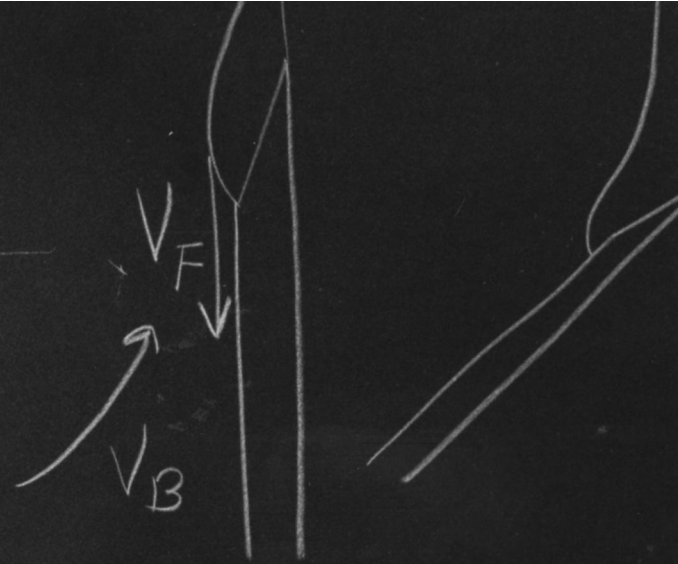


$$V_B = \left(2g \frac{\Delta H_c M_{ox\infty}}{T_{\infty} C_p} \right)^{1/2}$$



$$\hat{T}_p = \frac{\sqrt{2} k_s (T_u - T_{\infty})}{\rho C_p V_B (T_f - T_u)}$$

$$\bar{V}_F = f(\bar{B}) = \frac{\rho_s C_s V_F \hat{T}_p (T_u - T_{\infty})}{\sqrt{2} k (T_f - T_u)}$$

$$\bar{B} = \frac{B k M_{ox\infty}}{M C_p \Delta H_c M_{ox\infty}}^{2/3} \left(\frac{\bar{V}_F}{T_f} \right)^3 - \bar{T}_a / T_f$$