Input output configuration of measuring instruments

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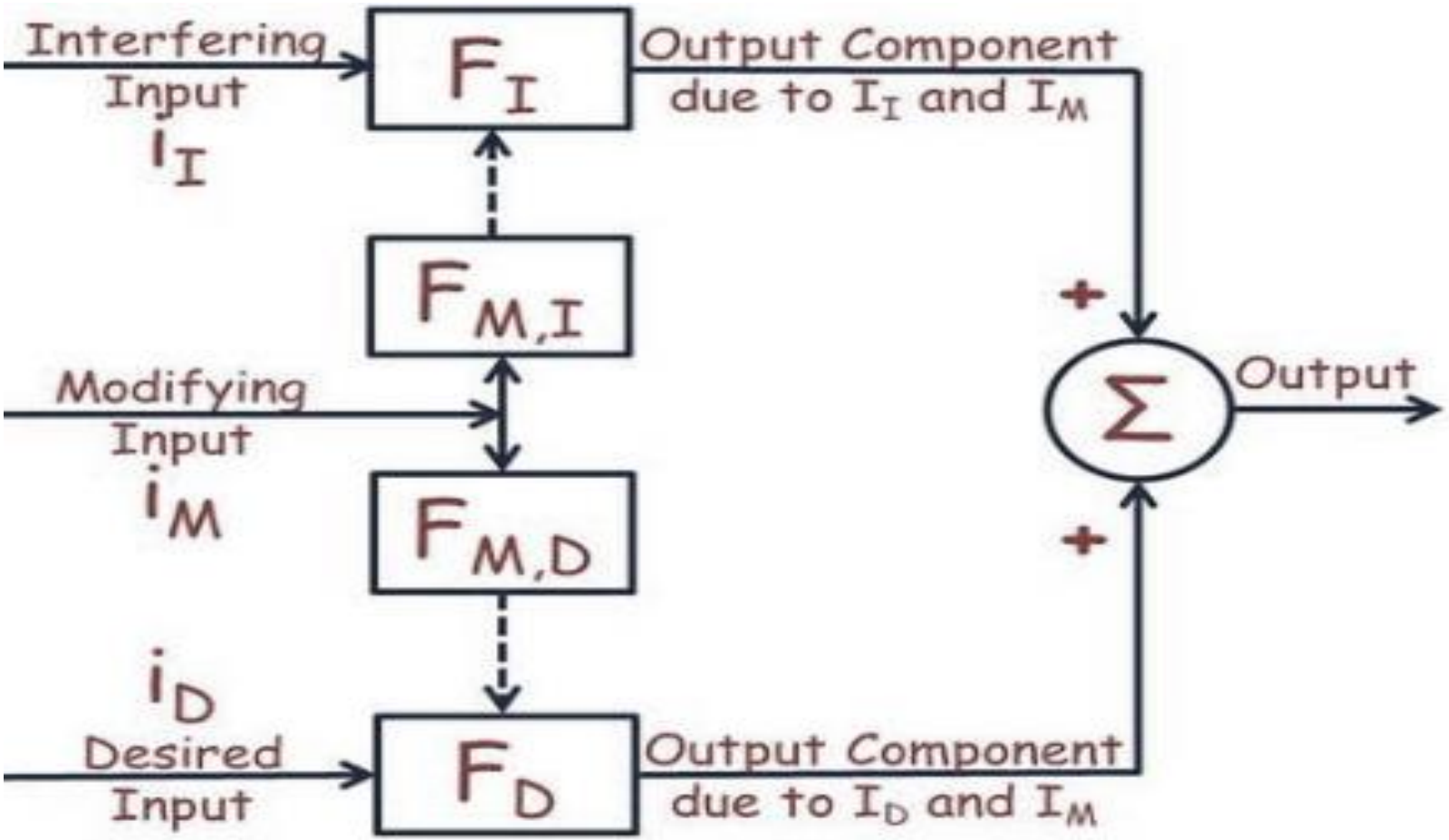
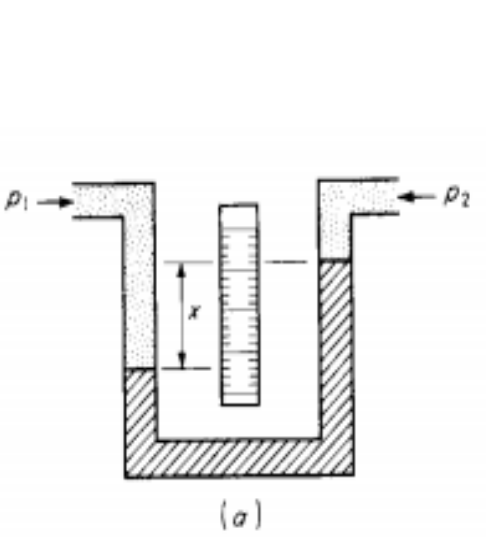
Input output configuration of measuring instruments

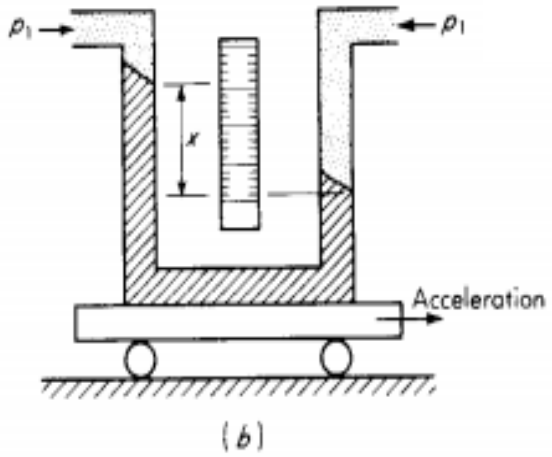


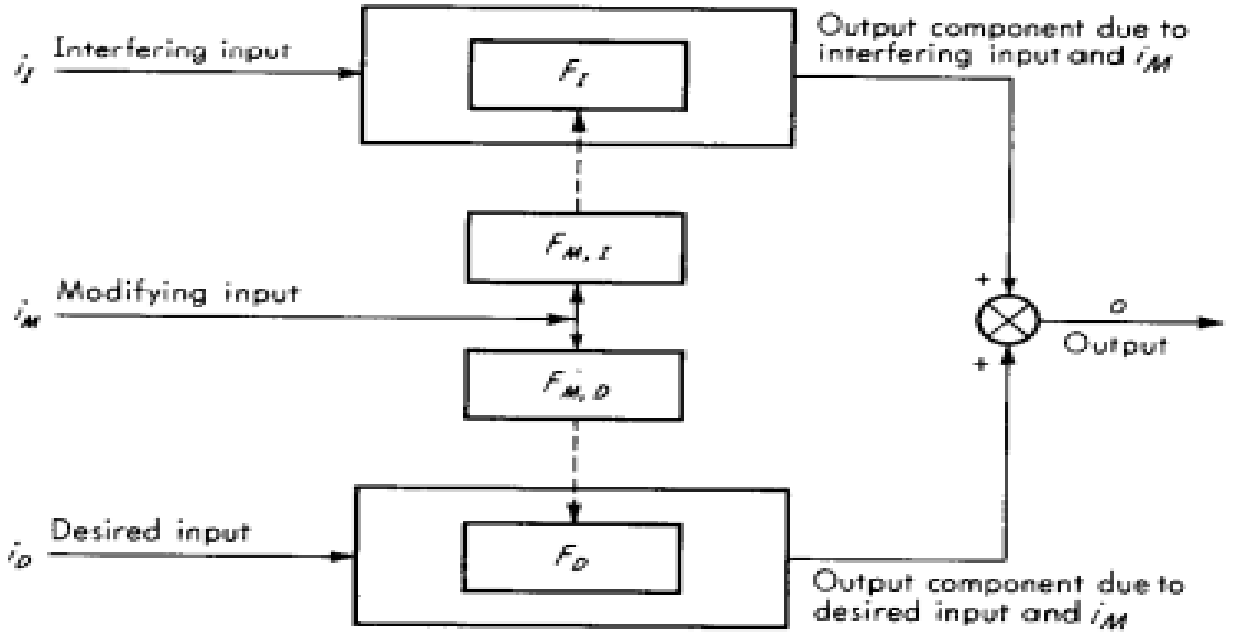
DEFINITIONS

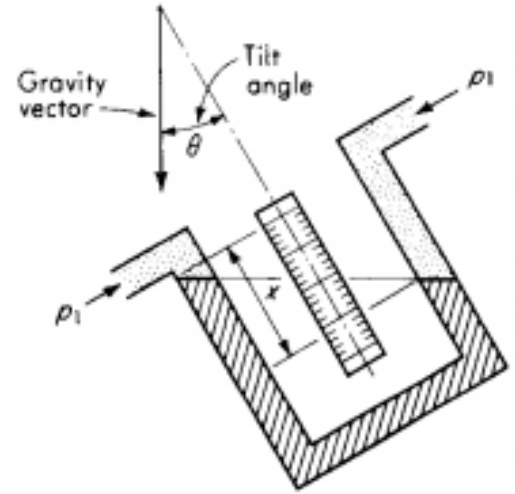
- *Desired inputs:* represent the quantities that the instrument is specifically intended to measure.
- *Interfering inputs:* represent the quantities to which the instrument is unintentionally sensitive.
- *Modifying input:* are the quantities that cause a change in the input output relations for the desired and interfering inputs.

UNWANTED INPUTS FOR MANOMETER

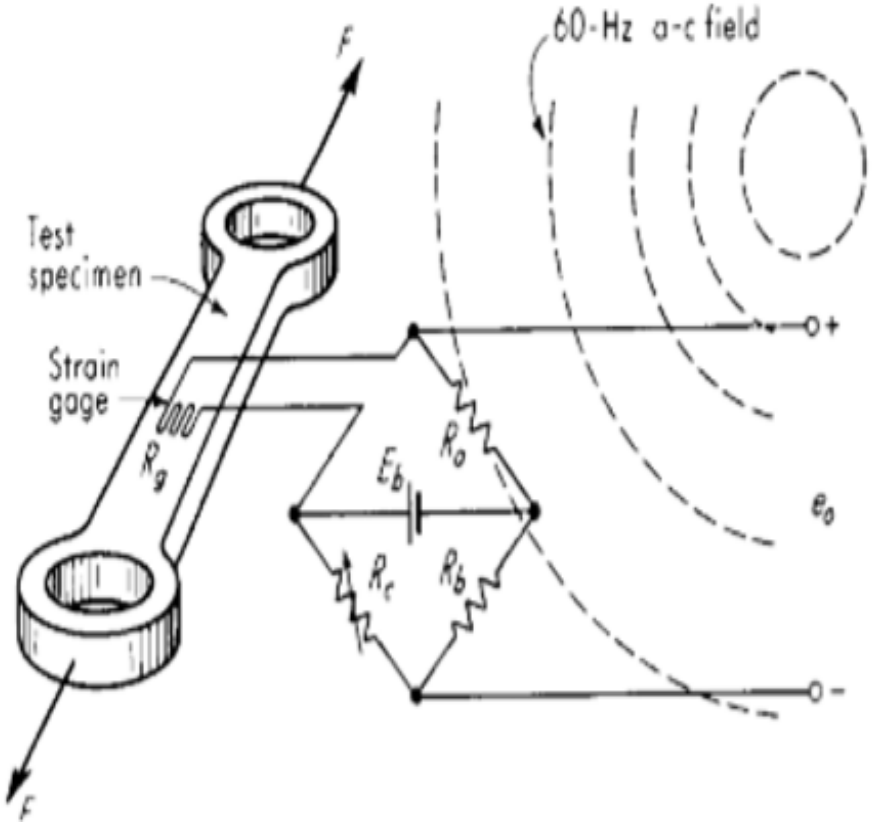








INTERFERING INPUT FOR STRAIN GAUGE CIRCUIT



The desired input is strain which causes a proportional output voltage Eo. The interfering input is the gauge temp. and 60 Hz field caused by nearby power lines an electric motors etc. This field induces voltages in the strain gauge circuit causing output voltages even if there is no strain.

THANK YOU