

## Industrial Robotic Challenge

## Folding and Covering Vinegar Packaging Boxes

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The challenge consists of taking covers for cardboard boxes placed on a dispenser, folding them and placing in the cardboard boxes. In Figure 1 it is possible to see the cardboard lids in their flat form (as they will be in the dispenser) and the cardboard box already with the cover in place. Figure 2 shows the flat and folded cardboard lids and its dimensions. The placing of the cardboard lid can be understood observing Figure 3, where Figure 3 a) shows the initial phase of placing the cardboard lid and Figure 3 b) the cardboard lid already placed on the box. The cardboard boxes will be arranged on a pallet, as shown in Figure 4. This Figure also shows the dimensions and organization of the cardboard boxes on the pallet.


Figure 1 - Box with lid and lids before folding


Figure 2 - a) Folded cardboard lid; b) Dimensions


Figura $3-a)$ Cardboard lid before being placed; b) Cardboard lid placed on the box


Figura $3-a)$ Pallet with 6 cardboard boxes b) Carton boxes and pallet dimensions

