

02-15

New 6D-Robotic Couch by gKteso increases throughput in radiology departments

RPS saves time and money in radiotherapy with linear accelerators

Radiotherapy with linear accelerators is an established treatment program in many clinics and medical centers. Radiology and everything related to it is subject to highest technical quality criteria and extensive documentation obligation. At the same time it is important to consider patient comfort as well as commercial aspects.

RPS (Radiotherapy Patient System) by gKteso GmbH enables clinics to get a grip on these partially contradicting requirements. Guido Kübler, founder and Managing Director of the mid-size company, located in Bobingen near Augsburg, Germany, knows what he is talking about. “As long as 25 years ago, we started to develop and construct 6D-controlled patient platforms. From our continuous contact with clinics, we know which characteristics a modern patient platform needs to have.”

In addition to easy handling, multidimensional adjustment options, compatibility with add-ons and high comfort for the patient, especially reliable quality at sustainable cost is required. The certification according to ISO 9001 and the compliance with ISO 13485 proves that the company meets all conditions regarding design and production of medical devices.

“In the development of RPS, the company has applied all its experience connected with patient platforms”, explains Guido Kübler. RPS with its 6D-Robotic Couch as key element is available in two models, RPS base and RPS extended. Both models are equipped with an RFID-Reader which reads in all fixation aids applied, providing those, together with the patient data, for further software. Once saved, the 6D-Robotic Couch will re-approach the desired position at the touch of a button. Storing the exact setting on an RFID-Chip

02-15

makes multiple day treatment cycles less time-consuming for both medical personnel and patient.

Six degrees of freedom for precise patient positioning

The high precision platform RPS base, movable in 6D, features high rigidity and supports precise radiotherapy by means of 6D-control. The patient lies on it perfectly stable and exactly aligned.

The low entry height facilitates climbing onto the platform. Additional comfort is ensured by the large procedural area from head to pelvis.

The patient platform is adjustable in height from 64 to 151 cm (25 to 59") at a velocity of 0 to 50 mm (0 to 2") per second. In RPS base, the margin provided in the lateral alignment is of up to plus/minus 25 cm (+/- 10") and in the length of up to plus/minus 57 cm (+/- 22") at 0 to 80 mm (0 to 3") per second. A large compensation angle of up to five degrees in any direction allows flexible adaptation to the radiation position.

RPS base also ensures pinpoint radiotherapy of the defined tissue by means of an additional external tracking procedure. An internal or external marker defines precisely both position and movement of an organ. Based on these coordinates, the patient platform will correct organ movements automatically.

Compatible with add-ons

RPS base is designed for the attachment of current add-ons, such as masks and vacuum mattresses. Here is one example: Radiotherapy in the head or neck area requires, aside from positioning aids, fixation by a mask in order to protect sensitive, adjacent organs such as thyroid, eyes, brain and spinal cord from being unnecessarily strained. The individually fitted mask made of special thermoplastic material may be attached as add-on to RPS base.

02-15

RPS extended enables preparation of up to three patients for radiotherapy

RPS extended features all advantages of RPS base, but with the addition of a satellite system it increases the efficiency of radiotherapy with linear accelerators. Up to three patients may be prepared for radiotherapy simultaneously. After the preparatory phase, automated satellite arms gently move the patient to the room with the radiation system. This is where the medical staff will review the fine-tunings on the patient. Once radiotherapy is completed, the patient is transferred back to the cabin and may leave the patient platform.

With its innovative concept, especially RPS extended increases the cycle time of treatments with linear accelerators. “Our patient platform system RPS extended streamlines preparation processes significantly. Treatment costs may be reduced by more than 55 percent”, states Guido Kübler, adding: „Aside from the commercial aspect, also the human aspect should be considered. In the preparation room, the treatment team gains much more time for the individual patient, due to the stored settings of the platform.”

Simplified documentation

RPS offers many advantages for clinics and medical centers. „The integrated RFID Reader in RPS base and RPS extended simplifies the documentation of the preparation for radiotherapy. Clinics save time and money, as data no longer need to be recorded manually“, emphasizes Guido Kübler.

In modernization of radiological systems, clinics and radiotherapy centers also benefit from RPS. As the system is compatible with older linear accelerators, expenses for re-equipment are exactly calculable.

((Dieser Text hat 5.170 Zeichen))

About gKteso:

gKteso specializes, among other areas, in the development of patient platforms with 6D-control for radiotherapy with linear accelerators. With RPS base and RPS extended, gKteso is now entering the international medical technology market. About 25 years ago, mechanical engineer Guido Kübler, founder and Managing Director of the company, started with the development and manufacturing of electronically controlled platforms for various applications. As a classic OEM, the company is distributor to distinguished international partners. The patient platform RPS extended by gKteso convinces both clinics and medical centers with numerous features making radiotherapy with linear accelerators more efficient and more comfortable for the patient. The accurate and reproducible positioning as well as the quality of patient fixation represents a substantial aspect. Another important advantage is the efficiency of this innovative system, as with RPS extended up to three patients can be simultaneously prepared for radiotherapy with linear accelerator by means of a specific satellite system.

Press Contact:**gKteso GmbH**

Technologies & Solutions

Guido Kübler

Hans-Böckler-Straße 3

D - 86399 Bobingen

Phone: +49 (0) 8234 / 966 38 41

E-Mail:

info@gKteso.comwww.radiotherapy-patient-system.com**Saupe Communication GmbH**

Michael Saupe

Industriestr. 36-38

D - 88441 Biberach

Phone: +49 (0) 7351 - 1897-10

E-Mail:

saupe@saupe-communication.dewww.saupe-public-relations.de