



$$F_n = \cos(71) * 189,449 = 61,678 \text{ [N]}$$

$$F_t = \sin(71) * 189,449 = 179,127 \text{ [N]}$$

$$F_{dim} = 19,3 * 9,816 = 189,449 \text{ [N]}$$

$$M_B = 300 * 189,449 = 56834,64 \text{ [Nmm]}$$

$$\tau = 179,127 / 91,9 = 1,949 \text{ N/mm}^2$$

$$\sigma_N = 61,678 / 91,9 = 0,671 \text{ N/mm}^2$$

$$\sigma_B = 56834,64 * 10,5 / 4393,57 = 135,827 \text{ [N/mm}^2\text{]}$$

$$\sigma_{Ref} = \sqrt{\text{pow}(135,827 + 0,671) + 3 * \text{pow}(1,949)} = 136,54 \text{ N/mm}^2$$

$$SF = 235 / 136,54 = 1,721$$