

# TO FIGURE WORKING TIME IN SECONDS

The motor speed times the pitch diameter of the motor pulley divided by the drive shaft pulley pitch diameter times (934) gear divided by large gear on compound gear (MB-41) times the small gear on the compound gear (MB-41) divided by driving clutch gear times idler shaft driving gear divided by idler shaft driven gear times change gear divided by meshing compound gear times other segment of compound gear divided by clutch body gear times worm divided by worm wheel equals R.P.M. of Cam Shaft during working (0-50) portion of time cycle.

The example shown below is at 75 indexes using a 75 tooth change gear to attain 1.2 seconds cycle time:

Motor Speed	(75Cycle) Motor Pulley	(934)Gear	Small Gear Compound	Idler Shaft Driving Gear	Change Gear	Compound Driven Gear	Worm	37.54
1745	7.4	32	26	32	75	60	6	= R.P.M.
1	8.6	32	104	60	30	80	60	of
	Drive Pulley Shaft	Large Compound Gear	Driving Clutch Gear	Idler Shaft Driven Gear	Compound Gear Drive	Clutch Body Gear	Worm Wheel	Cam Shaft

$$\frac{60 \text{ Seconds divided by } 37.54 \text{ R.P.M. of Cam Shaft}}{2} = \frac{1.6}{2} = .8 \text{ Working Time (0-50)}$$

.8 Working Time plus .4 Index Time equals 1.2 Cycle Time.