
Example

A starving Rose-Hulman student is preparing Ramen Noodles in a copper-bottomed pan bought from Goodwill. The diameter of the bottom of the pan is 0.3-m, and is maintained at 118°C by an electric heating element.

- Estimate the power required to boil the water in the pan.
- What is the evaporation rate?
- Estimate the critical heat flux.
- Estimate the number of shrimp used to create one flavor packet for shrimp-flavored Ramen Noodles.

