

2015

Swabbing Robot
Combines Productivity and Operator Safety
the next step in to the automatisaton
in the glass industry

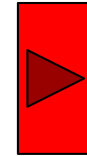
Introduction

- Heye works with partners on the implementation of a swabbing robot in the production process.
- First two installations have been successfully implemented in two high speed lines at an Ardagh plant and are currently in permanent operation.
- The second robot is much smaller than the first version.

Version 1



Version 2



Customer benefits

- **No container rejects after swabbing**
- **No necessity to use swabbing program**
- **75% savings on lubricant**
- **High safety for operators**
- **Stable and repeatable volume thickness and location of swabbing agent in the process.**
- **More time for operators to focus on optimization and defect correction.**

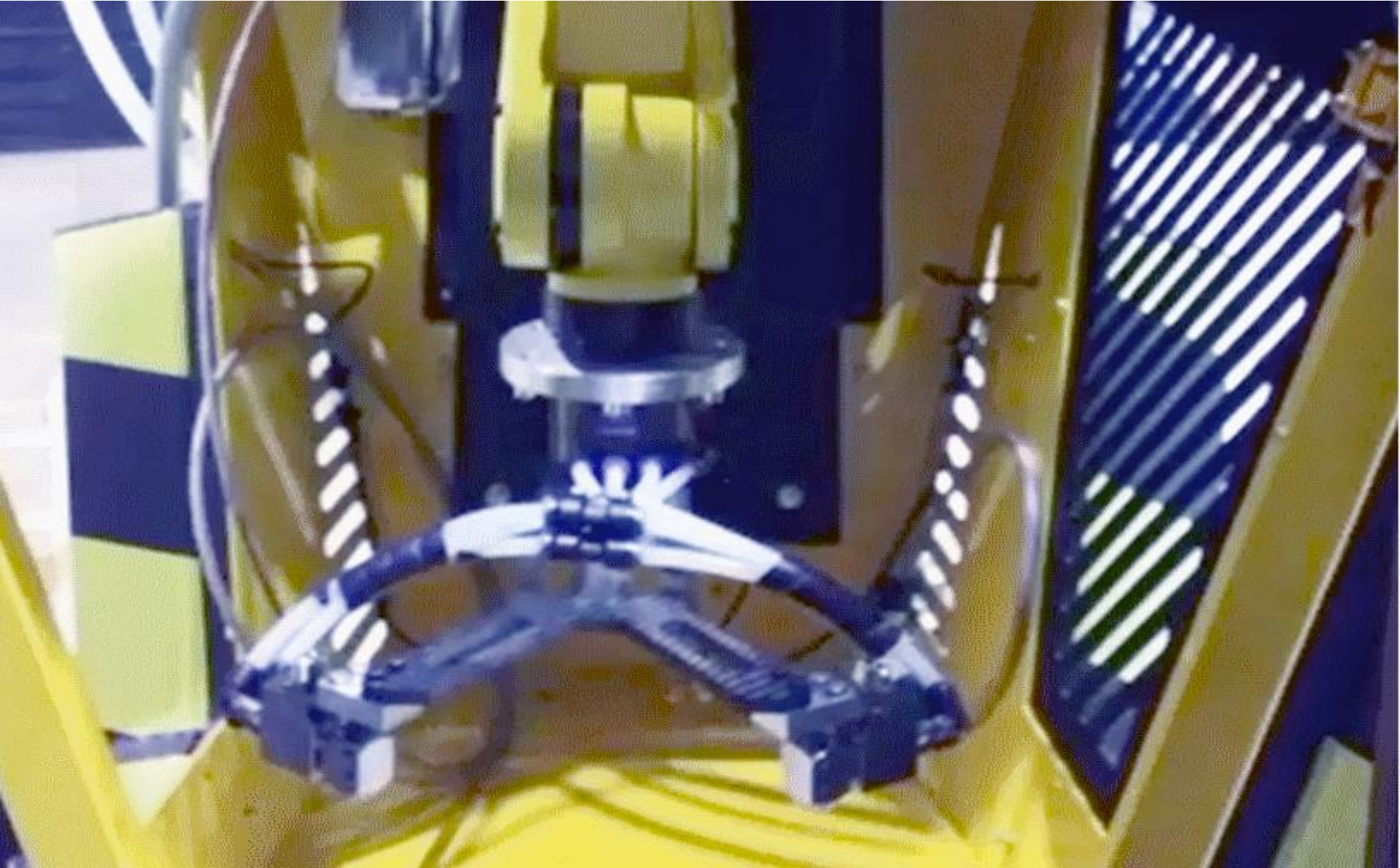
Version 2

- Interface adaptation of robot to IS timing system



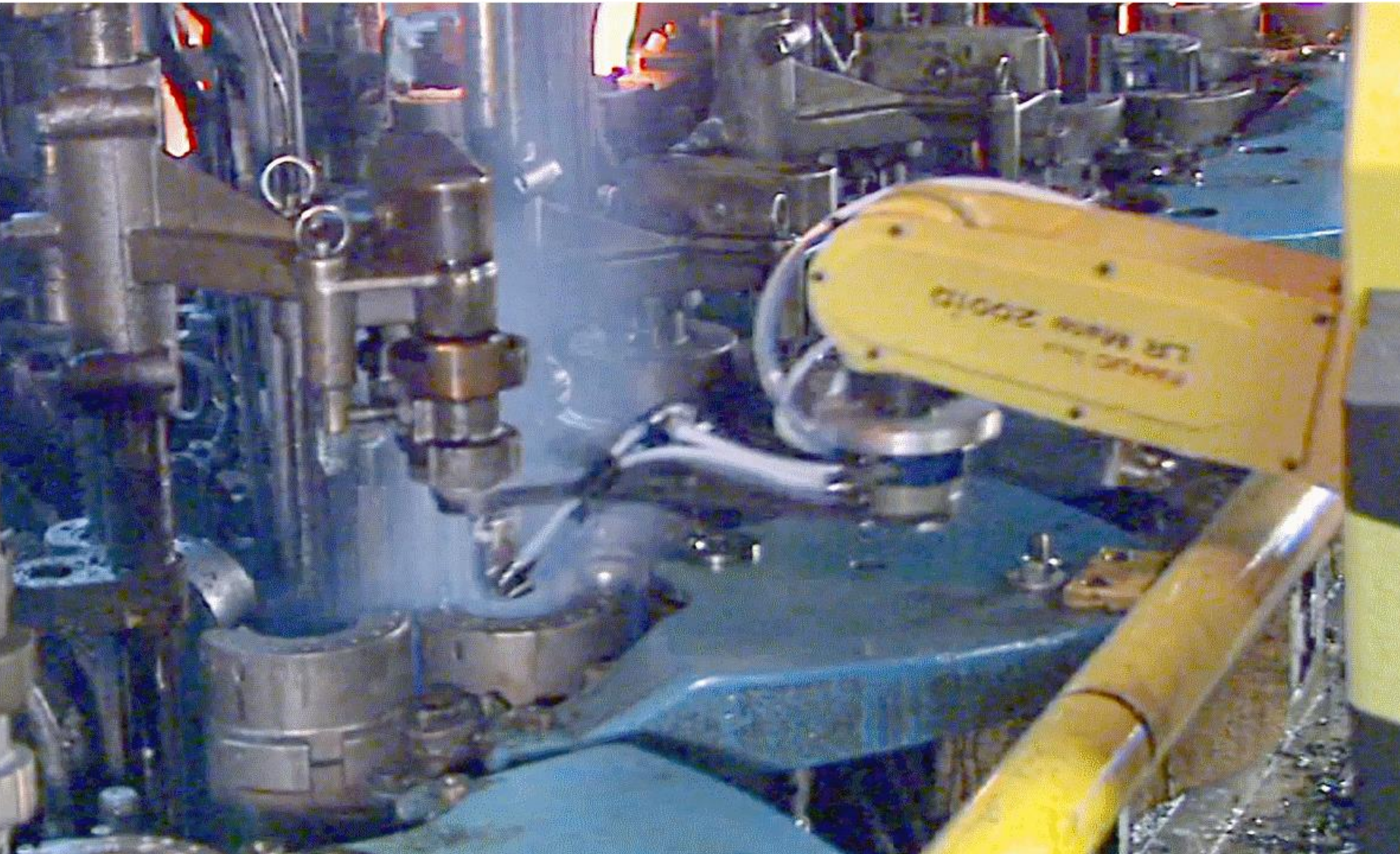
Head

- left and right spray nozzle



Spraying

- no influence or disturbance of production flow

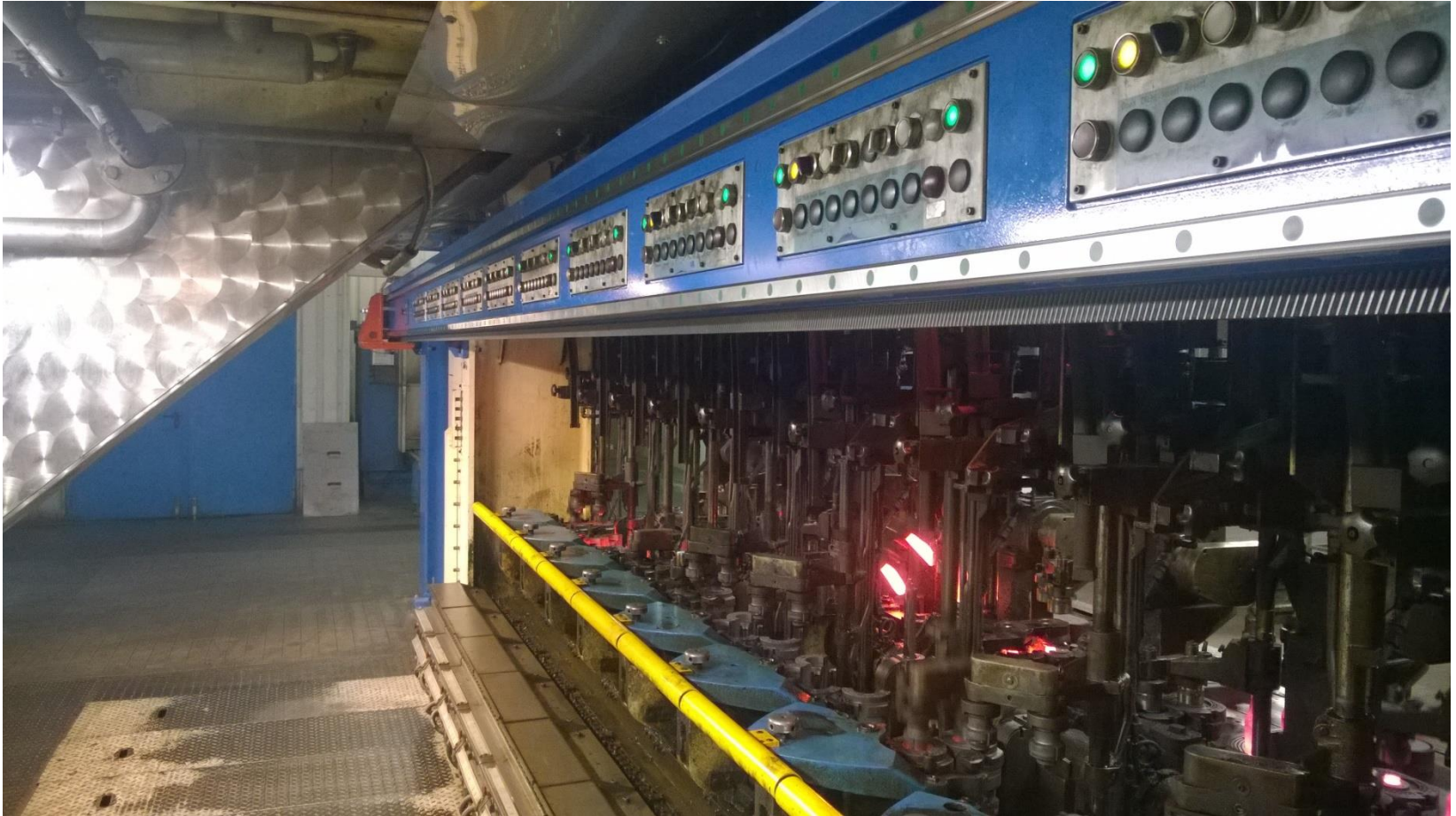


Highlights of latest version

- Robot is smaller, 25 kg instead of 125 kg
- Optimized cable guide design on Heye machines
- Safety cage
- Zero station
- Clean design
- Several parking places
- Left and right blank swabbing
- special program to spray neck ring
- Possible monitoring from IS-operator room

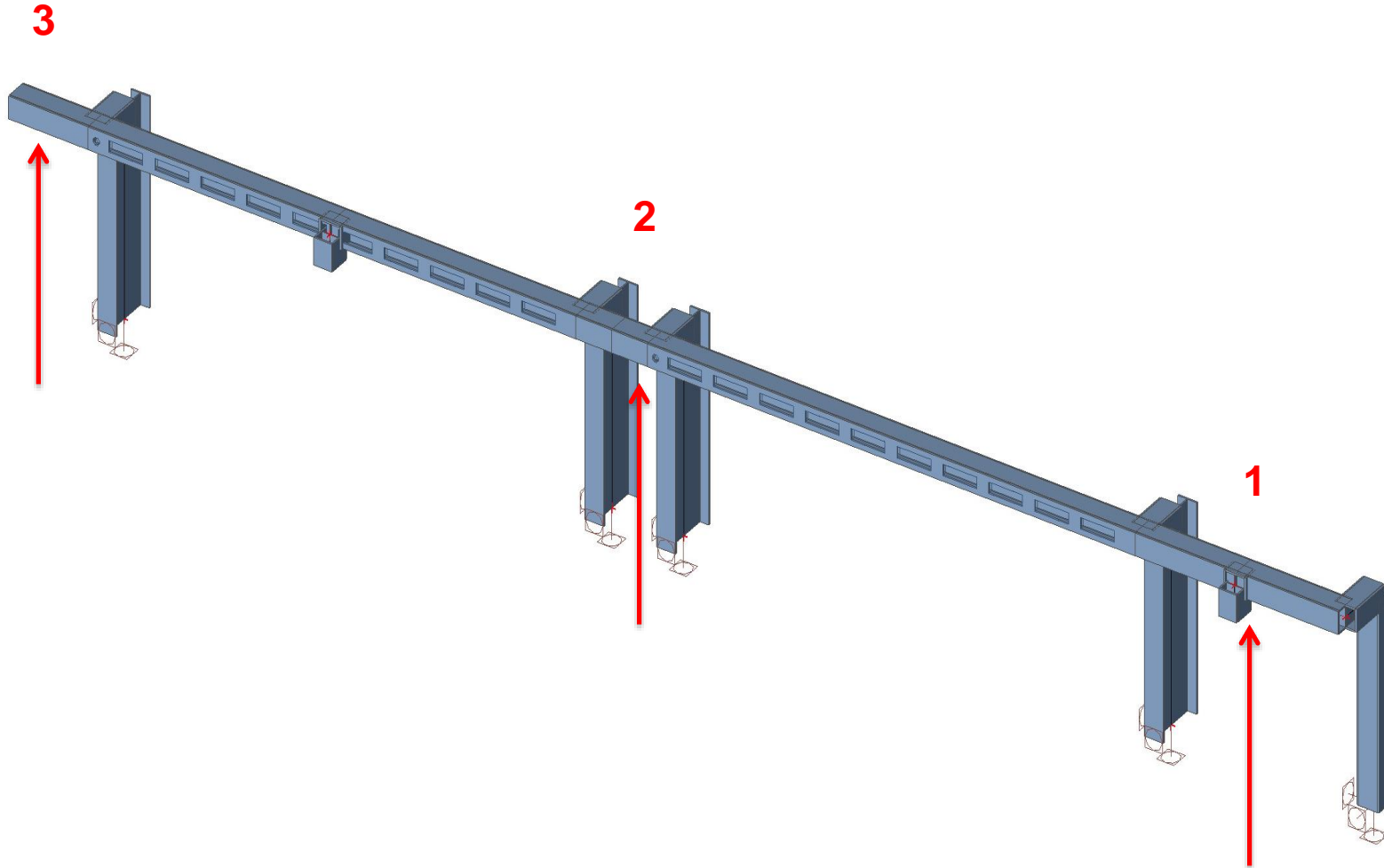
Beam

- Gear rack



Beam with parking positions

- Example of 20 section machine; tandem 2 x 10 section



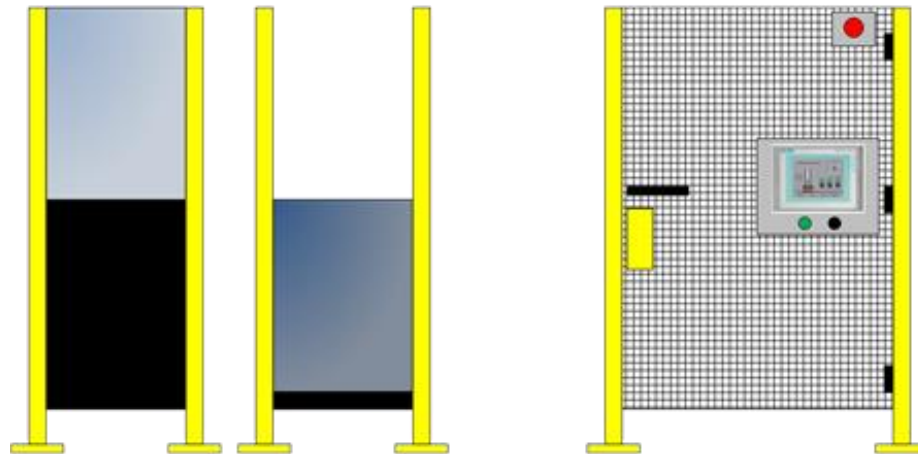
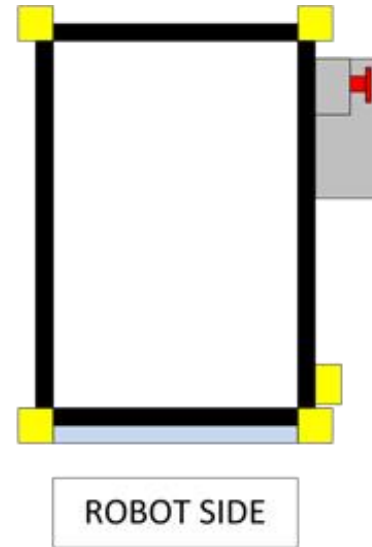
New safety cage

- Compact design and signal lamps



Zero station

- maintenance position area outside the machine for job change alignment and programming of the swabbing robot with HMI touch screen





THANK YOU VERY MUCH!