$$k_t := \text{interp}\left[y_S, x, y, \frac{d_t}{A_1}\right] = 2.647$$

$$s_1 := 40\ mm$$

$$s_2 := 30\ mm$$

$$S_1 := s_1 \cdot \left(A_1 - d_t\right) = 4600\ mm^2$$

$$S_2 := s_2 \cdot \left(A_1 - d_t\right) = 3450\ mm^2$$

$$\sigma := \frac{G_u + G_i + G_g}{2 \cdot \left(S_1 + S_2\right)} = 3.441\ \frac{kgf}{mm^2}$$

$$\sigma_{max} := k_t \cdot \sigma = 9.109\ \frac{kgf}{mm^2}$$