

# Calibration and Maintenance Service



The MacArtney Underwater Technology Group offers calibration and maintenance services of oceanographic and hydrographic instruments. This service is available from our German operation, MBT, in Kiel, Germany.

## Service jobs

- Calibration on CTD and SVP probes
- Maintenance of side-scan-sonar and echo sounders
- Maintenance of in-situ nutrient and particle analysers
- Maintenance of oceanographic sensors
- Pressure test facility
- MIL-standard services
- High-end data acquisition and analysis
- Further services available - please enquire!

## Test environment

- 3 stabilised salinity bathes (10 PSU, 20 PSU, 35 PSU)
- 4 stabilised temperature bathes (variable temperatures)
- 1 adjustable temperature bath for tall devices
- Lab climate monitoring
- ESD safe workspace

## Calibration standards

- Temperature: 0.01°C
- Conductivity: 0.01 mS/cm
- Pressure: 0.01 dbar
- Speed of sound: 0.03 m/sec
- Speed of sound from CTD: 0.1 m/sec
- Density from CTD: 0.1 kg/m<sup>3</sup>

## Reference measuring devices

- ASL resistance bridge
- DDM 1,000 precision temperature
- Rosemount PT 25 temperature sensors
- Ozeanus Gallium calibrator
- Isotech triple point calibrator
- Autosal 8400A and 8400B
- Budenberg pressure dead weights
- Various electrical and electronical test equipment

## Redundancy and cross check

All reference devices are operated in redundant set-ups to guarantee an uninterrupted availability and reliable performance of the calibration facility.

Calibration and maintenance

Service and Training

