

Answer on Question#40282, Physics, Mechanics Question: An engine absorbs 2000J of heat from a hot reservoir and expels 750J to a cold reservoir during each operating cycle. What is the power output of the engine if each cycle lasts for 0.5 seconds?

Solution. The output power is

$$\frac{2000 - 750}{0.5} = 2700 \text{ W}$$