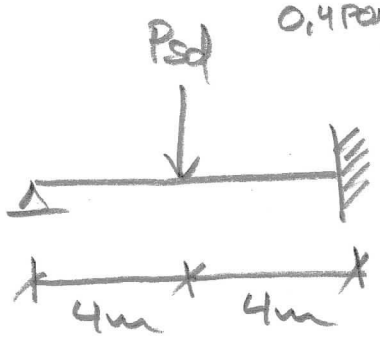
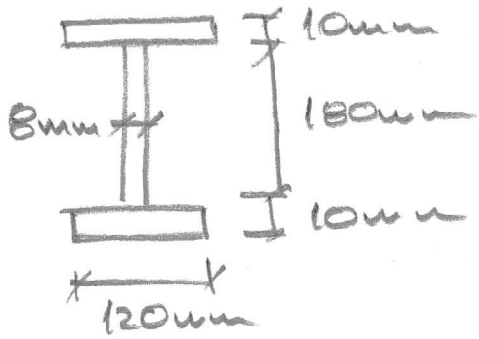
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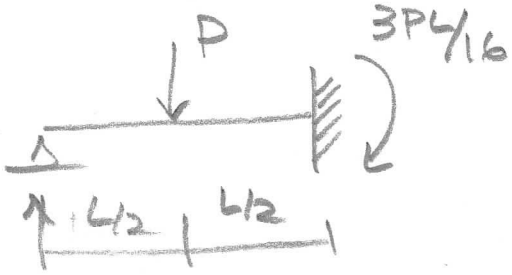
- Aço MR-250
- VIGA CONTIDA LATERALMENTE;
- DESPREZAR FLA/FLM;

0,4 PONTOS





$$Z_x = 12 \times 1{,}0 \times (18 + 1{,}0) + 18^2 \times 0{,}8/4 = 292{,}8\ cm^3$$



$$M_{MEIO} = \frac{5P}{16} \times \frac{L}{2} = \frac{5PL}{32} = 0{,}15625\,PL$$

$$M_{ENG} = \frac{3PL}{16} = 0{,}1875\,PL$$

$$M_{Rd} = Z_x \cdot f_y / \gamma_{a1} = \frac{292{,}8\ cm^3 \times 25\ kN/cm^2}{1{,}1} = 6654{,}5\ kN\,cm$$

$$M_{Rd} = 66{,}545\ kN\,m$$

$$M_{Rd} = \frac{3}{16} PL \qquad P = \frac{16 M_{Rd}}{3L} = \frac{16 \times 66{,}545\ kN\,m}{3 \times 8\ m}$$

$$P_{sd\ MÁX} = 44{,}363\ kN$$