

Abstract Submitted
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Shapes of elastic cylindrical tubes filled with liquids and granular media¹ G. JULIANA GUTIERREZ, ABRAHAM MEDINA, ESIME Azcapotzalco, IPN — In this work we discuss theoretically and experimentally the deformation equilibrium shapes of the elastic walls of a vertical tube when it was filled with water and sand. The use of elastic soft walls has been motivated to note, through the deformation of the walls, the role of the pressures induced by each material. By using the linear elastic theory it is possible to estimate analytically the shapes of the deformed walls induced by the respective hydrostatic pressures of water and sand.

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