Quantitative Ultrasound Phantom

Tissue Equivalent Calibration Standard

The Model 063 QUS Phantom provides a linear response of Broadband Ultrasonic Attenuation (BUA) in the diagnostic frequency range for assessment of bone quality.

Model 063

Features

- Linear response in the diagnostic frequency range
- Can be molded into any shape (custom manufacturing)
- Mimics calcaneus bone
- Proven construction methodology
- Known material properties permit phantom to be used as a calibration tool with various QUS systems

Tissue Simulation & Phantom Technology

CIRS

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Model 063 Specifications

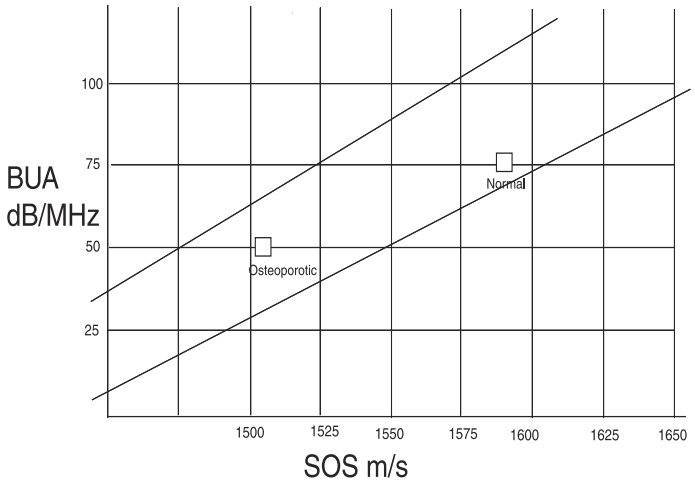
MATERIAL:
Proprietary Urethane

THICKNESS: 36 mm

SPEED OF SOUND RANGE:
1500-1600 m/s at room temperature

BUA VS SOS

As measured in Accoustic Laboratory at CIRS, Inc.



Test Conditions in CIRS Accoustic Laboratory:

- Water bath
- Transducer center frequency = 0.5 MHz
- Sampling frequency = 20 million samples/sec.
- Frequency range for BUA evaluation = 0.25 - 0.55 MHz
- Temperature = 21.3 °C