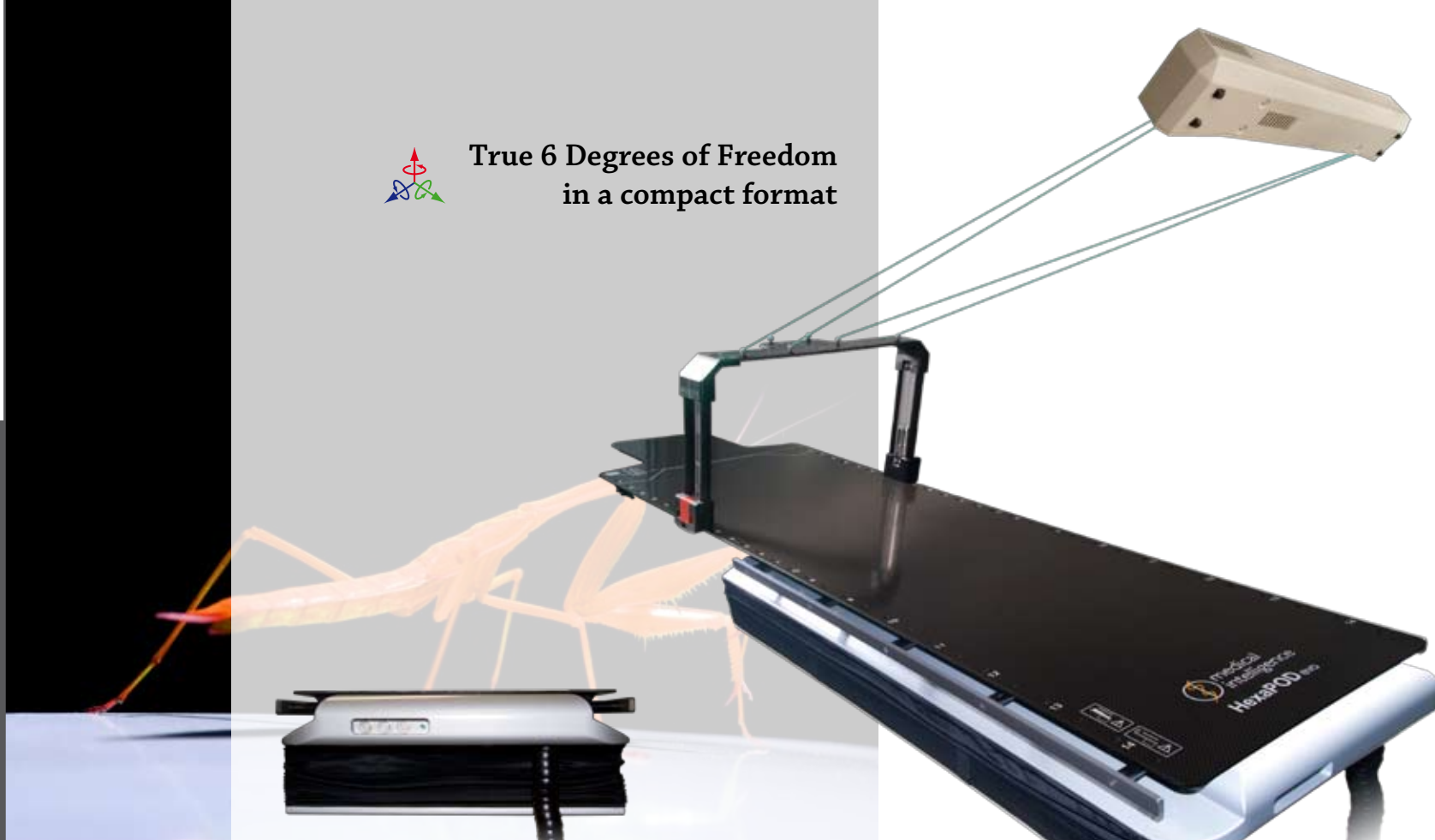




True 6 Degrees of Freedom  
in a compact format



## HexaPOD evo RT System

Vision-guided patient positioning

The HexaPOD™ evo RT System is the next generation robotic patient-positioning platform with six degrees of freedom. Incorporating all the well known features of the precursor HexaPOD RT CouchTop with greatly improved patient access and clearance aperture, HexaPOD evo RT System is a true evolution in vision guided patient positioning. Further, a reduction in height of 13 cm (5,12 inches) ensures convenient loading and unloading of the patient.

The HexaPOD evo RT System guided by an infrared-camera enables sub-millimetre patient positioning accuracy in six degrees of freedom, improving clinical workflow and clinical confidence. The system corrects translational errors (x, y, z) as well as all rotational errors (roll, pitch and yaw).

Accurate and remote geometric correction of any misalignments detected by state-of-the-art image guidance systems are enabled by HexaPOD evo RT System, thereby closing the gap in the 6DOF (Degrees Of Freedom) IMRT and IGRT localisation and tumour targeting chain. 6DOF facilitates IGRT guided SRT by simplifying corrections for rotational misalignment and changes in anatomy.

HexaPOD evo RT CouchTop offers improved speed of movement and a new designed handheld controller and iGUIDE® tracking system with simplified control. The tracking system is composed of the iGUIDE software and a new generation infrared camera system. The tracking system aligns the patient to the defined isocenter coordinates or to the latest coordinates entered in the software. This significantly aids patient positioning.

The new HexaPOD evo RT system further simplifies workflow by providing a physical rotation point at the tumour isocentre. The

physical rotation point has been shifted longitudinal to the head end of the couchtop. This repositioning of the rotation point also facilitates faster and easier system movements.

The newest generation of homogeneous carbon fibre couchtop, based on the iBEAM® evo Couchtop, has also been implemented in the HexaPOD evo RT System. It is completely constructed from carbon fibre, making it ideal for imaging. All fixation points for the extensions are made out of solid carbon fibre further reducing the risk of image artefacts and guaranteeing brilliant image quality for IMRT, IGRT and VMAT.

### HexaPOD evo RT System Features

- Improved patient access with lower loading and unloading height
- Increased patient clearance on the linac
- Computer-controlled robotic treatment couchtop
- Six degrees of freedom (x, y, z, roll, pitch and yaw)
- Remote positioning correction
- Achieves sub-millimetre positioning accuracy with zero fiddle factor
- iGUIDE graphical user interface is easy to use and self-explanatory
- Specifically designed for intensity modulated radiation therapy (IMRT), image-guided radiation therapy (IGRT), stereotactic radiation therapy (SRT) and volume modulated arc therapy (VMAT)
- Equipped with the newest generation of carbon fibre couchtop which significantly reduces appearance of artefacts



## HexaPOD evo RT System Clinical Workflow



Select the patient and treatment data on the iGUIDE® Workflow Software.

Position the patient on his specific BodyFIX® BlueBAG™ for accurate repositioning.

Then, place the reference frame over the patient.

Position the patient manually at the room isocentre for initial patient positioning; align the patient according to the skin tattoos.

The iGUIDE Workflow Software is zeroed and enables the HexaPOD™ evo RT CouchTop to perform the relative table movement.

Acquire a volume image of the patient, perform on-line registration and enter the correctional data of the exact tumour position into the iGUIDE Workflow Software.

The iGUIDE System precisely drives the HexaPOD evo RT CouchTop to the exact tumour coordinates.

The patient receives treatment.

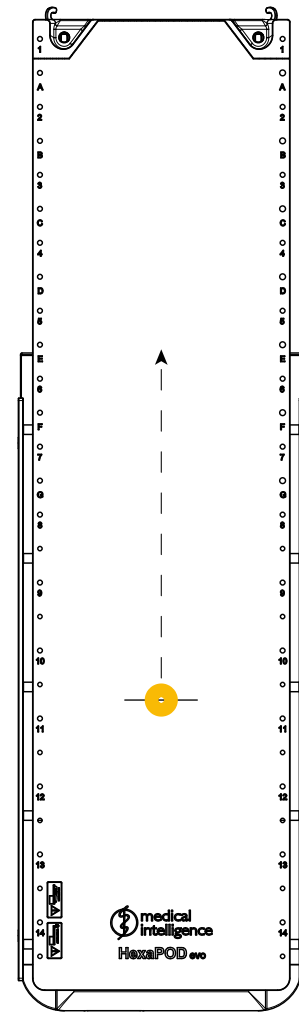
Once treatment is completed, set down the treatment table to the lower position and release the patient. The correctional data will be automatically stored in a patient database and reused for the next fraction.

## HexaPOD evo RT System Specifications

Range of linear and angular motion	vertical	± 40 mm
	lateral / longitudinal	± 30 mm
	pitch / roll / yaw	± 3°
Resolution	0.1 mm	
Moving Speed	up to 16 mm/sec linear translational movement	

## Couchtop Specifications

Component	Attenuation @ 6 MV	Attenuation @ 10 MV
Couchtop	2.4%	1.9%
Extension 650	2.4%	1.9%
Extension H&N	1.5%	1.3%



Physical rotation point has been shifted towards gantry to facilitate faster and easier system movements

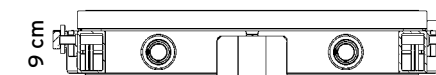
## Comparison of the robotic couchtops



HexaPOD evo RT CouchTop



HexaPOD RT CouchTop



Elekta C-arm couchtop

As the original couchtop will be removed, its respective height can be deducted from the above mentioned figures.

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