



has established a microphone calibration service in the audio frequency range 10Hz to 20kHz.

From now on factory calibration of our own products starts from 10Hz.

We are also pleased to offer our microphone calibration capabilities to DIY's and amateurs who want to learn more about the accuracy of their own microphones.

### Method of calibration:

The on axis frequency and phase response above 500Hz is measured using a MLS signal and microphone substitution.

(The microphone frequency response by the use of a reference microphone is measured first. Then the microphone that shall be calibrated replaces the reference microphone.)

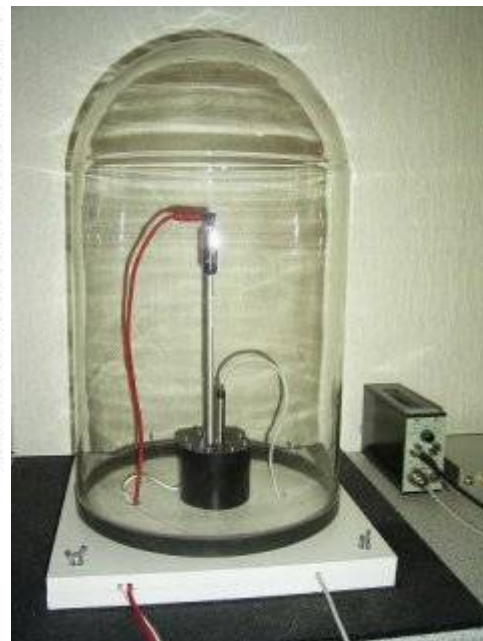
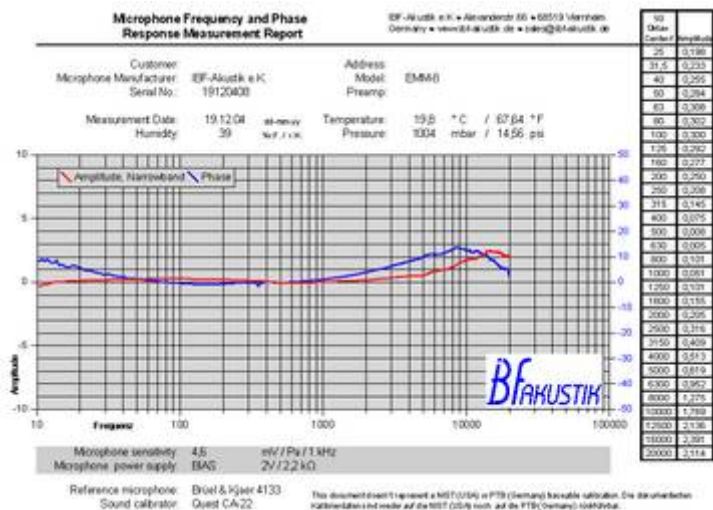
The frequency and phase response in the low frequency range is measured using an sound isolating measurement chamber.

The absolute microphone sensitivity is measured using a hand held sound calibrator.

The calibration accuracy of those acoustical methods is known to be within +/- 0.5 dB.

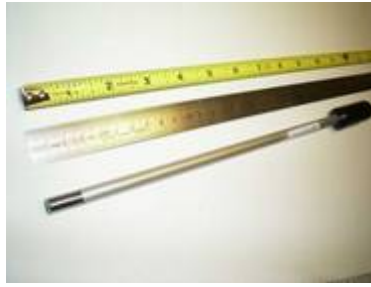
All the measurement results are stored in an human readable ASCII-file.

This file is also for use with various audio and acoustic measurement software. In addition we provide you with a printed measurement report. [Sample report in pdf-file-format](#)



### Products we calibrate:

Microphones with an diameter equal or less than 1/2" including customized products from DIY's, amateurs and/or semiprofessionals.



48V Phantom powered, ICP(R) powered or Bias supplied (2V, 2,2kOhm).  
Other supply voltages on request.

We can also calibrate the measurement chain preamplifier - measurement microphone.

If you have any questions about this new service, please contact [support@ibf-akustik.de](mailto:support@ibf-akustik.de).  
We will also be able follow your personal needs (e.g. other bias voltages).

We recommend to contact us first before sending your equipment unsolicited. In most cases we should be able to return your measurement equipment within 3 days.

#### Our measurement Equipment:

- Brüel&Kjaer 4133 measurement microphone w/ B&K 2639 preamplifier and B&K 2807 power supply.
- Microtech Gefell MK301 microphone capsule w/ MV201 preamplifier and A67 adapter.
- Customized pressure chamber with additional sound insulation glass cover.
- Stereo dynascope for visual microphone inspection.
- Quest CA-22 and CA-15 sound calibrators.
- Vacuum-chamber (300mbar / 4,35psi).
- RME-audio state of the art analog soundcard.



Microphones and  
calibrators



Stereo Dynascope for visual  
inspection



vacuum chamber ^ top  
and  
< front-view



**Please note, that our calibration service is not NIST (USA) or PTB (Germany) traceable. However we use calibrated reference microphones and periodically calibrated sound calibrators. If you require a traceable calibration service, please seek out an official acoustical calibration laboratory.**

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