



NORMI® MAM digital X-Ray Test Object

Test object for acceptance and constancy tests of X-ray installations for digital mammography

Highlights

- ▶ Checks all relevant parameters of digital mammographic X-ray installations
- ▶ Fully complies with DIN 6868-162 and DIN 6868-14
- ▶ Modularly composed CE marked class I certified test object incl. different absorbers and test elements
- ▶ Retrofit sets for PTW NORMI PAS test objects available

NORMI MAM digital is used for acceptance and constancy tests of digital mammographic X-ray units. The modularly composed test object includes a basic phantom, a structure plate, PMMA absorbers and different test elements for insertion into the structure plate.

The basic plate has an inclined aluminum step wedge with 14 ranges for testing the dynamic range. Two lines of five steel balls each symmetrically placed in the structure plate and in the basic attenuation phantom show the limitations on the thoracic wall side.

The PMMA absorbers can be used for tests of the automatic exposure control (AEC). Furthermore, different test elements can be placed into the cut-out provided in the structure plate. The test element SDNR is used to determine the average pixel values for the determination of the signal-difference-to-noise ratio. The high contrast can be tested with the test element HK, while the PMMA test element is used for checking the average grey value.

Different sets, as well as retrofit sets for the NORMI PAS are available.

Specification

Type of product	test object for quality control of digital mammographic units
Application	acceptance and constancy test acc. DIN 6868-162 and DIN 6868-14
Dimensions:	
Basic phantom	(240 x 180 x 40) mm
Structure plate	(240 x 180 x 6) mm
Absorbers	(240 x 180 x 4/6/10/20) mm (320 x 260 x 20) mm
Test elements	(80 x 80 x 6) mm
Weight	approx. 11.3 kg
Structures:	
Basic Phantom	PMMA block with stops on the thoracic wall side, two rows of 5 steel balls each on the underside, cut-out for Al step wedge
Al step wedge	Removable aluminum step wedge with 14 steps
Structure plate	PMMA plate with a cut-out for test elements
Test element SDNR	PMMA insert, with two (20 x 20) mm markings, one covered with a 0.2 mm thick Al foil
Test element HK	PMMA insert, with a (20 x 20) mm marking, half covered with lead foil
Test element PMMA	PMMA insert, with (20 x 20) mm marking, when inserted in structure plate, the center is at a distance of 60 mm from the thoracic wall side

Ordering Information

T42039 NORMI MAM digital 162
 L981427 Part 162 retrofit set
 T42040 NORMI MAM digital 14
 L981494 Part 14 retrofit set

Options

T42028.3.050 PMMA step substitute
 T42028.1.021 Test insert for dose detector
 T42028.1.008 Test element KP-ACR
 L981815 NOMEX Multimeter
 T11007 CONNY II