GE Healthcare

Diamond

Premier breast care platform

GE imagination at work

Design that combines form, function and future

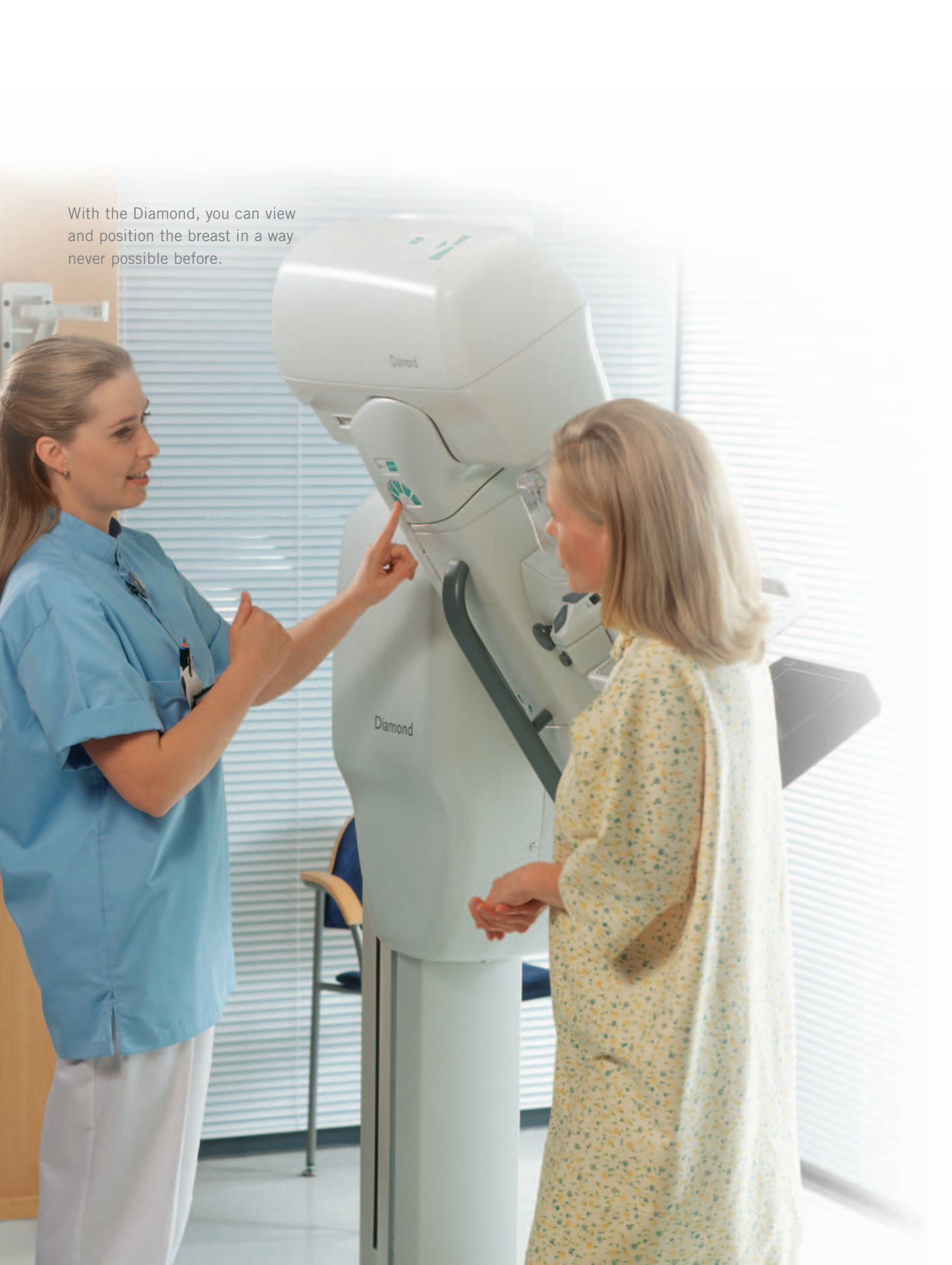
The award-winning Diamond began with a process of analyzing and understanding the key elements involved in breast healthcare. Its intuitive design started with clinicians and patients and then focused on the human touch that is required in the delicate field of breast imaging. With this approach, the Diamond becomes an extension of the user's thoughts and actions.

Full positioning control with ergonomic foot pedals.

The Diamond's all-in-one space-saving design, integrates all major components including the x-ray generator.


Diamond
Diamond

With the Diamond, you can view and position the breast in a way never possible before.



ParkBack gives you open workspace for ergonomic positioning

The unique ParkBack tubehead moves completely out of the way for a more comfortable positioning posture and avoids stress-related injuries. Better positioning results in better images. ParkBack also gives completely open workspace for biopsy procedures.

The unique ParkBack feature moves the x-ray tube in oblique and lateral positioning.

MLO without ParkBack

MLO with ParkBack

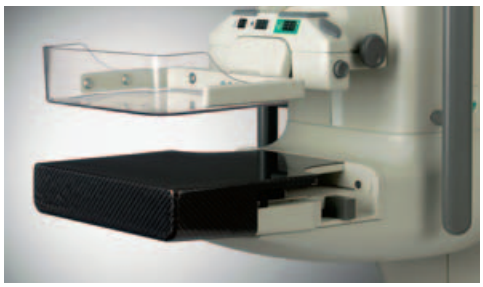
ParkBack gives open workspace for biopsy procedures.

LAT without ParkBack

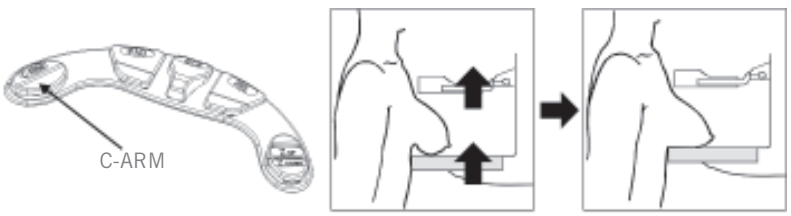
LAT with ParkBack

ECS — more breast tissue with improved comfort

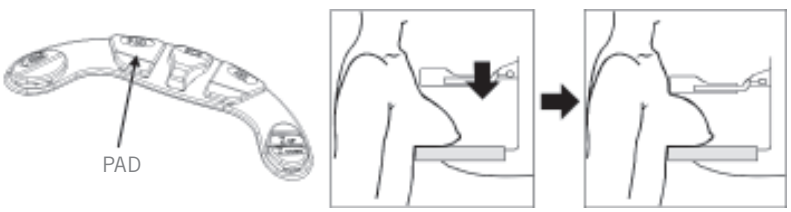
ECS – Easy Compression System is a unique bi-directional compression system which takes advantage of the natural mobility of the breast. It works as a helping hand in all projections to get more posterior breast tissue imaged with improved tissue separation in order to visualize anatomical structures better. ECS also assists in the positioning of challenging cases such as wheel chair patients, kyphotic patients or patients with small breasts. ECS increases patient comfort and results in more breast tissue being imaged.



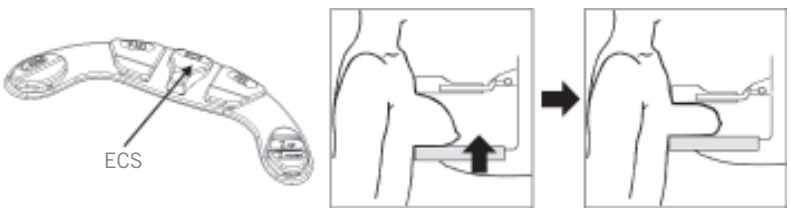
ProForm bucky: seamless construction with effortless motorized one hand cassette loading and unloading provides patient comfort and easy cleaning for technologists.



The C-arm is driven upwards without applying compression, to open the infra-mammary fold.



The breast is compressed slightly with the paddle to hold it in place.



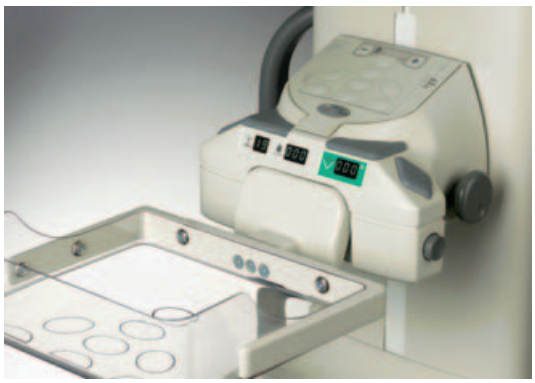
Using the ECS compression movement, final compression is applied by the bucky from below.

The bi-directional ECS compression and the ProForm bucky allow to image more breast tissue with improved patient comfort.

Exposures are excellent with Diamond.
Manual detector selection is no more necessary
and you can easily keep to your schedule.

AutoPoint helps you get it right first time

Diamond brings new intelligence to breast imaging. AutoPoint digitally analyzes breast composition and structure. PaddleLogic senses which paddle the operator has selected; AutoPoint analyzes only the compressed area of the breast and Diamond collimates automatically to the correct field size for each paddle.



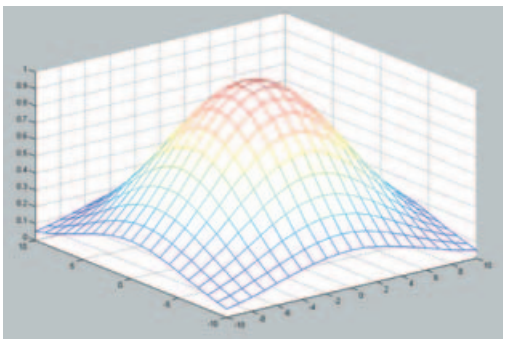
Everything you need for fast, efficient positioning – all within easy reach.

AutoPoint selects the correct AEC detectors at the beginning of the exposure. The eight detectors are optimized in size, location and shape.

Seeing the finest detail in every image, exposure after exposure, patient after patient, is reassuring.

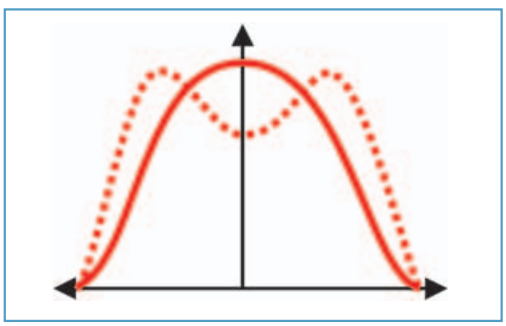
The Diamond tube offers a sharp image – time after time

Image quality is everything. The new Diamond x-ray tube ensures this by providing sharper images in breast imaging. The new precision-machined SP-cathode construction gives Gaussian intensity distribution within the focal spot, making the finest details visible in the images, especially with the small focus.



The Diamond x-ray tube with Gaussian intensity distribution for sharp images.

Superb magnification images in every study: the exceptional performance of the Diamond x-ray tube combined with the versatility of the MultiChoice magnification tunnel.



Intensity distribution within the focal spot.

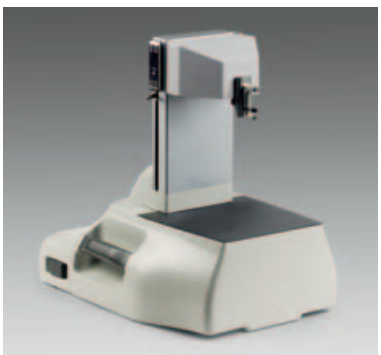
Diamond x-ray tube
Conventional x-ray tube

The integrated stereotactic system

Delta 32 is a natural extension to the Diamond breast care platform. This integrated digital stereotactic and diagnostic imaging unit is geared to enhance efficiency and patient comfort while the design skillfully combines the clinically correct shape for optimized positioning with sealed construction for easy cleaning.

Delta 32 allows a free choice of projection angle within ±185° to minimize the distance from the skin to the lesion. The stereotactic angles are freely selectable between ±15° by the user to optimize the biopsy accuracy and the volume of view. The ECS compression system with manual fine tuning informs the user about the applied force and compression thickness, while the motorized movement of the needle guide makes stereotactic examinations more accurate and more convenient.

The lightweight Delta 32 needle guide unit is simple and fast to put into use. No external cables or connections are necessary, instead, the Delta 32 connects to the Diamond by simply sliding the needle guide unit into position.



The clinically correct shape of the Delta 32 needle guide unit allows excellent visibility and access to the axillary area, which is one of the most demanding areas to biopsy in a breast.

With Diamond you can perform all the procedures you need – with the ease and sophistication you didn't think was possible.

With TACT® you will be able to send your patient home with both of you feeling more confident.

TACT® – more confidence with a 3D image

TACT® (Tuned Aperture Computed Tomography) technology from GE Healthcare reconstructs a 3-dimensional model of a region of breast from a series of 2-dimensional digital images. In a TACT® study, the breast is compressed with a normal spot imaging compression paddle and exposed from different directions using the Diamond's semi-automatic stereotactic tubehead movement. This patented method utilizes a reference point in each image to define the geometry, thereby allowing the user to freely select the projection angles.

The clinical benefits of TACT® are to define if the mammographic finding is caused by a real abnormal lesion or by superposition of normal parenchymal structures, and to detect changes in breast tissue which could otherwise be missed. TACT® also helps to verify the correct targets for biopsies and to reduce the number of biopsies performed.

TACT® technology is used in Delta 32 TACT® and Delta TACT® for diagnostic digital spot and diagnostic 3D imaging.

With the TACT® algorithm reconstruction technique, the Diamond mammography system acquires a number of two-dimensional digital images of the breast from different angles.

Delta 32 TACT® is an excellent diagnostic tool allowing viewing of the breast as a three-dimensional image or as image slices.

For more than 100 years, healthcare providers worldwide have relied on GE Healthcare for medical technology, services and productivity solutions.

So no matter what challenges your healthcare system faces - you can always count on GE to help you deliver the highest quality healthcare.

For details, please contact your GE representative today.

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