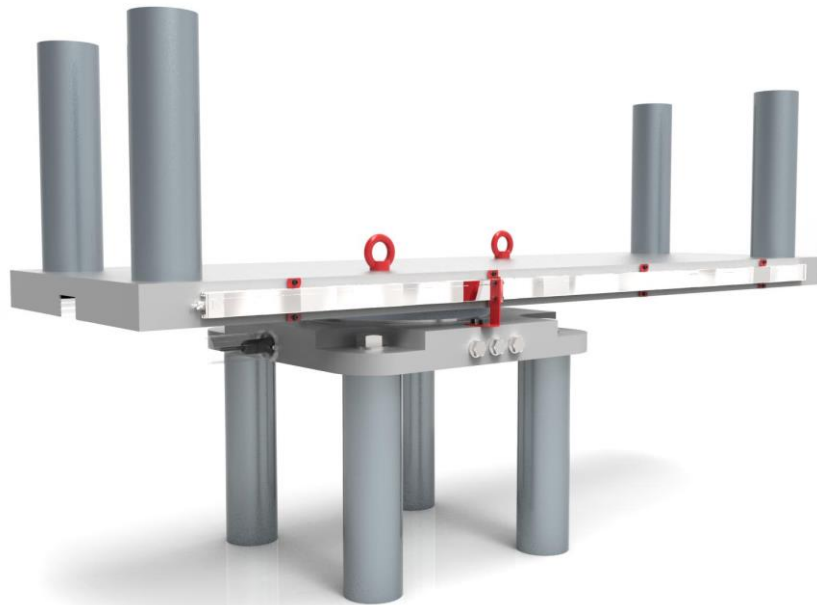


REF	104-03-01-06
CATEGORY	Smart Structural Bearing Technology
VERSION	EN-1.0

[SSBT] Smart Structural Bearing Technology



Product Description Structural bearing with a smart monitoring system allowing know the structure's behavior during its useful life. This smart pot enable monitoring the structure during the construction structure phase.
Parameters continuously monitoring as force, deformation, inclination and displacements provides fundamental information regarding the behavior of the bridge or structure, with viewable online at any time.

- Uses**
- Structural Health Monitoring (SHM)
 - Monitoring during bridges launching
 - Monitoring structure's behavior during its service life
 - Maintenance plan of the structures

- Advantages**
- Stabilizing control in recently constructed infrastructures and Safety of the structure in its useful life.
 - Allow predictive maintenance
 - Reliable measurements of magnitudes for bearings replacement, optimized design of new bearings and expansion joints

- Peculiarity**
- Turnkey solution
 - Autonomous and self-sufficient power
 - Long lifetime battery
 - RF / GSM / GPRS interface
 - Real-time data capture, analytics and alarm configuration
 - Remote service and configuration

Key Data

- Measurements: displacement, load, inclination, temperature
- Hardware: sensors, acquisition data, radio frequency, battery, solar panels,
- long-lived enclosures
- Software: secure web interface
- Installation: integrated ex-works in bearing, manual's installation or complete installation by MeKano4 in situ
- Accuracy: from 5% to 0,5% of full scale measurements
- Frequency: from 1 value per hour to 100Hz

Typical dimensions

On demand

Required information to produce quotation

For each bearing:

- Nsd,max Maximum vertical loads
- $\Delta x+$ and $\Delta y+$ movements in longitudinal and transverse direction
- $\theta x+$ and $\theta y+$ rotations in longitudinal and transverse direction
- Others parameters (Temperatures, strain, environmental conditions, etc.)
- Accuracy
- Type of link between sensor and datalogger

Reference Projects and Images

