

AUTOMATIC CARTRIDGE INFEED

Innovative, modular, plug & play robot solution reduces manual infeed of empty cartridges.

Automatic Cartridge Infeed frees resources and ensures systematic, efficient depalletizing, infeed and inspection of cartridges.



Challenge

Continuous manual filling of empty cartridges into washing/filling machines is repetitive and monotonous work.

Manual inspection of cartridges also risks overlooking chips and cracks. Human error increases the risk of production stops and downtime.

SOLUTION OVERVIEW

Automatic Cartridge Infeed is a modular and stable cobot-based automation system consisting of two UR5 robots and one UR10 robot.

- + The solution has a small footprint and can gently handle 650 empty cartridges per minute. No reconfiguration of the process flow is required. It can be easily implemented as a platform at the inlet of any filling line.
- + Using a vertical gantry, the UR10 unpacks pallets of cartridge boxes. It is equipped with a custom-built rotating vacuum gripper that handles each individual box.
- + The UR5 robots, equipped with vision systems, check cartridges for chips and cracks before gently and efficiently infeeding cartridges.

Automatic Cartridge Infeed can handle 3 ml cartridges and can be customized for 1½ ml and 2.25 ml cartridges.





TECHNICON CASE

Solution Benefits

Automatic Cartridge Infeed optimizes any filling line by eliminating repetitive tasks and increasing employee value creation. It also ensures effective inspection of chips and cracks, minimizing downtime risk:

- + Has a small footprint.
- + Can handle cartridges of varying sizes.
- + Can easily be unplugged if manual filling and inspection are desired.