



Certainly, not everyone needs an acoustic sensor.

*For everyone else:
the sensors of the **dsound**[®] series*

Equipment for industrial quality testing is often expensive, difficult to install, requires frequent and often difficult maintenance, and is not applicable in many areas. The **dsound**[®] **USS4** "hears" small changes of sound emitted by small parts or glass containers. Even the tiniest faults, like cracks, inclusions or geometry deviations are reliably detected despite intense ambient noise. Using the means of sound detection, high enclosure class and the compact housing of the sensor; quality testing is now possible in areas where other methods, like for example cameras fail. You will be amazed by the intelligent USS4.

Sometimes only sound gives you the whole picture



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Sound analysis for close monitoring



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A deviation from the usual sounds of a production process is often the first sign of an operational fault such as ripping material, breaking tools or bursting pressure hoses. With the help of the **dsound**[®] **USS5**, machines and processes can be reliably monitored acoustically. Additionally, assessments of valve- or relay states or snapped-in parts in assembly are viable. If the need arises, the USS5 is able to intervene in the event of unwanted ignitions or emerging leakage. The USS5 provides security to critical processes.

dsound[®] USS4

Application Range

- Rapid testing of small parts (metal, ceramics, glass):
- Nuts, washers, contact pins, sleeves, bushes, rings, punched and deep-drawn parts
 - Isolators, sensor elements, valve discs, filter parts, welding and centring pins

Testing of glass containers

Automated recording of sound signals in an industrial environment



Features

- Integral, high quality electret microphone or respectively an applied structure borne sound pick-up
- High power real-time signal processing directly on the sensor in the integral digital signal processor
- USB 2.0 - Interface
- Training, parameter setting, visualisation and saving of the sensor data through a PC program
- 2 switched outputs, 1 synchronisation input and an analogue input for direct PLC link (Functionality can be configured through a PC program)
- Robust, compact housing (M18 x 130 mm), enclosure class IP 67

dsound[®] USS5

Application Range

Machine, plant and tool monitoring:

- Tool in the cut
- Lack of material

Process monitoring

- Leakage, material ripping (film, veneer)

Monitoring assembly processes:

- Plug-connector assembly
- Springing on or locating circlips or detents
- Snap-In housing assembly

Material breakage detection

Equipment testing

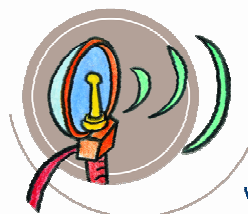
General sound level monitoring



Features

- Integral, high quality electret microphone or respectively an applied structure borne sound pick-up
- High power real-time signal processing directly on the sensor in the integral digital signal processor
- Setting of amplification, frequency band, smoothing period and required switching function through simple menu guidance directly on the sensor
- Analogue output for direct connection of a monitor headphone or output of the measured RMS / peak value
- Potential-free switching output and synchronisation input for direct PLC link
- Robust, compact housing (M18 x 130 mm), enclosure class IP 67

recognise signals
think ahead



ds automation gmbh

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