

$$f(dx) := \frac{\text{interp}\left(y_S, x, y, \frac{d_t}{A_1}\right)}{s_1 \cdot \langle A_1 - d_t \rangle} - \frac{\text{interp}\left(y_S, x, y, \frac{d_t}{dx}\right)}{s_2 \cdot \langle dx - d_t \rangle}$$

$$dx_1 := A_1 = 220 \text{ mm}$$

$$dx_2 := 3 A_1 = 660 \text{ mm}$$

$$dx_S := \mathbf{root} \left(f(dx), dx, dx_1, dx_2 \right) = 297.862 \text{ mm}$$

$$dx := dx_1, dx_1 + \frac{dx_2 - dx_1}{50} .. dx_2$$

$$\sigma_l := \frac{G_u + G_g + G_i}{4 \cdot s_1 \cdot \langle A_1 - d_t \rangle} = 3.011 \frac{\text{kgf}}{\text{mm}^2}$$

$$\sigma_p := \frac{G_u + G_g + G_i}{4 \cdot s_2 \cdot \langle dx_S - d_t \rangle} = 2.394 \frac{\text{kgf}}{\text{mm}^2}$$

$$kt_l := \text{interp}\left(y_S, x, y, \frac{d_t}{A_1}\right) = 2.647$$

$$kt_p := \text{interp}\left(y_S, x, y, \frac{d_t}{dx_S}\right) = 3.329$$

$$\sigma_{maxl} := kt_l \cdot \sigma_l = 7.97 \frac{\text{kgf}}{\text{mm}^2}$$

$$\sigma_{maxp} := kt_p \cdot \sigma_p = 7.97 \frac{\text{kgf}}{\text{mm}^2}$$