SIREMOBIL Iso-C$^{3D}$
Breathtaking Views in the OR!
A Whole New Perspective: Mobile C-arm with 3D Imaging

First you’ll experience Breathtaking Views! Just as a three-dimensional image of a distant horizon or a close 3D look at hidden details generates viewer excitement, your first experience with 3D images in the OR will leave a lasting impression.

Soon your fascination will give way to appreciating the possibilities. Up to now, the imaging of anatomical structures during surgical interventions has been, for the most part, two-dimensional. But three-dimensional imaging goes far beyond fascination to provide you more information and higher certainty during OR procedures.

With both scale as well as details in a whole new focus, you discover more exact, detailed representations of the objects you observe – and new horizons for using imaging in the OR.

Seeing in 3D means seeing more. Seeing more means improved productivity and patient care.

Siemens has again expanded the capabilities of mobile C-arm applications. The revolutionary three-dimensional imaging of SIREMOBIL® Iso-C3D creates a new standard in the OR. Let SIREMOBIL Iso-C3D’s Breathtaking Views show you the benefits of new perspectives and the possibilities of intra-operative three-dimensional imaging.
With SIREMOBIL Iso-C³D, Siemens sets a new standard in the field of mobile C-arm imaging.

Building on the benefits of the true isocentricity and 190° orbital rotation of the renowned SIREMOBIL Iso-C, developed especially for easy and precise imaging during surgery, SIREMOBIL Iso-C³D adds the choice of 2D and 3D imaging. In comparison with potential 3D modalities which may be used in the OR, SIREMOBIL Iso-C³D allows virtually unlimited patient access without increasing preparation time and complexity of the procedure. The 3D functionality of SIREMOBIL Iso-C³D is best suited for intra-operative use in orthopedics and trauma surgery.

During a motorized orbital rotation of 190°, a set of defined projections in fixed angular steps is recorded. A high-resolution, isotropic 3D dataset is generated and available directly upon completion of the orbital rotation. Immediately after, arbitrary multiplanar reconstructions (MPR) can be executed in real-time. MPR can be performed either directly from the OR table with a special mouse, or at the monitor trolley.

SIREMOBIL Iso-C³D for intra-operative 3D imaging in the OR.
Simple – Fast – Anytime
SIREMOBIL Iso-C$^3$D
Intra-operative 3D Imaging in Clinical Routine –
the New Standard in the OR

SIREMOBIL Iso-C$^3$D is primarily designed for intra-operative use with bones and joints of the lower and upper extremities, as well as for the cervical spine.

Intra-operative 3D imaging is especially important for the precise reconstruction of joint surfaces, complex fractures, and the exact positioning of screws and implants. Routine use of 3D imaging increases the levels of quality and safety during these surgical interventions.
Elbow fracture
Display of an elbow fracture with fissure extending into the joint in three MPR planes.

Hand in SSD (Surface-Shaded Display)
from three different views.
Normal cervical spine
Display of a normal cervical spine in three MPR planes.
Knee

Normal knee Display of the knee in three MPR planes.
SIREMOBIL Iso-C\textsuperscript{3D} 
3D Imaging – Consistent Implementation of Isocentricity

SIREMOBIL Iso-C\textsuperscript{3D} is based on SIREMOBIL Iso-C, the first mobile C-arm with true isocentricity. In comparison with standard C-arms, the central beam always remains in the point of rotation of the C-arm, regardless of the orbital angle. In addition, this special C-arm design features an orbital angular range of 190°.

When operating in 2D, many applications frequently require alternate AP/lateral projections and vice versa. With the isocentric design, time-consuming horizontal and vertical adjustments of the C-arm or corrective movements of the entire chassis are unnecessary. This results in time savings and a reduction in dose for the OR team and the patient.

3D imaging is made possible with true isocentricity and 190° orbital rotation in combination with hidden cables. The region of interest (ROI) always remains in the same position, regardless of the actual projection angle, so that a data volume can be generated around the isocenter.

Traditional C-arms have an offset between the point of rotation and the central beam. For different projection angles this requires cumbersome readjustments of the vertical and horizontal movement which takes time and can lead to unnecessary radiation exposure. Furthermore the design limits the orbital movement to approx. 115°.

The truly isocentric design of SIREMOBIL Iso-C\textsuperscript{3D} keeps the central beam always in the point of rotation independently of the projection angle. No readjustments are required resulting in time and dose savings. Furthermore the design yields an orbital movement of 190°.
A Perfect Match: The Modular Concept and SIREMOBIL Iso-C\textsuperscript{3D}

SIREMOBIL Iso-C\textsuperscript{3D} is additionally equipped with motorized 190° orbital rotation, as well as with hardware and software components for 3D imaging. These 3D components were designed for full modular compatibility so that all existing and future SIREMOBIL Iso-C systems can be upgraded to 3D imaging capability.

Whatever version you choose – SIREMOBIL Iso-C or its 3D version SIREMOBIL Iso-C\textsuperscript{3D} – modular compatibility provides cost effectiveness and investment protection, now and in the future.
High functionality and ease of use have always described Siemens C-arms. Especially during surgery, where speed and precision are essential, it’s important to work with easy to use equipment optimized for streamlined clinical operation – equipment like SIREMOBIL Iso-C³D.

SIREMOBIL Iso-C³D provides full-range DICOM 3.0 functionality for both 2D and 3D mode. Whether you wish to access pre-surgical demographic patient data or archive/transfer images post-surgically, SIREMOBIL Iso-C³D offers virtually all networking options.
Monitor trolley with 3D components
Keyboard
Monitors: 2D/3D Mode
CD ROM, CD burner
Hidden cables
SIREMOBIL Iso-C\textsuperscript{3D}  
Want to Learn More about the New Standard in the OR?

Please contact your local Siemens sales representative for more information about the innovative SIREMOBIL Iso-C\textsuperscript{3D} and other top-quality Siemens Imaging Systems.

You can also access information on the Internet at:

SiemensMedical.com