



SENSORS

In this sphere of expertise, we harness our skills to produce a variety of physical sizes, and building on this, we develop reliable, customised sensor solutions – from drafting the concept, through selecting the technology, to modelling and building prototypes.

YOUR BENEFITS:

To help bring innovations to market, reliable sensor systems are often indispensable as an interface between the environment and the equipment. LCM is there to assist you as your competent research and development partner. Through our systematic, solution-orientated approach, we help you to transform your ideas into successful products. We don't think one-dimensionally, we think interdisciplinarily. We draw on experts from other specialist fields in order to broaden the development horizon.

The starting point for tailor-made sensor concepts is always to select the measurements and the right sensors for the job. In parallel to this, we conduct intensive research into innovative sensor systems and utilise the possibilities of sophisticated sensor signal acquisition and processing, modelling, and state-of-the-art simulation tools. By constructing prototypes, we demonstrate the possibilities and limitations of the systems, thereby enabling you to develop robust, reliable products.





OUR EXPERTISE INCLUDES:

- Years of experience in measuring an array of physical quantities such as 3D position, distance, speed, weight and volume
- Comprehensive understanding of systems through an interdisciplinary perspective of solving measurement, test or identification tasks
- Concept development for selecting the optimum sensor principles and technologies
- Application of sophisticated signal processing and system modelling
- Design and realisation of functional samples
- Test and evaluation of sensor systems

CURRENT REFERENCES:

Our expertise can be demonstrated by the numerous sensor projects that we have undertaken for customers in a wide variety of sectors. This is just a small selection of our references:

- Highly accurate weight measurement with strong vibrations on a vehicle
- Volume measurement with a laser-cut image processing method
- Inductive sensors to record objects, distance and thickness measurement and material distinctions
- Velocity measurement of fluids in pipes or waters with high-end ultrasound sensors and coupling in different media
- Vibration measurement using acceleration sensors and intelligent evaluation of sensor signals in time and frequency domain