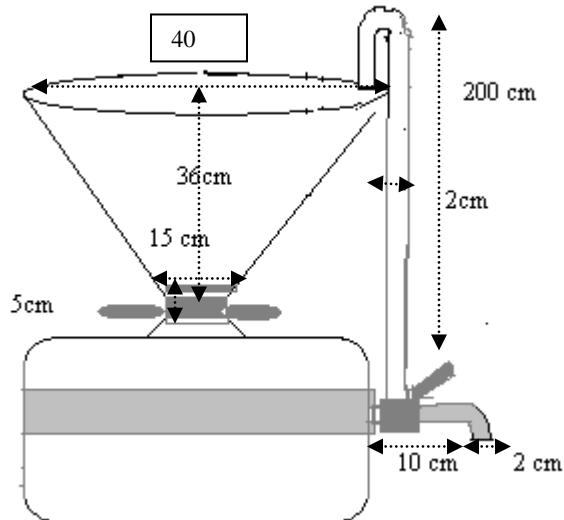




SURFACE AREA CALCULATION SHEET (COLLOIDAL MILL)

Colloidal Mill



SURFACE AREA OF COLLOIDAL MILL:

Surface Area of Hopper

$$\text{Surface Area} = \frac{(B1+B2) h}{2}$$

$$B1=40\text{cm}$$

$$B2= 15 \text{ cm}$$

$$\text{Height} =36 \text{ cm}$$

$$= 40+15/2 \times 36$$

$$= 990 \text{ cm}^2$$

$$= \mathbf{389.77 \text{ inch}^2}$$

Surface Area of Pipe

$$\text{Length} = 200 \text{ cm}$$

$$\text{Diameter} = 2 \text{ cm}$$

$$\text{Surface Area} = (2 \times \pi \times r \times h) + (2 \times \pi \times r^2)$$

$$= (2 \times 3.14 \times 1 \times 200) + (2 \times 3.14 \times 1 \times 1)$$

$$= 1256+ 6.28 = 1262.28 \text{ cm}^2$$

$$= \mathbf{496.97 \text{ inch}^2}$$

Surface Area of Tap

$$\text{Length} = 10 \text{ cm}$$



SURFACE AREA CALCULATION SHEET (COLLOIDAL MILL)

Diameter = 2 cm

$$\text{Surface Area} = (2 \times \pi \times r \times h) + (2 \times \pi \times r^2)$$

$$= (2 \times 3.14 \times 1 \times 10) + (2 \times 3.14 \times 1 \times 1)$$

$$= 62.8 + 6.28 = 69.08 \text{ cm}^2$$

$$= 27.19 \text{ inch}^2$$

$$\text{Total Area of Colloidal Mill} = 389.77 + 496.97 + 27.19 = \mathbf{913.93 \text{ inch}^2}$$