

WC25 Calibration sphere



KONGSBERG

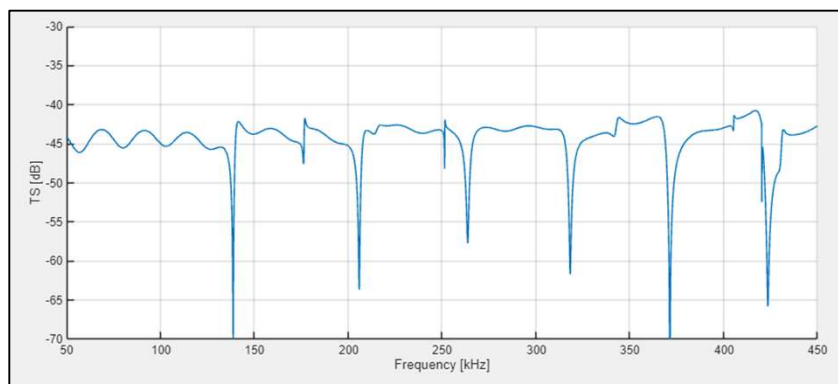


General

Kongsberg offers spheres for calibrating the echo sounder backscatter measurements. Calibration is performed for system verification and for optimizing measurement accuracy.

Kongsberg offers a WC25 mm calibration sphere tied in a net bag and with three separate suspension lines for attachment to the onboard calibration rigs. Suspension is designed to minimise the impact on the acoustic response of the calibration sphere.

The WC25 is recommended for calibrating the ME70 and MS70 scientific multibeam ranging from 70-120 kHz, and also suggested for calibrating the ES333 echo sounder transducer ranging from 280-450 kHz.



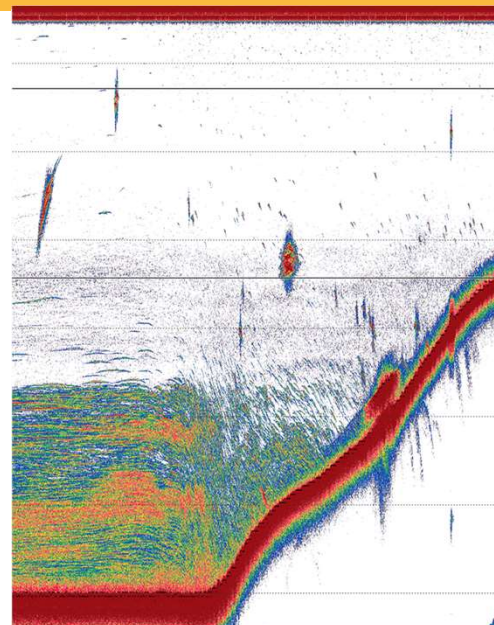
The theoretical frequency response of the WC25 mm calibration sphere is plotted. The plot is calculated by MacLennan (1981), "The theory of solid spheres as sonar calibration targets", using salt water with a sound velocity of 1480 m/s.

Order information

- Part number: 364507
- Included in the delivery: sphere, suspension lines on a coil, delivered in a storage box

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Technical specifications

Sphere specifications:

- Diameter: 25 mm
- Material: Tungsten carbide alloy with 6% cobalt
- Weight: 122 grams

Net bag and suspension lines:

- Type: 0.4 mm monofilament
- Material: Polyamid alloy
- Three separate 2 metre suspension lines

Handling recommendations

The material of the lines and their breaking strength can be affected by prolonged exposure to salt water and UV radiation.

The sphere and lines should be rinsed in fresh water after use to prolong their life.

To avoid breaking the lines and losing the sphere, the net bag should be replaced when the lines become brittle.

Snap loading can break the lines and should be avoided.