

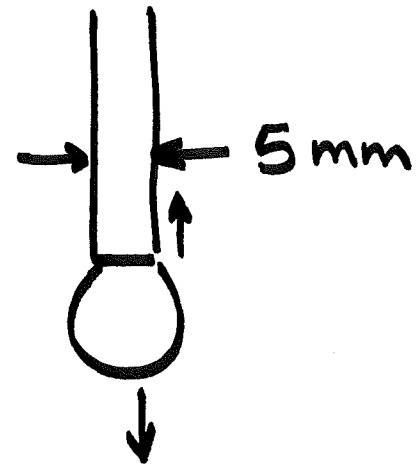
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Example :

$$N = 100 \text{ in } 5 \text{ min}$$

$$m = 2.7 \text{ g}$$

$$\rho = 0.78 \text{ g/cm}^3$$



$$B = \frac{W}{2\pi r f}$$

$$W = \frac{2.7}{100} \times 981$$

$$f = f\left(\frac{r}{V^{1/3}}\right)$$

$$V = \frac{0.027}{0.78}$$

$$\frac{r}{V^{1/3}} = \frac{0.25 \text{ cm}}{(0.027/0.78)^{1/3}} = 0.767$$

$$\rightarrow f = 0.6$$

①

$$\Gamma = \frac{2.7/100 \times 981}{2\pi(0.25)(0.6)}$$

$$\Rightarrow \boxed{\Gamma = 28 \text{ dynes/cm}}$$

# Amott Wettability Test

① Initial State  $\rightarrow$  sat. with water  
 $\rightarrow$  oil flood  $\rightarrow$  bring to  $S_{w,irr}$

② Place in Water  
 $\rightarrow$  spontaneous imbibition  $\rightarrow V_a$   
(SP)

③ Forced imb. of water  
 $\rightarrow$  additional oil gets out  $\rightarrow V_b$

④ What do I have in the sample?  
res. oil & Water

Immerse in oil  
 $\rightarrow$  Water gets out  $\rightarrow V_c$

③

⑤ Forced drainage

~~be even more~~

→ More water out →  $V_d$