



Dual Attenuation Phantom

GAMMEX 406 LE

The Gammex 406 LE Dual Attenuation Phantom gives you the benefit of having two phantoms in one with background attenuations of 0.5 and 0.7 dB/cm/MHz in a side-by-side configuration. Quality control tests over a wide range of frequencies can be performed quickly and easily, providing a comprehensive profile of the scanner's overall image quality - all with a single phantom.

The 406 LE phantom is a highly effective instrument for demonstrating superior image quality while challenging high performance ultrasound systems. The phantom incorporates our Tissue Mimicking gel which provides a smoother background texture, and a composite film scanning surface that has improved transmission

properties so more of the ultrasonic beam can be transmitted and received.

With extended target depths to 16 cm, this phantom provides greater scanner and transducer performance tests of resolution, depth of penetration and electronic caliper measurements. Extra pin targets are ideal for testing high frequency transducers which are designed to image the first few centimeters of human tissue. Resolution patterns and all vertical and horizontal targets are constructed of 0.1 mm nylon fiber. Three sets of axial resolution targets at 3, 8 and 14 cm, and spaced at 2.0, 1.0, 0.5 and 0.25 mm, make this phantom extremely effective for demonstrating high resolution detail and challenge the ultrasound system's resolution

continued

Gammex



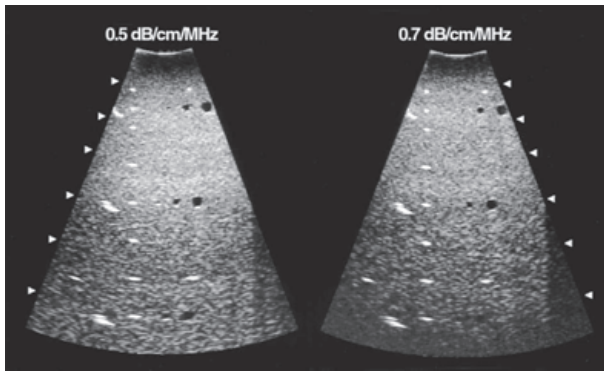
GAMMEX 406 LE

ULTRASOUND

continued from front...

capability. Scatter-free cylinders of 2, 4 and 6 mm diameter are embedded in the phantom representing blood vessels in human tissue

Optional accessories for the Gammex line of Ultrasound phantoms include Soft Foam-Lined Carrying Case, Rigid Case, or the Precision Ultrasound Transducer Guide.



This ultrasound image demonstrates the 0.5 (left) and the 0.7 (right) dB/cm/MHz attenuation phantoms contained in the Gammex 406 LE Dual Attenuation phantom.

SPECIFICATIONS

High Resolution Tissue Mimicking Gel

Speed of sound . . . 1540 \pm 10 m/s at 22°C

Attenuation 0.5 and 0.7 \pm 0.05 dB/cm/MHz

Targets

Anechoic Cysts

Diameters 2, 4 and 6 mm

Speed of sound . . . 1540 \pm 10 m/s at 22°C

Attenuation 0.05 \pm 0.01 dB/cm/MHz

Pin Targets

Diameter of

nylon lines 0.1 mm (0.004 in)

Vertical spacing . . . 10 mm at 2 to 4 cm deep;

20 mm at 4 to 16 cm deep

Horizontal

spacing 30 mm at 2 and 12 cm deep;

additional pins spaced at

20 mm in 2 cm set

Axial resolution . . . 3, 3 and 14 cm

Construction

Scanning

surface Composite Film

Walls Extruded ABS

Dimensions 23.2x8.25x18.5 cm

(9.25x3.25 7.25 in)

Weight 2.8 kg (6 lbs 5 oz)

All acoustic measurements at 4.5 MHz, 22°C