

Installation for oxygen-free filling of pear juice

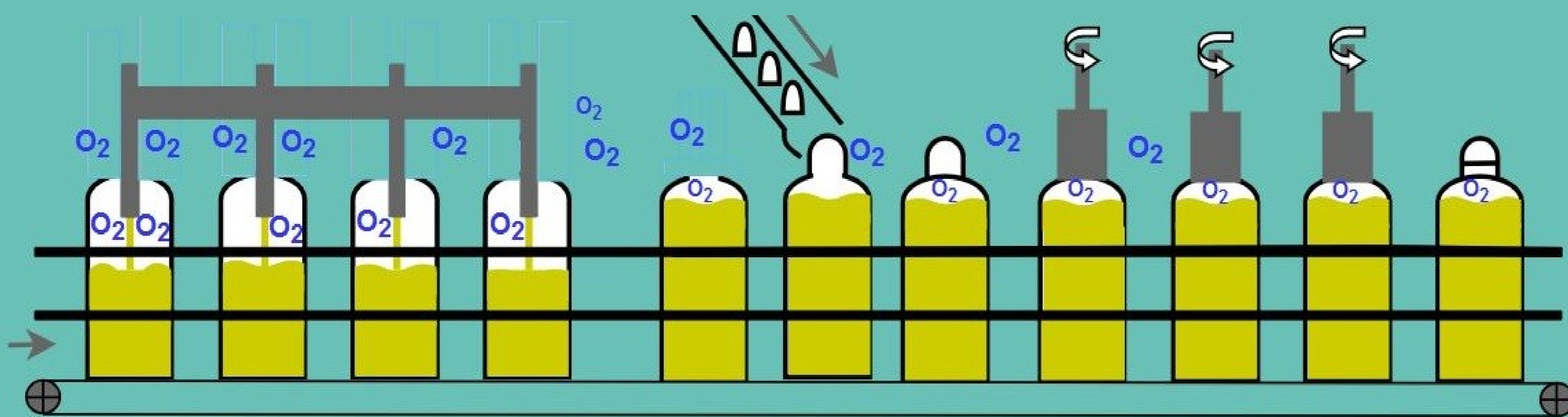
Weckx Pieter & Claes Yves

Specialization Preparation programme for Master of Electromechanical Engineering Technology

The problem

- Oversupply of pears in Limburg leads to food waste
- Pears that are exposed to oxide will be oxidized very quickly
- This can be solved by adding additives and chemicals but then the quality, taste and freshness of the pear juice will decrease

Traditional bottling installation



Outcome



✗ Oxidized pear juice

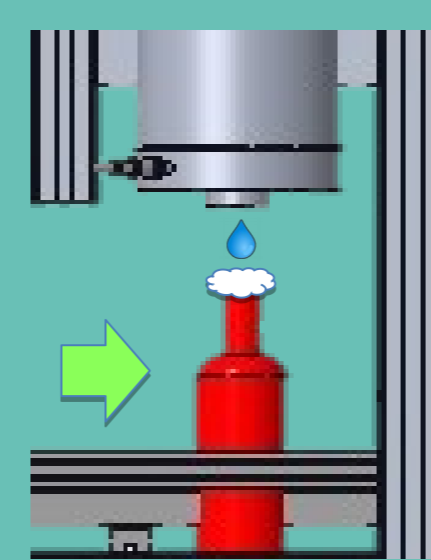
Challenge

Designing an installation for oxygen-free filling of pear juice on industrial level

Result

- using a nitrogen injection system to dose the nitrogen to the bottle. The nitrogen will purge the oxygen out of the bottle.
- A cap must be screwed on the bottle before the liquid nitrogen
- The installation can fill 3000 bottles per hour.

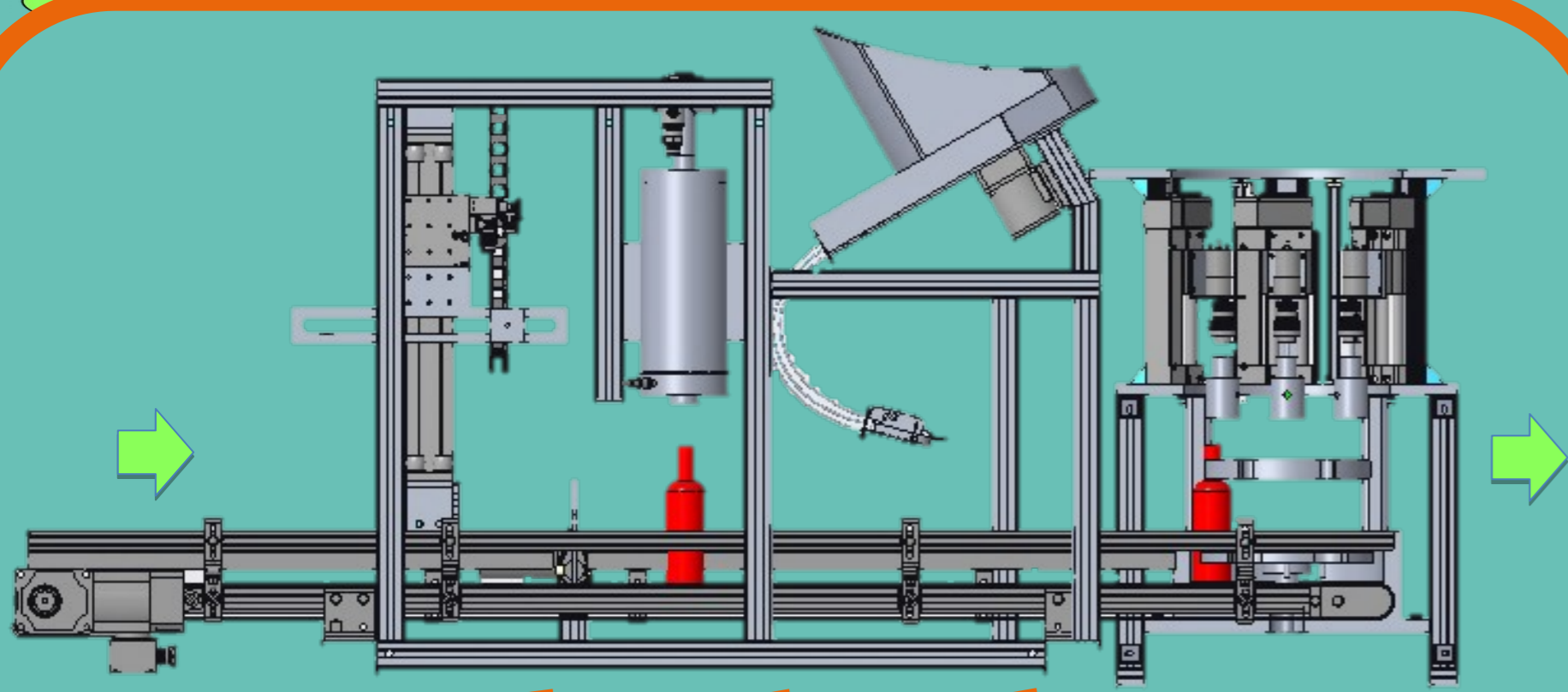
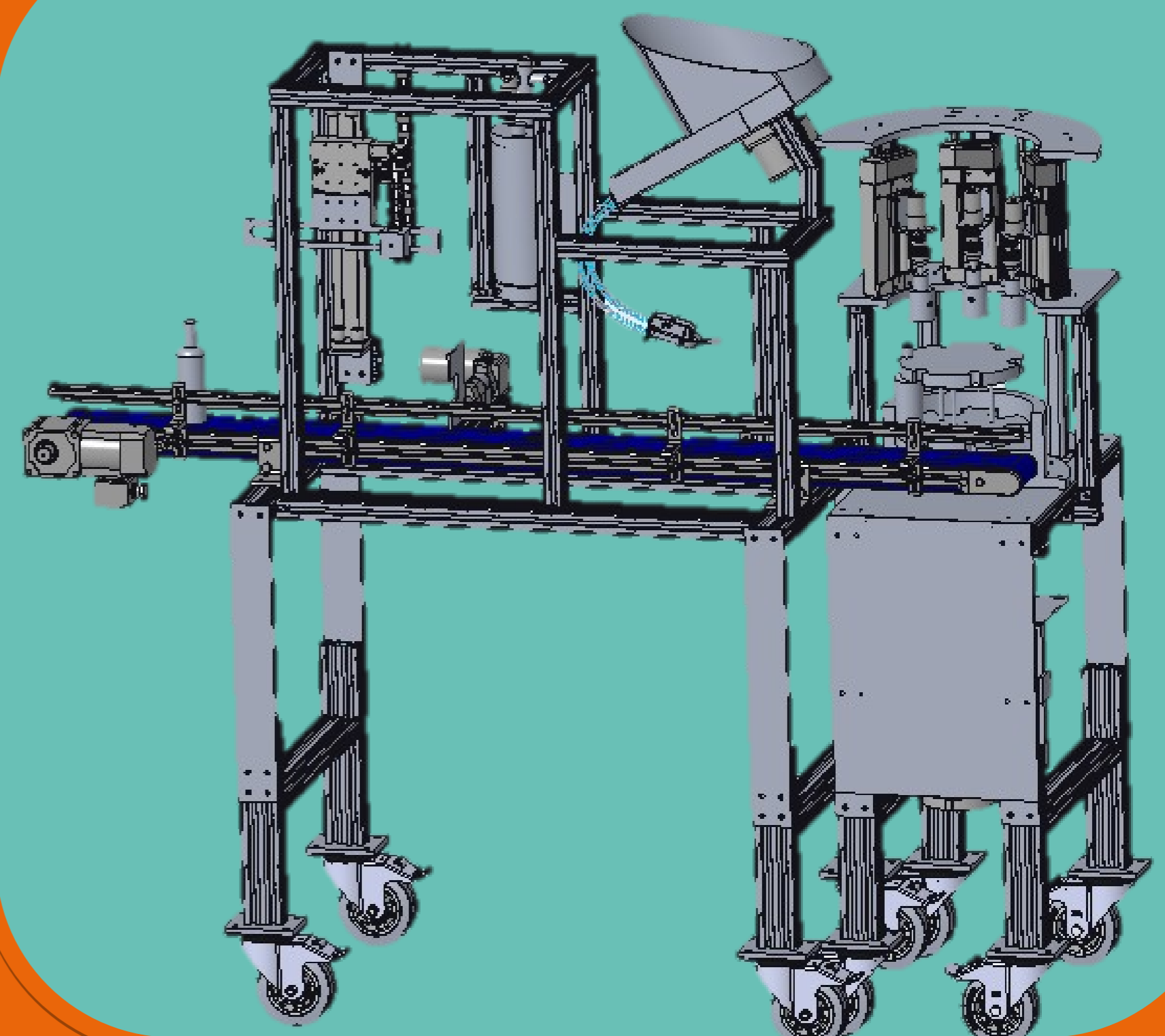
Nitrogen dosing system



with chemicals and additives



✓ not oxidized Pear juice



Filling Nitrogen doser Placing cap Screwing cap

The Company



- Valkenburg & Contreras since 2016, localized in Hasselt
- They strive to make authentic products, without compromising with chemicals
- Pro duce healthy juice that can be drunk by both our children and diabetics

The product



Order pear juice at:

<http://www.deliciouslyhealthy.be/>

Also look at:

[facebook.com/ToffePerensap](https://www.facebook.com/ToffePerensap)

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