















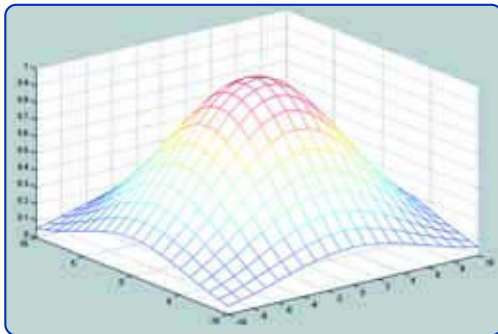






# The Diamond tube offers a sharper image – time after time

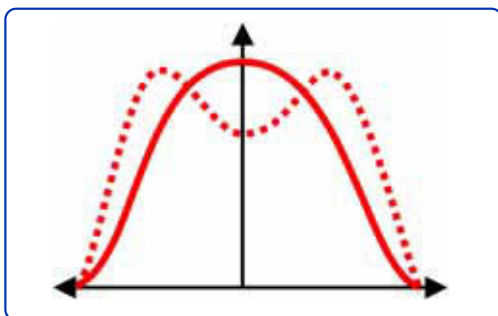
Image quality is everything. The new Diamond x-ray tube ensures this by providing the sharpest images in breast imaging. The new precision-machined SP-cathode construction gives Gaussian intensity distribution within the focal spot, making the finest details visible in the images, especially with the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



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

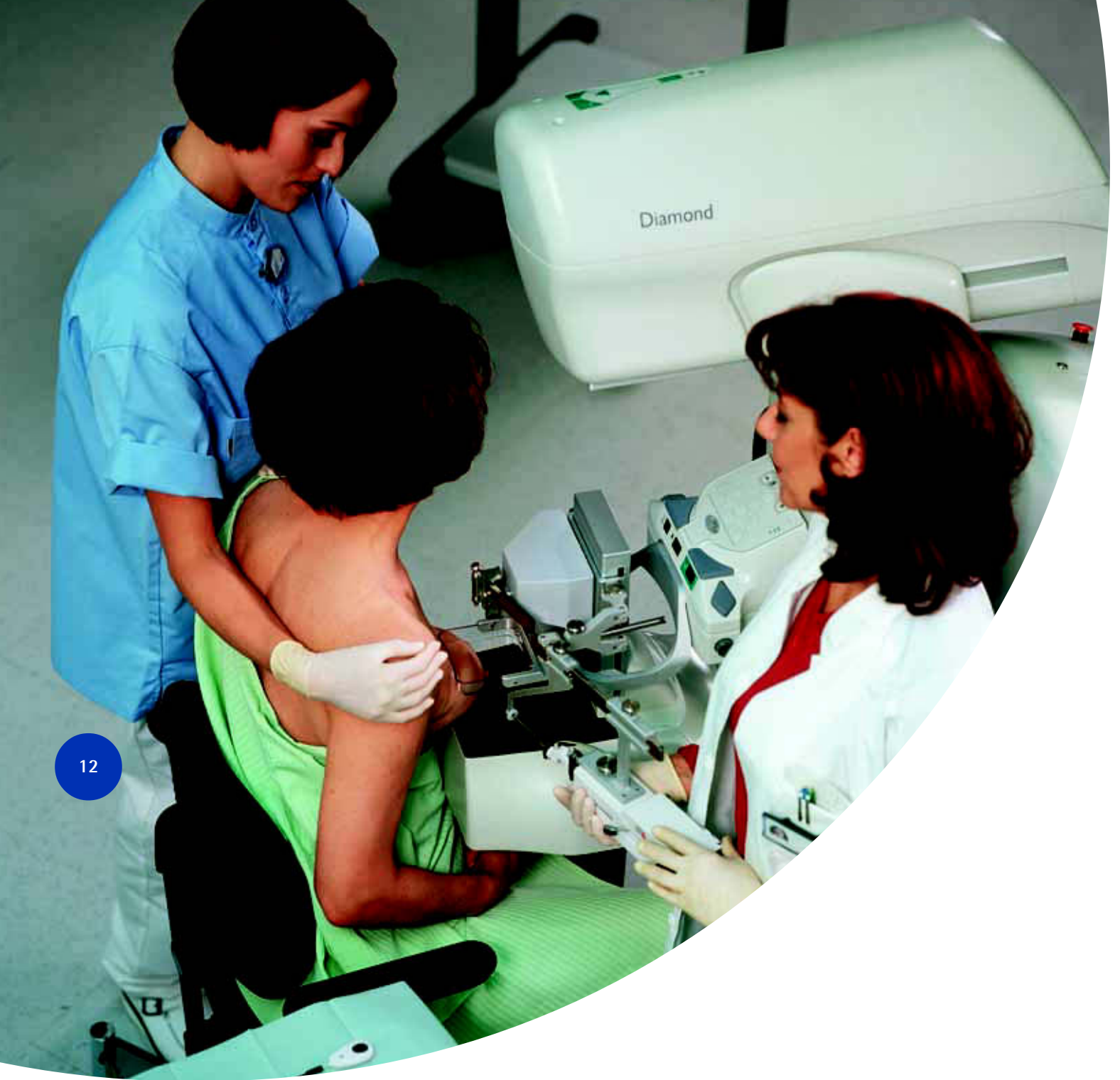


*The best magnification images in every study: the exceptional performance of the Diamond x-ray tube combined with the versatility of the MultiChoice magnification tunnel.*



*Intensity distribution within the focal spot.*

— Diamond x-ray tube  
- - - Conventional x-ray tube



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

# 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  $\pm 185^\circ$  to minimize the distance from the skin to the lesion. The stereotactic angles are freely selectable between  $\pm 15^\circ$  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.



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*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.*

*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.*



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*With TACT® I am able to send my patient home  
with both of us feeling more confident.  
This is what I expect from a digital system.*

TACT® (Tuned Aperture Computed Tomography) technology from Instrumentarium Imaging 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.

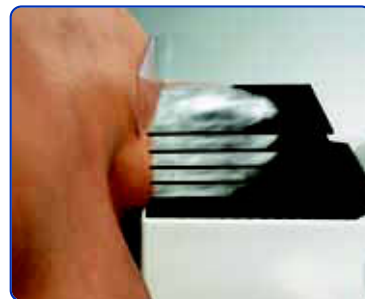
The clinical benefits of TACT® are to define if the mammographic finding is caused by a real abnormal lesion or by superposition of normal parenchymal structures, and to detect changes in breast tissue which could otherwise be missed. TACT® also helps to verify the correct targets for biopsies and to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

Instrumentarium Imaging has 510(k) FDA Marketing Authorization for Delta 32 and Delta 32 TACT® for diagnostic digital spot and diagnostic 3D imaging.

## TACT® – more confidence with a 3D image



*With the TACT® algorithm reconstruction technique, the digital 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 in ways not possible before - as a three-dimensional image or as image slices.*



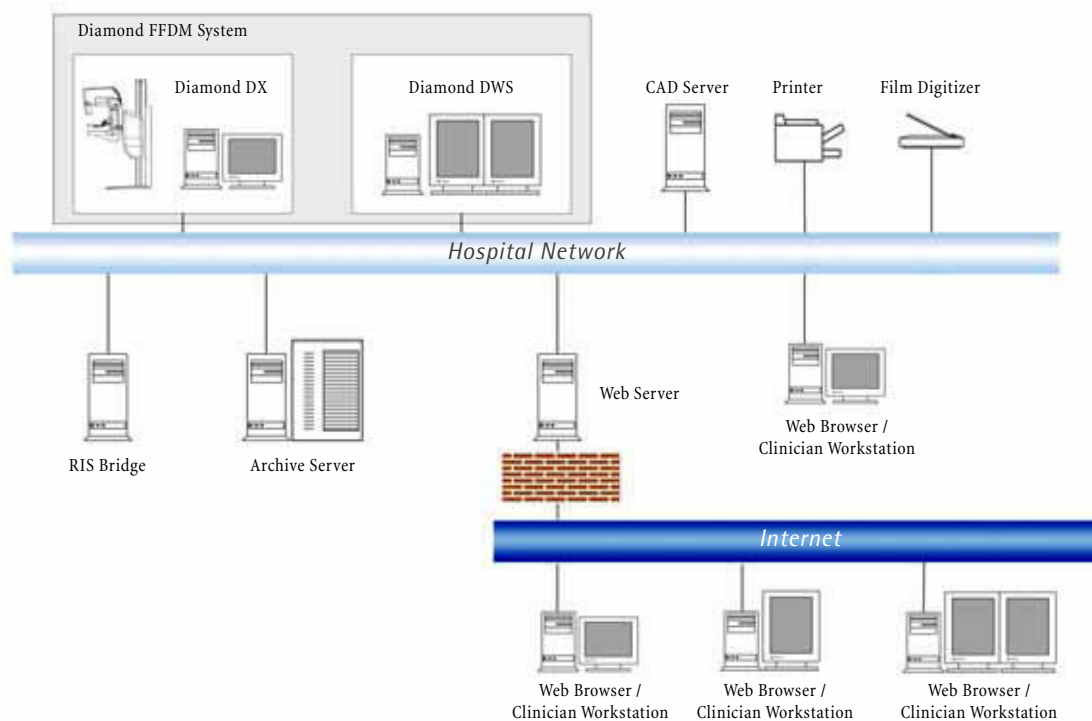
*The basic facts of high-quality mammography do not change with digital imaging.*

# Diamond FFDM system – the balanced clinical solution

Diamond FFDM system is well-balanced in all aspects of highquality digital mammography, starting from the unchallenged user and patient ergonomics of the proven Diamond platform. The Diamond workstations provide ease of use and seamless integration into the workflow of the clinic.

For the best image quality yet with low patient dose, Diamond DX utilizes RealTime amorphous Selenium technology. The RealTime detector has low image noise, insignificant ghosting, and short time between exposures. This allows fast imaging with high patient throughput in conventional imaging and a pathway into advanced applications, such as 3D imaging with TACT®, dual-energy imaging, and contrast media studies.

Upgrade from Diamond to Diamond DX, and upgrade the clinic into Full Field Digital Mammography.





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*And when my needs grow, I can upgrade  
my clinic to digital with Diamond.*

Instrumentarium Imaging manufactures a broad range of breast imaging systems and accessories, both for film and digital imaging, to be able to provide an optimal solution for various needs and applications.

# An optimized imaging solution for every need



*The Performa is the ideal solution for screening purposes. It has the smallest foot print in the industry, yet it's still more than capable of performing diagnostic procedures. The Diamond is the ultimate high-end interventional system for all current and future diagnostic applications. These breast imaging systems are complemented by a comprehensive range of accessories, from radiation shields to DICOM-enabled film flashers.*

# Instrumentarium Imaging Breast Imaging Products



- **Diamond product family**
  - Diamond
  - Diamond DX
  - Delta 32 - Digital Imaging
  - Delta 32 TACT® 3D Imaging
- **Performa product family**
  - Performa
  - Performa Stereo
- **Alpha product family**
  - Alpha RT
  - Alpha ST

Diamond DX is works in progress. TACT® is covered by US Patents 5359637 and 6289235, Canadian patent 2134213, Australian patents 4115893 and 697905, European patent 638224 and Japanese patent 7506277T. Other patents pending. TACT® is a registered trademark of Wake Forest University. Mammotome® is a registered trademark of Ethicon Endo-Surgery, Inc., a Johnson & Johnson company. Diamond complies with UL and C-UL (File E218408). CE marked according to Medical Device Directive (MDD) 93/42/EEC. Electrical safety according to IEC 60601-1. Manufacturing complies with ISO 9001 and ISO 14001.

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Instrumentarium Imaging is constantly improving its products and reserves the right to change these specifications without notice.



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