

# DOCTOR STOOL

ak 445 / ak 446 / ak 447



ak 447



ak 446



ak 445

## Instructions for use (IFU)

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# 1 General information



A thorough understanding of the instructions for use is essential for use of the DOCTOR STOOL ak 445, ak 446 or ak 447. Please familiarise yourself with its contents, paying special attention to instructions on how to use the stools safely.  
Please retain this IFU for future reference.

## 1.1 Copyright

© The distribution and reproduction of this document, and the use or dissemination of its contents are strictly prohibited unless explicitly authorised in writing by the manufacturer. Any infringement of this shall result in payment for damages.

If a patent is granted or a utility model is registered, all rights are reserved.

## 1.2 Exclusion of liability



### WARNING

This stool must be assembled, operated and used exclusively in accordance with its intended purpose and pursuant to country-specific regulations, generally recognised codes of practice and provisions on occupational safety and accident prevention.

Any improper or unauthorised use or maintenance, or modification to the product without the manufacturer's express written agreement excludes any liability on the part of the manufacturer.

## 1.3 Provisions and standards

This device complies with the following Directives:

- RL 2006/42/EC
- RL 2011/65 EU

This device meets the requirements of 2006/42/EC and its implementation in Germany under the German Machinery Directive.


Users must observe all statutory provisions stipulated by accident prevention regulations.

## 1.4 Explanation of symbols used


































### 1.4.1 Instructions for use (IFU)










Please take particular care to read and comply with all of the safety precautions and information in the instructions for use.













IMPORTANT	<b>IMPORTANT</b> Indicates possible damage to the product.
	<b>CAUTION</b> Indicates a potentially hazardous situation. Unless avoided, it may result in minor or moderate injury. May also be used as a warning against unsafe practices or possible damage to the equipment.
	<b>WARNING</b> Indicates a potentially hazardous situation. Unless avoided, it may result in death or serious injury.
	<b>HAZARD</b> Indicates an imminent hazardous situation. Unless avoided, it will result in death or serious injury.

	Action required
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### 1.4.2 Symbols used


		
Made in Germany	Made in Germany	Made in Germany
Doctor stool ak 445	Doctor stool ak 446	Doctor stool ak 447
 2023-10-01	 2023-10-01	 2023-10-01
<b>REF</b> 280.000XXX	<b>REF</b> 281.000XXX	<b>REF</b> 278.XXXXXXX
<b>SN</b> 280.00XXXX-00001	<b>SN</b> 281.000XXX-00001	<b>SN</b> 278.XXXXXX-00001
 ≤135 kg	 ≤135 kg	 ≤135 kg
		
 AKRUS GmbH & Co. KG Otto-Hahn-Straße 3 25337 Elmshorn Germany www.akrus.de	 AKRUS GmbH & Co. KG Otto-Hahn-Straße 3 25337 Elmshorn Germany www.akrus.de	 AKRUS GmbH & Co. KG Otto-Hahn-Straße 3 25337 Elmshorn Germany www.akrus.de
     	     	     
(01)04260647945XXX(11)231001(21)280.00XXXX-00001	(01)04260647945XXX(11)231001(21)281.000XXX-00001	(01)04260647945XXX(11)231001(21)278.XXXXXX-00001
Nameplate for DOCTOR STOOL ak 445	Nameplate for DOCTOR STOOL ak 446	Nameplate for DOCTOR STOOL ak 447


Symbol	Meaning
	Manufacturer
	Date of manufacture (YYYY-MM-DD)
	Catalogue number
	Serial number
	Label identifying the stool as a medical device
 <small>(01)04260647946000(11)210301 (21)279.012100-000000</small>	Device identification (data matrix and plain text)
	Indicates the maximum permitted weight the product can support.
	General warning sign
	Indicates that the product can only be used indoors.


Symbol	Meaning
	Applied part type B, in accordance with IEC 60601-1
	Consult instructions for use.
	CE marking – symbol indicates compliance with Machinery Directive 2006/42/EC and the Regulation on medical devices 2017/745/EC.
	Protect from rain
	Protect from sunlight
	Indicates minimum and maximum temperatures to which the product can be safely exposed.
	Indicates permissible minimum and maximum relative humidity levels during transport and storage.
	Indicates permissible minimum and maximum atmospheric pressure during transport and storage.
	Fragile: handle with care
	This way up
	Do not stack
	Do not open with a sharp blade

## 1.5 Requirements for safe operation

Please familiarise yourself with the contents of this IFU before putting into service your stool for the first time.

	<b>HAZARD</b>
	Please check that the product is working correctly before every use.


	<b>WARNING</b>
	The medical device may only be installed, operated and maintained by personnel who have received detailed training and have the necessary knowledge and experience. Please also refer to the national qualification guidelines which apply in your country.
	The medical device may only be used within the scope of its intended use.


	<b>CAUTION</b>
	Modifications authorised by the manufacturer may only be carried out by personnel authorised by the manufacturer. Any modifications not mandated or authorised by the manufacturer may cause malfunctions and expose personnel to hazards.
	Servicing and repairs to this product may only be carried out by personnel authorised by the manufacturer.
	The product must not be used as a holder for surgical equipment (e.g. surgical instruments, clothing, IV bags or other items).

<b>IMPORTANT</b>	<b>IMPORTANT</b>
	Correct use of this medical device is essential for its safe operation.
	Users require no training to operate the product.
	The product must not be used or stored in damp rooms, and under no circumstances in rooms with dripping, splashing or spraying water.
	The product may only be opened by persons authorised by the manufacturer.

## 2 Product lifetime and warranty

Any modifications to the product which are not authorised by the manufacturer will invalidate the warranty.

	<b>WARNING</b>
	Hazards due to operating errors
	The medical device may only be installed, operated and maintained by personnel who have received detailed training and have the necessary knowledge and experience. Please also refer to national qualification guidelines.

	<b>CAUTION</b>
	General hazards
	The expected lifetime of the product is 8 years. Product lifetime and the manufacturer's warranty are subject to compliance with all stated conditions and regulations.
	In consideration of the potential associated risks, the medical device has been developed and produced with the assumption that the product will have a useful life of 8 years. Modifications to the product, or failure to comply with the manufacturer's specifications may significantly reduce the product's expected lifetime, or significantly increase the risks of using the product. It is the responsibility of the operator (institution) to follow the manufacturer's instructions and to assess the risk/benefit ratio taking into account the product lifetime that has elapsed. When disposing of the product, e.g. at the end of its useful life, please do so in compliance with the requirements in Section 13 Disposal.
	This product must only be assembled, operated and used in accordance with its intended purpose and in accordance with country-specific provisions, generally recognised codes of practice and provisions on occupational safety and accident prevention, and the environmental conditions stipulated in Section 14 Technical data.
	If the medical device shows signs of wear, contact the distributor to have it serviced.

## 3 Contents at delivery


The DOCTOR STOOL ak 445 / ak 446 / ak 447 are delivered with the following items:

Item	Number
DOCTOR STOOL ak 445 / ak 446 / ak 447	1
Quality test report	1
Instructions for use (IFU)	1
Optional, depending on order	

## 4 Intended purpose

DOCTOR STOOLS are chairs that provide support for medical work carried out while seated. This excludes surgical interventions in the fields of neurology and cardiology.

## 5 Intended use

	<b>CAUTION</b>
	The DOCTOR STOOL is not certified for transporting people
	The DOCTOR STOOL can support a maximum weight of 135 kg

- Use in operating theatres and doctors' surgeries
- The product is suitable for use in immediate proximity to patients
- The DOCTOR STOOL is designed to support a maximum weight of 135 kg
- The DOCTOR STOOL is not certified for transporting people
- Any use other than the stated intended purpose is prohibited; the product must be used for its intended purpose


## 6 Putting into service

The medical device is delivered fully assembled and ready for use. For details of how to assemble or fit accessories or optional parts, please read the instructions in the relevant sections of the instructions for use.

If delivery includes options or accessories, please refer to the Troubleshooting Guide (available to the distributor's qualified service technicians) for instructions on how to install or attach these parts correctly.

No other assembly or calibration is necessary unless such actions are explicitly stated.

## 7 Checks before use

	<b>HAZARD</b>
	Before every surgical procedure, it is essential to check that the DOCTOR STOOL is fully functional.
	Particular attention should be paid to ensuring that the armrests are sufficiently stable. See Section 9.5 Armrests
	If any wear and tear is visible on the medical device, it must be repaired before use. See Section 11 Maintenance and repairs.



## **8 Description of the device**

The DOCTOR STOOL ak 445 and ak 446 feature either a round or a square ergonomic seat cushion. The DOCTOR STOOL ak 447 has a saddle seat. All adjustments are mechanical.

### **8.1 Adjusting stool height**

The height of the DOCTOR STOOL is adjusted with a lever or with a foot release/hydraulic foot pump.

### **8.2 Backrest**


The DOCTOR STOOL has an optional backrest. One lever adjusts the height of the backrest, the other locks it into position or releases it so the user can change the backrest angle.

### **8.3 Armrests**

Armrests are available for stools DOCTOR STOOL ak 445 and DOCTOR STOOL ak 446. Armrests can be standard or multi-articulated armrests.


## 9 Using the DOCTOR STOOL

### 9.1 Legs and castors

	<b>CAUTION</b>
	Danger of tipping
	When moving the DOCTOR STOOL over a ridge on the floor or a door threshold $\geq 20$ mm, pull the DOCTOR STOOL by its backrest. This reduces the risk of tipping.

The DOCTOR STOOL has 5 smooth-running double castors. The castors make manoeuvring the DOCTOR STOOL effortless.

To lock the castors, use your foot to push down on the small lever. Lift the lever with your toes to release the lock.

	<b>CAUTION</b>
	The DOCTOR STOOL is not certified for transporting people

### 9.2 Adjusting stool height

Stool height on DOCTOR STOOL ak 445 and DOCTOR STOOL ak 447 is adjusted with a gas spring.

- To operate, move the hand lever manually (see Section 9.2.1) or
- push down with the heel to depress the foot plate (see Section 9.2.2).

To raise the stool height, the user must lift his or her weight off the DOCTOR STOOL (ak 445 & ak 447).

To use the hydraulic lift on the DOCTOR STOOL ak 446, depress the foot lever with the heel (see 9.2.3).

Lifting the lever while seated lowers the stool.


The stool will continue to rise or lower while lifting the lever, or until it reaches its maximum upper or lower height.

#### 9.2.1 Adjusting stool height, hand operated (DOCTOR STOOL ak 445 and DOCTOR STOOL ak 447)

The hand lever for the gas spring is located under the seat in both series. Lift and hold the lever until the stool reaches the desired seat height.



### 9.2.2 Adjusting stool height, foot operated (DOCTOR STOOL ak 445 and DOCTOR STOOL ak 447)

	<b>CAUTION</b>
	General hazards
	Never push down with both feet in different places at the same time. This prevents the gas spring from releasing and risks damaging the mechanism.

The release plate for both series of DOCTOR STOOLS is located under the base. Gently depress the plate to unlock the gas spring. Continue depressing the plate until the stool reaches the desired seat height.



Release plate



Release plate

### 9.2.3 Adjusting stool height, foot operated (DOCTOR STOOL ak 446)

To raise the DOCTOR STOOL, press the release lever repeatedly. To lower the DOCTOR STOOL, depress the foot lever. A small stop minimises the chance of changing stool height accidentally.



Release lever

### 9.3 Adjusting the seat tilt (DOCTOR STOOL ak 447 only)

The seat on the DOCTOR STOOL ak 447 can be tilted by approx. 10°. The tilt lever is located under the seat.



Lever



Maximum tilt



Minimum tilt, tilted by 10°

### 9.4 Backrest

The backrest can be adjusted in three ways:

- Adjusting the tilt angle (Section 9.4.1)
- Adjusting the height (Section 9.4.2)

#### 9.4.1 Adjusting the tilt angle

The lever to adjust the backrest tilt angle is located under the seat. To allow the backrest to tilt freely, lift the lever to the highest horizontal position. To lock the backrest at a specific angle (see diagram), push the lever down to its lowest position.



Release lever



Backrest can tilt forwards and backwards

#### 9.4.2 Adjusting the height

Use the lever at the base of the backrest to adjust backrest height.


- In horizontal position: backrest can be moved up and down
- In vertical position: backrest is locked



Release lever to adjust backrest height

## 9.5 Armrests

The DOCTOR STOOL ak 445 and DOCTOR STOOL ak 446 can be fitted with different armrests. These can be adjusted very precisely to meet the user's ergonomic needs. The armrest support brackets can be swivelled and rotated.

	<b>CAUTION</b>
	Always <b>lock the different armrests sufficiently tightly</b> after making any adjustments to prevent them from moving accidentally.



Support brackets

### 9.5.1 Standard armrests

Standard armrests can be adjusted in height. In addition to the support bracket swivelling, they can be swivelled around the pivot point on the mounting.



### 9.5.2 Multi-articulated armrests

Multi-articulated armrests allow unlimited armrest adjustments, and therefore any ergonomic position the user wishes, or needs to operate. To adjust the armrests, first release the easy-access locking handles. Use the locking handles to lock the armrests in position.

#### 9.5.2.1 Adjusting longitudinal armrest position

The locking handles on the side of the armrests release the armrests so they can slide forwards or backwards by approx. 20 cm. Use the locking handles to lock the armrests in position.



Release lever



Sliding the armrest backwards and forwards

#### 9.5.2.2 Tilting the armrest

Use the locking handle under the ball head to tilt and turn the armrest.



Release lever



Inclining the armrest



Tilting the armrest

#### 9.5.2.3 Adjusting armrest height

Use the twist knob on the support bracket to adjust armrest height and to rotate it around the pivot point.




Twist knob on lower bracket



Adjusting armrest height

## 10 Equipment care and protection against contamination

	<b>WARNING</b>
	Contamination hazard
	Please follow the processing instructions to avoid the risk of contamination.

### 10.1 Warning notice

<b>IMPORTANT</b>	<b>IMPORTANT</b>
	Before using the DOCTOR STOOL for the first time, it must be processed according to these instructions.
	With high-risk patients, protection against contamination is recommended to protect the product from contamination by liquids, bodily fluids or other undesirable substances.
	When in use, covering the stool with a non-sterile, commercial, fluid-resistant disposable film is recommended to protect it against contamination by liquids, bodily fluids or other undesirable substances.
	Use the protective equipment recommended by the cleaner/disinfectant manufacturer during processing.
	Never use solvents or abrasion (scouring). The resistance of the fabrics used against aggressive chemicals depends on numerous factors, such as: <ul style="list-style-type: none"> <li>• Physical state of the chemicals (solid, liquid or gaseous)</li> <li>• Temperature</li> <li>• Concentration</li> <li>• Duration of contact</li> </ul> In some cases, a combination of chemicals can cause damage, even if the chemicals are individually safe.
	During processing, care must be taken to ensure that no fluids get into the stool.
	It is not intended for storing instruments or other medical devices.

### 10.2 Processing restrictions

The DOCTOR STOOL must be cleaned at regular intervals in compliance with the surface disinfection hygiene plan and at least once a day. If the stool is used by different personnel, it should be processed before each change of user or before changing the settings.

The DOCTOR STOOL cannot be processed automatically.

The DOCTOR STOOL cannot be sterilised.


Its estimated useful life is 8 years. If early signs of wear and tear appear, stop using the DOCTOR STOOL.

### 10.3 Processing instructions

<b>Preparations before cleaning</b>	None – n/a
<b>Cleaning</b>	<p>For manual cleaning, use ready-to-use “Cleanisept Wipes Maxi” by manufacturer Dr. Schumacher GmbH. Please proceed as follows:</p> <ol style="list-style-type: none"> <li>1. Follow the instructions from manufacturer Dr. Schumacher on using personal protective equipment.</li> <li>2. Clean visibly contaminated surfaces with a CLEANISEPT WIPE and remove contamination. Dispose of the wipe.</li> <li>3. Wipe surfaces with CLEANISEPT WIPES until fully wetted. Allow to dry for the full contact time.</li> <li>4. According to VAH, the full contact time is 1 minute.</li> <li>5. Discard the used wipe and begin disinfection.</li> </ol>
<b>Disinfection</b>	<p>For manual disinfection with wipes, use ready-to-use “Cleanisept Wipes Maxi” by manufacturer Dr. Schumacher GmbH. Please proceed as follows:</p> <ol style="list-style-type: none"> <li>1. Follow the instructions from manufacturer Dr. Schumacher on using personal protective equipment.</li> <li>2. To disinfect surfaces, wipe with CLEANISEPT WIPES until fully wetted. Allow to dry for the full contact time.</li> <li>3. According to VAH, the full contact time is 1 minute.</li> </ol>
<b>Drying</b>	<b>Allow the stool to dry completely before use.</b>
<b>Maintenance and checks before use</b>	<p>No maintenance is required. The product is maintenance free. See Section 11 Maintenance and repairs.</p> <p>For how to check the stool before use, see Section 7 Checks before use</p>
<b>Packaging</b>	None – n/a
<b>Storage</b>	None – n/a
<b>Additional information</b>	None – n/a
<b>Manufacturer's contact details</b>	<p>Manufacturer of Cleanisept Wipes Maxi:            Dr. Schumacher GmbH            Am Roggenfeld 3            34323 Malsfeld  <a href="mailto:post@schumacher-online.com">post@schumacher-online.com</a>  <a href="http://www.schumacher-online.com">www.schumacher-online.com</a></p>



## 11 Maintenance and repairs

	<b>CAUTION</b>
	Modifications authorised by the manufacturer may only be carried out by personnel authorised by the manufacturer. Any modifications not mandated or authorised by the manufacturer may cause malfunctions and expose personnel to hazards.
	Servicing and repairs to this product may only be carried out by personnel authorised by the manufacturer.

No maintenance by the user is needed.


If repairs by the distributor's maintenance staff or service technicians are required, the Troubleshooting Guide will provide all necessary information.

## 12 Safety inspections

The manufacturer does not require any safety inspections of this product.

Any statutory safety inspections in different countries are based on national regulations for Class I medical devices in their currently valid version.

## 13 Disposal

	<b>CAUTION</b>
	Before disposing of the product, it must be reprocessed in accordance with Section 10.3.

The basis for disposing of waste in the European Union is the European Waste List. In some cases, countries and even municipalities issue their own waste regulations, which must be complied with. Outside the European Union, the relevant country-specific regulations for waste disposal must be complied with.

**All components are to be treated as household waste.**

## 14 Technical data

Technical data	DOCTOR STOOL ak 445	DOCTOR STOOL ak 446	DOCTOR STOOL ak 447	Unit
Dimensions H x W x D	910 x 600 x 690	940 x 600 x 690	910 x 600 x 690	mm
Diameter of base	600	600	600	mm
Vertical lift	190	200	190	mm
Net weight of stool	10 - 28 <sup>1</sup>	13 - 22 <sup>1</sup>	10 - 28 <sup>1</sup>	kg
Castor diameter	50	50	50	mm
Range for adjusting seat height	530 - 720	550 - 750	530 - 720	mm
Seat area	420	420	430 x 340	mm
Seat cushion thickness	80	80	80	mm
Range for adjusting armrest height	140 - 290	140 - 290	140 - 290	mm
Range for adjusting backrest height	660 - 790	660 - 790	660 - 790	mm
Max. user weight	135	135	135	kg
<b>Special conditions for storage and/or use</b>				
Environmental temperature	-40 - +70	-40 - +70	-40 - +70	°C
Relative max. humidity	30 - 95	30 - 95	30 - 95	%
Air pressure	700 – 1060	700 – 1060	700 – 1060	hPa
<b>Environmental conditions during use</b>				
Environmental temperature	+10 - +40	+10 - +40	+10 - +40	°C
Relative max. humidity	50	50	50	%
Air pressure	700 – 1060	700 – 1060	700 – 1060	hPa

## 15 Troubleshooting

Fault	Possible cause	Corrective action
Mechanical damage	External causes	Phone the distributor's service technician

## 16 Manufacturer



**AKRUS GmbH & Co KG**

Otto-Hahn-Straße 3

25337 Elmshorn

Germany

Tel. +49 4121 7919-30

Fax +49 4121 7919-39

<sup>1</sup> Weight depends on stool configuration

Email: info@akrus.de  
Website: www.akrus.de

## 17 Reporting incidents

Users must report any complaints about the product's safety, efficacy or performance to Akrus (info@akrus.com) or to their local distributor.

If a DOCTOR STOOL has failed, and may have resulted in or contributed to serious injury to a surgeon, Akrus or the local distributor and the appropriate local authority should be notified immediately.

## 18 CE marking



We hereby declare that the devices listed herein comply with Machinery Directive 2006/42/EC and the Regulation on medical devices 2017/745/EC.

Users must observe statutory national provisions on accident prevention, Directive 89/391/EEC and Directive 2009/104/EC.