

CUSTOMIZED SENSOR SOLUTIONS FOR YOUR APPLICATION

Benefit from an agile co-creation of a sensor with IST AG and enable your business to focus on your core competence: From simple adaptations of our sensors to fit your application's needs to new development of a tailor-made sensor – from early prototyping to series manufacturing.

IST Innovative Sensor Technology
physical. chemical. biological.



ENVIRONMENT

- Isolation test
- High voltage test
- Helium leakage test
- ESD

INSTALLATION

- Tensile strength
- Shear test
- Optical microscope
- Measuring projector
- X-ray

PACKAGING

- Plastic bag
- Blisters
- Chip tray
- Customer specific
- Tape&Reel

WIRE END

- Stripped
- With plug
- Tinned

SENSOR ELEMENT

- Resistance
- Size
- Characteristic Curve

HOUSING

- No housing
- Stainless steel
- Drift

CONNECTION TECHNOLOGY

- Directly welded
- Laser extension
- Spot welding
- Soft soldering
- Brazing

CONNECTOR

- Wire
- Stranded wire
- Insulation/blank
- Diameter
- Length

MEASURING METHOD

- Accuracy
- Long-term stability
- Ceramic
- Polymer
- Screw

TEST POSSIBILITIES



MEDICAL DEVICES

Sensor solutions for the medical industry and ultra-dry air applications





SENSORS FOR MEDICAL DEVICES

Major developments in personal healthcare and diagnostic analysis, together with the ability to screen health issues early and deliver effective and personalised treatment options, is changing medical care as we know it.

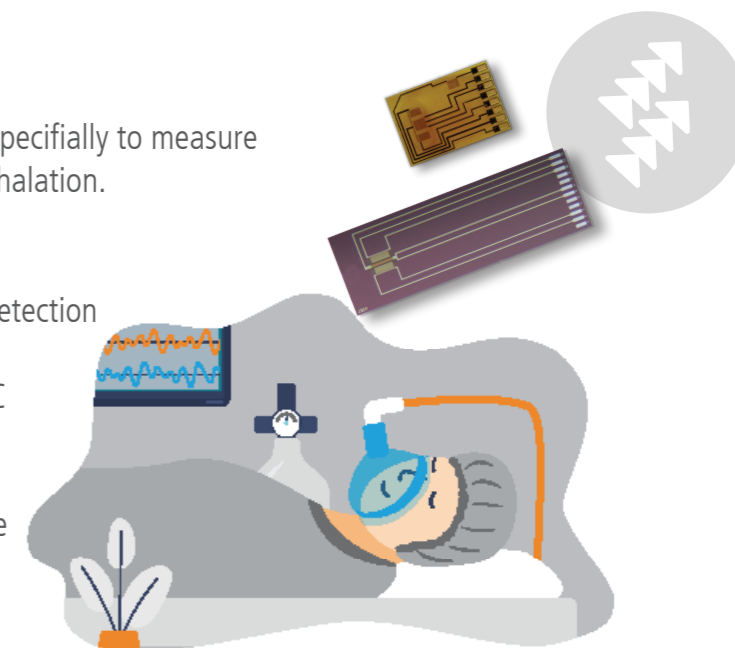
We combine thin-film or thick-film technology to manufacture a wide variety of sensor elements for temperature, flow, conductivity, humidity and biological metabolite monitoring.

Our sensors can be used in real-time remote health monitoring systems, monitoring breath intake respiratory rate, respiratory care anaesthesia gas blender and continuous critical care treatment.

RESPIRATORY RATE MONITORING

Our calorimetric flow elements are designed specifically to measure the flow volume of each breath intake and exhalation.

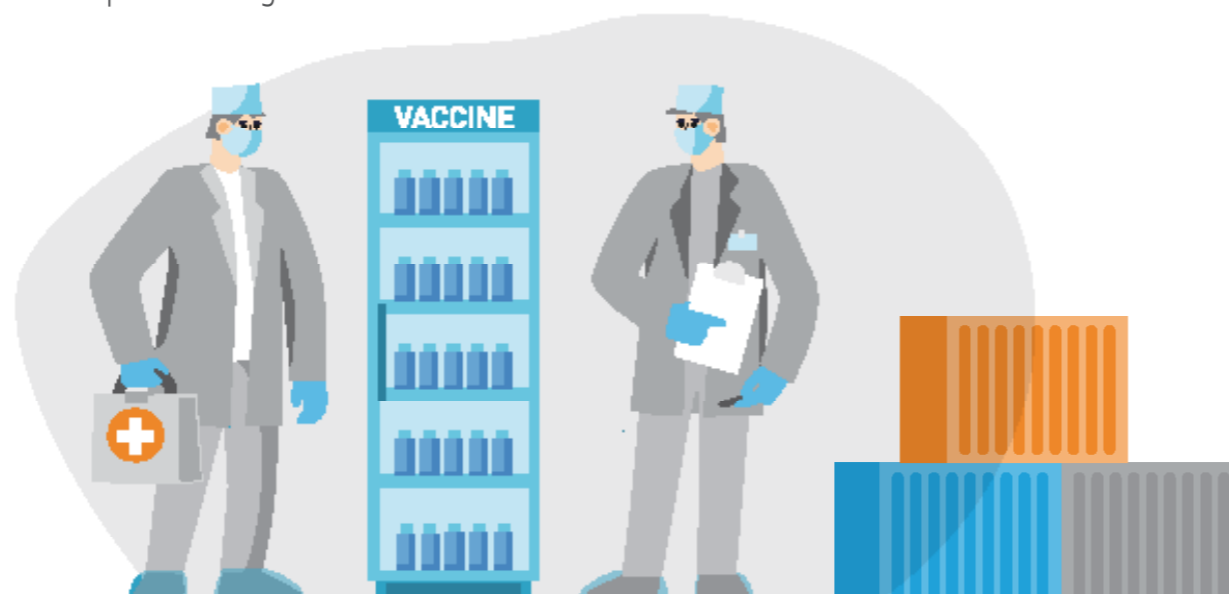
- Extremely fast response times
- Flow rate monitoring and flow direction detection
- Wide flow range from 0 to 150 m/s
- Temperature range from -40 °C to +80 °C
- Suitable for low flow velocities up to 3.5 m/s (in gases)
- Ceramic or silicon based versions available



TRANSPORT TEMPERATURE CONTROL

Our thin-film platinum temperature probes attached to a datalogger, are designed to meet the demands of transport temperature control with a much wider temperature range than traditional thermistor probes.

- Small size
- Long-term stability
- Simple algorithmic signal processing
- Wide temperature range



CONDUCTIVITY SENSORS

Blood purification works as an artificial kidney or liver in the management of patients with multiple organ failure (MOF), and usually performed intermittently.

- Customized electrode design
- With or without built-on temperature sensor
- Wide measurement range (10 nS/cm² to 200 mS/cm²)
- Chip design with high temperature stability of cell constants
- Glass and Ceramic substrates ideal for medical applications

