



TARKA-SYSTEMS

is a one-stop solution for
client-specific monitoring systems

With the 10-year anniversary of TARKA-SYSTEMS special posts will be made during this year. These posts will show the capabilities of TARKA-SYSTEMS on specific categories executed over the past 10 years.

1. Special integration projects (previous post)
2. **Strain gauge projects (this post)**
3. Diving projects
4. Sensor types

TARKA-SYSTEMS

is a one-stop solution for client-specific monitoring systems

This covers the following items:

- Sensor selection
- Sensor integration to one system
- System delivery from office
- System installation on-site
- Startup and handover to client
- Assistance with external projects

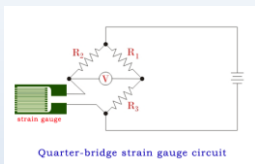
**Training and certifications for offshore and wind projects
BOSIET, WINDA, HUET, WOH**



STRAIN GAUGES

STRAIN GAUGES

A strain gauge is a resistor used to measure strain on an object. When an external force is applied on an object, due to which there is a deformation occurs in the shape of the object. This deformation in the shape is both compressive or tensile is called strain, and it is measured by the strain gauge. When an object deforms within the limit of elasticity, either it becomes narrower and longer or it become shorter and broadens. As a result of it, there is a change in resistance end-to-end.



The strain gauge is sensitive to that small changes occur in the geometry of an object. By measuring the change in resistance of an object, the amount of induced stress can be calculated.

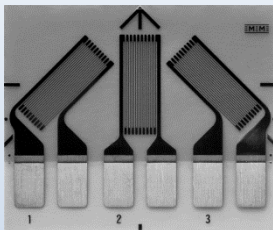
USE OF STRAIN GAUGES

- In the field of mechanical engineering, fatigue life measurements.
- To measure the stress generated by machinery.
- In the field of structural/component testing, structural damage etc.
- Research and validation of engineering values.

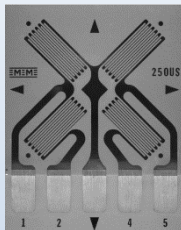
Source : Internet

STRAIN GAUGES DIFFERENT TYPES (many others possible)

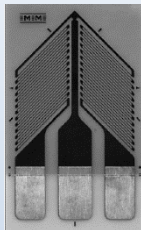
MANY DIFFERENT TYPES OF STRAIN GAUGES TO BE GLUED



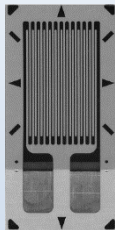
Three directions



Full bridge



Shear



Linear



STRAIN GAUGES TO BE SPOTWELDED

- Amplified
- Non-Amplified



**ASSISTANCE WITH
INSTALLATION ON
WIND-TURBINE BLADES**



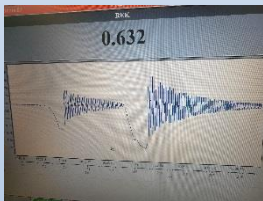
**STRESS MONITORING ON
MECHANICAL STRUCTURE.**

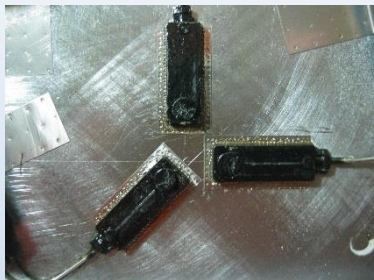


PRE-TESTING OF STRAIN GAUGE SOFTWARE



INSTALLATION ON STRUCTURE.





**SPOT-WELDED
STRAIN GAUGES**

**GOOD TOOLS FOR INSTALLATION
SPOT-WELD MACHINE
OR HANDTOOLS**

