

Fabric - I (Lab)

Experiment NO: 02 - Study on passage diagram of piren winding m/c.

Experiment NO: 03 - Study on gearing diagram and spindle RPM of piren winding m/c

Exp-02 - Piren = Neat parallel

Parts Name:

i) input \rightarrow Cone package (cross winding)

ii) 1st pig tail guide

iii) 2nd " " "

iv) Ceramic combined tensioner

v) Dead weight tensioner

vi) 3rd pig tail guide

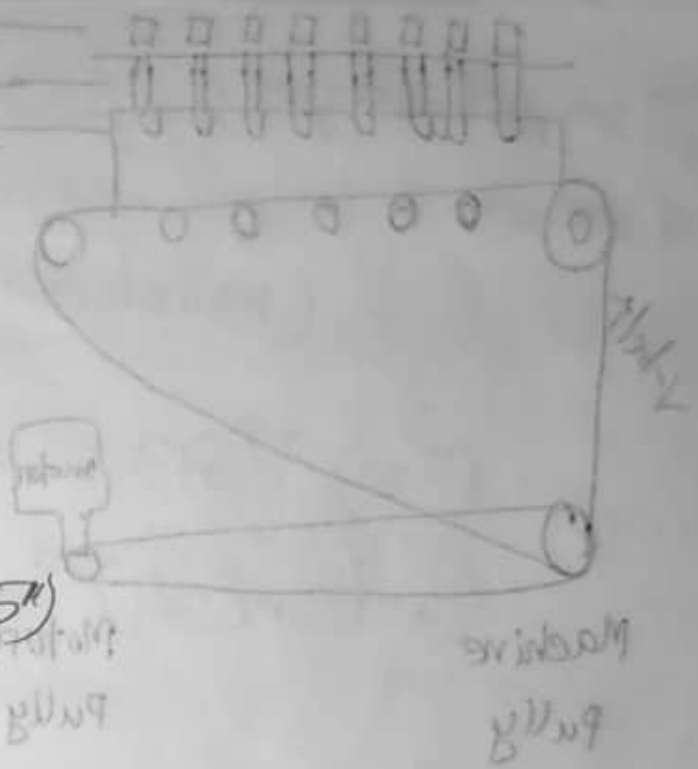
vii) Traverse guide

viii) Piren package - output (Neat parallel)

Exp - 03

Gearing Diagram:

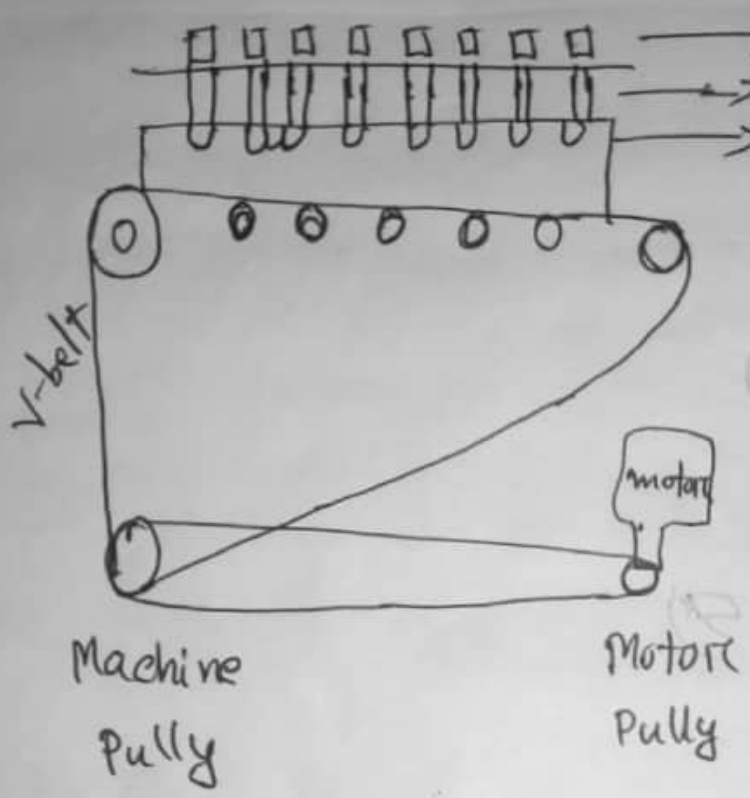
- i) Motor - 960 RPM
- ii) Motor pulley. (3.1")
- iii) V-belt
- iv) Machine pulley. (9.5")
- v) Tensioner pulley.
- vi) Bearing tensioner.
- vii) Spindle pulley. (1.5")
- viii) Spindle
- ix) Pin package
- x) Pin holder.



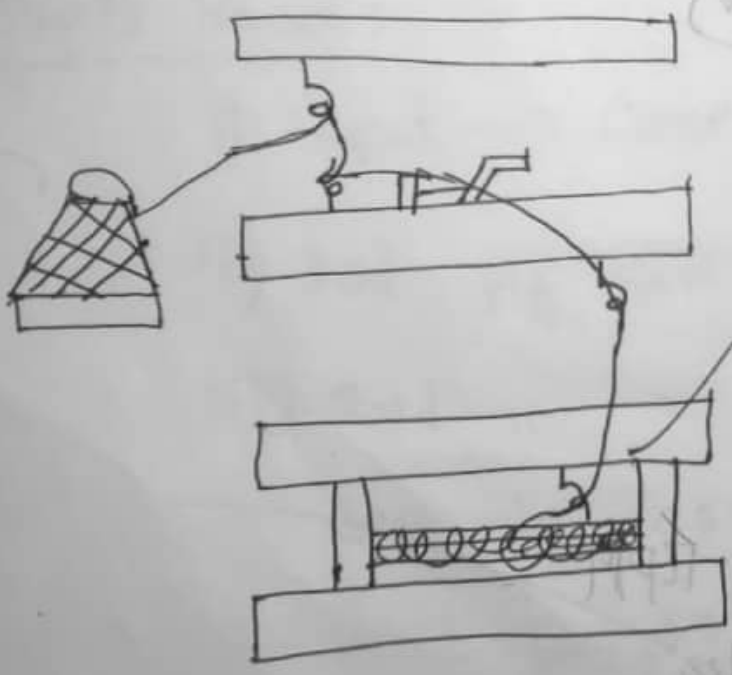
Calculation of spindle RPM

$$\text{Motor rpm} \times \frac{\text{motor pulley dia}}{\text{Spindle pulley dia}}$$

$$960 \times \frac{3.1}{1.5} = 1984 \text{ rpm}$$



Spindle
 Pin
 Pully
 V-belt
 Machine Pully
 Motor Pully



Calculation of spindle
 Motor pulley
 Spindle pulley

(Handwritten signature or scribble)

$$200 \times \frac{3.1}{1.5} = \text{Fast idler}$$