74. The rotational inertia of the passengers is (to a good approximation) given by Eq. 11-26: $I = \sum mR^2 = NmR^2$ where N is the number of people and m is the (estimated) mass per person. We apply Eq. 11-44:

$$W = \frac{1}{2}I\omega^2 = \frac{1}{2}NmR^2\omega^2 \ .$$

where $R = 38$ m and $N = 36 \times 60 = 2160$ persons. The rotation rate is constant so that $\omega = \theta/t$ which leads to $\omega = 2\pi/120 = 0.052$ rad/s. The mass (in kg) of the average person is probably in the range $50 \leq m \leq 100$, so the work should be in the range

$$\begin{aligned} \frac{1}{2}(2160)(50)(38)^2(0.052)^2 \ &\leq \ W \ \leq \ \frac{1}{2}(2160)(100)(38)^2(0.052)^2 \\ 2 \times 10^5 \text{ J} \ &\leq \ W \ \leq \ 4 \times 10^5 \text{ J} \ . \end{aligned}$$