

SITEX 45 SRL



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Parcul stiintific si tehnologic

WHO WE ARE

SITEX 45 SRL has been involved for over 12 years in following activities on the basis of very successfully cooperation:

- ✓ R&D and manufacturing of microelectronics components and optoelectronics devices, sensors and array sensors, transducers and microsystems as MEMS & MOEMS;
- ✓ R&D activity for new materials development and dedicated applications for micro & nanotechnologies;
- ✓ Relationships with our partners as R&D institutes, universities, research offices and industrial companies by direct access to specialized processing facilities;
- ✓ Design and engineering for new materials applications including nanostructured for microsystems and sensors productions;
- ✓ Design and engineering for microcontamination control and environment monitoring systems;
- ✓ Design and engineering of potential MST/sensors applications for new materials developed by a specialized partners IMNR BUCHAREST (R&D Institute for nonferrous and rare metals) for biocompatible and multifunctional thin films (materials piezoelectric, ferroelectric, core/shell structured), ceramic and polymers nanocomposite.

AFFILIATION MEMBERSHIP

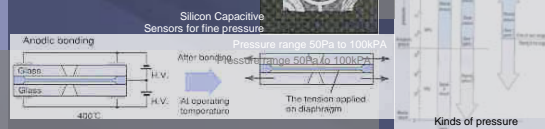
SITEX is affiliate member of: NEXUS (Network Microsystems European), EURO PRACTICE, 4M (Multi Material Micro Manufacture), Network of Excellence.

Member of: ICCCS (International Confederation of Contamination Control Societies), GUS Gessellschaft fur Unwellsimulation eV (G.), AMA (Association for Sensor Technology) GmbH (G)

THE FUTURE PERSPECTIVE OF ACTIVITIES

R&D AND RAPID PROTOTYPING EXPERTISING FOR PRESSURE SENSORS

SILICON SENSORS FOR FINE PRESSURE



SEMICONDUCTOR STRAIN GAUGE SENSOR FOR HIGH PRESSURE



This semiconductor strain gauge sensor, a strain gauge is deposited by plasma CVD on a metallic diaphragm and on insulator film. This pressure sensor detects strain caused by the distortion of the diaphragm due to the pressure applied on this diaphragm from liquid, by means of measuring the change in resistance.

CLEAN ROOM

Clean room and ultrapure facilities design, engineering and consulting special for microelectronics, pharmaceutical, medical and biotechnologies applications.

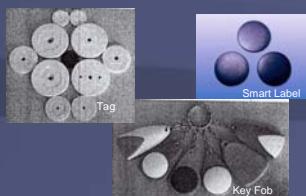
Detailed project:

- ✓ optimization of the lay-out and production equipment
- ✓ design of the utilities production stations and distribution network
- ✓ choice of instruments and control system
- ✓ contamination control and HVAC system design
- ✓ design of the facility monitoring system



Clean room of any size and classification, bio-containment laboratories (PCL2/PCL3/PCL4) in accordance with the standards in force

RFID SOLUTIONS



Applications:

- ID cards
- Access control
- Security
- Industrial transponders

We supply RFID transponders, ISO cards, Clamshell cards, Key Fob and Tag...Each RFID IC contains a unique code which is transmitted via the transponder antenna when the device is in close proximity to a reader device.



CERAMIC CAPACITIVE SENSORS FOR LOW PRESSURE

The CC sensor is a low pressure sensor which detects the pressure by sensing the capacity change between the electrode installed on the ceramic diaphragm and another stationary electrode at the other end.



Circuit pattern print



Electrode print (Diaphragm Base)



Mounting an integrated circuit (ASIC) and output's terminal

MAINTENANCE SERVICE

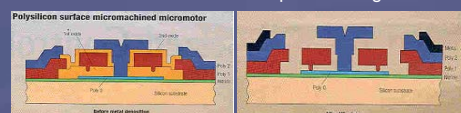
AFTER - SALE SERVICE AND VALIDATION

SITEX 45 are trained to apply the following regulations: ISO 14644-1, ISO 14644-2, ISO 14644-3, PD 6609-2000, EU GMP, EN 12469.



MICROCONTAMINATION CONTROL FOR MICROSYSTEMS, MEMS & MOEMS FABRICATION

Many of the particle and contamination issues of concern in IC manufacturing are valid for MEMS fabrication. The effects of contaminants tend to be very important to be taken into consideration for MST specific design.



Schematic representation of the polysilicon surface-micromachining process. The fabricate moving parts on the silicon substrates. The microcontamination effects shown on the table.