

1 GENERAL DESCRIPTION

The MAMMI breast equipment (hereinafter, MAMMI) is a Positron Emission Tomography system for examining the breast in applications for detecting small tumours in breast cancer. The readings taken with the MAMMI machine do not require breast compression, as is the case of X-ray examinations. The 3D images obtained are quantified with great precision and in SUV (Standard Uptake Values). The system also includes a comfortable bed designed especially for performing examinations in the prone position.



Figure 1: MAMMI PET system cart



Figure 2: MAMMI Prone Examination bed

The MAMMI equipment is basically comprised of two parts; a bed that permits to examine the breast in prone position (prone examination bed) and a cart (breast PET system) containing an elevation arm with the PET ring.

For data storage and image reconstruction work, the MAMMI cart must be connected to a reconstruction computer.



Figure 3: FP-0202 Model

1.1 Detailed description of the different parts of the MAMMI equipment

1.1.1 MAMMI breast PET system

The MAMMI breast PET equipment has the following components:

- PET ring and elevation arm
- The unit that allows the images to be captured: monitor, mouse, keyboard, cart and MAMMI Suite software
- The systems that allow the equipment to be moved: handle, 2 front wheels, 2 rear wheels and 2 brakes
- The maintenance operations part: maintenance door.