



The Strain Gauges is designed to measure the change in strain in and on any structural member associated with many types of structure like:

- Concrete Dams
- Buildings over tunnelling work.
- Deep Excavation
- Bridges
- Pile Caps
- Suitable with Portable Readout Unit or Data Accusation System.

STRAIN GAUGES

STRAIN GUAGES FOR STEEL STRUCTURE:

- For measuring the stresses in structural member of buildings, bridges, tunnel linings and supports during and after construction.
- For measuring the performances of wall anchors & Post tensioned support system.
- For measuring the loads in strutting systems for deep excavation.
- For measuring the strain in tunnel linings and support.
- For measuring the areas of concentrated stress in pipelines.
- For measuring the distribution of load in pile tests.

Embedment Strain Gauges

- For measuring strain in reinforced concrete and mass concrete.
- For measuring the curing strains.
- For measuring the changes in load.
- For measuring the strain in tunnel linings and support.



Data Digger Equipment

Data Digger Equipment

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Operating Principle

The Vibrating Wire strain gauges/meter basically consists of magnetic, high tensile strength stretched wire, one end of which is anchored and the other end is displaced proportionally to the variation in strain. Any change in strain, directly effects the tension of the wire, resulting in a corresponding change in frequency of vibration of wire.

The wire is plucked by a coil magnet, proportionate to the tension in the wire, it resonates at a frequency. To summarize, any variation in strain causes the strain gauges to deflect, this change in tension in the wire thus affecting the frequency of vibration of the wire when it is vibrating at its natural frequency. The Readout Unit is capable to display the strain in $\mu\epsilon$ (Micro Strain) which is proportional to the square of the frequency.

Embedment Strain Gauge is designed for measuring concrete curing strains and is commonly used for strain measurement in foundations, Piles, Bridges, dams, tunnel linings etc. The Strain has a 150, 250 mm gage lengths making it particularly suitable for use in large aggregate concrete. The gage has a $3000\mu\epsilon$ (Micro Strain) range and a sensitivity of 1 micro strain.

SPECIFICATIONS

DDE-5500 A.W (ARC WELDABLE)

Range :	3000 μ strain
Sensitivity :	1 μ strain
Active gage length :	150mm
Temperature limit:	-20 to 80°C
Accuracy:	$\pm 0.1\%$ F.S
Sensor Material:	Stainless Steel
Cable 4-core shielded 1 m long;	

SPECIFICATIONS

DDE-5500 E.B (Embedment)

Range :	3000 μ strain
Sensitivity :	1 μ strain
Active gage length :	150mm
Temperature limit:	-20 to 80°C
Accuracy:	$\pm 0.1\%$ F.S
Sensor Material:	Stainless Steel
Cable 4-core shielded 1 m long;	



AN ISO 9001:2015 Certified Organization
Certificate No: 304920053008Q