GE HealthCare

OEC 3D

Spine procedural imaging

Precise images

CT-like images in the operating room

Reduce the need for two C-arms in the operating room with OEC 3D, a single mobile CBCT C-arm that performs both 3D and 2D imaging easily.

Precise

The OEC 3D provides comprehensive imaging coverage with precise 19 cm x 19 cm x 19 cm 3D volumes – 67% larger volume[2]- to see more levels during a spinal fusion, as well as exceptional fluoroscopy images during procedures.

Clear

The OEC 3D Volume Viewer presents 3D volumes in five perspectives: Axial, Coronal, Sagittal, MIP, and VR. Enhance fluoroscopy imaging with Spine and C-Spine preset profile. Review mCBCT and fluoroscopy images on a large 4K display that easily adjusts for viewing comfort.

In-Depth

Analyze CT-like images with the OEC 3D Volume Viewer which includes Multi Oblique Mode, Magnifier, rotate, zoom, and more for quick and comprehensive visualization. Scroll through the 512 slices or adjust slice thickness to aid in visualization of spinal structures.

Relevant

Overlay 3D regions or lines of interest selected from the volume onto live fluoroscopy with Augmented Fluoroscopy[1]. Automatically assigned motorized presets allow one touch gantry positioning for a top-down or perpendicular view of a line overlay.

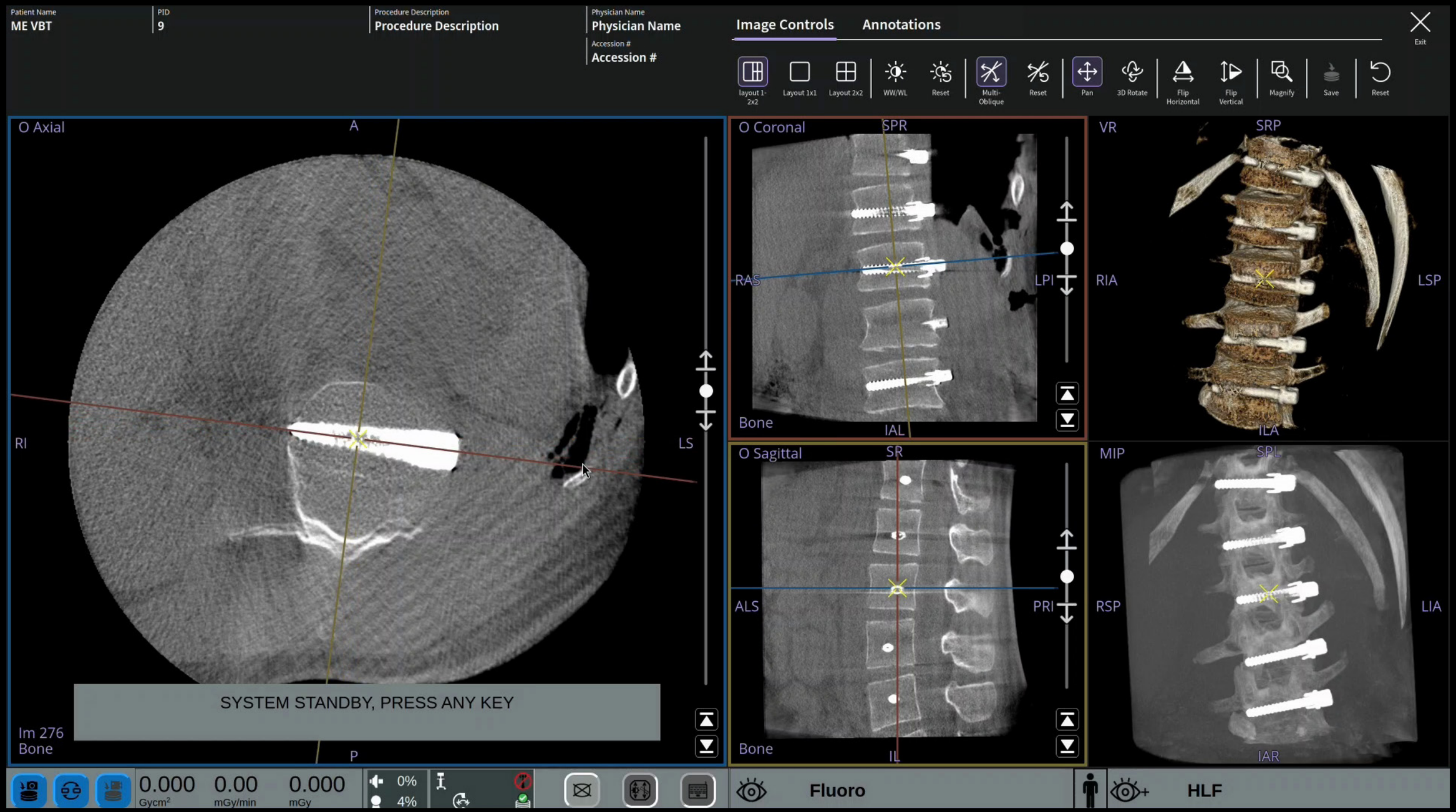
Retrospective

Leverage retrospective reconstruction after a m-CBCT acquisition to reduce metal artifact and noise for a desired look. The OEC 3D presents multiple ways for clinicians to plan, analyze, and confirm during a procedure.

[1]Optional in select countries
[2]Compared to other 3D C-arm published specifications

Volumes of detail

View CT-like images in minutes during spine procedures.



Efficient workflow

Streamline
Reduce need for scout images with Live View, which gives a real time look at C-arm detector positioning without using X-ray. A motorized preset, overlay mask, and positional indicators of a saved Live View position provide repositioning aid.

Consistent
Achieve desired oblique angles during fluoroscopy with user-controlled speed up to 15° per second as well as multiple saved presets for positioning gantry. Set a preset from current position, by inputting angles, or saving MIP and VR rotations in the volume.

Lightweight
At a light weight of 740 lbs, easily move the OEC 3D C-arm around a patient table or room to room without battery powered floor movement, bringing adaptability to every procedural suite.

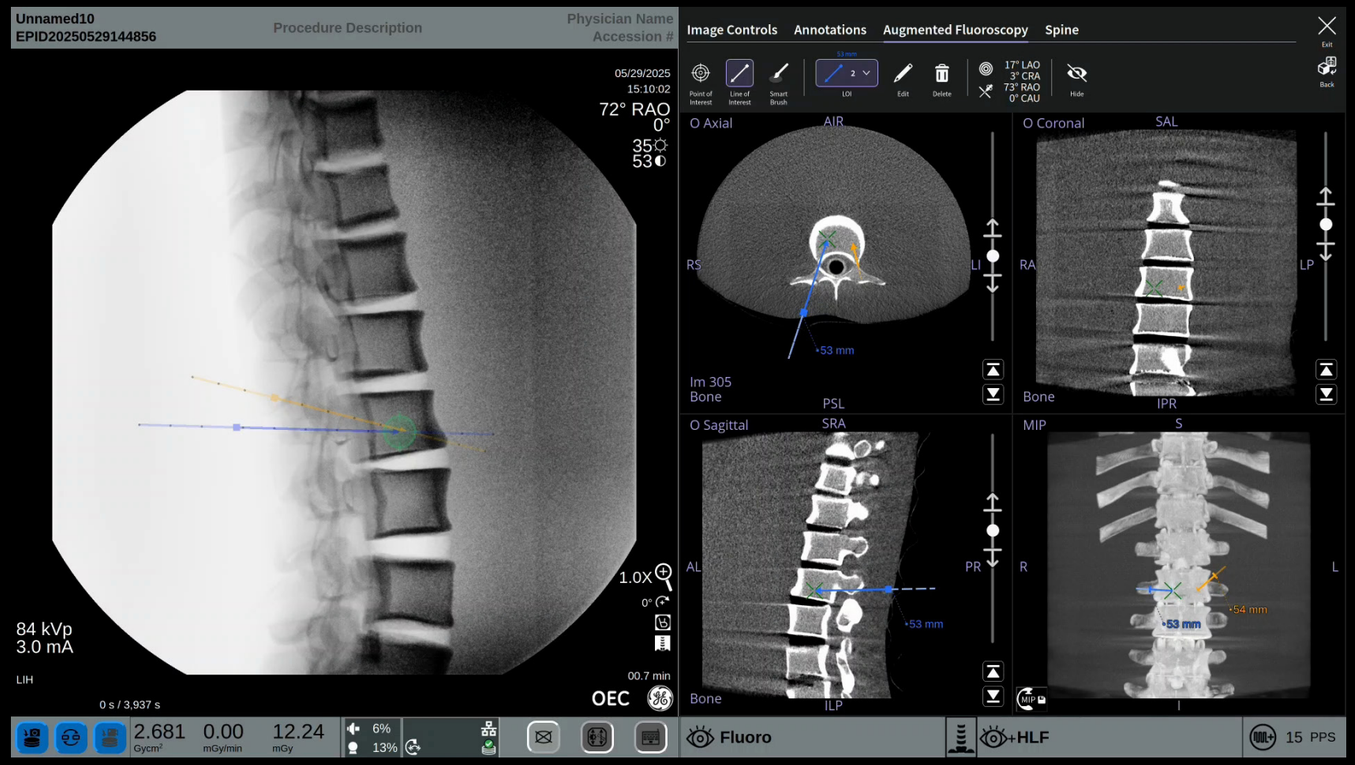
Quick
In less than a minute, the OEC 3D powers up and is available for 2D or 3D imaging. With 30 second acquisition and 30 second reconstruction for a typical scan, 3D images are ready swiftly for review.

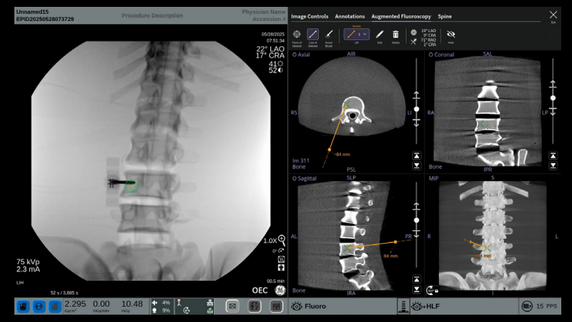
Convenient
Control imaging from within the sterile field or step away with the OEC Touch Tableside*, a rollstand with all the control functionality available on the C-arm.

*Optional in select countries

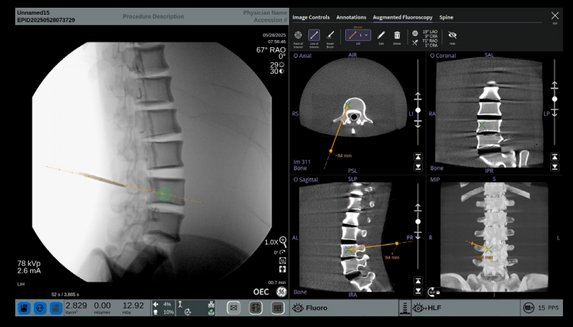
Spine Suite

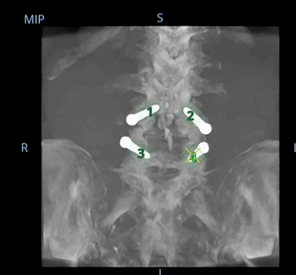
Optional package of software features



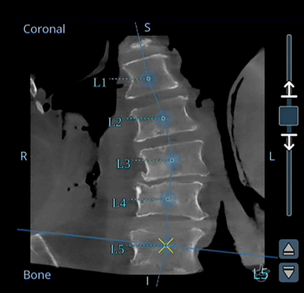


Augmented Fluoroscopy: Regions and Line of Interest
Bullseye View (above) & Progress View (below)
in Volume Viewer on workstation display





Screw detection and numbering



Centerline tracing and manual vertebrae labels

Overlay

Augmented Fluoroscopy overlays 3D regions or lines of interest selected in the volume onto live fluoroscopy aiding in visualization during a procedure. Regions can be marked with target points or highlighted using the Smart Brush tool.

Position

Move gantry for top down or perpendicular views of a line of interest with Line of Interest Guidance Presets, two motorized presets automatically assigned when a line is drawn in Augmented Fluoroscopy.

Detect

Review screw placement with automatic detection and numbering within the OEC 3D volume. Thoroughly assess positioning with oblique views relative to pedicle and vertebral body cortices viewable in all 3D perspectives.

Label

Manually label spine levels (cervical, thoracic, lumbar, and sacral vertebrae) in the OEC 3D mobile CBCT volume.

Centerline

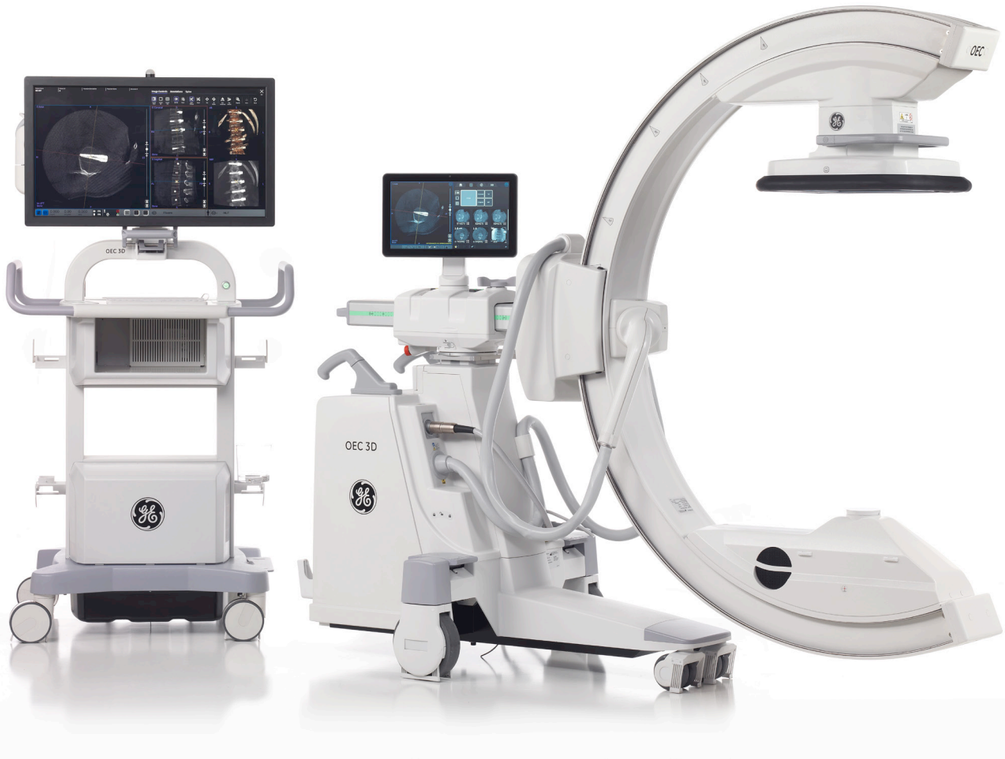
Trace an alignment centerline/ midline on a spinal curvature. Images are obliquely reformatted according to kyphotic, lordotic, and scoliotic curvatures. Each image dynamically reformats when scrolling along the centerline in the axial direction.

Open

OEC 3D Spine Suite includes an OEC Open verified interface to transfer 3D volume data sets seamlessly to a verified navigation and robotic system.

Augmented Fluoroscopy visuals obtained using phantom

Everyday imaging



Versatility

The clinical versatility of this mobile CBCT C-arm makes the OEC 3D ideal for any operating room or interventional suite. Whether used exclusively for spine procedures or shared across departments, OEC 3D has advanced 2D and 3D imaging features for every day utilization.

Minimize

Minimizing X-ray exposure to patients and clinicians is important while ensuring optimal image quality is achieved. The OEC 3D has multiple features to minimize dose including Low Dose Mode, Live View camera, laser aimers, and preset profiles and modes based on preference.

Connectivity

OEC 3D supports flexible image viewing throughout the surgical suite. OEC 3D images can be displayed on additional in room monitors via DisplayPorts or Live Cast* wirelessly, easily adapting to a viewing setup that works for room layout.

Security

Protecting patient health information is critically important and concerns about cyber security continue to increase. The OEC 3D provides data encryption at rest, runs on a Linux operating system, and enables user level access controls. Images and dose reports can be exported via USB or transferred via DICOM.

*Optional in select countries

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Availability of select models, configurations, and options varies by country.
Please contact your local sales representative.

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