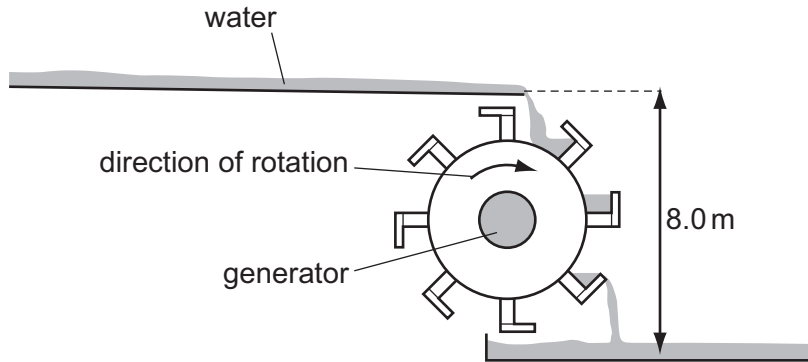


- 18** The diagram shows the design of a water wheel which drives a generator to produce electrical energy. The flow rate of the water is 200 kg s^{-1} . The generator supplies a current of 32 A at a voltage of 230 V .



Ignoring any changes in kinetic energy of the water, what is the efficiency of the system?

- A** 14 % **B** 16 % **C** 22 % **D** 47 %

- 19** A car engine exerts an average force of 500 N in moving the car 1.0 km in 200 s .