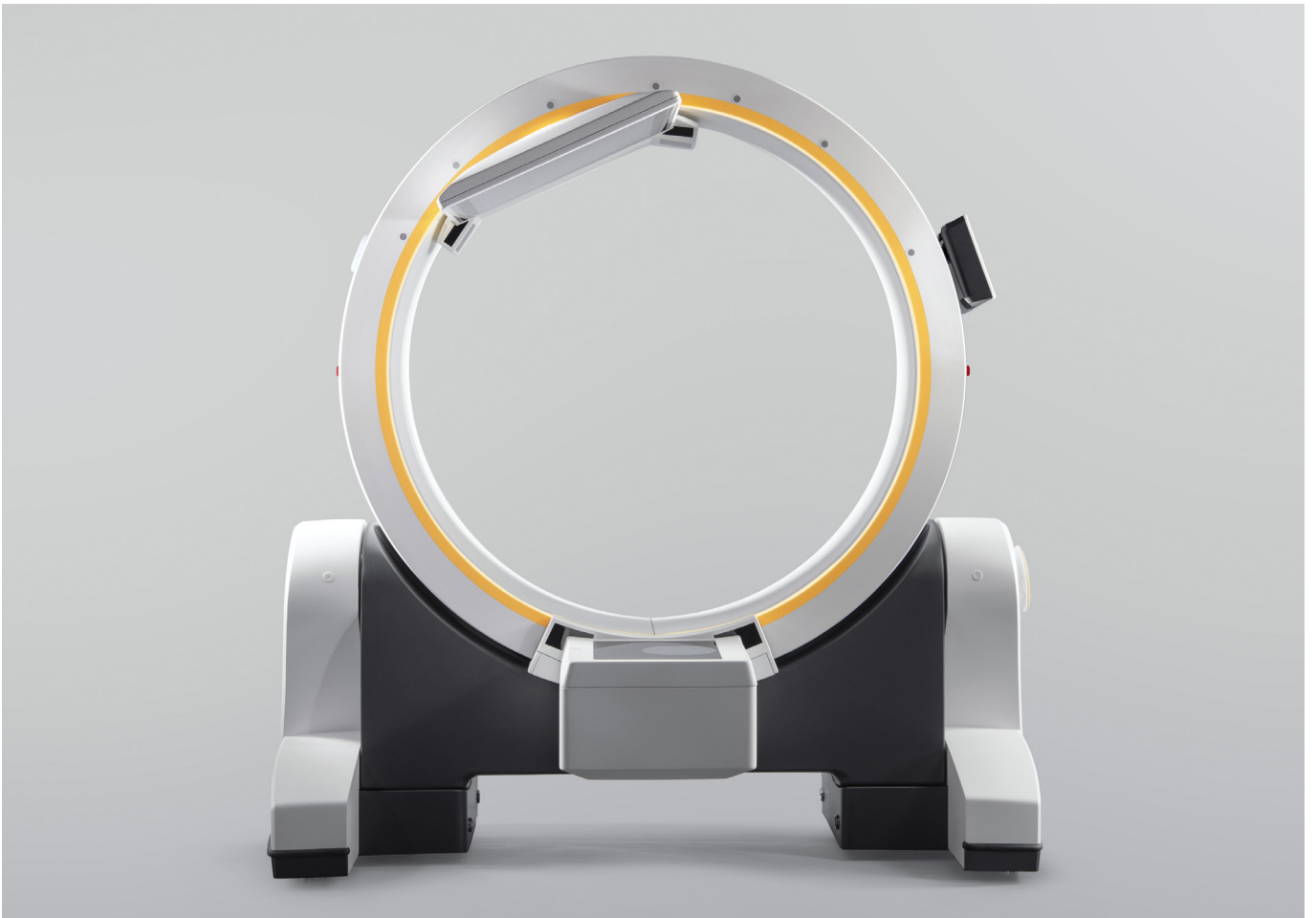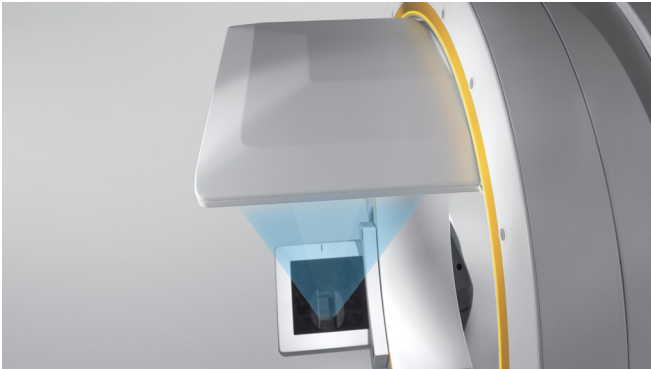Portfolio

Loop-X
Mobile imaging robot

Loop-X® is a closed loop, 2D and 3D mobile imaging robot that redefines how scanner and navigation work together to automate movements that accurately follow the surgical workflow.

Adaptive collimation

Adaptive collimation constantly changes the size and direction of the X-Ray beam to fit the region of interest. As a cone beam CT scanner, Loop-X is capable of generating a 25 x 60 cm 2D field of view and 3D volumes of 25 x 48 cm. With adaptive collimation, you can scan an area as small as 3 x 3 cm, enabling focused radiation to reduce dose by sparing surrounding tissue.

Non-isocentric imaging

The independent movement of source and detector creates a dynamic field of view, enabling non-isocentric patient positioning. In other words, patients don't need to be positioned in the center of the gantry, since the system moves the scan area to the region of interest.

Robotics

Autonomous movement of Loop-X to defined parking and imaging positions creates an efficient surgical workflow. The surgeon can control the system from the sterile field with these stored positions as well as live navigation. Loop-X reduces scanner interaction, ensuring an optimized, time-saving workflow and giving surgeons imaging freedom and control in the O.R.