

Brochures Distribution Robot

1. Introduction:

In order to complete this task, a 3D hand sketch for brochures distributor robot with clarification of its working mechanism is required.

2. The idea and its working mechanism:

There will be two primary parts in my designed robot:

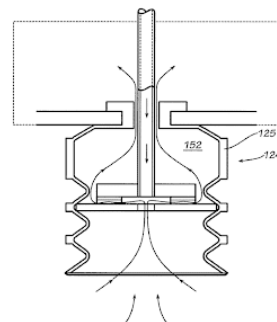
1- Stand (or box) that hold the Brochures attached to the first arm.

2- vacuum end effector at the end of the second arm that hold the brochures by using a portable vacuum and simple quantity of pressure to create atmospheric pressure to grip the required surfaces.

For more clarification: <https://www.youtube.com/watch?v=Xwa-ws6q-Bg>



[1] vacuum end effector connected to robot arm

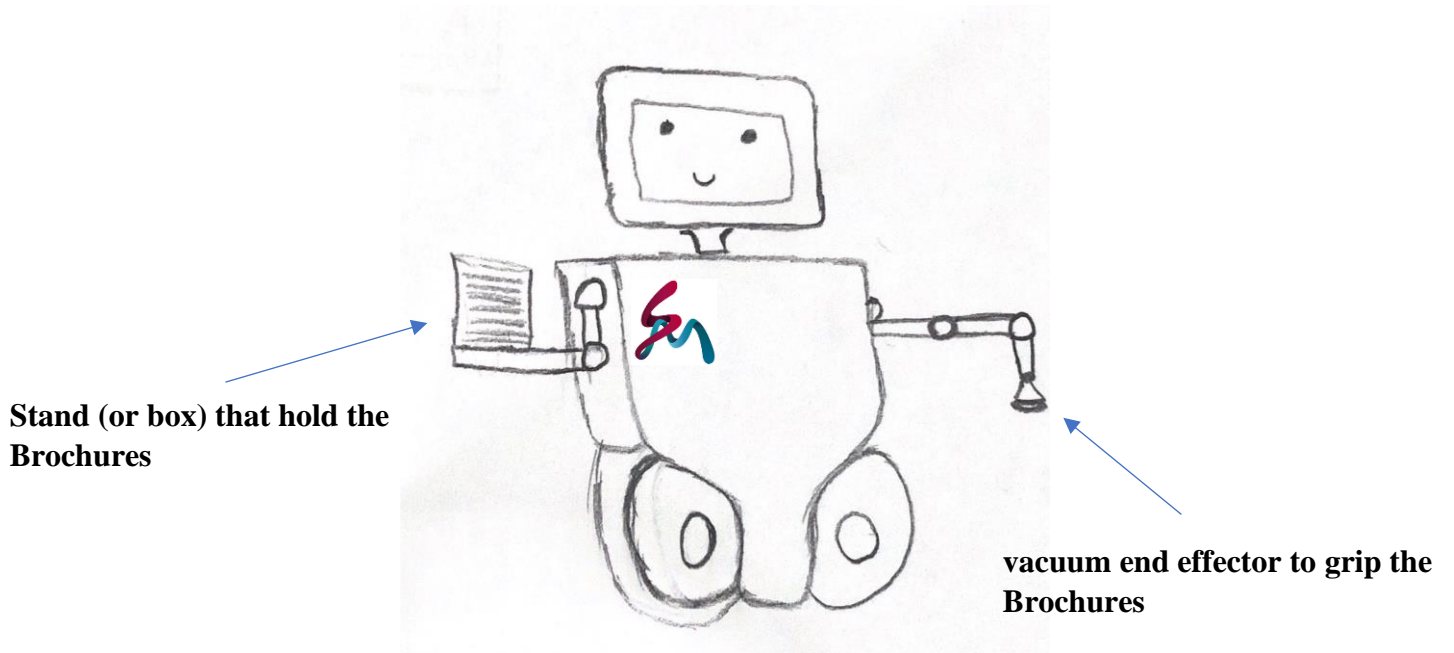


[2] vacuum end effector sketch

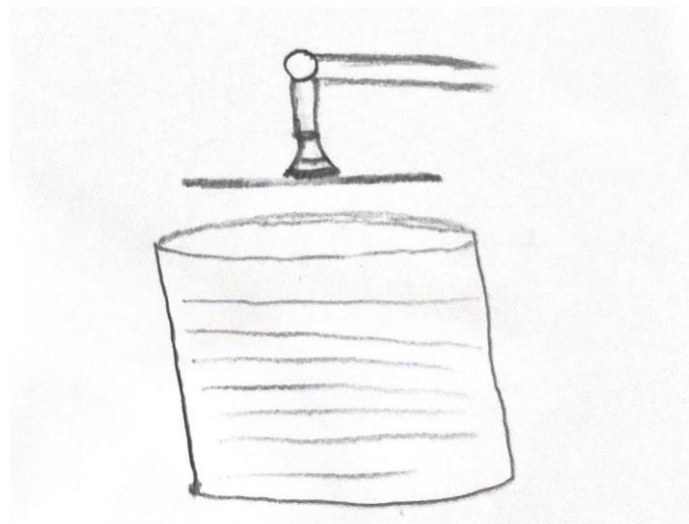


[3] vacuum end effector

3. 3D hand sketch:



A closer look to the mechanism:



References:

- [1] <https://www.universal-robots.com/plus/urplus-components/handling-grippers/epick/>
- [2] http://www.patentsencyclopedia.com/imgfull/20110254298_14
- [3] <https://www.schmalz.com/en/vacuum-technology-for-automation/vacuum-components/vacuum-suction-cups/suction-cups-for-packaging/bellows-suction-cups-spb1-1-5-folds-70>