

## PRS 500 B



Abb.: Komplettsystem PRS 500 B  
Fig.: Complete system PRS 500 B

**CE 0297**



made  
in  
Germany

**Please note:**

The CE marking with identification number of the notified body (0297) refers only to medical devices intended to be used for human beings.

**Hinweis:**

Die CE-Kennzeichnung mit der Kennnummer der Benannten Stelle (0297) bezieht sich ausschließlich auf Medizinprodukte zur Anwendung für Menschen.

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# Product Features

The PRS 500 B radiography system is a motorized X-ray system with an autotracking function for versatile applications and a high workload. Due to the integrated sophisticated autotracking functions the system enables the user a comfortable, fast and efficient daily workflow. This complete system delivers excellent exposure quality supporting any kind of X-ray examinations in radiological centers, clinics and hospitals, regardless whether it is used for analog or digital imaging techniques.

## Sophisticated autotracking functions

The PRS 500 B features an autotracking X-ray tube stand adjusting its position to the wall stand bucky and to the height of the elevating table. As a result, when performing an X-ray examination of the patient in standing position in front of the wall stand, the manual positioning of the tube and further adjustments by the user become redundant. The system is also ideal for oblique examinations thanks to the automatic drive of the Bucky to the central ray position, both for X-ray table and for wall stand. A faster and more efficient work performance are the obvious benefit to the user. Frequent work steps are automated and daily work efficiency achieves a maximum - combined with a constantly high quality level - due to the sophisticated autotracking functions.

## Manual and motorized movements in one system

The PRS 500 B system features both manual and motorized movements. The demanding daily work environment depends on precision, simplicity and rapidness of the equipment, this is why the PRS 500 B offers both ways of operation. Only by this powerful combination, a maximum user comfort and an optimum workflow can be ensured. Specific positioning changes, e. g. the rotation of the controls unit, are only efficient by manual adjustment - while here the user is also assisted by very precise distance and angle indications in the touch-screen display.

The key feature of PRS 500 B X-ray system is its highly intelligent autotracking function which enables an automatic positioning adjustment of several system components to each other. This results in significant time saving in work practice, e. g. in case of vertical autotracking of the SID.

The best of both worlds for the benefit of the user – rapidness, handling comfort and longevity.

## Free positioning

360° rotation of the entire X-ray tube stand for a maximum of application flexibility. Ideal for immobile patients who should be X-ray examined directly in sickbed without relocating the person. The PRS 500 B represents the perfect alternative to more complicated and much more expensive ceiling suspension installations.

## Maximum choice – Maximum variability

CR, DR or conventional film? It doesn't matter. The PRS 500 B works reliable with all of them.

When choosing DR a comprehensive choice of detectors is offered by PROTEC. The RAPIXX series (single detector, dual detector combination, fix installed or portable/wireless systems) together with the most user-friendly CONAXX 2 image acquisition software. The complete digital X-ray solution from one source!

Furthermore PROTEC offers different models of generators, tubes, anti-scatter grids and other X-ray accessories to fulfill all desires and needs of each customer.

## Fully digital auto-stitching

In combination with the maximum user friendly PROTEC CONAXX 2 image acquisition software, you can optionally equip your PRS 500 B system with auto-stitching functionality in order to perform full leg or full spine examinations for which two or three X-ray images will be stitched.

The exposures are made from a 3 meter distance, and the wall stand Bucky and the collimator adjust automatically. The special collimator features independent shutters: only the specific area of interest is being collimated and therefore, patients are protected against unnecessary X-ray dose.

# PRS 500 B

## Technical Product Specifications

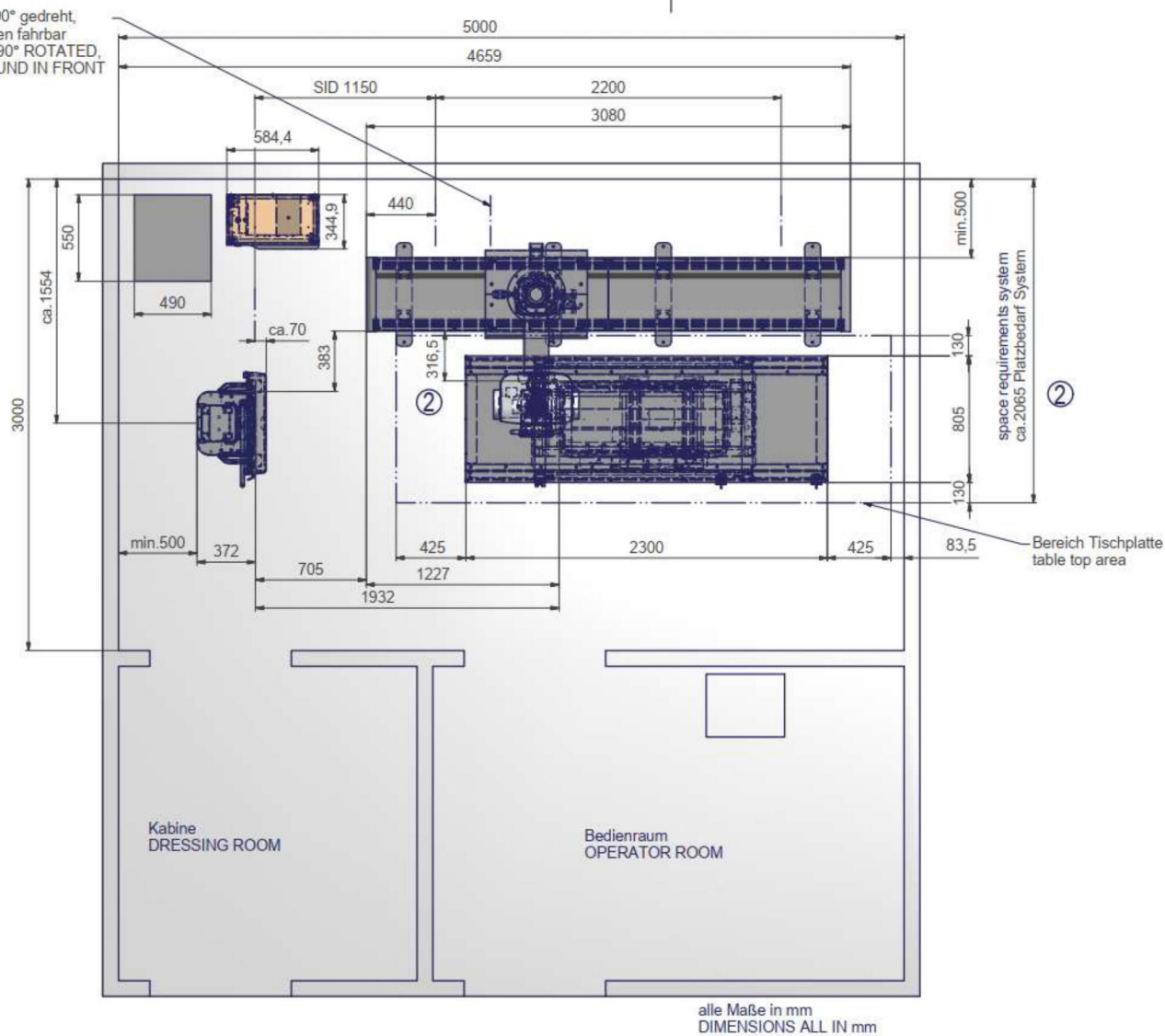
<b>Table</b>	<i>Table top dimension, standard</i>	2300 mm x 805 mm
	<i>Table top movement, transvers</i>	260 mm, +/- 130 mm
	<i>Table top movement, longitudinal</i>	900 mm, +/- 450 mm
	<i>Table top height</i>	575 – 875 mm
	<i>Table top brakes and height adjustment</i>	Electr. 4-pedal foot switch
	<i>Elevation speed</i>	Upwards: 20.4 mm/s, downwards: 22 mm/sec
	<i>Elevation time</i>	15 s
	<i>Programmable height/position for favored FFS/SID</i>	yes
	<i>Table top thickness</i>	9 mm
	<i>Table top material</i>	MDF
	<i>Al. attenuation equivalent @100 kV</i>	1.0 mm Al
	<i>Min. distance Bucky center to table head end</i>	400 mm
	<i>Min. distance Bucky center to table foot end</i>	380 mm
	<i>Distance table top to image receptor</i>	70 mm
	<i>Patient load, max.</i>	320 kg
<b>Operating unit</b>	<i>Angulation X-ray tube assembly</i>	
	<i>Around horizontal support arm</i>	+/- 180°
	<i>Around tube column</i>	360°, +/-180°
	<i>Detents at</i>	-90°, 0°, +90°
	<i>Brakes for the movements of the column</i>	electromagnetic
	<i>Control of the brakes</i>	at control handle
	<i>Power supply of the column</i>	via Power Box (230V)
	<i>Height tube column</i>	2400 mm
	<i>Tube stand longitudinal travel</i>	2200 mm
	<i>Focal spot to table to distance</i>	max. 1225 mm
	<i>Focal spot vertical travel @ horizontal X-ray beam</i>	350 – 1900 mm
	<i>Autotracking</i>	Height adjustment table → autotracking tube Moving or turning tube → autotracking Bucky Positioning wall stand Bucky → autotracking tube
<b>Wall stand</b>	<i>Column height</i>	2290 mm
	<i>Vertical shift receptor center</i>	350 – 1900 mm
	<i>Distance Bucky cover to image receptor</i>	70 mm
	<i>Vertical movement via remote control</i>	Yes
<b>Bucky</b>		Different models selectable
	<i>Cassette/detector sizes</i>	13 x 18 cm - 43 x 43 cm
	<i>Longitudinal travel</i>	500 mm
	<i>Grid</i>	Different models selectable
<b>Tube</b>		Different models selectable
<b>Collimator</b>		Different models selectable
	<i>Automatic switch-on collimator light</i>	Yes, switches on automatically when moving
	<i>Light remote switch-on</i>	Yes, wall stand button to switch on

<b>Generator</b>	Venus- or Polydoros series selectable
<b>Total weight</b>	approx. 900 kg
<b>Upgrades</b>	
Flat panel detector	RAPIXX series – optional, selectable
3-field measuring chamber	optional
Touch display	yes
Dose area product meter	optional



# Space requirement standard / Platzbedarf Standard

SID max. 1500mm, Röhre 90° gedreht,  
vor dem Tisch bis zum Boden fahrbar  
SID MAX. 1500mm, TUBE 90° ROTATED,  
MOVEABLE TO THE GROUND IN FRONT  
OF THE TABLE



Raumhöhe min. 2,5m  
Optimale Raumhöhe min. 2,7m

ROOM HEIGHT MINIMUM 2.5m  
OPTIMAL ROOM HEIGHT MINIMUM 2.7m

Verschiedene Raumplanungen sind im Dokument „Room\_Drawing\_PR5500B“ abgebildet.  
DIFFERENT ROOM PLANS ARE SHOWN IN THE DOCUMENT „ROOM\_DRAWING\_PR5500B“.