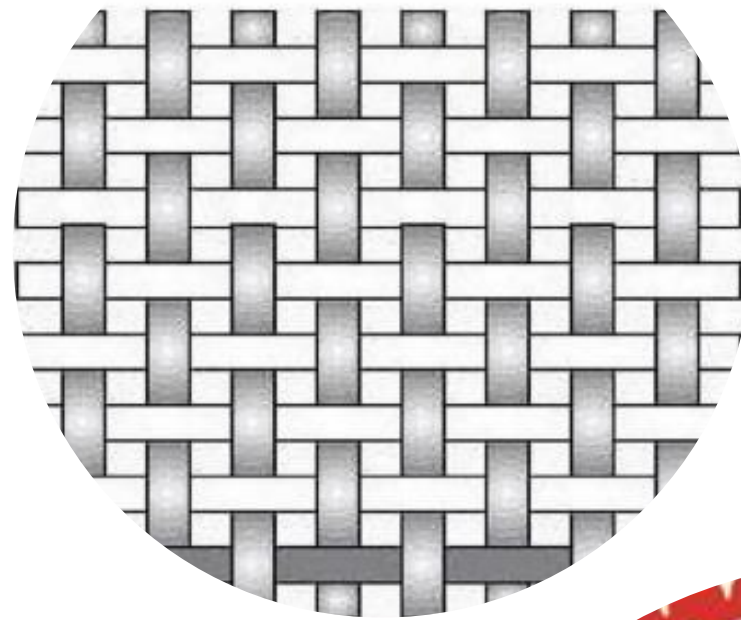


# **Fabric Manufacturing I (TXL231)**

**Dr. Sumit Sinha Ray**

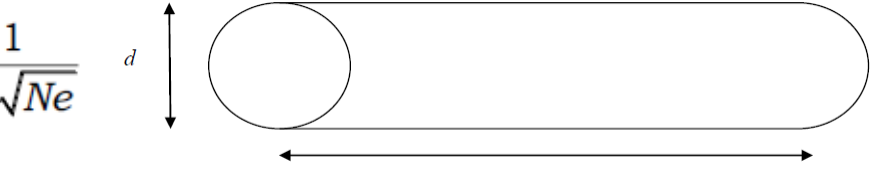
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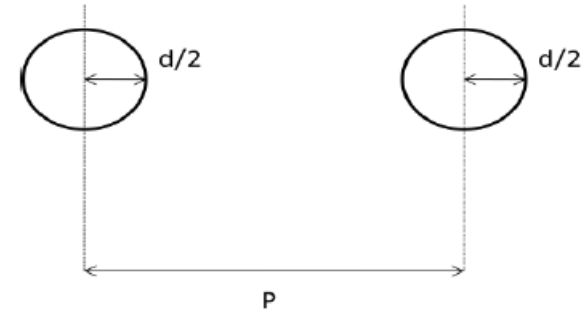


P1. The length of a fabric is 10 m. The length of a warp yarn, removed from the fabric, in straight condition is 10.8 m. Determine the crimp% in warp direction. What should be contraction %?

P2. Prove that for cotton yarn with packing factor of 0.6,  $\text{diameter (inch)} = \frac{1}{28\sqrt{Ne}}$  (Note that- Yard: 840 x 36 inch, Density of cotton fibre is  $1.51 \text{ g/cm}^3$ )



P3. A cotton fabric is made from 20 Ne warp and ends per inch is 50. Determine the warp cover factor



P4. Show that the expression for fabric cover factor is  $K_1 + K_2 - (K_1 \cdot K_2 / 28)$ , where  $K_1$  is warp cover factor and  $K_2$  is weft cover factor.

