



- 1 *Catheter-based blood-flow sensor.*
- 2 *Dual-frequency imaging-array in sandwich technology.*
- 3 *ISO 9001 and 13485 certified production technology facility.*



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ULTRASOUND – PIEZOSYSTEMS AND MANUFACTURING TECHNOLOGY

Range of Services

The sensor of an ultrasound system is very important for the overall system performance. In most cases, it is necessary that frequency, beam pattern and sensitivity are adjusted for the needs of an application.

Before a new idea or product can be placed on the market, development of appropriate sensors or modification of an existing sensor may become necessary.

The group Piezosystems and Manufacturing Technology assists customers during the complete way of product development from the idea to the production serving:

- sensor development and optimizations
- consulting services
- feasibility studies
- ultrasonic measurements
- sensor production technology

Our Expertise

The strength of the group Piezosystems and Manufacturing technology is the great

experience of the group's collaborators.

Over the last 15 years more than 200 development projects were successfully finalized. These projects were mostly located in the fields of industry, medicine or sonar.

Starting with a few kHz up to the high MHz range, our developments cover nearly each possible application of ultrasound.

Having finished the development, we also offer the development of the production process. In our ISO 9001 and ISO 13485 certified facility, it is possible to bring new products to prototype and initial batches.

Technology Examples

- Linear, curved and phased arrays for 2-dimensional imaging
- two-dimensional arrays (3D-imaging)
- catheter-based or intravascular probes
- sonar transducer and antennas
- high-bandwidth airborne transducers
- industrial transducers (e. g. flow, level)
- optoacoustical transducers
- piezocomposites for sonar, medical or NDT-transducers (50 kHz – 20 MHz)