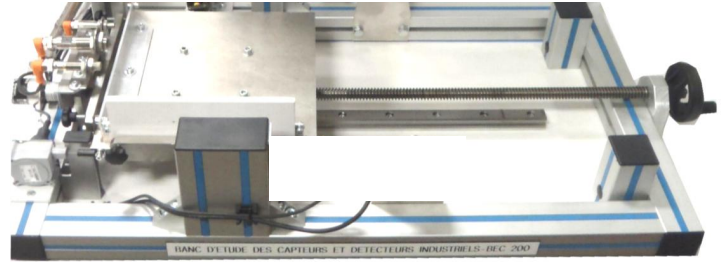


## Bench study of industrial detectors and sensors

### DESCRIPTION

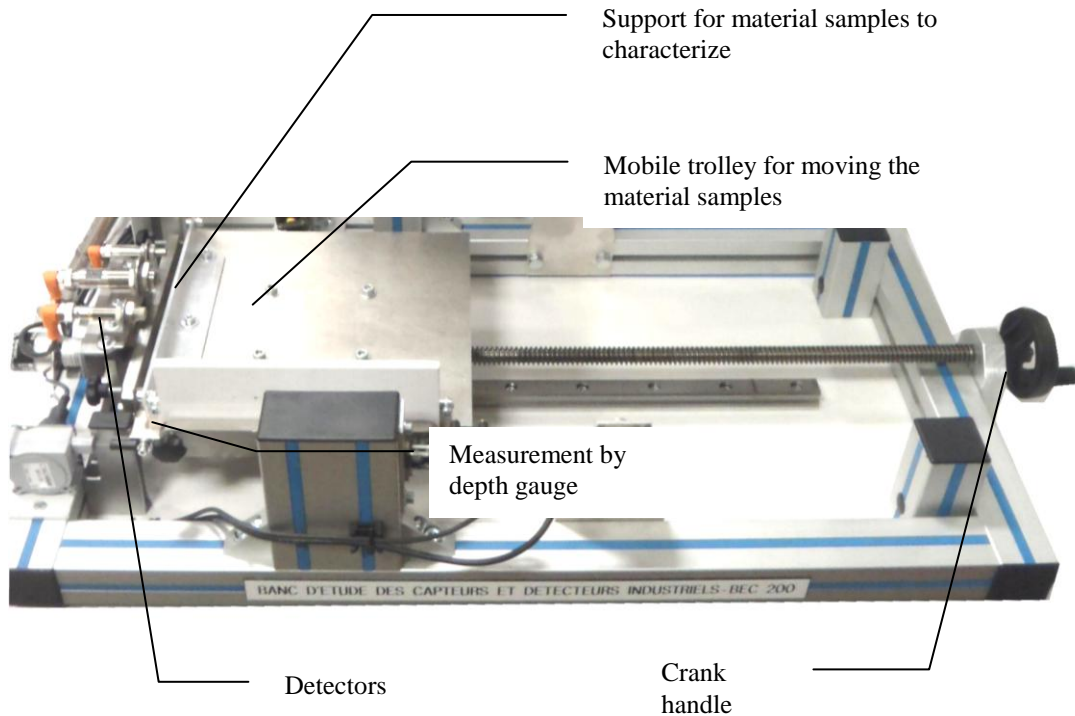
- The bench study of the sensors BEC 050 allows to characterize the behavior and operation of inductive proximity sensors, capacitive, electric photo as well as a pressure sensor.
- This bench comes complete with experimentation material, manual and technical documentation.
- Industrial equipment.
- The didactic interest of BEC 050 is directed to different levels and fields of study.



### PEDAGOGICAL APPLICATIONS

- Characterization of technological compatibilities of detection / material to be detected
- Determination and quantification of hysteresis effects of the sensors
- Determination of the action area of a sensor
- Programmable optical sensors, inductive, capacitive and pressure sensor

## Technical description:



### Structure :

- Benchtopy bench
- Structure in anodized aluminum profiles
- 4 feet
- 1 mobile trolley for integrating the material samples to be detected
- 1 crank handle for precise movement of the trolley.
- 1 depth gauge - accuracy of reading 0.01mm allowing to evaluate the detection distances for each substance / detector.

### Electrical box:

- **Case** with integrated components DIN Format
- **Power supply 24VDC** for supply of sensors
- **1 circuit breaker**
- **1 protection fuse**
- **Switch on / off**
- **Connections** of all sensors and detectors by extenders industry standards (3 wires, 4 wires, M8 or M12)

### Proximity detectors proposed:

- Inductive sensor
- Capacitive sensor
- Programmable photoelectric sensor
- Each sensor features a **status LEDs** allowing to visualize when this latter changes state

Illustrations not binding

Our benches are subject to regular improvements, this technical description may be changed without notice

\*: Depending on version or options

## Pressure sensor:

- **Pressure sensor** with programmable **pressostat function**
- Display of **pressure values** as well as the **commutations outputs** (with color change of the display according to the pressure level measured against the thresholds)
- Output **NO/NC** configurable
- **On/Off thresholds / configurable triggering**
- Pneumatically supply of the sensor by a pressure regulator allowing to vary the latter.
- Providing also a suction cup with venturi for measuring negative pressures.

## Material plates :

- Plate compatible with the integrated mobile trolley housing.
- 1 PVC plate
- 1 sheet of polycarbonate (transparent)
- 1 aluminum plate
- 1 steel plate

## Utilities:

- Power of the bench in 230V / 50Hz
- Compressed air max 7 bars
- Envelope dimensions (L\*W\*H in mm): 800\*600\*400
- Weight: 50kg approx

## Miscellaneous:

- Manual, technical documentation of the sensors and detectors as well as the lab exercises are provided in paper and digital format