





- 1) Cordones y Montantes } Dimensionar a flexo-compresión y flexo-tracción

- e) Predimensionado al corte

Se adopta A-30 y todos de = dimensiones

$$V_u \leq \phi \left( \frac{5}{6} \sqrt{f'_c} \cdot b \cdot d \right)$$

$$b \times d = V_u / (\phi \cdot \frac{5}{6} \sqrt{f'_c}) = \frac{2.250.000}{0,75 \cdot \frac{5}{6} \sqrt{30}} = 657.257 \text{ mm}^2$$

Adopto  $b = 900 \text{ mm}$  →  $d = 730 \text{ mm}$  → Adopto  $A = 900 \text{ mm}$ .

$$V_c = \frac{1}{6} \sqrt{f'_c} \cdot b \cdot d = \frac{1}{6} \sqrt{30} \cdot 900 \cdot 870 = 714,7 \text{ kN} \approx 715 \text{ kN}$$

$$V_s = \frac{V_u}{\phi} - V_c = \frac{2.250.000 \text{ N}}{0,75} - 715.000 \text{ N} = 2.285.000 \text{ N} = 2.285 \text{ kN}$$

$$\frac{A_s}{s} = \frac{V_s}{f_y \cdot d} = \frac{2.285.000 \text{ N}}{420 \frac{\text{N}}{\text{mm}^2} \cdot 870 \text{ mm}} = \frac{6,25 \text{ mm}^2}{\text{mm}} = 0,625 \frac{\text{cm}^2}{\text{cm}}$$

$$s = \frac{A_{s \text{ ramas}} \cdot f_y \cdot d}{V_s} = \frac{6 \times 420 \frac{\text{N}}{\text{mm}^2} \cdot 870 \text{ mm} \cdot 113 \text{ mm}^2}{2.285.000 \text{ N}} = 108 \text{ mm}$$

6 ramas  
φ12c/10cm  
7 ramas  
φ12c/12,5