



# Inspired by you

MAMMOMAT Inspiration

Answers for life.

**SIEMENS**

# MAMMOMAT Inspiration



MAMMOMAT Inspiration

# Inspir

Siemens understands the demands you face as you balance providing the best patient care with meeting competitive business demands. For this reason, our innovative healthcare solutions are designed to support you in achieving your goals without compromising patient comfort.

Therefore, during the research and development of Siemens' new system for digital mammography, MAMMOMAT Inspiration, we emphasized continuous customer involvement. Your personal requirements as well as the wishes of your staff and your patients were considered during the whole process. The result is a mammography unit that improves your workflow and is well suited for the needs of each patient.

In addition to lower dose and individualized compression, MAMMOMAT Inspiration features the special MoodLight™ to further encourage your patient's comfort.



You and your staff require time-saving ease-of-use functionality that improves workflow. One of the unique features is the one-click-to-image function of MAMMOMAT Inspiration.



For administrators, profitability is essential. MAMMOMAT Inspiration can turn faster workflow into high patient throughput and thus cost efficiency.



ed by you



Comfort

“I’d like to have a system that gives me a feeling of comfort and care.”

This is exactly what Siemens had in mind when developing MAMMOMAT Inspiration. With its unique, appealing design, the system is ideally suited for any screening environment.

& Care

MAMMOMAT Inspiration

# A more inviting exam for the patient



## Attractive design

The design of MAMMOMAT Inspiration is one of a kind. Its smooth round shapes and clear lines are emphasized by the soothing cover colors of pastel pink, lime, and silver. These colors are carried into the design of the operating buttons and underline the individual style of MAMMOMAT Inspiration.

## MoodLight

The most significant design element is the unique LED light panel providing a more comfortable screening environment. MAMMOMAT Inspiration's MoodLight\* can easily be set according to your personal preference: You may choose a setting that changes the color of the light dynamically throughout the day, or you may choose just one color that best matches your environment.

\*Option

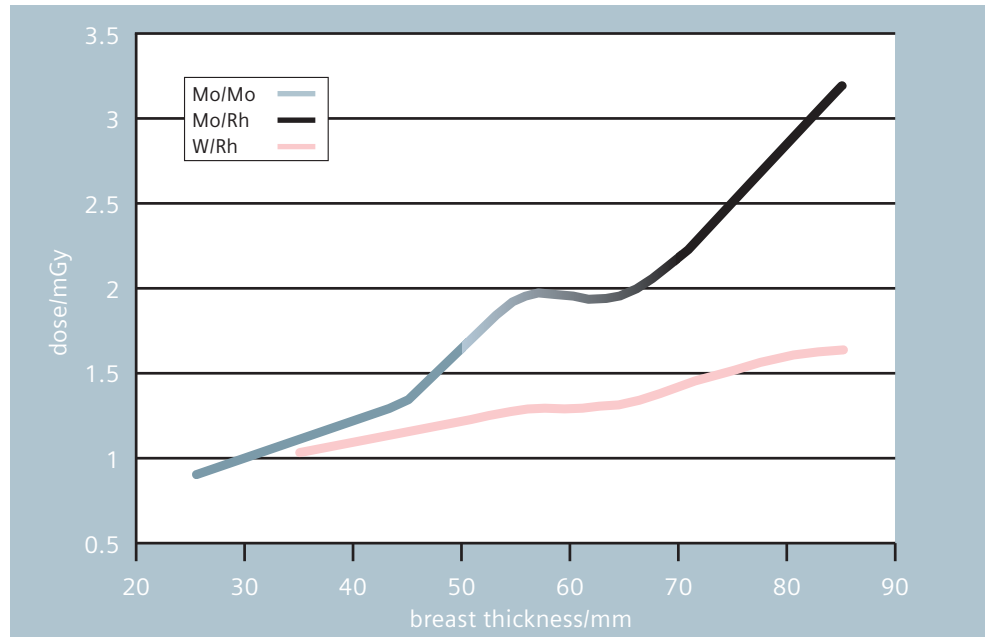


### **Low dose and intelligent compression**

The primary advantage of MAMMOMAT Inspiration is low dose. To match the breast density and thickness of your patients, it offers three anode/filter combinations: Mo/Mo, Mo/Rh, and W/Rh. Opdose® automatically selects the best anode/filter combination and the lowest dose for the individual breast characteristics. With its Tungsten technology, the system gives you the possibility to examine even dense breasts with shorter exposure times and significantly reduced dose.

Siemens' intelligent Opcomp® function applies compression only as long as the patient's breast is soft and pliable. For best image quality, it stops at the point of optimal compression.

The material composition of the paddles provides a warm and smooth feeling during the exam.



Siemens' Tungsten/Rhodium (W/Rh) technology reduces dose significantly when compared to conventional Molybdenum exposure. Especially for dense breasts, a dose reduction of up to 50% can be achieved. The graphic reflects clinical data of more than 4800 mammograms. Equivalence of image quality has been demonstrated by CNR (Contrast-to-Noise-Ratio) evaluation of breasts imaged with both X-ray spectra.



A close-up photograph of a Siemens water dispenser. The top section is white with the 'SIEMENS' logo embossed in silver. Below this is a grey section with two small silver clips. A pink handle is visible on the left side, with a silver grip. The background is a light pink wall.

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“I need excellent exams and I need them fast. Simplicity in all system features would make my day much easier.”

With its automation and integration in screening, MAMMOMAT Inspiration reduces the number of steps required to produce exam results. This increases efficiency and improves workflow for both you and your staff.

Ease & Exo

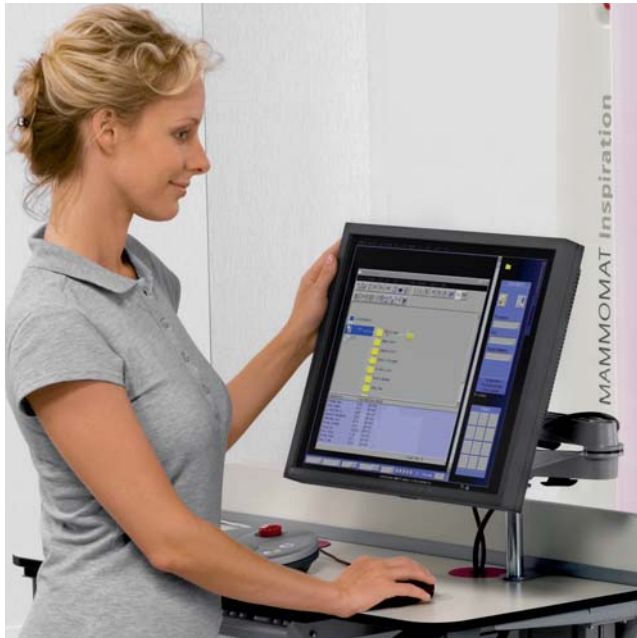




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# Efficient workflow for the technologist



## One-click-to-image

MAMMOMAT Inspiration streamlines your workflow. After one exam is finalized, the system automatically opens the patient scheduler. Selecting the next patient is the only mouse click needed. The user interface is already set for the whole exam. A second click allows you to close the study.

## Single-touch positioning

Another convenient feature is provided by our single-touch rotation. With one touch, the tube head goes from cranio-caudal to mediolateral-oblique in an instant. While independent and accurate system movements take less attention, you have more time for the patient.

## Small and space-saving workstation

Less is more. This is how the new Acquisition Workstation (AWS) is best described. The operator interface of the *syngo*®-based AWS includes the generator console. This reduction in equipment makes it possible to introduce a height adjustable table – a workplace designed to perfectly match the technologist's needs.



## Three X-ray release options

Serial examinations are typical for a screening environment. Therefore, a versatile working environment is very important. MAMMOMAT Inspiration offers three different options for X-ray release. Your staff can either use the standard control box, the optionally available hand switch, or a new dedicated foot switch. This operational flexibility enables maximum efficiency in examination rooms.



### **Immediate image display**

The MAMMOMAT Inspiration detector makes it possible – very little time between exposures. A few seconds after X-ray exposure, a preview image enables you to quickly assess the quality of positioning and to proceed with the next exam. Such time reduction encourages continuous workflow throughout the entire day.

### **Simplified maintenance and service**

Cleaning compression paddles must be simple and convenient. That's why MAMMOMAT Inspiration's plastic paddles can be easily detached from the metal holders and can be cleaned separately.

Medical devices require servicing on a regular basis. That takes valuable time. Therefore, Siemens has reduced the calibration rate to once a quarter.



### **Isocentric rotation**

No matter which position the technologist is targeting next, the center of the detector always stays at the same height, thanks to the isocentric rotation. This ensures a transfer to the next exam by true single-touch.

MAMMOMAT Inspiration

# Enhanced image quality for the physician



In a clinical environment, achieving high-end image quality while maintaining low dose is a priority. Certain and confident diagnoses are essential for your everyday work and for all following treatment measures. You need to acquire images with the finest diagnostic detail within seconds. This is exactly what we keep in mind while developing our products.

## Direct-to-digital aSe detector

In a screening environment, the ability to detect small and low contrast objects is mandatory. This is why MAMMOMAT Inspiration provides an amorphous selenium (aSe) detector – directly converting X-ray energy into an electric charge. Compared to indirect technologies, the absorption rate of aSe is higher in the low energy range used in mammography, and at the same time the Detective Quantum Efficiency (DQE\*) is higher and little information is lost. This makes smaller pixel sizes possible and leads to increased spatial resolution.

## Adaptive AEC

With a new AEC algorithm, dose calculation has been further optimized: The system measures and selects exposure parameters based on the individual breast size and composition. This adaptive AEC provides full flexibility in terms of breast positioning.

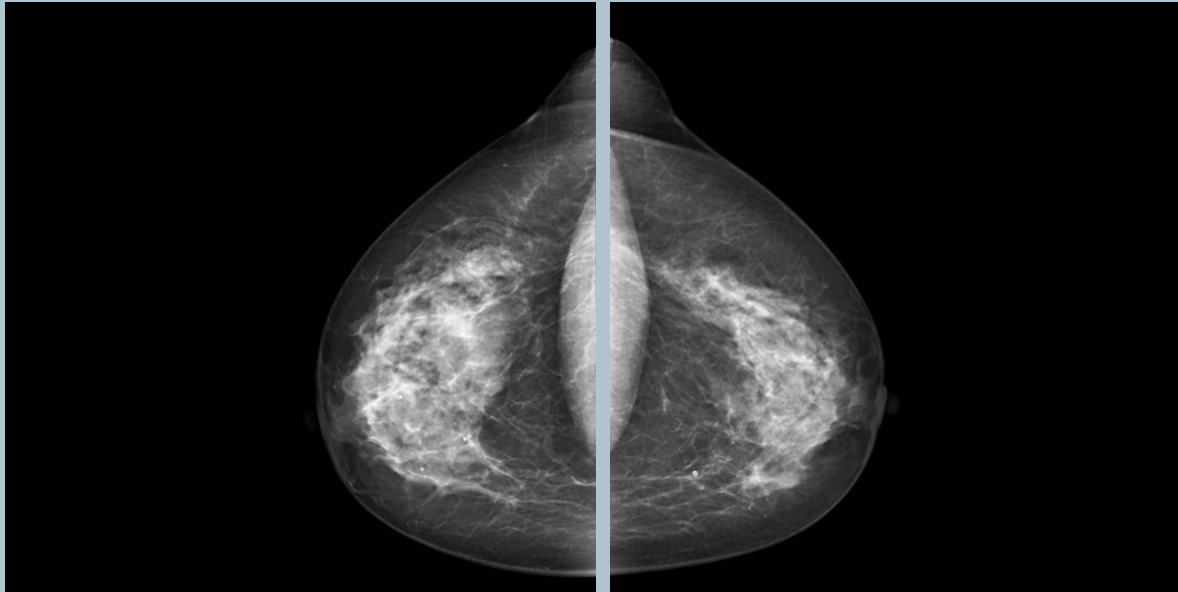
## OpView 2

The new image processing software OpView 2 from Siemens is specially designed for digital mammography to produce superior image quality. New algorithms provide excellent visibility of the breast border as well as structures in dense tissue. It provides better visualization of microcalcifications and masses and offers great results in imaging breasts with implants. The settings can be customized for your viewing preferences, providing versatility.

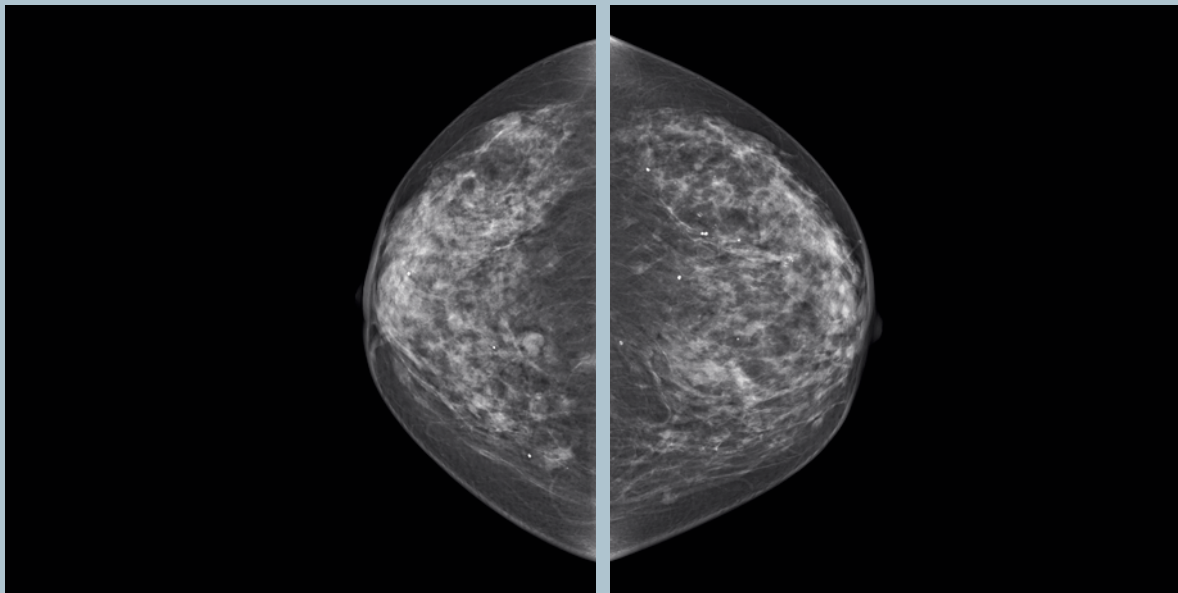
\*DQE = Detective Quantum Efficiency: DQE measures the efficiency of the detection process of an image detector given by squared ratio of the output signal-to-noise ratio to the input signal-to-noise ratio.



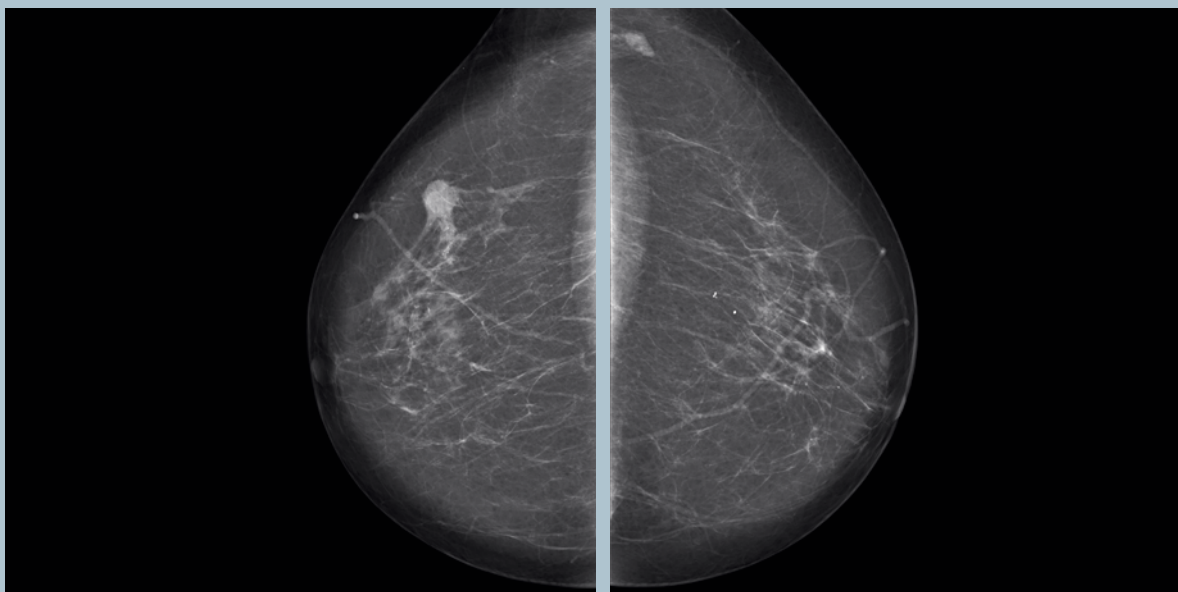
Excellent contrast and clear visualization of all details even in the presence of dense glandular tissue




Small structures like microcalcifications are clearly depicted without compromise in skin line delineation



High conspicuity of a tumor-suspicious lesion



Courtesy of Prof. Dr. Uhlenbrock & Partner, Dortmund, Germany



“Competitiveness, efficiency, sustainability – these are requirements that everyone wants. Is there any system that can meet these demands?”

With its ability to be upgraded, MAMMOMAT Inspiration protects your investments and ensures state-of-the-art functionality. This translates into cost efficiency and helps you to achieve your strategic goals.

# Strategy &



# Success

## MAMMOMAT Inspiration

# Cost efficiency for the administrator



MAMMOMAT Inspiration meets the individual needs of each patient and speeds up workflow. A patient throughput of up to 15 patients per hour allows you to realize significant cost savings.

### **IT connectivity**

With MAMMOMAT Inspiration, you profit from the advantages of *syngo*, the comprehensive Siemens user interface allowing multi-modality viewing.

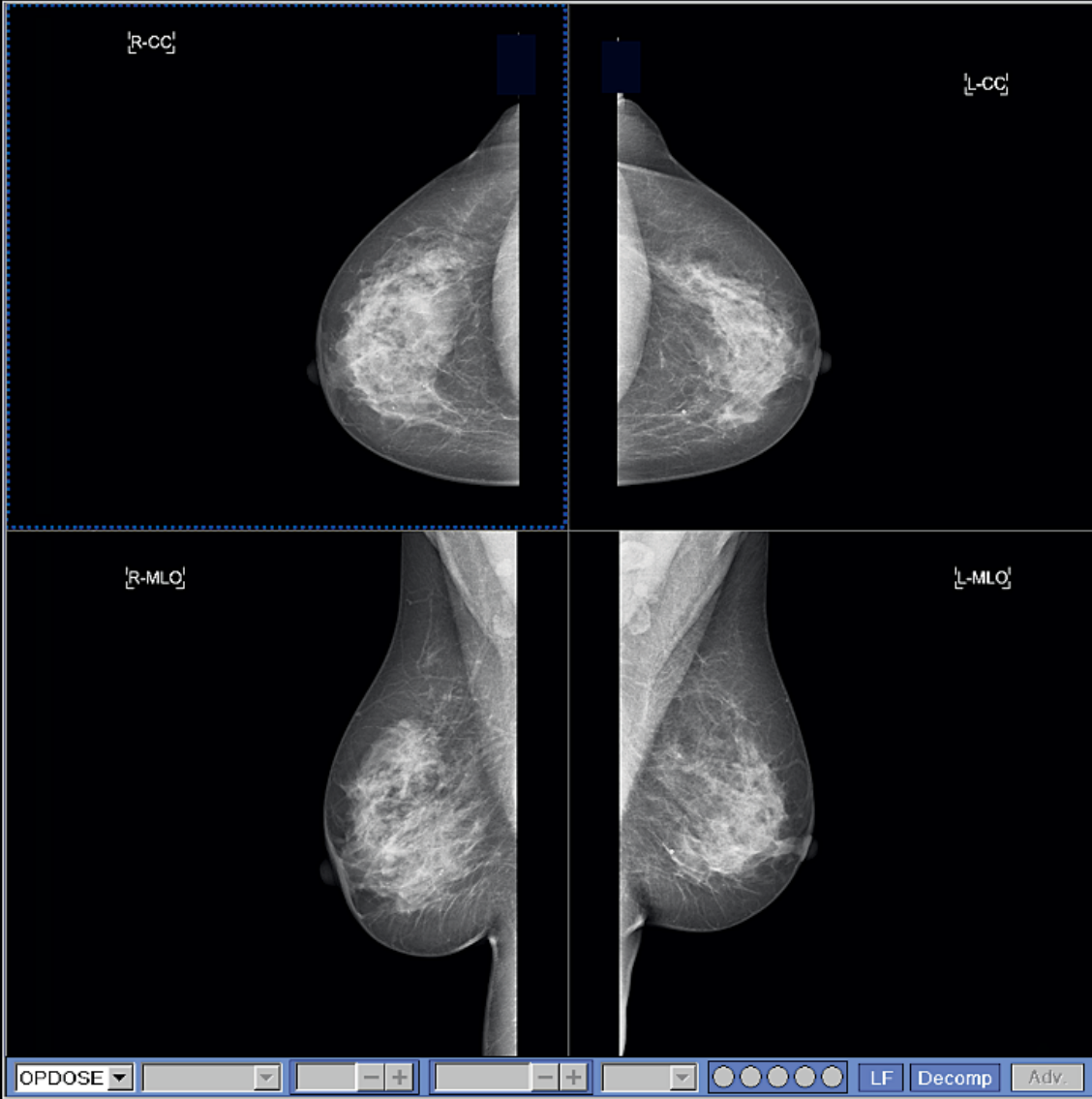
To take full advantage of the benefits of digital mammography, Siemens' dedicated Acquisition Workstation (AWS) and *syngo* MammoReport for reporting provide an ideal solution for clinical processes. Through DICOM and RIS compatibility, patient data is readily stored in existing clinical archives.

### **Reliable service**

Servicing systems as fast as possible is crucial in a clinical environment. Due to Siemens Remote Service, time gaps are shortened or downtime is even completely eliminated. Thanks to constant monitoring, deviating parameters are detected before problems occur.

### **Future upgradeability**

MAMMOMAT Inspiration not only presents a new mammography system but rather a technology platform that provides a smooth upgrade path – from the standard configuration needed for screening purposes to stereotactic biopsy and, in the future, 3D imaging with tomosynthesis (work in progress).



Examination

Viewing

- Open patient
- Acquisition
- Post processing
- Close patient

- Open MPPS Dialog
- Open Scheduler

Procedure:  
Bilateral Mammo

Images


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## Comfort & Care for the patient

- While maintaining highest image quality, dose is significantly reduced as a result of the Tungsten technology and Siemens' Opcomp.
- The MoodLight rounds off the open and distinct design.



## Ease & Excellence for the physician and the technologist

- With one mouse click, the system is ready for image acquisition.
- The fast aSe detector minimizes time between exposures.
- The new image processing OpView 2 provides superior image quality.



## Strategy & Success for the administrator

- More than 15 patients can be screened in one hour.
- Siemens Remote Service allows for improved maintenance.
- The system is easily upgradeable to biopsy and tomosynthesis (work in progress).

The product is not yet available in the U.S.

The information in this document contains general descriptions of the technical options available and may not always apply in individual cases.

The required features should therefore be specified in each individual case at completion of contract. Siemens reserves the right to modify the design and specifications contained herein without prior notice. Please contact your local Siemens sales representative for the most current information.

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

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