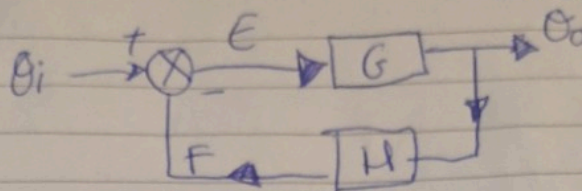


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2(c) $\frac{e_o}{e_i} = \frac{G}{1+GH}$



(d) $G_1 = 5 \times 10^{-3}$ Sensor = 5.0 mA/V Solenoid Valve = 0.25 mm/mA
 G_2
 $H = 150 \times 10^{-3}$ Feedback loop = 150 mV/mm

$$\frac{G_1 G_2}{1 + G_1 G_2 H} = \frac{5.0 \times 0.25}{1 + (5.0 \times 0.25 \times 150)} \times \frac{0.005 \times 0.25}{1 + (0.005 \times 0.25 \times 0.150)}$$

$= 1.25 \text{ mV/V}$
 $\frac{\text{mA}}{\text{V}} \times \frac{\text{mm}}{\text{mA}} \times \frac{\text{mV}}{\text{mm}}$

- e) 1) OVEN TEMPERATURE CONTROL IN INDUSTRIAL CAKE MAKING PROCESS
 2) Humidity Control in an Environmental chamber test rig.

Q
 1a) Measurement - is the recorded value of a variable at a moment of time

monitoring - a constant assessment of a value within a process.