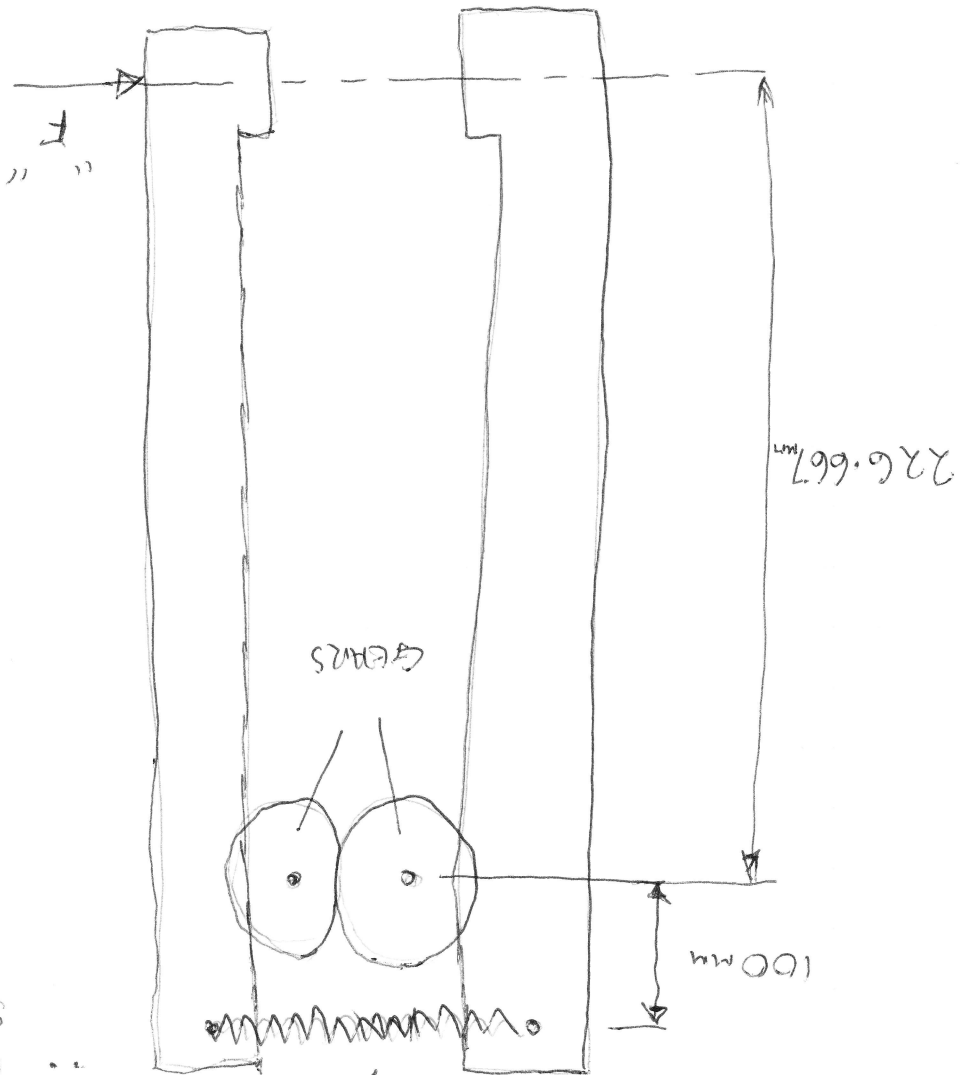


2 SPRINGS EACH SPRING SET AT 10.2 kg

∴ FORCE IN

$$\text{SPRINGS} = 2 \times 9.81 \times 10.2$$

$$= 200 \text{ N approx}$$



TAKE MOMENTS ABOUT GEAR CENTRE :

$$200 \text{ N} \times 100 \text{ mm} = 226.667 \text{ mm} \times F$$

$$F = \frac{200 \times 100 \text{ mm}}{226.667 \text{ mm}} = 88.235 \text{ N or } 88.235 \times \frac{9.81}{1000} = 8.994 \text{ kg}$$

So The Force  $F$  For This Set Up  $88.235 \text{ N}$  OR A MASS OF  $8.994 \text{ kg}$ , This Load Method is How To Calculate Your Force At The Load Cell AND.