelines may not be applicable for all cases. The propagation of electromagnetic values is influenced by absorptions and reflections of buildings, objects and people.

<sup>a</sup> The field strength of stationary transmitters such as fixed parts of cellular phones and mobile radio sets, amateur radio stations, AM and FM radio and television cannot be determined exactly in theory. To detect the electromagnetic environment in regard to stationary transmitters a study of the location should be considered. If the measured field strength at the location where the device is being used exceeds the accordance level above the device should be watched to verify the proper functions. If unusual features are watched additional actions might be necessary such as a modified orientation or another location of the device.

<sup>b</sup> For the frequency range of 150 kHz to 80 MHz the field strength should be lower than 3 V/m.

**Manufacturer's Declaration - Electromagnetic Emissions  
 (Tab. 202 according to DIN EN 60601-1-2)**

The instrument table HT-series is intended for use in an electromagnetic environment as described below. The customer or user of the HT-table should ensure that the device is used in such an environment.

| Interference Resistance Test  | IEC 60601-Testing level                                     | Accordance Level  | Electromagnetic Environment - Guidelines  |
|---|---|---|---|
| Electrostatic discharge (ESD) acc. to IEC 61000-4-2                 | ± 6 kV contact discharge<br>± 8 kV air discharge            | ± 6 kV contact discharge<br>± 8 kV air discharge            | Floors should be of wood, concrete or ceramic tiles. If the floor is tiled with synthetic material the relative air humidity must have 30 % at least. |
| Fast transient electric disturbances / bursts acc. to IEC 61000-4-4 | ± 2 kV for power lines<br>± 1 kV for input and output lines | ± 2 kV for power lines<br>± 1 kV for input and output lines | The quality of the supply voltage should conform to a typical business or clinic environment.   |
| Surge voltage acc. to IEC 6100-4-5                                  | ± 1 kV normal mode voltage<br>±2 kV common mode voltage     | ± 1 kV normal mode voltage<br>±2 kV common mode voltage     | The quality of the supply voltage should conform to a typical business or clinic environment.   |

| <b>Interference Resistance Test</b>  | <b>IEC 60601- Testing level</b>  | <b>Accordance Level</b>   | <b>Electromagnetic Environment - Guidelines</b>   |
|--|--|---|---|
| Voltage drops, short interruptions and variations in supply voltage acc. to IEC 61000-4-11 | < 5% UT<br>für 1/2 period<br>(> 95% Break)<br>40% UT<br>für 5 Period<br>(60% Break)<br>70% UT<br>für 25 Period<br>(30% Break)<br>< 5% UT<br>für 5 s<br>(> 95% Break) | < 5% UT<br>für 1/2 Periode<br>(> 95% Break)<br>40% UT<br>für 5 Period<br>(60% Break)<br>70% UT<br>für 25 Period<br>(30% Break)<br>< 5% UT<br>für 5 s<br>(> 95% Break) | Floors should be of wood, concrete or ceramic tiles. If the floor is tiled with synthetic material the relative air humidity must have 30 % at least. The quality of the supply voltage should conform to a typical business or clinic environment. |
| Magnetic field at the supply frequency (50/60 Hz) acc. to IEC 61000-4-8                    | 3 A/m  | 3 A/m   | Magnetic fields at the supply frequency should conform to the typical values as they occur in the business or clinic environment.   |
| NOTE: $U_T$ is the AC mains voltage before the use of testing levels                       |  |   |   |

## EG-KONFORMITÄTSERKLÄRUNG

### EC- DECLARATION OF CONFORMITY

|   |   |
|---|---|
| <b>Gerätebezeichnung</b><br>product                 | Instrumententische Serie HT<br>instrument tables HT series          |
| <b>Typ/ UMDNS-CODE:</b><br><i>type/ UMDNS-CODE:</i> | Tisch, Untersuchung/Behandlung (15-257)<br><i>instrument tables</i> |
| <b>Klassifizierung:</b><br><i>classification</i>    | I (Richtlinie 93/42/EWG)<br>I ( <i>directive 93/42/EEC</i> )        |

Hiermit erklären wir, dass das bezeichnete Gerät aufgrund seiner Konzeption und Bauart sowie in der von uns in Verkehr gebrachten Ausführung den Anforderungen der Medizinprodukterichtlinie 93/42/EWG entspricht.

*The instrument tables are on the basis of design in all type of construction in correlation with directive 93/42/EEC.*

|                           |                |                         |
|---------------------------|----------------|-------------------------|
| Angewandte Normen:        | DIN EN 60601-1 | 3 <sup>rd</sup> Edition |
| <i>Applied standards:</i> | IEC 60601-1-1  | 2006                    |

Die Instrumententische HT Serie gelten nach der Medizingeräterichtlinie 93/ 42/ EWG als nicht invasive, aktive Medizinprodukte der Klasse I und entsprechen den aktuellen Sicherheits- und Gesundheitsanforderungen zur Aufnahme von Prüf- und Messuntersuchungsgeräten der Augenoptik.

*The instrument tables HT series apply to the Medical Device Directive 93 / 42 / EEC as a non-invasive, active medical devices in Class I and in terms of safety and health requirements for inclusion of ophthalmics test and measurement equipment.*

Diese Erklärung wird verantwortlich abgegeben durch:  
*This declaration is submitted by:*

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Dorfstraße 57  
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Kennzeichnung/  
*marked with*



Stefan Guder, Dipl.-Ing.(FH)  
(Geschäftsführung)



Hermstedt, 01.01.2017