

DETERMINE TENSILE AND COMPRESSIVE STRAINS OF CANTILEVER BEAM USING STRAIN GAUGES

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ABSTRACT

The objective behind this title is to determine tensile and compressive strains of the link bridge in Inti University by placing strain gauge(s) on each side of the bridge. This has been performed into a smaller size to test the performances of the strain gauge(s) by applying it on a cantilever beam. It has been tested first on the tensile strength machine and followed by the cantilever beam. The tested materials on the tensile strength are mild steel, brass, copper and aluminum, it proved that strain gauge changes the ΔR (change of resistance) as ΔL (change of length) changes. The cantilever beam strain has been determined according to these reference readings developed from the tensile testing.