A low cost automated device to release a certain volume of liquid

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Abstract. A simple automated device have been designed and constructed in order to release a predetermined amount of liquid from a container. This preliminary study indicates that the device releases water with an accuracy of ± 0.2 ml and 92% of the time the accuracy is within ± 0.1 ml. The volume of the water released could be adjusted to any predetermined value. It could fill a 500 ml water bottle in about 25 s. The device could be used for other liquids with low viscosity. This could be modified and used for many applications ranging from small-scale shops selling any kind of liquid by volume to large-scale industries such as bottling any liquid. The accuracy could be improved further. The main advantage is that the device can be easily manufactured locally at low cost.

Keywords:

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