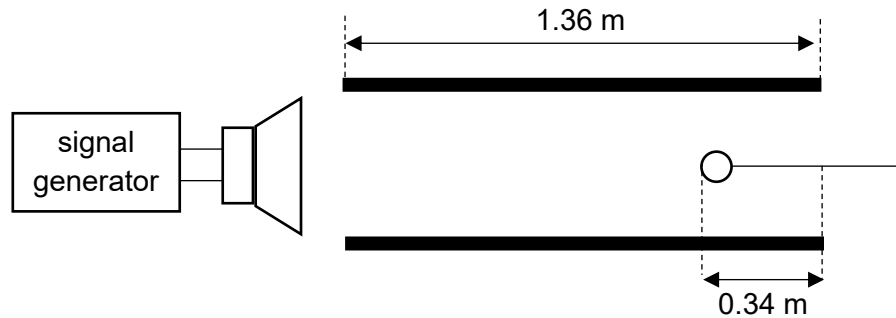


- 17** A speaker connected to a signal generator is placed in front of an open tube of length 1.36 m. A small microphone is inserted inside the tube. It detects the first position with zero intensity at a distance of 0.34 m from the end. The microphone is then fixed in this position. The speed of sound in the tube is 340 ms^{-1} .



The frequency of the signal generator is now increased until the microphone again detects zero intensity.

What is this new frequency?

- A** 750 Hz
- B** 1000 Hz
- C** 1500 Hz
- D** 3000 Hz