

Acoustical and vibration standards at the BEV - Bundesamt für Eich- und Vermessungswesen News from 2004 to 2006

Verification bodies for acoustical measuring instruments

Since June 2004 a new legislation basis exists which allows the accreditation of private bodies to perform verification of measuring devices. The accreditation procedure of these companies through the BMWA, the accreditation body of Austria, has been started in the field of acoustics and verification bodies for sound level meters and sound calibrators are expected to be accredited soon. This will allow the Austrian NMI - BEV to concentrate on standards and research projects connected with.

Improvement of the primary method for pressure calibration of acoustical standards

The new pressure calibration system type B&K 5998 is extended with the option of low frequency measurements and is equipped with an environmental control system.

Development of the primary method for calibration of vibration standards using laser technique

During last 2 years the homodyne technique with quadrature output is implemented in the region of middle frequencies, (40 Hz - 5000 Hz).

CMCs

The existing CMCs connected to the acoustical primary standards are improved. New CMCs for vibration are also declared. They are both expected to be approved.

Participation in key comparisons

During the last two years BEV has participated in the

- EUROMET.AUV.A-K3
- EUROMET.AUV.V-K1
- CCAUV.A-K2 (as pilot laboratory)

Research program

- Calibration of vibration standards in the low frequency region down to 0.4 Hz.
- Implementation of laser techniques for acoustical standard calibration.