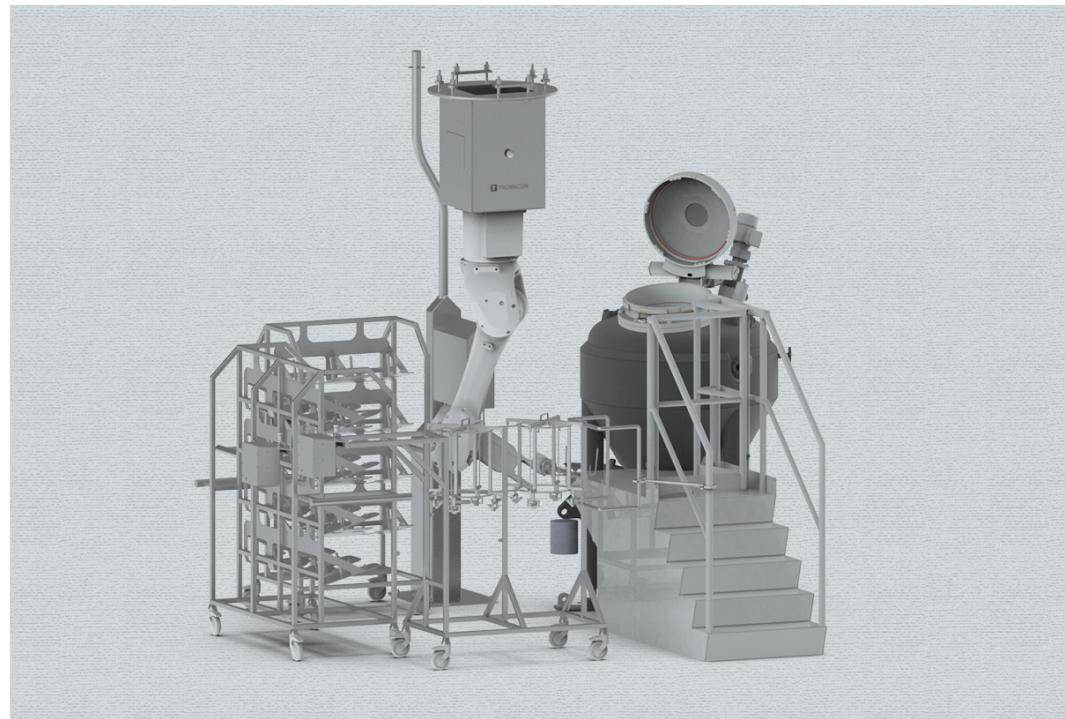


BUCKET HANDLING

Scalable API automation solution for clean rooms. A stable robot with customized vacuum tool reliably, gently, and efficiently unpacks and empties filled 10L buckets.



Challenge

Manual emptying of filled buckets in clean rooms can be highly labor-intensive, costly, and poses an increased risk of human error and contamination.

The effort to minimize such cost and risk and stay ahead of compliance is essential.

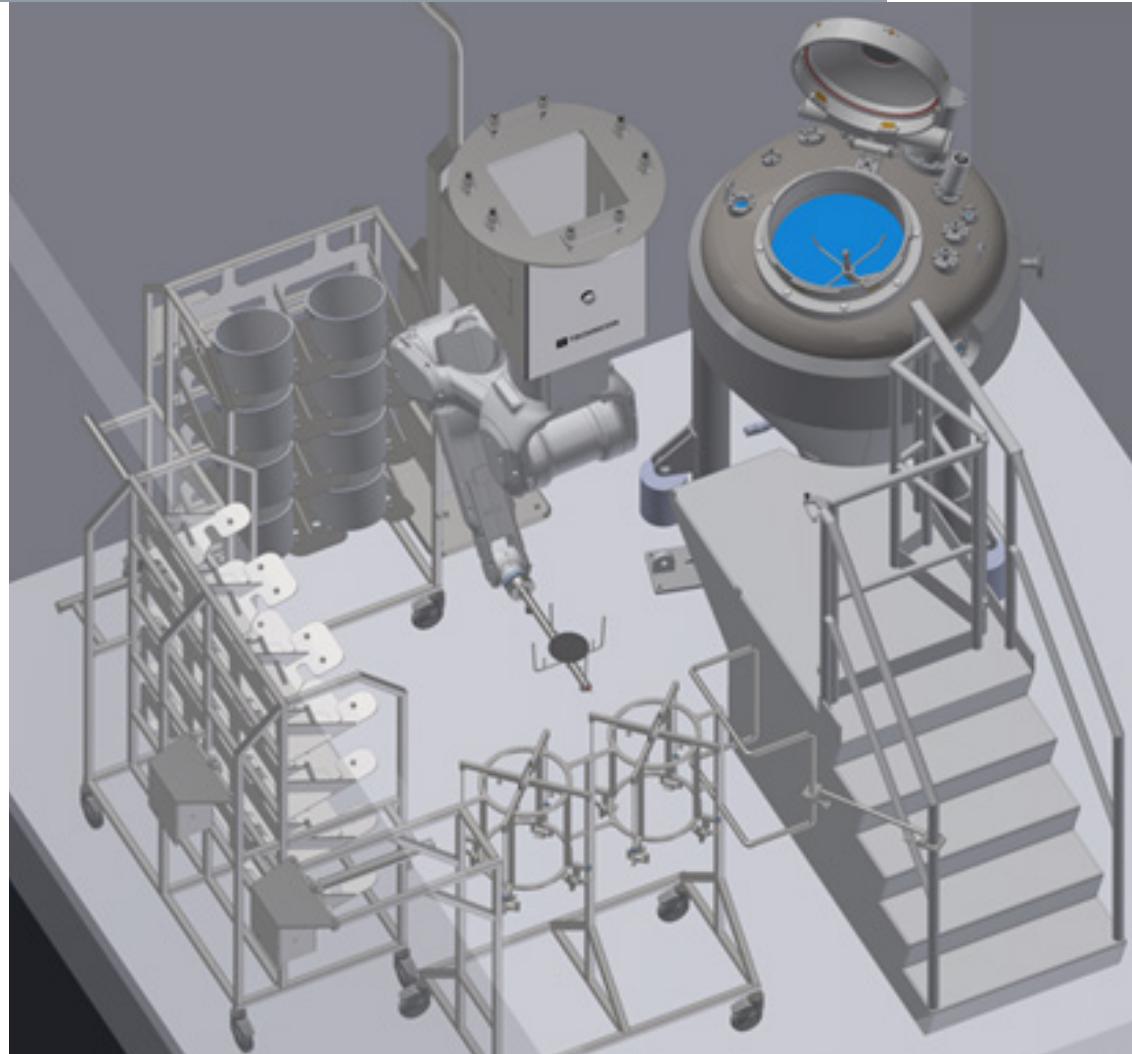
SOLUTION OVERVIEW

Bucket Handling is a scalable automation solution. It consists of a durable six-axis Fanuc robot (M-20iB/25C) with a reach of 1.835 mm and a payload of 25 kg.

- +
- The Fanuc robot is equipped with a fixed-mounted Robotiq vacuum gripper.
- +
- The solution is classified as Clean Room (Class 5) and meets IP67 standards.
- +
- The vacuum gripper, with a 10 kg payload, has an integrated sensor, allowing the robot to initially check the number of filled 10L buckets.

Subsequently, the Fanuc robot moves one bucket at a time to a specially developed fine mechanical latch opener, ensuring gentle and correct opening of the buckets.

The robot then empties the open bucket into a tank. Finally, it separately places each empty bucket on an outfeed trolley.





TECHNICON CASE

Solution Benefits

Bucket Handling is flexible and scalable, capable of handling containers up to 20 kg, and can be adjusted to meet changing requirements.

- + Reduces operating costs and eliminates the human factor, minimizing contamination risks.
- + Enhances working conditions by removing tasks related to lifting and emptying filled containers.