

Nama : Muhammad Fikri Nur Ihsan

NIM : 10521061

4. Diketahui :  $V_0 = 50 \text{ L}$

$$f_{\text{void}} = 0,30$$

$$\text{S.G. CaCO}_3 = 2,93$$

Ditanya : a.  $p \text{ bulk} \dots?$

b.  $w \text{ bags} \dots?$

$$\begin{aligned} \text{Jawab : a. } p \text{ bulk} &= \frac{2,93 \text{ kg CaCO}_3}{\text{L CaCO}_3} \times \frac{0,70 \text{ L CaCO}_3}{\text{L total}} \\ &= 2,05 \text{ kg/L} \end{aligned}$$

$$\begin{aligned} \text{b. } w \text{ bags} &= p \text{ bulk} \cdot V \cdot g \\ &= 2,05 \text{ kg/L} \cdot 50 \text{ L} \cdot 9,8 \text{ m/s}^2 \\ &= 1004,5 \text{ kg m/s}^2 \\ &= 1,00 \times 10^3 \text{ N} \end{aligned}$$