

$$\frac{6.52 \times 10^{18}}{P_c} \times \frac{t_c}{\eta} + (1.1 \times 10^5 t_s + 1.03 \times 10^7 t_w) < 6.52$$

$$t_s + 93.62 t_w < 59.2 \left(1 - \frac{0.093}{\eta} \right) \times 10^{-6}$$