NC DEPARTMENT OF
HEALTH AND
HUMAN SERVICES

ROY COOPER • Governor
MANDY COHEN, MD, MPH • Secretary
MARK PAYNE • Director, Division of Health Service Regulation

December 20, 2018

Elizabeth Kirkman
Atrium Health
2709 Water Ridge Parkway, Suite 200
Charlotte, NC 28217

Exempt from Review – Replacement Equipment

Record #:	**2819**
Facility Name:	Carolinas Healthcare System NorthEast
FID #:	943049
Business Name:	The Charlotte-Mecklenburg Hospital Authority
Business #:	1770
Project Description:	Replace and relocate interventional radiology equipment in room #9
County:	Cabarrus

Dear Ms. Kirkman:

The Healthcare Planning and Certificate of Need Section, Division of Health Service Regulation (Agency), determined that based on your letter of December 11, 2018, the above referenced proposal is exempt from certificate of need review in accordance with N.C. Gen. Stat. §131E-184(a)(7). Therefore, you may proceed to acquire without a certificate of need the Siemens Artis Q Single Plane interventional radiology equipment to replace the Siemens Axiom Artis dTC/dTA Detector System interventional radiology equipment.

Moreover, you need to contact the Agency's Construction, Radiation Protection, and Acute and Home Care Licensure and Certification Sections to determine if they have any requirements for development of the proposed project.

It should be noted that the Agency's position is based solely on the facts represented by you and that any change in facts as represented would require further consideration by this office and a separate determination. If you have any questions concerning this matter, please feel free to contact this office.

Sincerely,

Gloria C. Hale

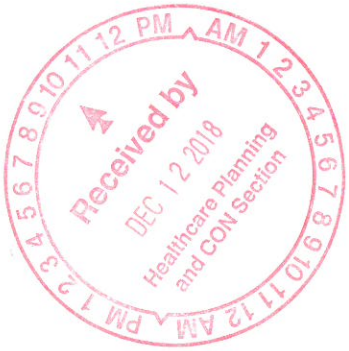
Gloria C. Hale
Team Leader

Martha J. Frisone

Martha J. Frisone
Chief, Healthcare Planning and
Certificate of Need Section

cc: Construction Section, DHSR
Radiation Protection Section, DHSR
Acute and Home Care Licensure and Certification Section, DHSR
Melinda Boyette, Administrative Assistant, Healthcare Planning, DHSR

Atrium Health



December 11, 2018

Ms. Martha Frisone, Chief
Healthcare Planning and Certificate of Need Section
Division of Health Service Regulation
N.C. Department of Health & Human Services
809 Ruggles Drive
Raleigh, NC 27603

RE: Notice of Exemption for Two Projects on the campus of The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Healthcare System NorthEast: 1) Replace and Relocate Interventional Radiology Equipment in Interventional Radiology Room #9 and 2) Replace and Relocate Interventional Radiology Equipment in Interventional Radiology Room #11

Dear Ms. Frisone:

The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Healthcare System NorthEast (CHS NE) is planning to replace and relocate two of its existing interventional radiology rooms with new, technologically comparable equipment. The existing equipment is currently located in Interventional Radiology Room #9 and Interventional Radiology Room #11 on the first floor of the Clinical Services Building on the main campus of CHS NE. The replacement equipment will be relocated to the new patient tower that is currently under development on the main campus of CHS NE pursuant to previously approved Project ID #F-8219-08.

Pursuant to N.C.G.S. 131E-176(22a) which defines replacement equipment and N.C.G.S. 131E-184(a)(7), which provides an exemption from certificate of need review for replacement equipment projects if prior notice is provided to the CON Section, the following letters serve as prior notification of our intent to proceed with the two projects discussed above. We would appreciate your written concurrence that these projects are exempt from CON review. If you have any questions or require further information regarding this project, please contact me at 704-446-8475.

Sincerely,

Elizabeth Kirkman

Elizabeth Kirkman, Assistant Vice-President
Atrium Health Strategic Services Group

Atrium Health

December 11, 2018

Ms. Martha Frisone, Chief
Healthcare Planning and Certificate of Need Section
Division of Health Service Regulation
N.C. Department of Health & Human Services
809 Ruggles Drive
Raleigh, NC 27603

RE: Replace and Relocate Interventional Radiology Equipment on the campus of The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Healthcare System NorthEast

Dear Ms. Frisone:

The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Healthcare System NorthEast (CHS NE) is planning to replace and relocate one of its existing interventional radiology rooms with new, technologically comparable equipment. CHS NE intends to purchase a Siemens Artis Q Single Plane System to replace a Siemens Axiom Artis dTC/dTA Detector System that was installed in 2007. The existing equipment is currently located in Interventional Radiology Room #9 on the first floor of the Clinical Services Building on the main campus of CHS NE. The replacement equipment will be relocated to the new patient tower that is currently under development on the main campus of CHS NE pursuant to previously approved Project ID #F-8219-08.

The Siemens Artis Q Single Plane System will be used for the same types of procedures as the existing equipment and will not be used to provide a new health service. A chart comparing the existing equipment and the replacement equipment is included in Attachment A along with supporting documentation. The existing equipment is currently in use and documentation provided in Attachment B indicates 3,110 procedures were performed in Interventional Radiology Room #9 from November 2017 through October 2018.

The total cost related to the replacement of the equipment is $1,517,535 which includes equipment costs only ($1,391,700 for the single plane equipment, $28,612 for the injector and $97,223 for sales tax). The cost of the development of the room that the equipment will be relocated to in the new patient tower is included in the capital cost approved under Project ID #F-8219-08. The vendor quote for the replacement equipment is provided in Attachment C. The total capital cost worksheet is provided in Attachment D.

The existing single plane equipment located in Interventional Radiology Room #9 has a maximum fair market value (FMV) of $57,023 (see Attachment E for FMV analysis). Since the fair market

value of the existing equipment is less than $750,000, it does not trigger the CON reviewability threshold for "major medical equipment" under N.C.G.S 131E-176(14o). As such, CHS NE also proposes to retain the existing single plane equipment. The existing equipment will remain in its current location in Interventional Radiology Room #9 and will be used for interventional radiology and vascular overflow cases.

The North Carolina Certificate of Need statutes provide a definition of replacement equipment in N.C.G.S. 131E-176(22a). The definition requires the replacement equipment be comparable to the existing medical equipment and costs less than $2,000,000 when installed. The statutes further provide in 131E-184(a)(7) an exemption from certificate of need review for replacement equipment projects if prior notice is provided to the CON Section.

Based on the above facts, the proposed project is exempt for CON review and this letter serves as prior notification of our intent to proceed with this project. We would appreciate your written concurrence that this project is exempt from CON review. If you have any questions or require further information regarding this project, please contact me at 704-446-8475.

Sincerely,

Elizabeth Kirkman, Assistant Vice-President
Atrium Health Strategic Services Group

Attachments

Attachment A

EQUIPMENT COMPARISON – Interventional Radiology Room #9 (Single Plane)

	Existing Equipment	Replacement Equipment
Type of Equipment (List each component)	Interventional Radiology	Interventional Radiology
Manufacturer of Equipment	Siemens	Siemens
Tesla Rating for MRIs	N/A	N/A
Model Number	Axiom Artis dTC/dTA Detector System	Siemens Artis Q Single Plane
Serial Number	55423	Not Available Until Installed
Provider's Method of Identifying Equipment	Internal Asset # / Serial #	Internal Asset # / Serial #
Specify if Mobile or Fixed	Fixed	Fixed
Mobile Trailer Serial Number/VIN #	N/A	N/A
Mobile Tractor Serial Number/VIN #	N/A	N/A
Date of Acquisition of Each Component	August 2007	May 2019
Does Provider Hold Title to Equipment or Have a Capital Lease?	Title	Title
Specify if Equipment Was/Is New or Used When Acquired	New	New
Total Capital Cost of Project (Including Construction, etc.)	$1,692,671	$1,488,932
Total Cost of Equipment	$1,437,047	$1,488,932
Fair Market Value of Equipment	$1,437,047	$1,488,932
Net Purchase Price of Equipment	$1,437,047	$1,488,932
Locations Where Operated	NE CSB	NE Modernization Tower
Number Days in Use/To Be Used in N.C. per Year	365 days/year	365 days/year
Percent of Change in Patient Charges (by procedure)	0%	0%
Percent of Change in Per Procedure Operating Expenses (by procedure)	0%	0%
Type of Procedures Currently Performed on Existing Equipment	Interventional radiology procedures	Interventional radiology procedures
Type of Procedures New Equipment is Capable of Performing	Interventional radiology procedures	Interventional radiology procedures

Answers for life.

Experience the future of interventional imaging

Artis Q

Visionary in performance.
Visionary in precision.

The Artis Q product line for interventional imaging is a visionary breakthrough in X-ray generation and detection that takes **performance** and **precision** to the next level.

Artis Q offers unparalleled **performance** with the new powerful GIGALIX X-ray tube for high contrast resolution at any angle and any patient size while the high-dynamic range detector enables enhanced image quality in advanced 3D imaging.

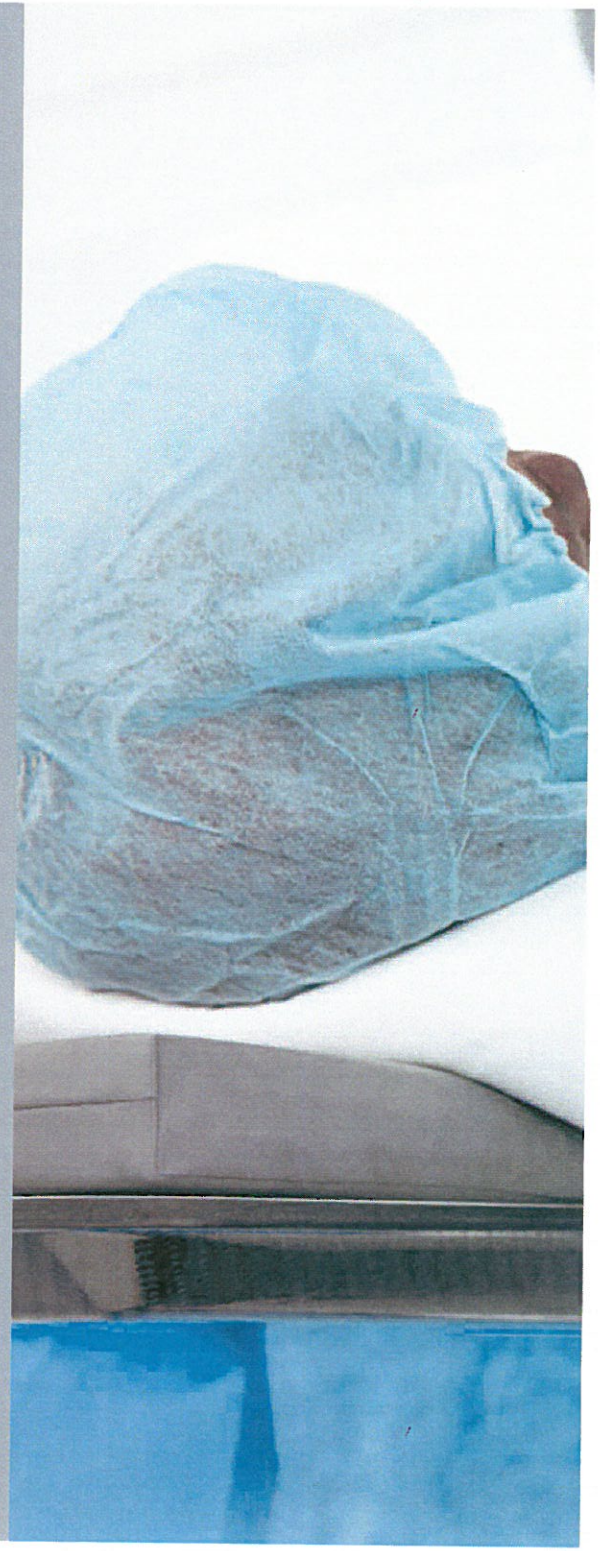
In the fight against the most threatening diseases such as coronary artery disease, stroke, and tumors, Artis Q delivers innovative applications offering **precision** for enhanced guidance during interventional procedures in cardiology, radiology, and surgery.

Experience the future of interventional imaging.

Not all features shown are necessarily standard and available in all countries.

Visionary in ...
performance

To see any device and anatomical structure in any patient and at any angulation is one of the main challenges in interventional imaging. For better performance and image quality, Artis Q provides enhanced visualization to see small devices. It offers high contrast resolution even at steep angulations. And it enables sharp images of moving objects such as coronary arteries while the optimized X-ray pulse helps to reduce radiation by up to 60%. The new large HDR detector offers high dynamic range for excellent soft-tissue resolution in 3D.




CARE+CLEAR

GIGALIX

Focused power

The GIGALIX X-ray tube has been designed around a unique flat emitter technology that generates powerful short pulses. Compared to filament technology, the higher maximum current of the flat emitter enables CLEARpulse and enhances image quality in challenging situations such as with obese patients or in steep angulations. The small square focal spots of the GIGALIX result in higher spatial resolution for all clinical applications and help to better visualize small devices and vessels.

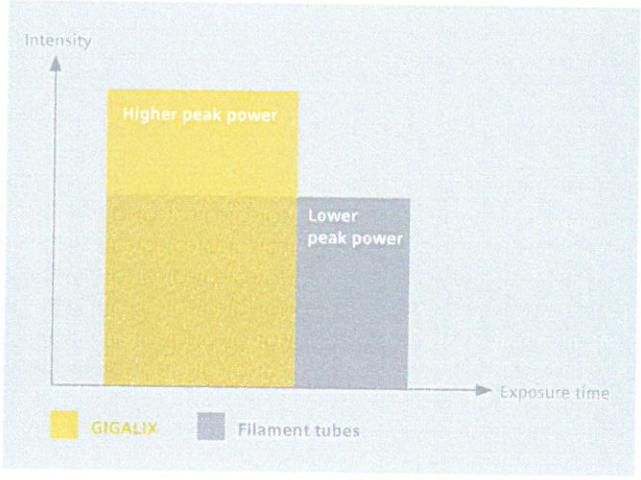
Together with the higher contrast resolution, this results in up to 70% better visibility of small devices.*

With CLEARpulse, the pulse length can be shortened. This allows visualizing moving objects such as coronary vessels more sharply.

CLEARpulse also optimizes the X-ray spectrum by lowering the required tube voltage and allowing for additional filtration.

Together with small focal spots, this generates equal image quality with up to 60% less dose*.

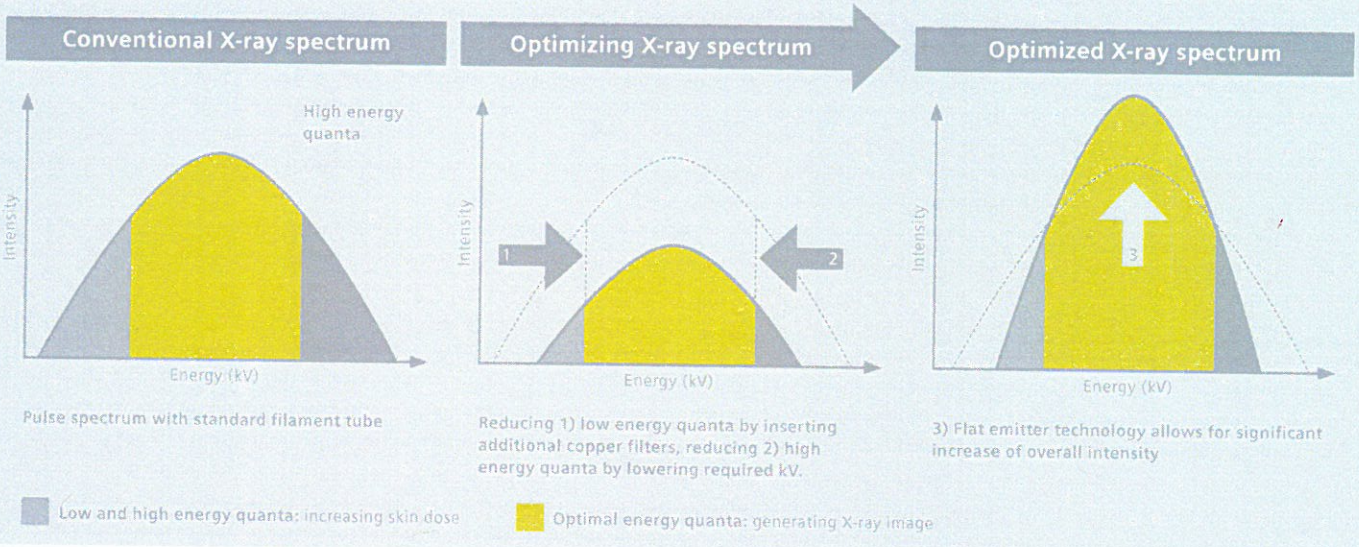
The GIGALIX X-ray tube in the Artis Q product line scores a double win: enhanced image quality at a significantly lower dose for both patients and staff.



- Flat emitter technology for high contrast resolution even at steep angulations
- Small square focal spots for excellent spatial resolution to see more details
- CLEARpulse for sharp images and low dose

CLEARpulse – sharp images and low dose

How to optimize X-rays with the GIGALIX tube



Up to 70% better visibility of small vessels*

Up to 43% shorter pulses for better images and optimized dose*

* Compared to previous X-ray tube technology. Data on file.

- High dynamic range for enhanced soft-tissue resolution in 3D imaging
- High dose efficiency enables better image quality at less radiation
- Water cooling to meet the demands of high hygienic standards and to provide stable image quality

New large HDR detector

High dynamic range and dose efficiency

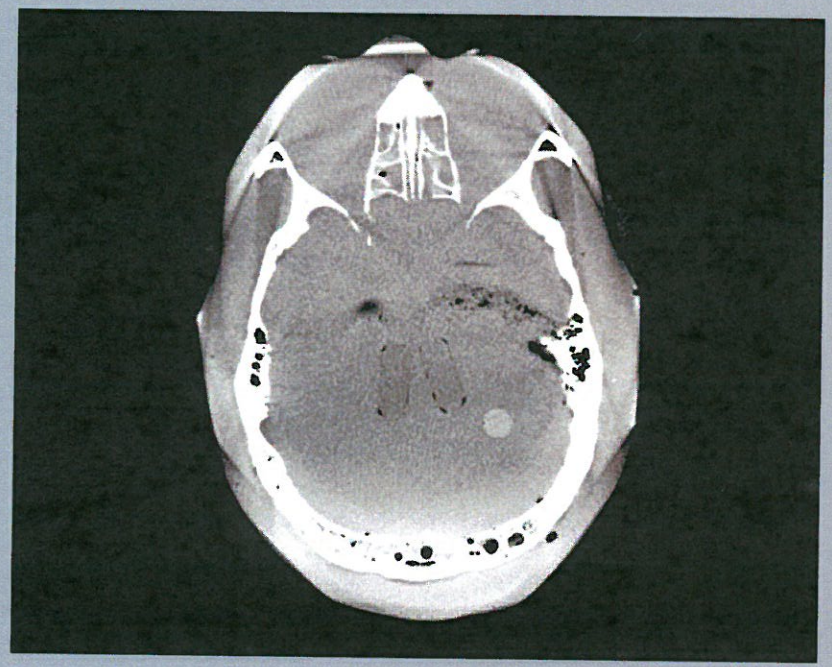
In addition to X-ray generation, X-ray detection is crucial for high image quality. The new large detector comprises a 16-bit read-out generating more than 65,000 gray scale values leading to enhanced soft-tissue contrast in 3D imaging, especially at image borders (e.g. close to bones like the skull).

Increased scintillator thickness enables higher detective quantum efficiency. This provides imaging excellence even in challenging situations and helps to reduce radiation.

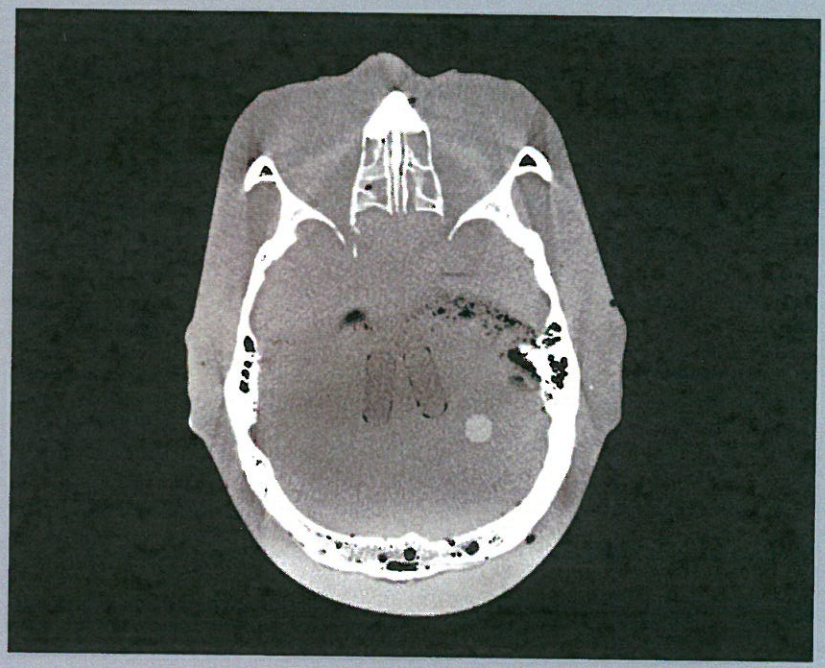
The water-cooled design meets high hygienic requirements, especially in hybrid operating rooms. In addition, it supports a stable image quality even in long-lasting procedures.

syngo DynaCT with large HDR detector – Increased soft-tissue resolution

syngo DynaCT (14 bit read-out)



syngo DynaCT with large HDR detector (16 bit read-out)



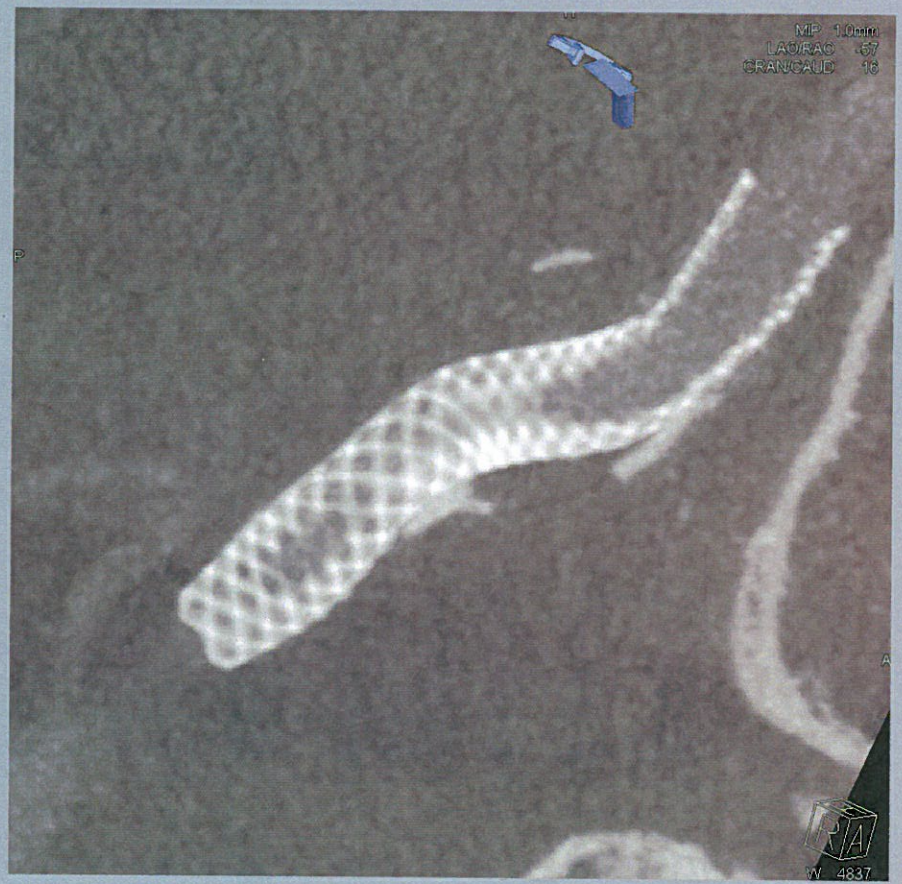
Enhanced soft-tissue resolution, especially close to the skull (phantom images using CATPHAN CTP 515 phantom)

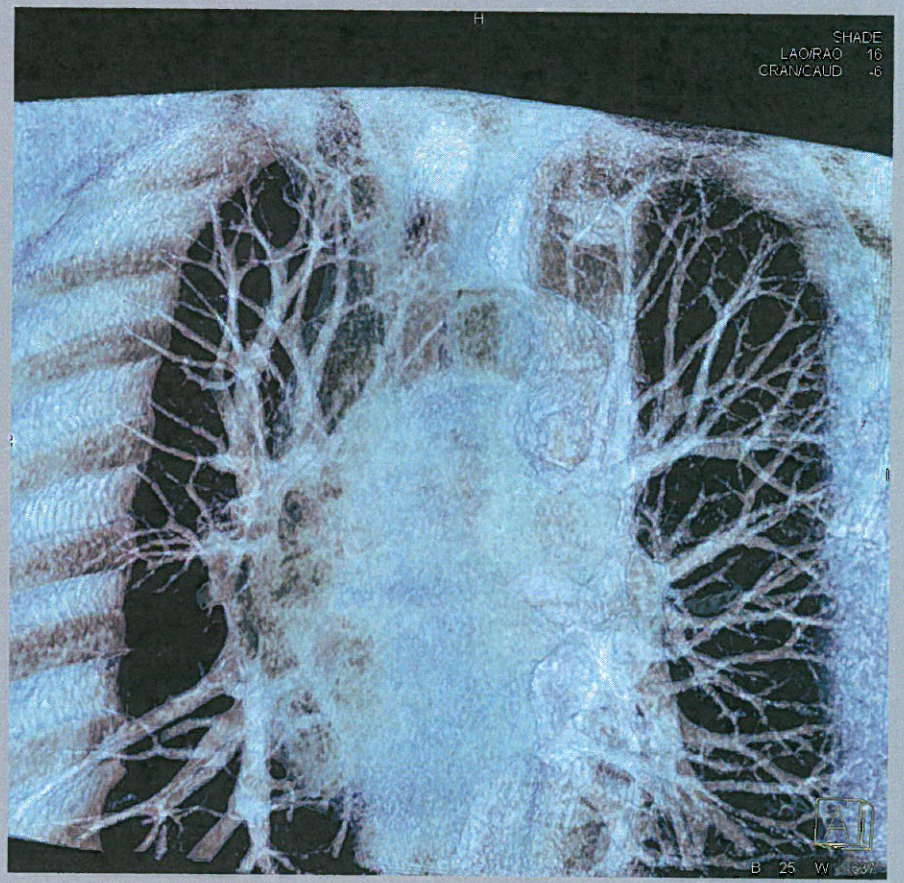

Artis
Artis Q

Visionary in ... precision

Precise guidance is needed to help improve clinical outcomes during interventions. Artis Q offers applications for cardiology, interventional radiology and image-guided surgery.

Applications for advanced interventional imaging





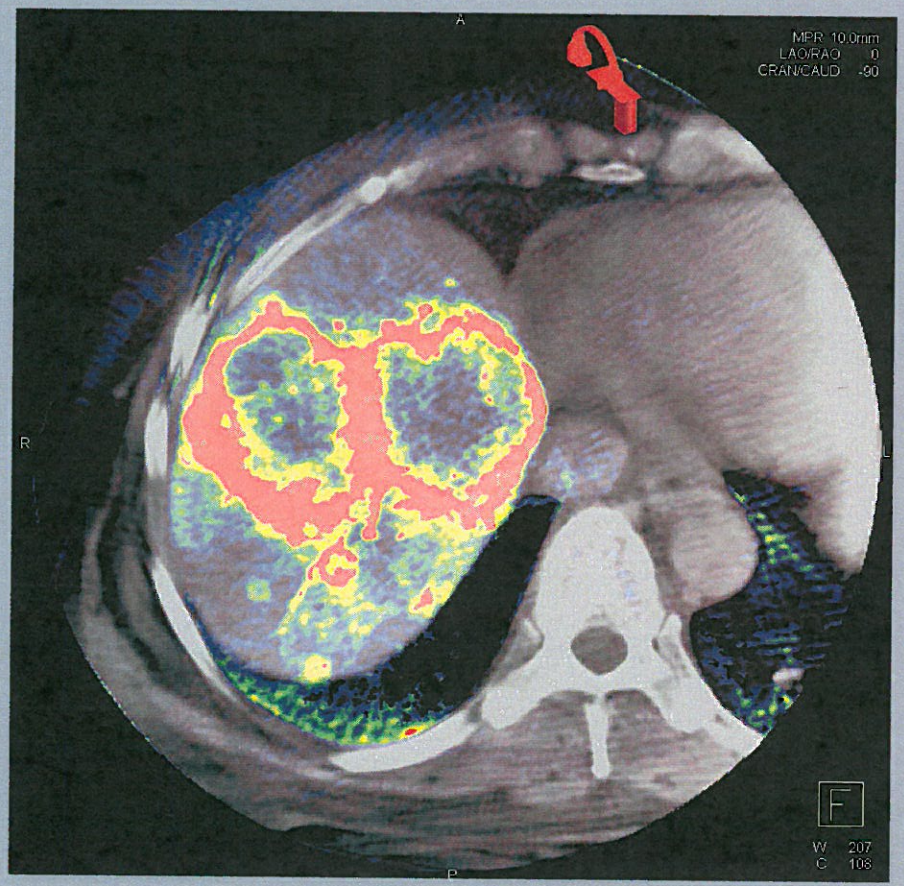
syngo DynaCT Micro –
Boosting the level of detail

- 40% increased spatial resolution compared to standard *syngo* DynaCT
- Better visualization of finest structures
- Enhanced evaluation of e.g. stents, flow diverters or stapes prosthesis

syngo Dyna3D HighSpeed* –
Freeze the motion for better treatment

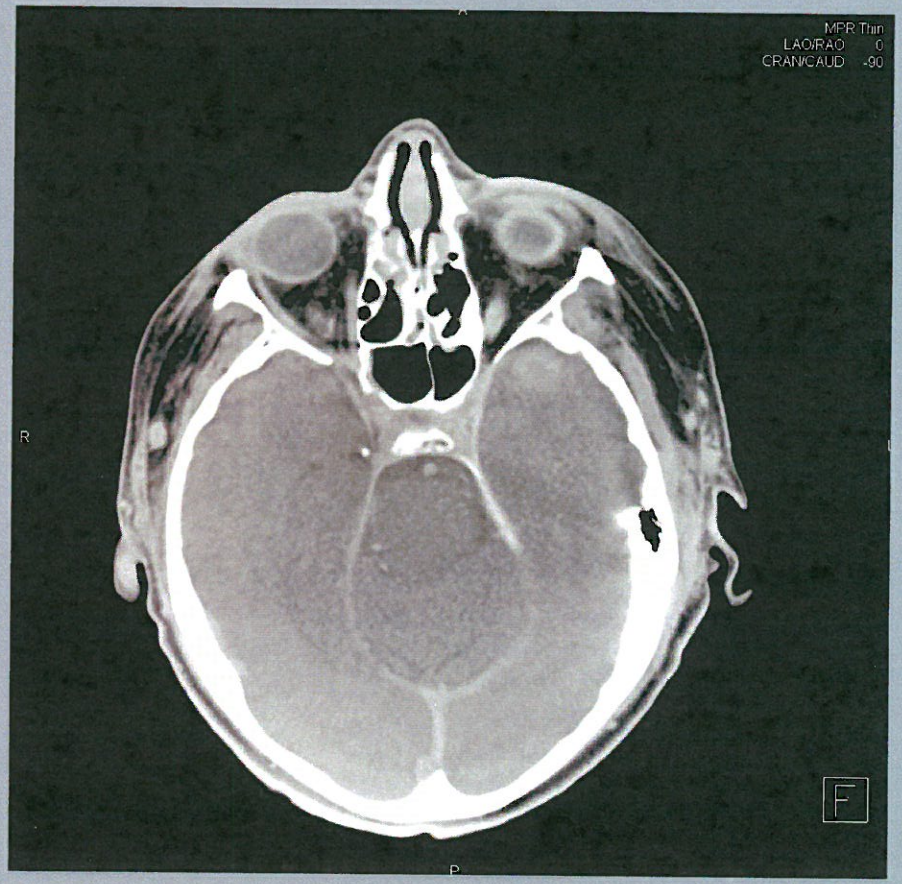
- The fastest 3D protocol on the market – in less than 3 seconds
- Fewer motion artifacts, less contrast media
- Better visualization of moving organs

*For Artis zeego only



syngo DynaPBV Body –
Evaluate perfusion for personalized therapy

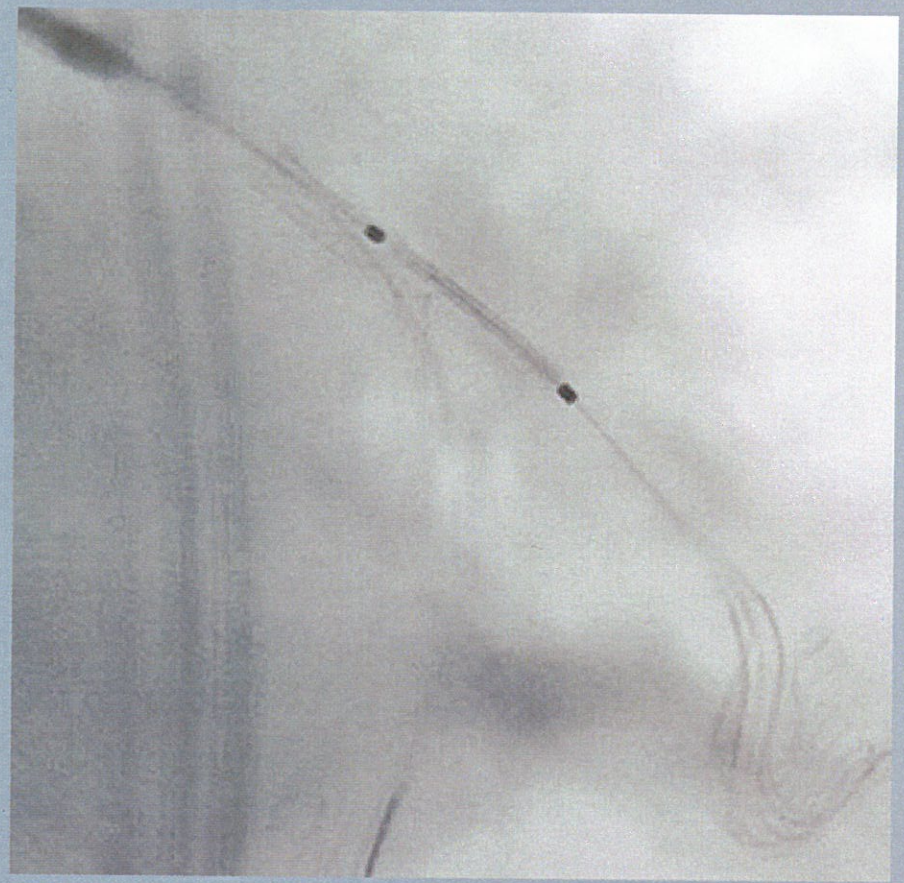
- Provides physiological information about lesions directly in the angio-suite
- Supports endpoint determination during embolization
- Potential to identify non-responders directly after interventional therapy



syngo DynaCT with new large HDR detector –
Increasing soft-tissue resolution

- 4 times the gray-value information
- Enhanced soft-tissue resolution
- Homogeneous image quality

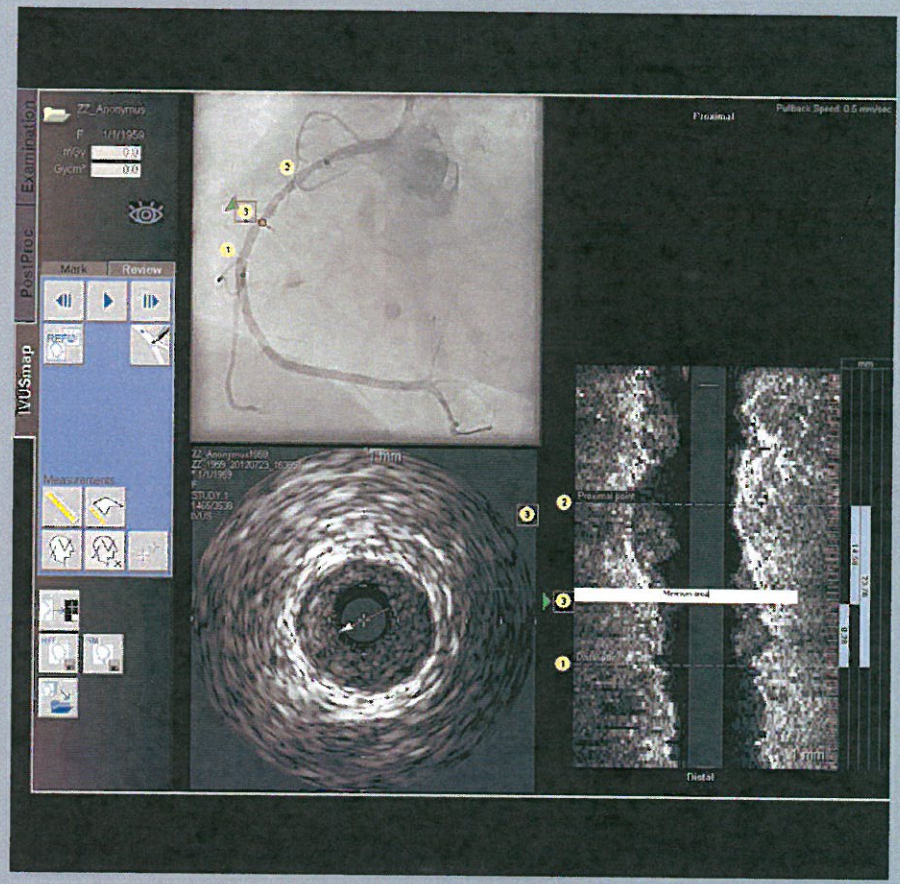
Applications for advanced interventional imaging



CLEARStent Live –

Real-time stent enhancement software

- Support of complex procedures
- Real-time verification of stent positioning while moving the device
- Potential to speed up procedures and to save contrast agent



IVUSmap –

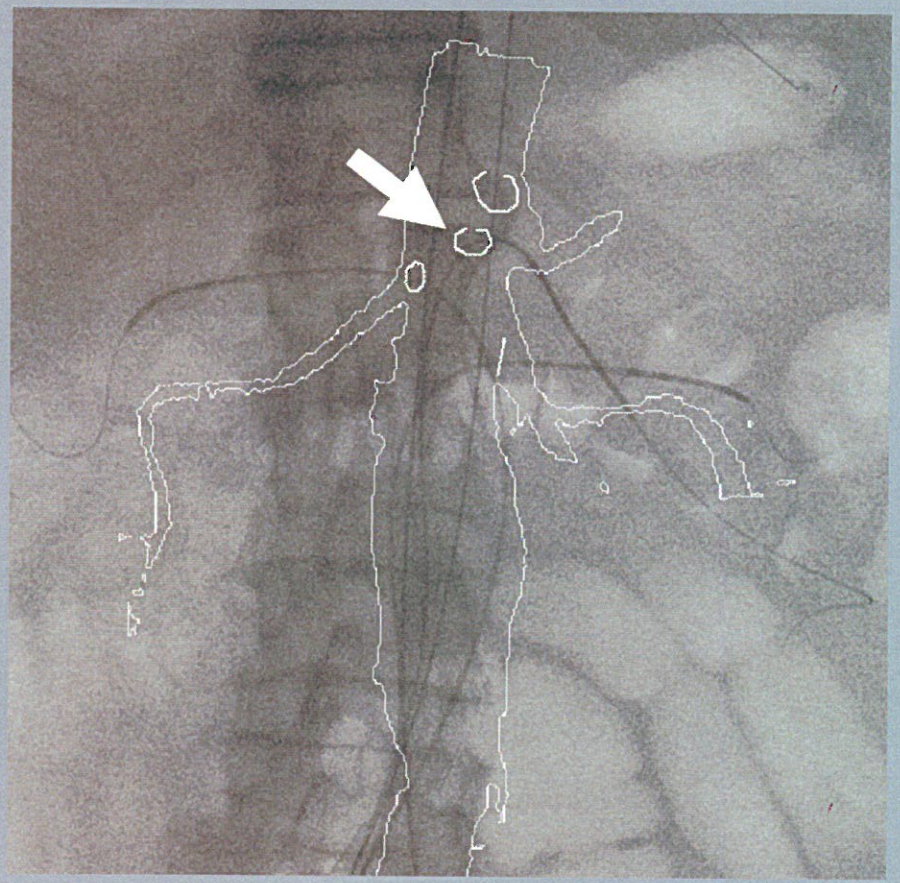
Integrated co-registration of IVUS images with angiography

- Combined information of angiography and IVUS imaging
- Bookmarks guide stent positioning and deployment
- Automated workflow integrated into procedure

syngo Aortic ValveGuide –

A new level of valve positioning convenience

- Automated aortic root segmentation and visualization of anatomical landmarks in seconds
- Automated C-arm positioning to orthogonal view without fluoroscopy allowing for dose and contrast medium savings
- Improved guidance through overlay of aortic contour and landmarks onto live 2D image



EVAR-3D Guidance –

New comfort for precise graft deployment

- Segmentation of aortic aneurism and marking of anatomical landmarks like renal arteries
- Automated C-arm positioning to orthogonal view without fluoroscopy allowing for dose and contrast medium savings
- Improved guidance through overlay of aortic contour and landmarks onto live 2D image

When vision becomes reality ...

Experience the future of interventional imaging and learn more about Artis Q system configurations and options.


SIEMENS
Artis Q

Artis Q

Floor-mounted system

The Artis Q floor-mounted system offers high positioning flexibility on a very small footprint.

The C-arm features a floor rotation point with motorized swivel – from the head-end position to a left-side position. This ensures optimum access to the patient's head as well as extensive coverage from head to toe.

Flexible positioning of the C-arm relative to the table is possible, e.g. allowing access to the patient's left side for pacemaker implantations.

A special orthogonal position with rotated table enables easy access to the patient's head and sides for hybrid procedures.

Artis StraightView maintains upright images for all C-arm and table positions.

The compact and slimline C-arm design has a small footprint requiring an examination room size of only 25 m^2.

- High positioning flexibility on a very small footprint
- Excellent access to the patient's head for complex procedures under anesthesia
- Extensive coverage from head to toe

Artis Q

Ceiling-mounted system

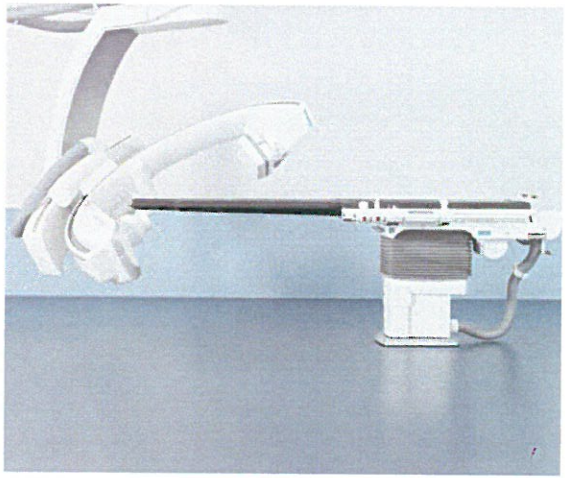
The Artis Q ceiling-mounted system offers high positioning flexibility for the C-arm at any angle.

The C-arm can be conveniently positioned around the patient's left, right or head side, and any angle in between. This enables optimum patient access. The longitudinal ceiling travel offers maximum coverage from head to toe as well as easy parking away from the table.

For increased imaging accuracy, InFocus maintains the projection angle during stand rotation, IsoTilt the projection angle during table tilting, and StraightView upright images for all positions of the C-arm and table.
In addition, the system provides the uncompromised image quality of *syngo* DynaCT in the lateral position.

Not only the Artis tables, but also surgery tables from Maquet and Trumpf can be integrated into the system.

- High positioning flexibility of the C-arm at any angle
- Easy parking away from the table
- Maximum patient coverage from head to toe
- High 3D image quality also in lateral acquisition



Artis Q

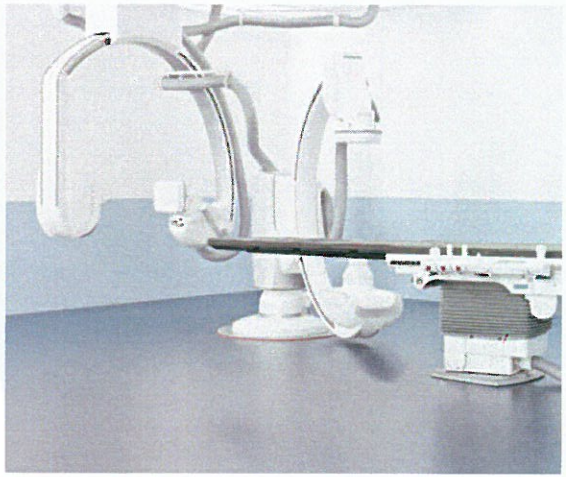
Biplane system

The Artis Q biplane system offers high positioning flexibility and excellent patient access for biplane imaging.

The Artis Q biplane system combines high performance and positioning flexibility. It supports two isocentric imaging positions enabled by the floor rotation point with motorized swivel from head end to left side. This allows optimum access to the patient's head as well as extensive coverage from head to toe in biplane imaging mode.

In single plane mode, the table and stand rotation allows access even to the patient's left side. A special orthogonal position with rotated table enables easy access to the patient's head for complex procedures under anesthesia. For increased imaging accuracy, IsoTilt maintains the projection angle during table tilting and Artis StraightView upright images for all C-arm and table positions.

- Two isocentric imaging positions enabling access to the patient's head for anesthesia in biplane mode
- Synchronized movements of both planes
- Extensive coverage from head to toe



Artis zeego

Artis zeego offers unparalleled positioning flexibility with a variable isocenter.

The unique multiple-axis design of Artis zeego enables unparalleled positioning flexibility and makes it the optimal system for hybrid operating rooms and all procedures where coverage and advanced 3D imaging are key.

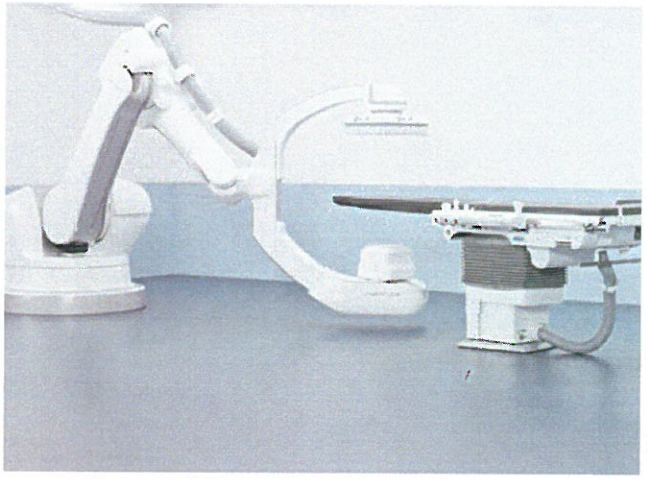
3D rotational imaging can be performed from five different system positions: at the patient's left, right, and head, and with the table rotated to the left or right. Artis zeego offers unique 3D imaging protocols such as *syngo* DynaCT 360 and *syngo* Dyna3D HighSpeed.

Thanks to its unique variable isocenter, the working height of the Artis zeego system can be adjusted to a comfortable level according to user height.

Flexible parking positions provide operators with ample work space around the table when imaging is not required.

Artis zeego meets the highest hygienic standards in the OR, allowing laminar air flow and maintaining sterility requirements.

- Variable Isocenter for comfortable working height
- Enables 3D rotational imaging from five different system positions
- Meets the highest hygienic standards in the OR

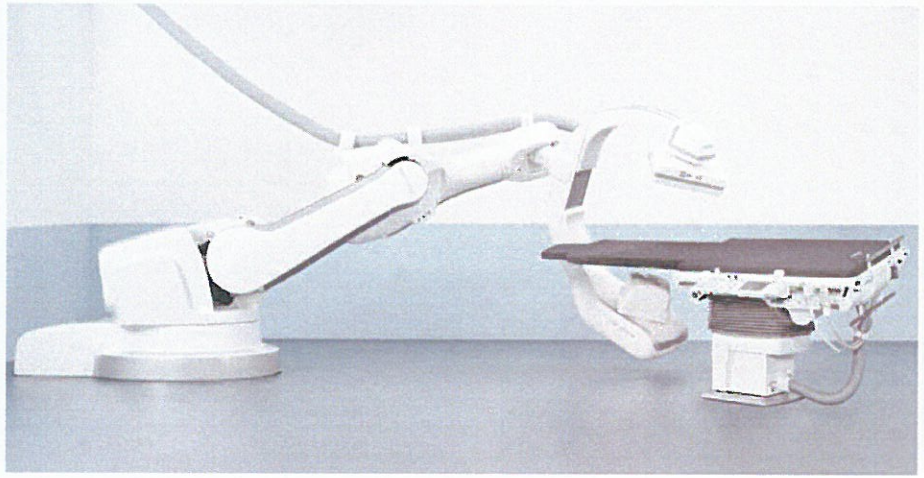


The broadest portfolio of surgical tables on the market

With the Artis OR table and integrated surgical tables from Maquet and Trumpf, Siemens gives you the broadest choice of table systems for your hybrid and operating rooms.

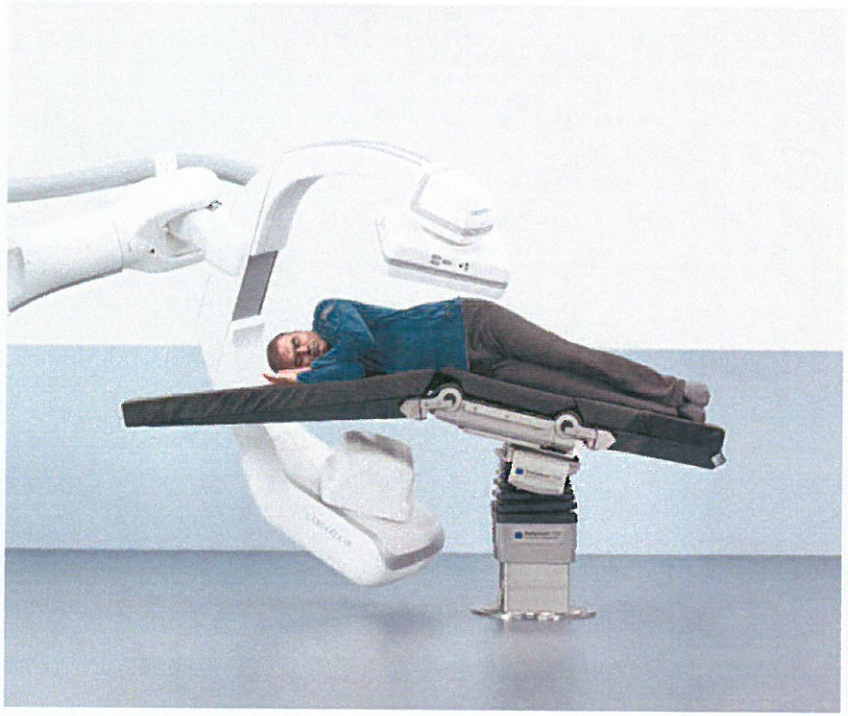
Artis OR table

Designed for easy patient access, superb positioning and total body coverage, the integrated Artis OR table is a proven and reliable interventional table with tilt and cradle functionality. Featuring a radiolucent free-floating tabletop that allows for artifact-free 3D imaging, it is particularly well suited for procedures in cardiac and vascular surgery. This is the table of choice, particularly if the room is shared with interventionalists.

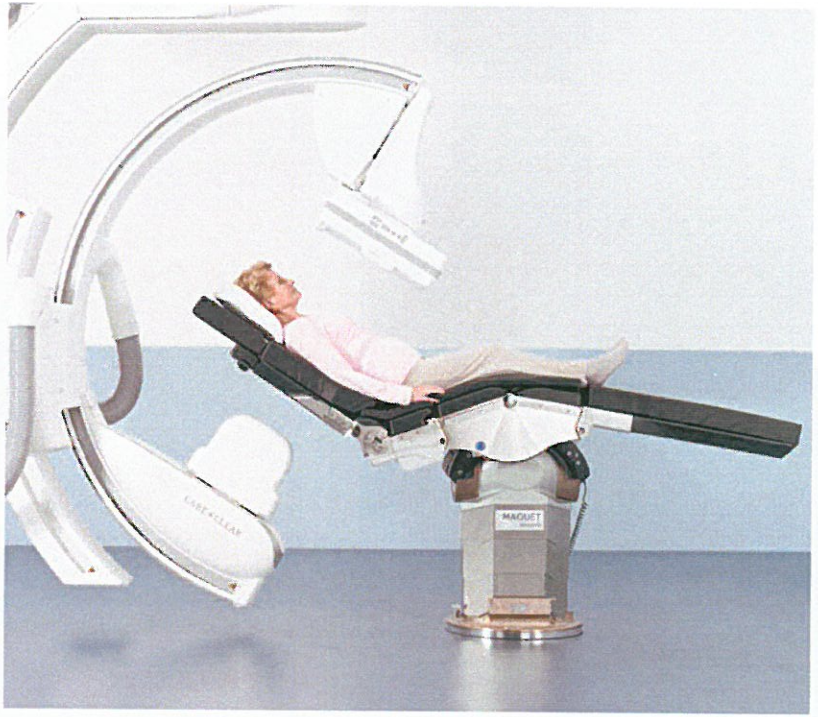


Artis OR table

- Available with the entire Artis family
- Suitable for 3D imaging
- Free floating
- Tilt and cradle functionality ±15°
- Overhang 224 cm (102.36")
- Maximum weight 200 kg (440.9 lbs)



Trumpf TruSystem 7500



Maquet Magnus

Trumpf TruSystem7500 and Maquet Magnus

These surgery tables come with one-piece carbon or with segmented, radiolucent tabletops. These breakable tabletops are highly flexible and the segments are partially motorized. Shuttling allows convenient use of whichever tabletop best matches the requirements of a procedure. Therefore, the integrated surgery tables are optimally suited for multidisciplinary use or rooms with a high percentage of open surgical procedures. Most surgical disciplines require sophisticated patient positioning, i.e. neurosurgery, urology, trauma surgery, orthopedic surgery, abdominal surgery, and thoracic surgery. These integrated surgery tables provide the flexibility necessary.

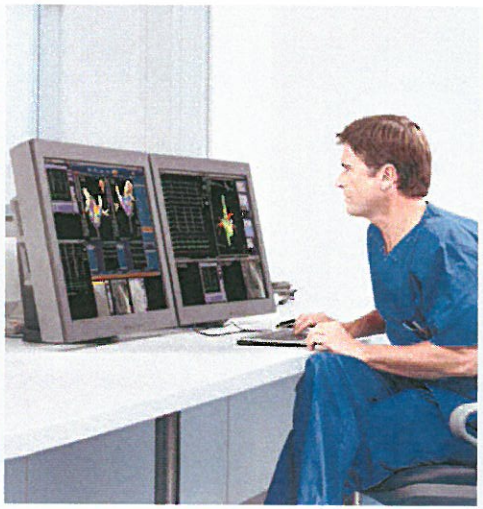
Artis Large Display

It's time to see the whole picture on one monitor.

With the Artis Large Display, 9, 18, or 24 video signals can be connected to the screen. The screen layout can be changed from the tableside.

With its built-in backup concept, additional back-up monitors are no longer necessary. Also, a special algorithm ensures sharp display of ECG signals in zoomed formats, which is especially important to precisely visualize intracardiac ECG signals.

- Scaleable from 9 to 24 inputs
- Tableside control
- Special ECG signal optimization algorithm



- Control up to 9 systems from one workplace and clean up your control room
- Configure the Cockpit to your needs with one or two keyboards and monitors

Artis Cockpit

It's time to clean up the control room.

Stop running from one system to the next – let the Artis Cockpit consolidate all your information in one workplace. The 30-inch medical-grade monitor offers 4 megapixel resolution and high brightness for excellent image display. Up to 9 inputs can be simultaneously displayed and controlled, with a choice of four different layouts. The position of the system inputs on the screen can be easily rearranged using the unique drag & drop functionality.

Artis Cockpit offers one single workplace that can be equipped with one or two keyboards and monitors. With so much more efficiency in the control room, you can focus on your procedure and your patient.

CARE & CLEAR

Artis Q includes the CARE and CLEAR packages to complement the imaging chain for optimized post-processing and dose reduction. The CARE package helps reduce radiation for the operator and patient. The CLEAR package offers a comprehensive range of applications to enhance image quality. CARE and CLEAR are standard with all Artis Q systems.

We think beyond technical hardware improvements. Introduced in 1994, our ever growing CARE portfolio (Combined Applications to Reduce Radiation Exposure) continues to reduce radiation dose for patients and clinical staff while maintaining high image quality for diagnostic confidence.

Dose saving

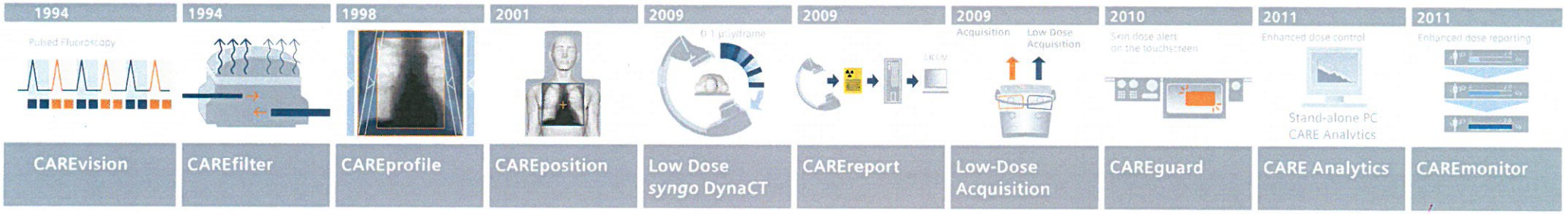
- **CAREvision** provides variable fluoroscopy frame rates, pulse frequencies can be adapted to clinical needs
- **CAREfilter** is a specially designed copper prefiltration system that automatically adjusts the filter to the patient's anatomy
- **CAREprofile** allows radiation-free collimator and semitransparent filter adjustment using the last image hold (LIH) position as reference
- **CAREposition** enables radiation-free object positioning, i.e. allows the table or C-arm position to pan without using fluoroscopy
- **Low-Dose Acquisition,** a dedicated acquisition protocol, helps to achieve dose reductions
- **Low-Dose *syngo* DynaCT** provides 3D images at the lowest possible dose levels

Dose monitoring

- **CAREguard** allows three threshold values to be defined for the accumulated skin dose and signals when a skin dose level is exceeded
- **CAREwatch** displays the dose area product and dose rate at the interventional reference point on the live display in the examination and control rooms
- **CAREmonitor** shows in real-time the accumulated peak skin dose according to the current projection in the form of a fill indicator on the live monitor

Dose reporting

- **CAREreport** is a DICOM-structured radiation report containing all patient demographic, procedure, and dose information
- **CARE Analytics** is a stand-alone tool for installation on any PC in the hospital network, allowing evaluation of DICOM dose structured reports



CLEAR offers a comprehensive range of applications with real-time processing to enhance image quality – without increasing the dose.

- **CLEARpulse** shortens the pulse length and optimizes the X-ray spectrum, which leads to overall image quality improvements
- **CLEARcontrol** enhances the image creation process with a unique histogram analysis and optimizes image brightness and contrast
- **CLEARview** enhances overall image quality, especially when using low-dose imaging protocols with dose-adaptive noise reduction
- **CLEARmotion** helps detect small structures and efficiently compensates for motion artifacts
- **CLEARchoice** enables preferred image quality selection during application

Almost 20 years of Siemens innovations to reduce, monitor, and report dose in angiography

On account of certain regional limitations of sales rights and service availability, we cannot guarantee that all products included in this brochure are available through the Siemens sales organization worldwide. Availability and packaging may vary by country and are subject to change without prior notice. Some/All of the features and products described herein may not be available in the United States or other countries.

The information in this document contains general technical descriptions of specifications and options as well as standard and optional features that do not always have to be present in individual cases.

Siemens reserves the right to modify the design, packaging, specifications and options described herein without prior notice. Please contact your local Siemens sales representative for the most current information.

In the interest of complying with legal requirements concerning the environmental compatibility of our products (protection of natural resources and waste conservation), we recycle certain components. Using the same extensive quality assurance measures as for factorynew components, we guarantee the quality of these recycled components.

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Attachment B

CHS NE Interventional Radiology Room #9 (Single Plane) Volumes

Month	Volume
Nov-17	251
Dec-17	234
Jan-18	227
Feb-18	249
Mar-18	248
Apr-18	237
May-18	252
Jun-18	284
Jul-18	264
Aug-18	276
Sep-18	264
Oct-18	324
Total	3,110

Attachment C

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PRELIMINARY PROPOSAL

Customer Number: 0000035965

Date: 12/7/2018

ATRIUM HEALTH
1000 BLYTHE BLVD
CHARLOTTE, NC 28203-5812

Siemens Medical Solutions, USA, Inc. is pleased to submit the following quotation for the products and services described herein at the stated prices and terms, subject to your acceptance of the terms and conditions on the face and back hereof, and on any attachment hereto.

Quote Nr:	**1-HGDCDG Rev. 3**
Trade:	**N/A – No trade**
Terms of Payment	**00% Down, 80% Delivery, 20% Installation** **Free On Board: Destination**
Purchasing Agreement	**Premier Purchasing Partners**
Terms and Conditions	**Premier terms and conditions apply**
Proposal Valid Until	**12/31/2018**

Siemens Artis Q Ceiling for CMC-Northeast

All items listed below are included for this system: *(See Detailed Technical Specifications at end of Proposal.)*

Qty	Part No.	Item Description
1	14434094	**Artis Q ceiling Interv. Rad.** Artis Q ceiling for interventional radiology The Artis Q product line is setting new standards in interventional imaging. The Artis Q ceiling for interventional radiology now features PURE(r). PURE adds smooth interaction to Siemens' smart technologies. It is designed to boost productivity and enhance outcomes for certain clinical applications while increasing image quality and reducing dose. The GIGALIX X-ray tube concentrates high pulse power on small, square-shaped focal spots (flat emitter technology for all focal spots). This provides unprecedented image quality for confidence in challenging situations. The ceiling-mounted C-arm offers highly flexible positioning. The motorized rotation of the C-arm from a head-end position to a lateral position allows for free head access and full patient coverage without rotating the table. The patient table is fitted with a freely movable patient positioning tabletop. The as40HDR flat detector is optimized for the requirements of radiology.

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Qty	Part No.	Item Description
		Digital acquisition technology and digital subtraction angiography with up to 7.5 f/s in 1k/12 bit matrix are available. The complete CARE+CLEAR package offers optimal image quality at the lowest reasonable dose. Live and reference images are displayed on two 19" flat screens in the exam room. In the control room live images are displayed on a third screen.
1	14432948	**Automap** Automatic stand positioning depending on the selected reference image and automatic reference image selection depending on the stand positioning.
1	14432939	**2nd 4 pedal wireless footswitch** Additional 4-pedal footswitch for release of fluoroscopy, exposure, and table brake, as well as a configurable additional function. Wireless connection via radio communication.
1	14432897	**Head-end table tilting** Motorized tilt and stepping of the patient table in longitudinal direction for electrophysiological or peripheral examinations, for example, as well as for stabilizing a patient. Includes a power-assisted tabletop control module. Notes: Table tilting reduces the maximum patient weight to 200 kg. As before however, it is possible to install up to 40 kg of additional accessories. Note: It is mandatory to provide UPS back up with this table option in order to comply with IEC 60601-2-43 CL. 201.15.101. Reason: In the event of power failure a neutral table position suitable for CPR must be reachable within 15 seconds. Please include a suitable UPS from Siemens as required or make sure any existing / planned UPS provision for your installation site will satisfy the requirement
1	14432894	**Laser crosshairs** Laser crosshairs integrated in the cover of the flat detector and tableside operation for easier, quicker and dose-saving positioning of the patient (with biplane systems only plane A).
1	14432947	**Fluoro Loop** Storage and review of dynamic fluoroscopic sequences (Fluoro Loop). This saves an additional acquisition and reduces dose. The maximum storable fluoroscopic time depends on the selected pulse rate, e.g. 34 s at 30 p/s, 68 s at 15 p/s.
1	14434151	**DYNAVISION DSA/DR** Native or subtracted digital rotational angiography with angle triggering.
1	14432926	**Card acq. mode w/high speed** Fast acquisition module for DR and DSA as well as digital card acquisition technology with frame rates of 7.5, 10, 15 and 30 f/s, acquisition, display and storage in 1k matrix.
1	14432943	**Vascular analysis** Vessel analysis with determination of degree of stenosis, distance measurement and calibration.
1	14432831	**syngo interv. Onco. Engine Pro as40** A workstation for reconstruction, post-processing and handling of 3D information including specific applications for interventional oncology. The package includes the following functionalities: 3D high-contrast and CT-like soft-tissue imaging (syngo DynaCT), 3D functional imaging providing physiologic blood volume information (syngo DynaPBV Body), 3D roadmap for dynamic overlay of planning data and 3D volumes on live fluoroscopy, 3D/3D fusion functionality for integration of pre-interventional 3D datasets, Workflow support for embolization and needle guidance, extended visualization (e.g. DSA) and post-processing of 2D images or scenes on the XWP (Angio Viewer) incl. 2D functional imaging for visualization of blood flow characteristics (syngo iFlow) and side-by-side comparison of images or scenes (Scene Compare), in-room control for table-side operation of advanced applications, Expert-i functionality for remote operation of the XWP. Only for PURE systems, the package also includes: 3D Wizard for expert step-by-step guidance in 3D acquisition, Parallel patient processing capabilities, Fusion of pre-interventional 3D datasets based on 2 projections (2D/3D Fusion), Marking of points or lines on the 3D geometry or MPRs and overlay of these markings on live fluoroscopy.
2	14432953	**Lower body radiation protection** This radiation shield protects the user from scattered radiation when standing at the table side. It can be attached to

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Qty	Part No.	Item Description
		the accessory rails either on the right or on the left side of the patient positioning table. It provides the user an additional accessory rail. It includes a basic unit (71.5 cm x 75 cm / 28.2" x 29.5" (l x w); 7.7 kg / 16.98 lb), one lower body radiation protection pivot swivel element (77 cm x 48 cm / 30.3" x 18.9" (l x w); 3.8 kg / 8.4 lb) and three clip-on units (57 cm / 22.4" x 33 cm / 12.99" (l x h), 2.2 kg / 4.85 lb; 27 cm / 10.6" x 33cm / 12.99", 0.9 kg / 1.98 lb and 27 cm / 10.6" x 25cm / 9.8", 1 kg / 2.2 lb) with a lead of 0.5 mm / 0.02" Pb. The maximum weight of the accessory rails is 40 kg (88.2 lb). Intended only for use with Artis / ARTIS tables.
2	14434157	**Moveable upper body rad. protection** This radiation shield protects the user from scattered radiation. For room heights up to 290 cm / 114.2". It includes a ceiling rail (4 m / 157.5"), a ceiling mounted and movable stand (80 cm or 57 cm / 31.5" or 22,4"), a support arm (94 cm x 91 cm / 37" x 35.8") and an acrylic glass. The shield is made of acrylic glass with lead equivalent of 0.5 mm (w x h: 61 cm x 76 cm / 24" x 29.9"), which can pivot and rotate around a fixed point with a range of 360 degrees. The operation range is limited when used with Artis floor/biplane MN. Max. weight: 18 kg / 39.68 lb.
1	14440512	**LED Exam Light** Ceiling-mounted, flexible positionable examination light with focusable light system. It is fully integrated into the ceiling-installed radiation protection mounting unit. - Luminance: 60,000 Lux for 100 cm / 39.4" distance - Working distance: 70 to 140 cm / 27.6" to 55.1" - Color rendering index Ra at 4500 Kelvin: 95 - Color temperature: 4,300 Kelvin - Focusable light field: 14 to 25 cm / 5.5" to 9.8" - Diameter of light head: 33 cm / 13" - Number of LEDs: 19 - Total input power: 20 VA
1	14440411	**Intercom - Comfort** Intercom system for communication between examination room and control room. It includes - a microphone with a control box for the control room - a microphone with an adaptive acoustic filter for background noise suppression for the examination room - a footswitch for conversation selection for the examination room
1	14443011	**Large Display diagn. Protection** The high quality laminated glass protective screen protects the panel of the monitor against mechanical damage and fluid ingress on the front. It is suited for clinical image evaluation. Features: The laminated glass enforces high mechanical strenght and resistivity against mechanical impact, the special coating reduces reflections for a continuous image quality, excellent spectral transmisison of at least 98%, can be added to existing Artis Large Display installations. Weight: approx. 12kg (55") up to 16kg (60")

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Qty	Part No.	Item Description
		Note: Observe the maximum permissible load of the display suspension, a combination with other options mounted to the display suspension might be restricted.
1	14434231	**Sec. operation in the control room** Interface for connecting the additional system control from the control room. Rail profile for hanging control modules (e.g. the table module) in the control room. Safety button for switching off all system functions from the control room.
1	14440510	**Secondary Hand Switch Ctrl (C Room)** Additional hand switch for radiation release and additional control functions.
1	14434220	**VOLCANO s5i cable set** Cable set for operating the Volcano s5i ultrasound system incl. s5iz and s5iu (CORE-System). It contains all cables for connecting the components at the patient table to the s5i imaging system in the control room. This cable set will already be integrated into the Artis table in the factory. With this item, a display is delivered additionally for the examination room if an Artis Large Display was not ordered. If an Artis Large Display is ordered, the configuration includes a connection kit for the Artis Large Display instead of the 19" display.
1	14432950	**DICOM RIS-Modality Worklist** Import of patient/examination data from an external RIS/HIS patient management system with DICOM MWL (Modality Worklist).
1	14434232	**Injector conn. in the control room** Interface for controlling the contrast medium injector in the control room. Injectors can be offered by Siemens Healthcare Accessory Solutions
1	14417114	**AXA-CS special solution** This option is used to order via SCM a special solution previously requested from the Customized Solutions Team. The price is presented by the Customized Solutions Team in a separate offer.
1	14434173	**Large Display large work area** Preparation for the large color flat screen display on an extended arm for increased reach and working range. An additional cantilever beam extends the radial coverage of the display by approximately 60 cm. This extended suspension is installed on a ceiling-mounted carriage. The display holder is height-adjustable, longitudinally mobile and can swivel and rotate. In case of a ceiling-mounted or biplane configuration the carriage operates in the same rails as the C-arm carriage, which have been extended by 1.2 m for easy operation. This item also includes cables for the examination room. Note: The type of large display can be chosen with a separate position.
1	14434176	**Large Display video controller 18** Large Display Video Controller 18 is the middle of three different video controller sizes. A maximum of 18 video signals can be connected and displayed simultaneously on the Large Display. The Large Display video controller 18 receives various internal and external video signals for presentation to scale on the Large Display. Up to 18 external and internal video sources can be connected (max. 14 DVI-D and 4 analog (VGA) channels).
1	14443012	**LD High Contrast panel size 55"** Large color flat screen display (including cables) for the examination room, with a panel diagonal of 55". This large display version provides an excelling clinical image quality due to it's new IPS panel technology.
1	14455598	**Artis Freestyle Access cable kit** Preparation for mounting, connection and display of the wireless "ACUSON Freestyle Elite with Artis Access" ultrasound system on the Large Display of the Artis system. Artis Freestyle Access optimizes the workflow when using ultrasound guidance in the interventional suite.

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Qty	Part No.	Item Description
		It provides a zero-cables, zero footprint, fully connected solution for ultrasound guidance in the interventional suite.
1	AXA_INITIAL_32	**Initial onsite training 32 hrs** Up to (32) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	AXA_FOLLOWUP_32	**Follow-up training 32 hrs** Up to (32) hours of follow-up on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	AXA_FOLLOWUP_12	**Follow-up training 12 hrs** Up to (12) hours of follow-up on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	AXA_FOLLOWUP_12	**Follow-up training 12 hrs** Up to (12) hours of follow-up on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	AXA_ECLASS	**e.class-Virtual Instructor Led Training** AXA_ECLASS Tuition for up to (4) imaging professionals to participate in a Siemens instructor led virtual class. The virtual setting allows the participant to benefit from classroom training without the need to travel to a Siemens training center. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	AXA_PURE_ESSCL	**AX Artis PURE Essential Class** Tuition for (1) imaging professional to attend Siemens class at Siemens Training Center. The Artis PURE Essentials Course is a 3.5-day classroom course beginning on Tuesday at 8:30 a.m. and ending on Friday at 12:00 p.m. It is designed to provide the participant with an in-depth knowledge of the essential functions of the Artis system as well as the skills needed to perform these functions. Through the use of demonstrations, lectures, and hands-on lab experience using an Artis system, participants will learn Artis system principles and workflows of patient examinations. Additionally, participants have the opportunity to meet other users and share their experiences and solutions to various challenges of the IR, cath lab, and the Hybrid OR environment. This class includes lunch, economy airfare, and lodging for (1) imaging professional. All arrangements must be arranged through Siemens designated travel agency. This educational offering must be completed by the later of (12) months from purchase or install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	AXA_PURE_3DADVCL	**AX PURE 3D Advanced Class** Tuition for (1) imaging professional to attend Siemens class at Siemens Training Center. The Advanced PURE Applications classroom course is a 4 day classroom course beginning on Tuesday at 8:30 a.m. and ending on Friday at 4:30 p.m. This course will provide the participants with the in-depth knowledge of the essential functions of the PURE advanced 3D applications software as well as the skills needed to perform these functions. Through the use of demonstrations, lectures, and hands-on lab time on a PURE system, participants will learn the advanced post-processing techniques and advanced 3D applications for PURE software. This class includes lunch, economy airfare, and lodging for (1) imaging professional. All arrangements must be arranged through Siemens designated travel agency. This educational offering must be completed by the later of (12) months from purchase or install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.

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Qty	Part No.	Item Description
1	EPW935515UPS	**Eaton Powerware 9355 15 kVA UPS** Includes UPS, battery, maintenance bypass panel, and one year on-site parts and labor coverage (24x7) by Eaton Powerware. This UPS is recommended when protection and uninterruptible power is required for the Artis' C-arm and table. Emergency fluoroscopy is not available with this UPS. If emergency fluoroscopy is required, the 9390 - 160 kVA UPS is recommended for the full system. One UPS per lab. Additional seismic brackets are required to make this system OSHPD approved.
2	GEL1040136601278	**Black anti-fatigue mat 36x60** Black NewLife EcoPro anti-fatigue mat (36 inches x 60 inches), 3/4 inch polyurethane foam, fluid and dirt resistant with anti-micorbial properties, matte textured surface. The ultimate employee benefit for workers who stand, are ergonomically designed to provide the perfect balance of premium comfort and optimal support. Proprietary Cellulon(r)Polyurethane Technology stands up to the tough demands of commercial environments while providing lasting comfort that won't bottom out over time. This eco-friendly line of anti-fatigue mats is certified by the National Floor Safety Institute for its high traction bottom surface.
1	VO400010002	**Volcano CORE Integrated** CORE Precision Guided Therapy System CORE CPU, Operator's Manual, Power Transformer, Cable Pre-Install Kit, Connection Box, two (2) Standard Controller and one (1) bedrail mount, 19"NEC Monitor Kit, Phased Array PIM Body, FFR functionality, DICOM Network Connection, ChromaFlo Functionality. -Includes VH IVUS End User License Agreement Customer agrees that use of the VH IVUS Software is subject to the terms of the End User License Agreement. A copy of the End User License Agreement is also available from your VOLCANO representative or online at www.volcanocorp.com/products/pdf-files/sofware-support-vh-ivus.pdf -Includes Seven (7)Year IVUS Software Support Agreement and one year warranty through Volcano. This signed Agreement provides for the purchase of the IVUS Software Support Agreement (SSA), which provides for unspecified IVUS software revisions released during for a seven (7)year term (should any be commercially released) at no additional cost. In the absence of an SSA, future software revision releases will be made available at additional cost to be determined upon commercial availability. Options: CORE Revolution Option Includes SpinVision PIMr and PIM Cable CORE Control Pad Option Bedside touchscreen controller offering system control from the sterile field CORE Printer Option Medical grader local printer for Volcano system
1	VO806071026	**Volcano CORE Revolution Option** Includes SpinVision PIMr and PIM Cable This kit includes a patient interface module (PIM-r) for connecting rotational IVUS catheters and all hardware required for the upgrade.
1	VO400161001	**Volcano CORE Control Pad Option** Bedside touchscreen controller offering system control from the sterile field
1	VO430420006	**Volcano CORE Printer Option** Medical grader local printer for Volcano system.
1	VO435010030	**Volcano iFR Modality software** iFR Hyperemia-Free Lesion Assessment Modality CORE Interface, Operator's Manual. Volcano's proprietary instantaneous, trans-lesional pressure ratio measured during the wave-free period.
1	AXA_RIG_QSP_STD	**Standard Rigging Q Q.Zen SP**
1	AT_USD_FREESTYLE	**ACUSON Freestyle ultrasound system** ACUSON Freestyle ultrasound system

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Qty	Part No.	Item Description
		Includes 3 Year Standard Warranty 11002300 ACUSON Freestyle Mainframe "The ACUSON Freestyle(tm) ultrasound system* is the world's first ultrasound system that operates with wireless transducers, a breakthrough in ultrasound imaging. The system features superior image quality and a new standard in ease of use in an ergonomic and portable design. Standard features include: - B-mode - Color flow mapping - Spatial compounding - Speckle reduction - Auto image optimization - Supports wireless transducers - One (1) transducer cable adapter - Two (2) batteries for wireless transducers - DICOM Storage, Storage Commitment, Modality Worklist and Echo - DICOM networking: Ethernet (wired) and 802.11b/g (wireless) - Factory default and user customizable exam types - High resolution flat panel display - A/C and battery operation - Two (2) charger bays for wireless transducer batteries"
1	AXA_BIOMED_TRN	**Biomedical Training AXA: AX2ARTZPUR Artis Zee system with/without PURE 15 days $23,205**
1	CS10943	**monitor cart with live/Ref display** The customized solution enables the configuration of the system with a monitor cart with two 19" displays for Live- and Reference Image as 2nd display device. Parts of the CS kit: The CS kit includes a permanently connected mobile display trolley with two 19" flat displays as well as all required tests, the documentation and the release for this modification. Notes: • This CS is not valid with an ecoline system. • A second DCS is not possible with this CS solution.
1	AXA_ADDL_RIGGING	**Additional Rigging AXA $13,335**
2	AXA_BIOMED_TRN	**Biomedical Training AXA: XX2SYNGO Syngo with MultiModality Workstation 5 days $8,542.50**
1	AXA_BIOMED_TRN	**Biomedical Training AXA: XP1XPESADV Service Essentials for AX/XP- Advance Level 10 days $15,300**
2	AXA_BIOMED_TRN	**Biomedical Training AXA : AX2ANGCOFA Common Functions/Apps for Angio 10 days $15,555**

Sell Price :	**$1,376,700**
Freight and Rigging :	**$15,000**
Final Price :	**$1,391,700**

Estimated Tax (final tax is computed at time of installation) : $97,223

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Optional Items (not included in Final price above) :

Qty	Part No.	Item Description	Extended Price
1	BART700PEDL	**Mark 7 Arterion, Pedestal System** The Arterion Mark 7 Pedestal contrast medium injector can be positioned anywhere at the patient positioning table on a mobile unit, for direct operation of all functions in the examination room. The injector system includes: A mobile pedestal stand with electronics unit, a contrast medium heater and a connection cable to the manual release. A support arm with injector head and a control lever for moving the injector head. A user control console with large touch screen and corresponding additional monitoring display on the injector head. Functions Pressure limitation: for 150 ml syringes 689 to 8273 kPa, corresponds to 100 to 1200 psi. . Flow rates for 150 ml syringes: 0.1 to 45 ml/s in increments of 0.1 ml/s 0.1 to 59.9 ml/min in increments of 0.1 ml/min rise/fall: 0 to 9.9 s in increments of 0.1 seconds Release delay for injection or radiation: 0 to 99.9 s in increments of 0.1 s. Adjustable volume for 150 ml syringes: 1 ml to the max. syringe capacity in increments of 1 ml. Fill rate: Variable syringe filling speed 1-20ml/s. Injection protocols: Up to 40 injection protocols possible. Parameters currently displayed on the touch screen display and on the head display: Injection speed Injection volume Remaining volume Injection duration Applied pressure Contrast medium heating: Nominal 35°C (95°F)+-5°C (9°F) Injection data memory Up to 50 injection data items stored Included in the scope of delivery Injector standard configuration 150 ml SIEMENS interface cable Operator Manual Service manual (English). Power supply 200 V to 250 V; 50/60 Hz.	+ $27,067
1	BINSART700P	**Arterion Pedestal Install**	+ $1,545

Attachment D

PROPOSED TOTAL CAPITAL COST OF PROJECT

Project name: CHS NE Interventional Radiology Room #9 (Single Plane) Equipment Replacement

Provider/Company: Atrium Health

(1)	Purchase price of land	
(2)	Closing costs	
(3)	Site Preparation	
(4)	Construction/Renovation Contract	$0
(5)	Landscaping	
(6)	Architect/Engineering Fees	$0
(7)	Medical Equipment	$1,517,535
(8)	Non Medical Equipment	
(9)	Furniture	
(10)	Consultant Fees (CON Fees and Legal Fees)	
(11)	Financing Costs	
(12)	Interest During Construction	
(13)	Other (Sales Tax Value)	
(14)	**Total Capital Cost**	$1,517,535

I certify that, to the best of my knowledge, the above construction related costs of the proposed project named above are complete and correct.

John M. Beyer 12/10/18

(Signature of Licensed Architect or Engineer) *DATE*

WRIGHT McGRAW BEYER ARCHITECTS, P.A. REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 50842 NORTH CAROLINA CHARLOTTE, N.C.

JOHN MATTHEW BEYER REGISTERED ARCHITECT 4844 NORTH CAROLINA CHARLOTTE, N.C.

Sales taxes have been included in these equipment costs. However, because Atrium Health is entitled to a sales tax refund under N.C. Gen. Stat. § 105-164.14(b) and 105-467, the sales tax that Atrium Health initially incurs for this medical equipment purchase will be refunded to Atrium Health, and thus will reduce the capital costs that Atrium Health actually incurs for the equipment by $97,223.

Attachment E

SELECTPLUS™ Fair Market Value Analysis

WO: 871595

For: Chris Hollar
Facility: Carolinas Healthcare
Date: Wednesday, November 28, 2018

Total ECRI FMV Estimate = $22,809 to $57,023

Vendor: Siemens Healthcare
Device: Radiographic/Fluoroscopic Systems, Angiography/Interventional
Model: Axiom Artis DTA

Contents

Thank you for your request for a fair market value (FMV) analysis of your Model 1 from Man 1. If you have any questions or require additional information, please do not hesitate to call the analyst.

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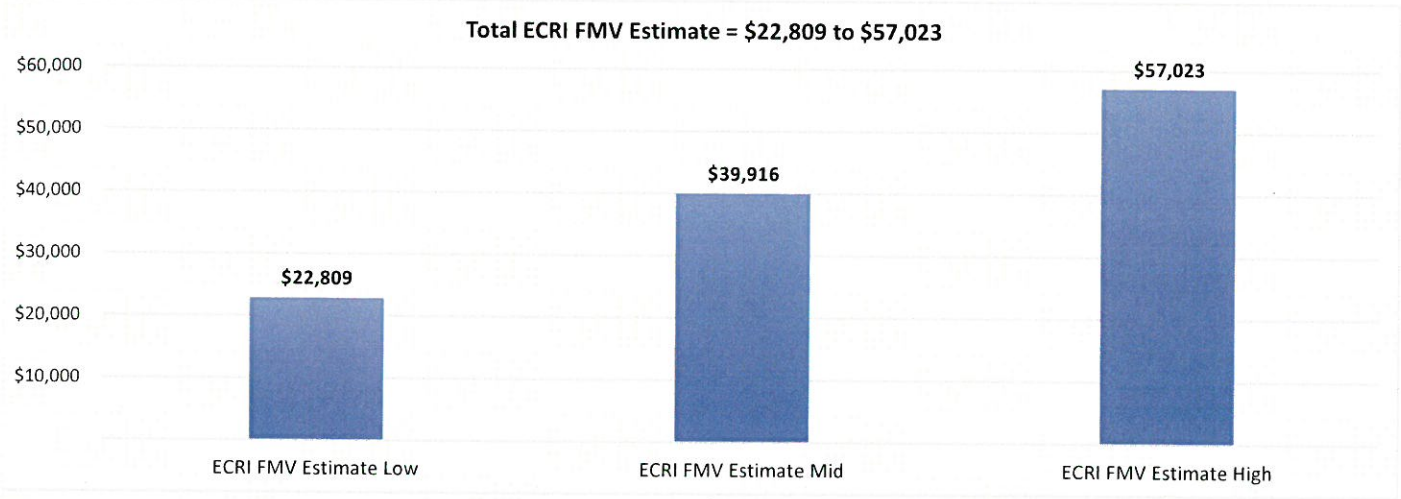
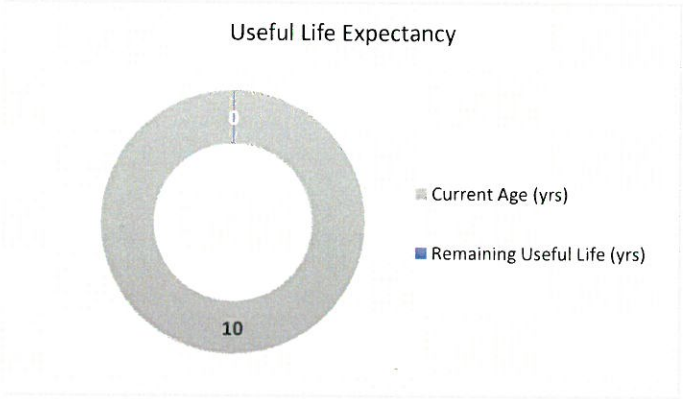
FMV Analysis Details



Manufacturer	Model	Current Age (yrs)	ECRI Useful Life (yrs)	Purchase Price	Price Source	Qty	ECRI FMV Estimate Low	ECRI FMV Estimate Mid	ECRI FMV Estimate High
Siemens Healthcare	Axiom Artis DTA	10	10	$1,140,470	Client	1	$22,809	$39,916	$57,023
			TOTALS	**$1,140,470**		**1**	**$22,809**	**$39,916**	**$57,023**

Total ECRI FMV Estimate = $22,809 to $57,023



The ECRI useful life is the number of years we believe the product can typically be used and serviced. These expected useful lives are derived from a consensus of ECRI Institute experts that have examined the real-world replacement intervals for capital equipment and information technology.

We utilize a useful life expectancy of ten (10) years for angio systems. By way of comparison, the American Hospital Association (AHA) life span for this technology is seven (7) years.

Discussion

Purchased 10+ years ago, your Siemens Axiom Artis DTA has surpassed its expected useful life. Furthermore, this model has been discontinued and may be difficult to service. As such, we believe the residual value of the equipment would be limited to no more than 2% to 5% of the original estimated purchase price of $1,140,470. Therefore, we estimate the FMV for your Axiom Artis DTA to be $22,809 to $57,023.

Please note that our FMV estimates do not take into account usage or condition of the equipment. Our analysis also does not account for any clinical value that the equipment may hold, but rather estimates what value the equipment may have in the used medical device marketplace. In order to most accurately determine the FMV of your equipment, we suggest that you:

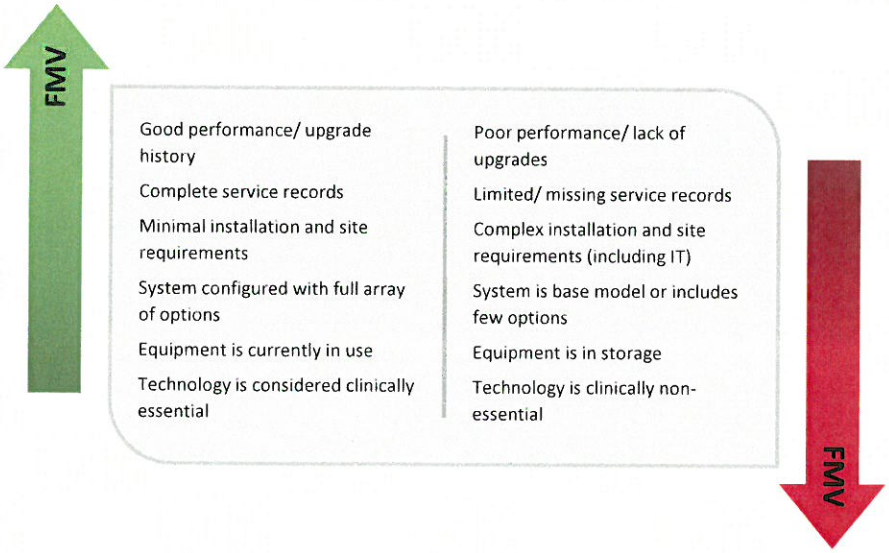
1. Consider the availability of new technology.
2. Determine if the equipment no longer meets government or safety standards.
3. Decide if it is more economical to repair or replace the equipment.
4. Ensure the availability of repair parts from original equipment manufacturer (OEM).
5. Ascertain if obsolescence impacts clinical/operational effectiveness.
6. Define the reliability/dependability of the equipment.

Many factors can enhance or detract from the FMV. Changes in demand due to reported problems and device recalls, as well as technological innovations can also have a significant impact.

Model-specific factors affecting the FMV:

Enhances FMV		Detracts From FMV	
Large market share	☐	Small market share	☐
Model still in production	☐	Discontinued model	☐
Well known OEM	☐	Little known OEM	☐
Service available from OEM	☐	No longer serviceable by OEM	☐
Service available from 3rd party	☐	Servicing restricted to OEM	☐
Stable technology	☐	Volatile Technology	☐

Other facility-specific factors that can impact the FMV:



Straight Line Depreciation Table(s)

10 Year Useful Life

FMV	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Max	90%	81%	72%	63%	54%	45%	36%	27%	18%	10%
Min	85%	76%	67%	58%	49%	40%	31%	22%	13%	5%