

# Success Story

## Mobile cobots at the bakery Mariën Bakkerij

Feasibility of implementation of mobile cobots at a bakery





# Implement mobile cobots

## Company description

Mariën Bakkerij Producten, with its production plant located in Balen, Belgium, is a SME with 18 own bakery shops in Belgium, and deliveries to an additional 20 retailers. The bakery, founded in 1958, produces all sorts of breads, varying in size and composition, once or twice a day. Next to bread, the bakery also produces various cakes and tarts in small series. The company has a turnover of over Euro 8 Mio, and 55 employees.

## Motivation/Starting Point

The company is facing a growing difficulty in finding staff to work the early hours in the bakery plant, performing monotonous, repetitive heavy (strengthening) tasks, such as lifting trays of dough of a cart into the oven, and taking trays of the various bread out of the oven. Especially taking and placing the trays in the lower and higher part of the cart is heavy work. Their work also involves carving the dough before it goes in the ovens, which is monotonous as well and thus potentially hazardous.

Marieën is aware that further digitisation and automation is needed to maintain the business, but would also offer the possibility to further grow the business, including employability.

## Analysis

A complex obstacle however, is that the bakery produces many different products in relative small series at various production machines, for only one or a few hours per day for each product. Dedicated automation of each of these processes would not be economically feasible. Therefore, the board of Marieën asked Cotemaco to investigate if it would be feasible to use mobile cobots, moving between the various production machines, to solve their challenges of improved working environment for their staff and more controllable and increased output for their business.



## Technical realization

The Cotemaco Support program for Marieën was conducted by the Technology Providers of Food Tech Brainport in The Netherlands. The support consisted of a feasibility study with regards to technical and economical feasibility, as well as feasibility of financing. The technical and economical feasibility were assessed by Technology Providers Van Wees Waalwijk and Producon, whereas the financing feasibility was assessed by TechNet, all members of the Cotemaco Support team of Food Tech Brainport.



## Result

From April 2020 – July 2020 the Technology Providers conducted the feasibility studies in close contact with Marieën. Various technical available solutions were evaluated, and optimised in iterations, meeting the processing requirements at the plant. Special attention was given to safety requirements for staff, hygienic and health issues related to food products, ease and flexibility of operation and integration to other digital platforms such as the company's ERP.



At the last phase of the project, when technical and economic feasibility had been established, the Cotemaco Support team was able to arrange a grant of € 120.000,00 to facilitate the development and integration of mobile cobots in the plant of Marieën. This implementation started on in September 2020 and is planned to be finished by September 2021.





## What is COTEMACO?

The project, which is an initiative of Interreg North-West Europe, aims to support around 60 SMEs in the automotive and food manufacturing industries with so-called „test environments“ and to encourage them to integrate collaborative robotic systems and digital technologies into their business. Accordingly, in addition to increasing production flexibility, the relocation of production abroad will be curbed and the number of jobs in manufacturing increased, which will generally lead to an improvement in the competitiveness of the companies involved.

In the project new technologies are implemented in application examples - the aim is to move from the prototype in the laboratory environment to the transfer to production, taking into account the legal situation and certifications.

**You want to become part of COTEMACO too?**

**You are interested in further Best Practice implementations?**

Then visit our website at:

**[www.robot-hub.org/cotemaco](http://www.robot-hub.org/cotemaco)**

Implementation partner:

