526-B40016
BRONX, NY.

MAMMOMAT Inspiration

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

Qty	Part No.	Item Description	Extended Price
1	14409947	**MAMMOMAT Inspiration** Universal mammography examination system streamlined for mammographic images on standing, seated or recumbent patients. The system consists of a 24x30 cm amorphous selenium detector, a free-standing examination stand with integrated microprocessor-controlled high-frequency generator, X-ray tube unit with molybdenum/tungsten rotating anode tube, molybdenum and rhodium k-edge filter and AEC (automatic exposure control). Power requirements: Alternating current 208 - 400 V, single or two-phase connection, CE marked according to Medical Device Directive (93/42/EEC).	
1	14404849	**Covers pink # Inspiration** Covers for swivel arm with partly pink color.	
1	14409948	**Acquisition Workstation Basic** The syngo based FFDM image acquisition station enables immediate preview and fast quality monitoring of the FFDM images.	
1	14409812	**Color TFT Monitor** Standard monitor 19" TFT color display 1280 x 1024 pixels The TFT color monitor is supported by the syngo user interface. Only for viewing images not for diagnosing.	
1	14418409	**Extra Color Monitor 3MP**	
1	14404856	**Extra mon. holder f. operator table** Additional holder for the use of a further monitor at the control console table.	
1	14402186	**Syngo standard keyboard USA** syngo Keyboard for international use - English	
1	14404854	**Operator Tble w.radiation shield** Control console table, 85 cm x 50 cm (33.5" x 19.7"), in white. Stepless hydraulic height adjustment. Integrated radiation protection shield with 0.5 mm Pb, 85 cm x 195 cm (33.5" x 77"). The table has one holder for PC monitor included, one extra can be ordered.	
1	14404859	**Standard compr.plate 18x24 l Insp** Standard compression plate with dimensions 18 cm x 24 cm and low edge (4 cm high front edge). An additional plastic tray (14404870) can be ordered.	
1	14404867	**Standard compr.plate 24x30 l Insp** Standard compression plate with dimensions 24 cm x 30 cm and low edge (4 cm high front edge). An additional plastic tray (# 144 04 871) can be ordered.	

Qty	Part No.	Item Description	Extended Price
1	14404862	**Detail compress. plate 9x9cm Insp** Compression plate for target exposures for compressing a small tissue area (9 cm x 9 cm). An additional plastic tray (# 144 04 874) can be ordered.	
1	14418353	**Magnification 1.5 (without paddles)** Magnification table for survey and detail exposures with geometric magnification factor 1.5	
1	14418354	**Compr. plates kit for mag. factors Insp.** Compression plates for magnification set: - Mag. compression plate with dimensions 16 cm x 20 cm - Mag spot compression plate with dimensions 9 cm x 9 cm Additional plastic trays (Mag-Spot # 144 09 813 or Mag # 144 09 814) can be ordered.	
2	14409798	**Wall support, compress.plate** Wall holder for 4 compression plates. Vertical and horizontal mounting possible.	
1	SPS_STD_RIG_GOV	**SPS Rigg & Inst Offset - Gov't only**	
1	SPS_STD_RIG_INST	**SPS Standard Rigging & Installation**	
1	R12156	**GAMMEX Mammographic Accreditation Phanto**	
1	ICINSTALVOL	**PowerLook+Volpara Install_3** Up to three days of on-site installation and applications training for PowerLook AMP and Volpara Includes travel and expenses	
1	ICD70080	**Volpara Breast Density Module_w/ICAD** Volpara module for breast density assessment Includes initial license Compatible with GE, Hologic, Fuji, Siemens Comes with a one year warranty through iCAD Includes software updates (not upgrades) released during the warranty period Accommodates up to 4 acquisition ports MUST purchase PowerLook AMP and Volpara, Installation and Applications Training	
1	PWEAT5S1500LCD	**Eaton 5S, 1500VA, UPS** Eaton Powerware 5S, 1500VA Tower UPS, Line-interactive 1500VA/900W Input: 5-15P Output: (10) 5-15R Dimensions: 9.8"H x 3.4"W x 15.0"D Weight: 25.5 Lbs. Internal battery runtime at full load (1500VA/900W): 2 Minutes Internal battery runtime at half load (750VA/450W): 12 Minutes Two Year Limited Warranty (3 Years with product registration) provide through Eaton Powerware. Installation and start-up are the responsibility of the customer.	
1	SPS_INITIAL_24	**Initial onsite training 24 hrs** Up to (24) 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	SPS_ADJ_GOV_24	**GOV'T OFFSET Initial onsite trng 24 hrs**	
1	14409867	**Addit.set acc.set accompanying docs. WH**	
1	14409868	**Addit. set of operator manuals WH**	

OPTIONS for MAMMOMAT Inspiration

All items listed below are OPTIONs and will be included on this system ONLY if initialed: *(See Detailed Technical Specifications at end of Proposal.)*

Qty	Part No.	Item Description	Extended Price	Initial to Accept
1	SPS_ADD_24	**Additional onsite training 24 hours** Up to (24) 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 if applicable. 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	G156D	**Stereotactic Mammography Phantom**		
1	AS10562963	**Horiz. holder Mammotome Inspiration** Needle holder for Mammatome (Johnson&Johnson, Ethicon) for use on the biopsy unit on MAMMOMAT Inspiration. With this holder the Mammotome can be used with horizontal approach. For 14G, 11G and 8G needles. Note: For use on MAMMOMAT Inspiration only! Please Note: Prerequisites: - 14409802 Biopsy unit Insp - 14409805 Compression plate biopsy - 14409807 Insert 3D biopsy comp.pl.lat Insp (compression plate 96mm x 100mm without window for stereotactic biopsy) Bushings for the needles used are available separately via Ethicon.		
1	AS10562964	**Vert. holder Mammotome Inspiration** Needle holder for Mammatome (Johnson&Johnson, Ethicon) for use on the biopsy unit on MAMMOMAT Inspiration. With this holder the Mammotome can be used with vertical approach. For 14G, 11G and 8G needles. Note: For use on MAMMOMAT Inspiration only! Please Note: Prerequisites: - 14409802 Biopsy unit Insp - 14409805 Compression plate biopsy Bushings for the needles used are available separately via Ethicon.		
1	G7164A	**GAMMEX Stereotactic Breast Phantom 164A**		
1	14418367	**Biopsy attach. w. Laser Cross Insp** Compression plate with the dimensions 11 cm x 19 cm including laser crosshairs for performing a manual biopsy or marking.		
1	14409802	**Biopsy Unit Insp** The biopsy unit is used for automatic stereotactic biopsy with MAMMOMAT Inspiration. The biopsy unit comprises a control panel for automatic motorized movement of the needle holder to the preset position as well as a face shield to protect the patient from movements of the swivel arm.		
1	14409805	**3D biopsy comp.pl. Insp** Compression plate 96 mm x 100 mm (3.8" x 3.9") with 52 mm x 42 mm (2" x 1.7") window for stereotactic biopsy. The compression plate can be used with vertical needle guidance. The plastic paddle can be removed from the holder for cleaning. An extra paddle with window (144 09 806) or a paddle without window (144 09 807, for horizontal needle guidance) can be ordered.		

Qty	Part No.	Item Description	Extended Price	Initial to Accept
1	14409807	**Insert 3D biiopsy comp.pl.lat Insp** Additional plastic insert for compression plate 96mm x 100mm without window for stereotactic biopsy. The compression plate can be used with horizontal bushing. Note: For use on MAMMOMAT Inspiration, only!		

Detailed Technical Specifications

MAMMOMAT Inspiration

Part No. / Product	Description
14409947 MAMMOMAT Inspiration	The aSe detector is a direct digital full-field detector which directly converts the incident radiation into electrical signals, thus ensuring high image quality with regard to the signal-to-noise ratio and contrast resolution. A special Control box for exposure release and on/off functions can be put on the AWS behind the radiation shield. Acquisition Workstation (AWS) enables immediate preview and fast quality monitoring of the FD images. Relevant settings and display of exposure parameters and messages are made/shown on the AWS (aquisition work station). After exposure, the image is displayed on the monitor where the user checks both the positioning of the patient and patientdemographic data. The syngo based AWS includes a security package software that meets the general statutory security requirements and offers enhanced security features, including user administration and logs of functions that are relevant for data protection. This package includes the following functions: - User identification to prevent unauthorized access - Administration of rights of user-based and role-based functionalities - Data access authorizations - Logging of actions relevant to data protection for the documentation of system and data access Swivel arm system consisting of X-ray tube unit, generator, compression device and detector. 65 cm SID for high geometric resolution and best possible patient access during positioning. Motorized, isocentric rotation (+/- 180°) with preselectable angles. The detector remains at a constant height while the swivel arm rotates between projections. Optimized screening workflow is necessary to achieve automatic movement between projections at a single touch. Motorized height adjustment of the swivel arm system from 69 cm to 150 cm above the floor for frontal and lateral projections. Height adjustment controlled by buttons on the swivel arm and the foot switch. Digital display at the bottom of the stand base showing the compression force, compression thickness and rotating angle. The patient name is sent and displayed by the AWS to prevent patient mix-ups. Moreover, the optimal compression/OpComp is displayed Compression system for automatic or manual compression. Compression plates can quickly be mounted and de-mounted with an press button. OpComp microprocessor-controlled automatic compression device for optimized compression force and excellent image quality. Footswitch control for motorized compression and OpComp. Preselectable compression force from 5 to 20 kg (200 N). The OpComp automatic compression device can be overridden with the footswitch or by manual control. Positioning/collimator light is switched on when the footswitch for compression is actuated. Automatic positioning of the collimator to X-ray field sizes depending on the compression plate used. Dedicated high-output mammography X-ray tube with a molybdenum/tungsten (Mo/W) rotating anode and four focal spots 0.1 / 0.3 (star pattern test). Anode heat storage capacity of 162 000 HU. Total heat storage capacity of tube assembly 2 430 000 HU. Two anode materials Molybdenum and Tungstern combined with two filter materials Molybdenum and Rhodium

Part No. / Product	Description
(Continued) **14409947** **MAMMOMAT Inspiration**	give three different anode/filter combinations (Mo/Mo, Mo/Rh, W/Rh) to produce high energy spectrums for penetration of dense breasts, optimized for all breast tissue types. Heel-effect compensated by angulated molybdenum/rhodium filter. AEC with integrated OpDose automatic system for optimized image quality at the lowest possible dose. Automatic selection of the best combination of k-edge filter and kV value for each individual breast. OpDose can be configurated to any number (chosen by the operator) of steps based on thickness e.g one setup/cm. With the help of the pre-exposure-controlled automatic exposure control (AEC) the image parameters are set automatically. Manual setting of kV, anode/filter combination and dose is possible. OpView 2 the new image processing software especially for mammography, provides excellent visibility of the breast borders, structures in dense tissue as well as microcalcifications. Dose calculation system. The SW calculates the patient dose (glandular dose) for each exposure. The dose value is shown in mGy on the acquisition workstation. Automatic selection of small focal spot and motorized grid retraction for magnification. CE marked according to Medical Device Directive (93/42/EEC). Power requirements: 208 - 400 V AC, single or two-phase connection
14404849 **Covers pink # Inspiration**	Color in two shades; one soft pink for larger parts and one strong pink for operating areas (e.g buttons).
14409948 **Acquisition Workstation Basic**	**Workflow** At the beginning of the examination the patient demographic data is registered at the acquisition workstation directly from the RIS via DICOM Modality worklist or manually. The patient is positioned according to the selected type of examination and radiation is released at the control box. The raw data image is automatically transferred to the acquisition workstation where it is processed with OpView2. The image is displayed on the monitor in less than 20 seconds after the end of radiation. The user thus has the ability to check the patient position, general image quality and add annotations to the image. After it has been reviewed and confirmed, the image can either be sent directly to a PACS system or printed in a standard DICOM format. **Software** The *syngo* software offers a wide range of functions covering all processes necessary for a complete examination. All functions can be controlled via logically structured menus and activated using the mouse. The standard system provides the following functions: Image display: - Easily selectable screen layout - Window settings (contrast and brightness setting) - Magnification, stepped and dynamic zoom - Image inversion (black/white) Annotation: - Left/right marking - Text annotations - Lines - Rectangles and circles Measurements: - Distance - Angle - Density (ROI) Image evaluation: - Contrast enhancement (with table) - Display of histogram - Length measurements

Part No. / Product	Description
(Continued) **14409948** **Acquisition Workstation Basic**	- Before/after comparison - Filters Administration: - The demographic patient data can either be retrieved directly from a HIS/RIS system via DICOM Modality Worklist or entered manually. - Retrieval of images from hard disk or PACS - User identification by password - Archived studies in the local archive or PACS - Printing of images on DICOM-compatible printers - Auto routing for automatic image distribution to predefined destinations. **The following DICOM Classes are supported:** **Creation of the following image types:** - DICOM MG for processing - DICOM MG for presentation - DICOM CT **Display of the following image types:** - DICOM Mammography (MG) - DICOM Computed Radiography (CR) - DICOM Computed Tomography (CT) - DICOM Digital X-ray (DX) - DICOM Magnetic Resonance (MR) - DICOM Secondary Capture (SC) - DICOM Ultrasound (US) **DICOM Services:** - DICOM Basic Print - SCU - DICOM Modality Worklist - SCU - DICOM Modality Performed Procedure Step - SCU - DICOM Storage / Storage Commitment – SCU, SCP - DICOM Query/Retrieve - SCU, SCP **Hardware** The *syngo* based FFDM image acquisition workstation consists of: - PC Intel XEON W3520, 2.66GHz - 3GB RAM - 500GB hard disk, capacity about 24,700 images in 3328 x 4048 / 14bit matrix - CD/DVD burner for documenting of images in DICOM format on CD/DVD (multisession) - Interface card for the X-ray system, Windows XP oper. system, syngo-based applications Power requirement of the workstation: 100 - 240 V AC, single-phase connection. CE marked according to Medical Device Directive (93/42/EEC). *Note:* *Monitors provided with MAMMOMAT Inspiration are not for diagnostic purposes.*
14418409 **Extra Color Monitor 3MP**	21”high-resolution TFT flat panel display: 1536 x 2048 pixels Format portrait 21”For images and text Diagnostic image quality for MR, CT + ultrasound only.
14404856 **Extra mon. holder f. operator table**	The second holder becomes necessary when the additional 3MP monitor is attached to the control console table.

Part No. / Product	Description
14402186 Syngo standard keyboard USA	*syngo* Keyboard for entering text and commands in English
14404854 Operator Tble w.radiation shield	The table has one holder for PC monitor included one extra can be ordered. A cabinet where the AWS PC can be locked in is placed under the table. Shelf for keyboard under the table surface. The radiation shield and/or control console table are not required if adequate constructional measures are taken, e.g. a separate control room exists.
14404859 Standard compr.plate 18x24 l Insp	The plastic tray can easily be removed from the holder for cleaning.
14404867 Standard compr.plate 24x30 l Insp	The plastic tray can easily be removed from the holder for cleaning.
14404862 Detail compress. plate 9x9cm Insp	The plastic tray can easily be removed from the holder for cleaning.
14418353 Magnification 1.5 (without paddles)	The compression plates for magnification exposures are to be ordered separately (14418354).
14418354 Compr. plates kit for mag. factors Insp.	The plastic tray can be easily removed from the holder for cleaning.
14409798 Wall support, compress.plate	The compression plates are snapped into the wall holder. Several wall holders can be attached, as required, if more than 4 compression plates are to be stored.
R12156 GAMMEX Mammographic Accreditation Phanto	The phantom simulates the x-ray attenuation of a 4.2 cm slab of compressed human breast composed of 50% adipose tissue and 50% glandular tissue. Target objects in the phantom are of known size, shape, and density. These represent the different structures or malignancies found when imaging the breast. Image quality and system sensitivity is evaluated using these targets and following ACR/MQSA guidelines. The 156 is also an excellent tool to help identify artifacts due to grids, filters, film-processing (for film-screen systems), as well as those produced by digital mammography systems. The phantom consists of a precision wax insert containing the test objects. The insert is protected by an external acrylic shell. The combination of these materials provides the simulation of a 4.2 cm thick 50%/50% breast. A reference contact radiograph of the insert is included. This provides information on the location and orientation of the test objects in the individual phantom. An acrylic test disk provides the test step needed to measure density differences. Phantom Body: Material . . . . . Acrylic Phantom Dimensions . . . . . 4.5x10.2x10.8 cm (HWD) (1.75x4x4.25 in) Acrylic Base . . . . 3.3 cm (1.3 in) thick Cover . . . . . 0.3 cm (0.12 in) thick Acrylic Disk. . . . . 4 mm thick x 1 cm diameter Test Objects . . . . Nylon fibrils (1.56, 1.12, 0.89, 0.75, 0.54 and 0.40 mm nylon fibers) Simulated microcalcifications . . . (0.54, 0.40, 0.32, 0.24 and 0.16 mm specks) Tumor-like masses. . . . . (2.00, 1.00, 0.75, 0.50, 0.25 mm)
G156D Stereotactic Mammography Phantom (Optional)	The Gammex 156D Stereotactic Mammographic Accreditation Phantom is used for monitoring digital mammography systems currently used for stereotactic biopsy and localization. The phantom is accredited by the ACR. The phantom is 4.4 cm, and is made up of a 7 mm wax insert that contains 12 sets of test objects, with a 3.4 cm acrylic base and a 3 mm cover. Together, this approximates a 4.2 cm compressed breast of 50% glandular and 50% adipose composition. The 5x5 cm wax insert contains simulated microcalcifications in the form of aluminum

Part No. / Product	Description
(Continued) **G156D Stereotactic Mammography Phantom (Optional)**	oxide (Al2O3) specks, four different size nylon fibers to simulate fibrous structures, and four different size lens-shaped masses to simulate tumors.
G7164A GAMMEX Stereotactic Breast Phantom 164A (Optional)	The phantom is made of a clear gel encased in a soft vinyl for easy compression and a skin-like resistance to needle insertion. Embedded in the gel are 20 to 25 radiopaque lesions ranging in size from 2 to 5 mm. The 3 and 5 mm gel lesions are used for practicing core biopsies and the 2 mm liquid lesions allow for the practice of fine needle aspiration and tests the accuracy of the biopsy system and the operator. Construction . . . . Gel with attenuation properties similar to breast tissue. Outer casing . . . . Vinyl Radiopaque
14409802 Biopsy Unit Insp (Optional)	The biopsy unit includes: - Biopsy unit with manual control box - Holder for manual control box that can be attached to the handle (left or right) - Face shield - Standard needle holder for vertical needle bushing - Hardware modifications for the mammography system - Calibration phantom and corresponding calibration needles incl. bushings **Description:** The biopsy unit can be easily installed by sliding an additional hood with the biopsy attachment over the object table on the mammography stand. As soon as the unit is installed, it is detected automatically and the mammography stand can be used for a biopsy. The grid does not need to be removed manually. Software and hardware support a highly integrated workflow: Every set of two stereotactic images are acquired in a single step through the automatic movement of the tube head. The biopsy images are acquired on the same FFDM detector as the screening and diagnostic images and go through the same Siemens image processing, OpView 2 on the syngo-based Acquisition Workstation (AWS). The display of the biopsy images and screening/diagnostic images is therefore identical. All screening/diagnostic functions of the MAMMOMAT Inspiration also apply for the stereo version. **Technical specification:** Total maximum size (hood and biopsy attachment): 360 mm x 250 mm x 340 mm Weight: 3.5 kg Biopsy volumes (vertical bushing) : 50 mm x 40 mm x 110 mm Biopsy volumes (lateral bushing) : 50 mm x 40 mm x 60 mm Biopsy compression plates with removable, easy-to-clean plastic: - Biopsy compression plate with window: 96 mm x 100 mm, window size: 52 mm x 42 mm (vertical bushing) - Biopsy compression plate without window: 96 mm x 100 mm (lateral bushing) Patient position for stereotactic biopsy: standing/sitting and recumbent Angle of swivel arm: ±90°, (±180° technically feasible) Tube swivel range in stereo mode: -15° and +15°. Note: Compression plates and needle holders must be ordered separately. Needle guides for fine needles and needles for core and vacuum biopsy from the main manufacturers must be ordered separately, e.g. XP AS or needle manufacturer.
14409805 3D biopsy comp.pl. Insp (Optional)	The plastic tray can be easily removed from its holder for cleaning and disinfection. An extra plastic tray can be ordered.

Part No. / Product	Description
14409807 Insert 3D biiopsy comp.pl.lat Insp (Optional)	Prerequisite: 14409805 3D biopsy comp.pl. Insp (compression plate 96mm x 100mm with window 52mm x 42mm for stereotactic biopsy). The stereo compression plate without window is used on the holder of 14409805 3D biopsy comp.pl. Insp.