The logical choice for mobile mammography

Philips MicroDose Mammography system

Philips MicroDose Mammography systems offer high resolution and low patient dose, as well as temperature-tolerant detector technology and system stability that are well suited for a mobile environment.

By offering the same high quality, ergonomics and reliability as found on stationary MicroDose Mammography systems, both radiographers and patients can feel as comfortable as if they were in a traditional hospital or clinic.

The first MicroDose Mammography unit was installed onto a UK mobile screening trailer in 2005. There are now more than 50 MicroDose units installed on trailers worldwide.

PHILIPS

sense and simplicity

Ten reasons to choose MicroDose Mammography for mobile breast screening

1. **Superb image quality with proven clinical effectiveness[1]:** The small pixel size of 50 µm, one of the smallest available, enables visualization of fine structures in the breast, such as microcalcifications and spiculations.
2. **Dramatic dose reduction:** Clinicians report using 18% to 50% lower radiation dose than used on other digital mammography systems, with an average dose reduction of 40%.[2,3,4]
3. **Ergonomic design:** The system ergonomics simplifies the screening process for radiographers and may help reduce the risk of musculoskeletal injury, such as repetitive strain injury (RSI).[5]
4. **Simplified and enhanced workflow:** The efficient workflow contributes to high patient throughput without creating additional fatigue for the mammography staff. MicroDose users can perform up to 15 four-image examinations per hour.
5. **100% pixel warranty:** MicroDose's scanning technology eliminates dead pixels and associated image data loss, making faulty pixels a thing of the past.
6. **Stable, temperature-tolerant detector:** Philips crystalline silicon detector is stable and tolerant toward temperature and humidity alterations, providing great economic benefits. Because the equipment can tolerate temperatures ranging from -10°C to +50°C (14°F to 122°F) during transport, mobile units can perform examinations year-round. In many climates, the power can be turned off at night or on weekends without requiring expensive, continuous temperature management.
7. **Proven robustness:** The MicroDose system has been subjected to extensive vibration and shock tests in simulated mobile environments, and has proven performance in clinical practice at numerous mobile installations worldwide.
8. **Quick and easy installation:** The specially designed mobile installation kit provides a proper and secure installation of MicroDose Mammography on the trailer. Philips supports you in planning, design, workflow consulting, and application training. When you relocate a trailer you simply lower the C-arm and the system is ready for transport. No need to strap down or provide additional security for the X-ray unit.
9. **Flexible power configuration and connectivity options:** The system can operate from a range of power sources. Philips can provide the components required to create connectivity between the trailer and the screening service where reporting is performed.
10. **Trailer independence and cost reduction:** Thanks to its temperature stability, Philips MicroDose can be installed in almost any new or refurbished trailer (subject to validation by Philips), without requiring additional thermal insulation in the walls, floors and ceilings. This provides an excellent opportunity to reuse trailers and reduce cost, and is an environmentally conscious choice.

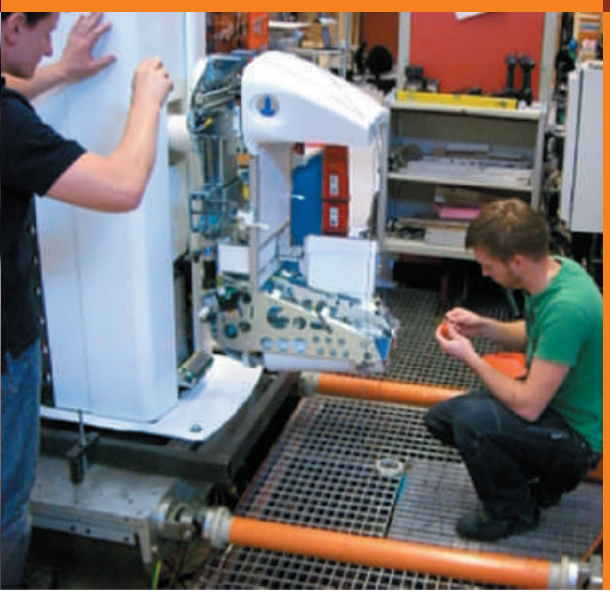
Extensive tests prove MicroDose Mobile Mammography performance

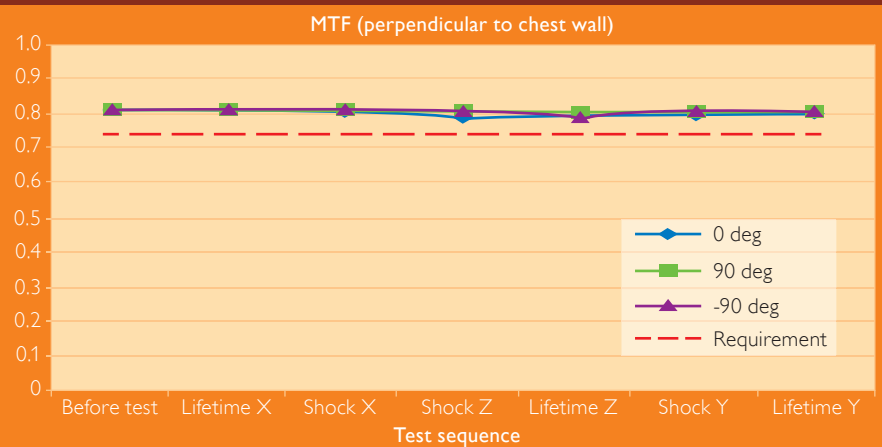
The designers of MicroDose Mammography demonstrated that the systems would be well suited for mobile screening environments. The first system to be installed into a trailer was road-tested at a specialized vehicle testing facility. The forces, shock, and vibration effects were all monitored as the trailer underwent extreme handling situations, such as fast cornering, hard braking, and driving over speed bumps at high speed. All of the data from these tests were then reproduced on a test rig that underwent continuous cycling between the extreme conditions, and image quality and performance testing. The MicroDose system proved to be stable throughout the testing process, which was designed to replicate 10 years of use in a typical screening environment.

Mobile mammography units provide convenience, ease-of-access

Organized mammography screening has shown to be the most effective method for early detection of breast cancer. However, increasing participation rates is an ongoing challenge. Reducing time spent traveling to an appointment may be key in this ambition.

Mobile breast screening units are ideal for taking the screening service out of the hospital environment and into the community. The trailers are usually located at easy-to-access locations, such as shopping and sport centers, or in close proximity to where people live and work. As a result, it takes less time to travel to appointments. In addition, mobile mammography units are able to distance themselves from the hospital environment, making it easy to position mammography as a service for healthy women.





To demonstrate that MicroDose Mammography could maintain performance and reliability despite the rigors of travel, a system was mounted onto a vibration testing platform and subjected to lifetime testing. The graph demonstrates the consistency maintained during these tests.

Bedfordshire and Hertfordshire chose MicroDose Mammography for their mobile trailers

The Bedfordshire and Hertfordshire (Beds and Herts) Breast Screening Service, part of the National Health Service Breast Screening Program in England, provides a free breast screening service for well women between ages 50 and 70 once every three years. Currently the service invites more than 60,000 women from the region for breast screening each year. In 2011, the Beds and Herts Breast Screening Service decided to replace five of its analogue mammography systems with digital MicroDose L30 systems. Four of these units were placed on mobile trailers.

"As our vans operate on generators, we were aware that the detector is less sensitive to temperature than other detectors," said Babs Arnold, Deputy Breast Services Manager. "The generators are switched off at night, so the detector must be capable of withstanding wide variations in temperature. As a screening modality, the MicroDose L30 came out on top of our evaluation list."

She adds, "Another reason for our purchase was that we are now in the process of introducing the age extension of the breast screening program and it was essential that we had digital mammography equipment for this expansion. The MicroDose systems had demonstrated improvements in throughput efficiency for other UK screening services."

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Please visit www.philips.com/microdose

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