Arogunmati Oluwadamilola Alexander

18/ENG05/011

MECHATRONICS ENG

ENG 232 ASSIGNMENT [CALCULATIONS]

Specifications

least radius of the Cam = 30mm

r = 30mm, follower height = 50mm

length => $2\pi r$ => $2 \times 3.142 \times 30 = 188.5$mm (approx)

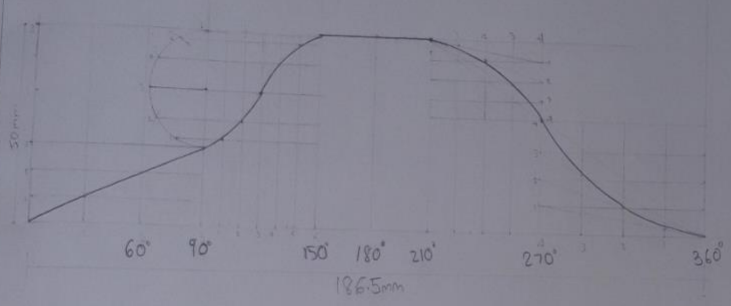
for Rise (uniform velocity) $0°-90°$ => $\frac{90}{360} \times 188.5$ => 47mm

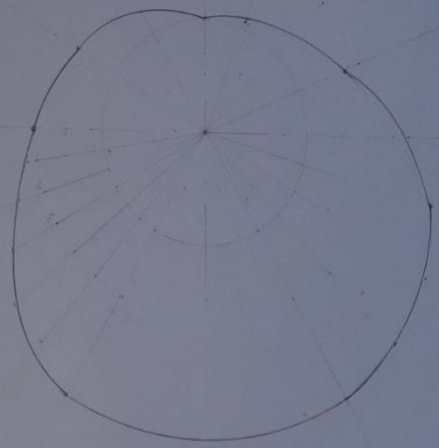
for $90°-150°$ (S+M) => $\frac{60}{360} \times 188.5$ => 31mm

for $150°-210°$ (Dwell) => $\frac{60}{360} \times 188.5$ => 31mm

for $210°-270°$ {falls with uniform acceleration} => $\frac{60}{360} \times 188.5 = 31$

for $270°-360$ (falls with uniform retardation) => $\frac{90}{360} \times 188.5 = 47$mm





NAME	AROGUNMATI
DEPT	MECHATRONICS ENG
MAT NO	18/ENG05/011
TITLE	ASSIGNMENT ON CAM
DATE	29TH APRIL 2020