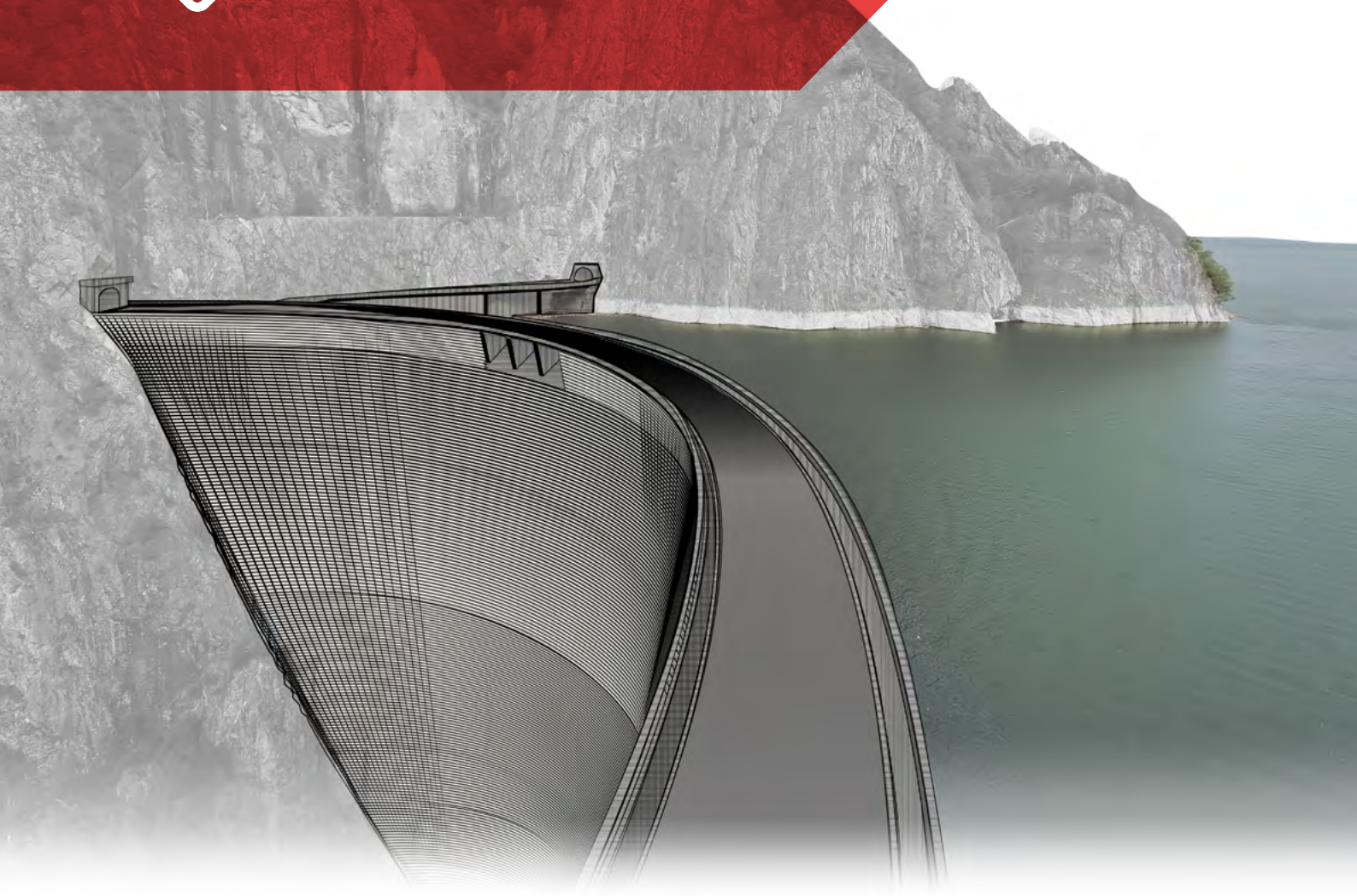
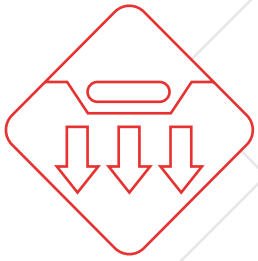
pizzi instruments



Settlement Plate



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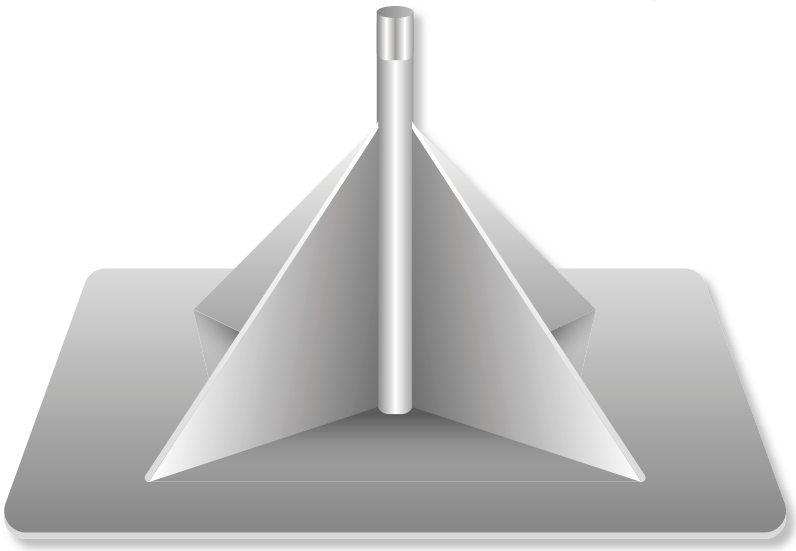
Instruments and Systems for Geotechnical and Structural Monitoring

Settlement Plate



Description

The settlement plate is used to detect any settlement, subsidence and deformation of artificial embankments, both during construction and in the management phase.

Simplicity of installation and reading, reliability, accuracy of measurement and very low cost, make it extremely popular for geotechnical and structural monitoring in all types of embankment. The instrument can be read manually or through a graduated “stadia”, or automated via electrical sensors and readable remotely with our hand-held units, portable units DEC5 and DEC3000 or our automatic acquisition unit DAC3000.

Applications

- **Road and railway viaducts**
- **Landfills**
- **Embankment dams and rockfill dams**

Features and benefits

The settlement plate is part of the same family of instruments as our mechanical USBR system and magnetic probes.

It has the merit of being low cost compared with these instruments, with the limitation of having one measuring point for each column.

Measuring principle

The operating principle is simple; a rigid rod, is free to slide inside a tube or guide sheath.

At the bottom, the rod has an integral plate which constitutes the rod anchor point in the ground. The upper end forms the measuring point.

The anchor plate is made of galvanized steel, 500mm x 500mm x 3mm in dimension which is connected to the measuring rod made of 3/4” galvanized pipes. The measuring rod is protected by a sheath made with corrugated tube, or on request with 2” galvanized pipe.

To facilitate the formation of columns of various lengths, the system is divided into 2 groups, namely:

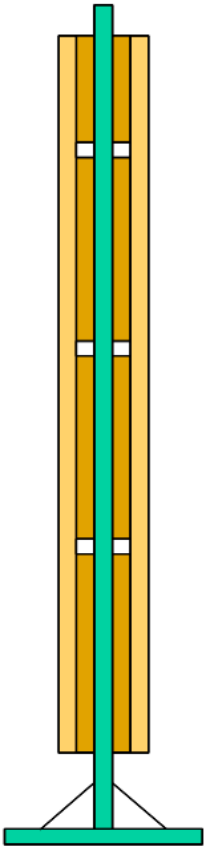
• The bottom element, constituted by the plate and by a rod piece

• Intermediate elements consisting of:

2m rod with coupling
2m friction tube of high density polyethylene. O.D. 55mm
2 guide rings (on requestor for the galvanized tube)

• 1 brass bushing for the head element of the rod

A special benchmark is fixed to the head of the rod for topographic surveying.
As an optional accessories protection) for the head, made of a tubular steel (1.20m long), removable cap and leveling rod(stadia – length 200mm) for measurement of settlement.can be provided
By means of special connecting devices, it is possible to add an electrical sensor for automatic measurements.



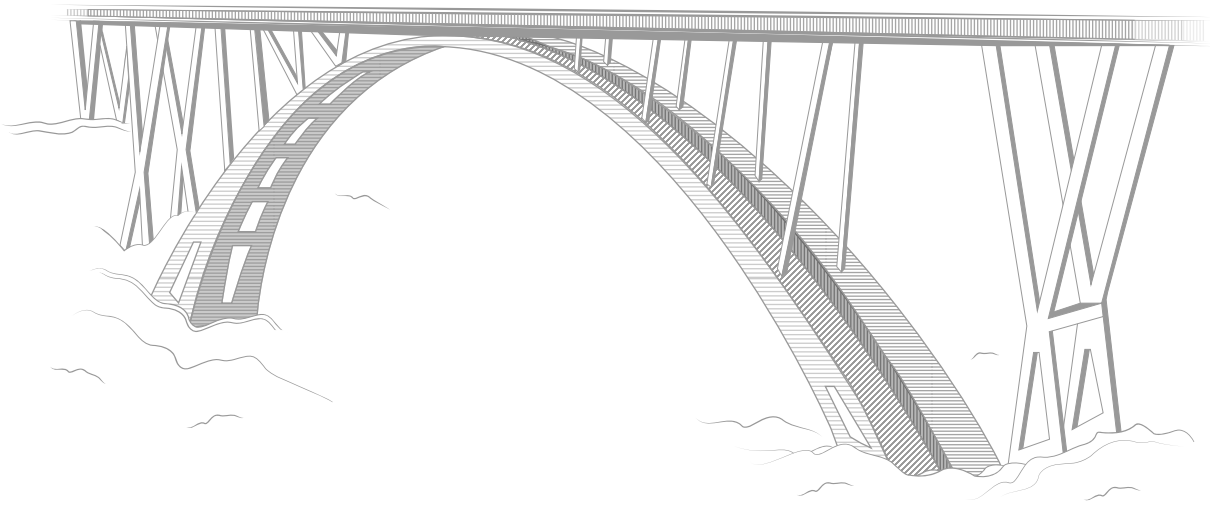
Technical specifications

Material of the plate and the rod	Galvanized Steel
Dimensions of the plate	500 X 500 X 3 mm
Diameter of the measuring rod	3/4"
Length of the measuring rod	2000 mm
Material of the threaded connection	Galvanized Steel (inox steel on request)
Material of the anti friction tube	High Density Polyethylene O.D.= 55mm – Option: Galvanized Iron O.D. = 2 “
Material of the outer casing holder rings:	PVC
Material of the topographical marker:	Brass

The Company

For over 40 years we have been producing precision and large facility monitoring instruments sold throughout the world.

Accuracy in design, efficiency in construction, reliability in management; these are the prerogatives that every major work must have and that Structural Monitoring Systems must guarantee.



Technical assitance

If you have any requests or questions about our instruments or if you have special needs that require different solutions from the standard, please contact us. Our team will provide all the necessary information and will be very happy to work with you to study, develop and customize instruments and solutions suitable for your specific needs.

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