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Equilibrium shapes of drops emerging slowly on top of vertical tubes ABEL LOPEZ-VILLA, ABRAHAM MEDINA, ESIME Azcapotzalco, IPN, FRANCISCO HIGUERA, ETSI Aeronauticos, UPM — In this work we are interested in describing the shape of a single drop which emerges on top of a vertical tube just when it reaches the edge of the tube. We assume that the liquid is injected at a very low, constant, volume flow rate Q. We consider, as a first approximation, that the drop shape can be calculated by using a balance of force equation that relates the hydrostatic and capillary presures. The results are valid for cases of good and poor wetting, respectively, and for high and low Bond numbers. We present experiments that validate the numerical results obtained for the drop shapes.

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