

## Siemens receives FDA Clearance for Multitom Rax Robotic X-ray System

30 November 2015 | News | By BioSpectrum Bureau

### Siemens receives FDA Clearance for Multitom Rax Robotic X-ray System



Siemens Healthcare has announced that the US Food and Drug Administration (US FDA) has cleared the Multitom Rax (Robotic Advanced X-ray). It is a universal diagnostic imaging system that enables a wide range of examinations in multiple clinical areas from emergency medicine and interventional to pain management and orthopedics, and from conventional 2D radiography to fluoroscopy examinations and angiography applications - all in one room using one X-ray system.

The world's first Twin Robotic X-ray system, the Multitom Rax boasts a unique design that enables, for the first time, the acquisition of 3D natural weight-bearing images.

"With the Multitom Rax, Siemens is proud to introduce the world's first Twin Robotic X-ray system," said Mr Martin Silverman, VP of X-ray Products at Siemens Healthcare North America. "This universal X-ray system delivers unprecedented versatility for health care facilities. Now, clinicians can perform a multitude of imaging exams in one room without moving the patient. With the Multitom Rax, we're opening a new chapter in X-ray technology."

The unique open design of the Multitom Rax Twin Robotic X-ray system features a height-adjustable patient table and two independent, ceiling-mounted robotic arms for the X-ray tube head and the flat-panel detector for almost unlimited positioning freedom anywhere in the room.

Both robotic arms can be moved into position automatically or manually with servo motor support to make fine adjustments. While one robotic arm moves the X-ray tube, the other arm carries the 17" x 17" flat panel detector, which can acquire static, dynamic, and Real 3D sequences. The operator is always in control of the system's movement and able to position both robotic arms precisely and safely around the patient.

The Multitom Rax Twin Robotic X-ray system enables, for the first time, the acquisition of 3D images under the patient's natural weight-bearing condition - whether they are seated, lying down, or standing. Images acquired in the natural standing

position are essential because the knees, pelvis and spinal column appear differently when the patient's body weight is applied compared to when the patient is lying down.

The Multitom Rax's 3D-ready image capabilities can offer better diagnostic and planning certainty than images that do not reflect a natural weight-bearing condition. Conventional 2D X-rays do not always reveal fine hairline fractures in the bone. In cases of a suspected bone fracture, the patient historically has required a computed tomography (CT) 3D image to confirm the diagnosis. With the Multitom Rax Twin Robotic X-ray system, a 3D image can be acquired on the same system, so the patient does not have to wait for a future appointment or be transferred to a CT system.

Built-in features like Comprehensive CARE (Combined Applications to Reduce Exposure) and more precise positioning of the system aid in reducing patient radiation dose.