

# Case History

## The challenge of Danone

**DANONE GROUP  
HERENTALS PLANT  
Belgium**



**The product  
"GOUTERS REM"**

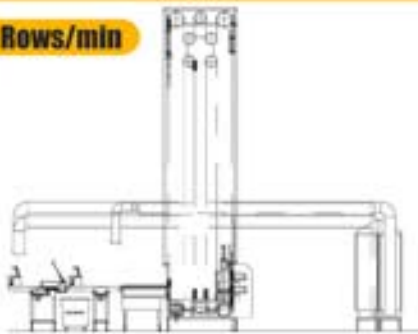
### CHALLENGES

**efficiency 99%**

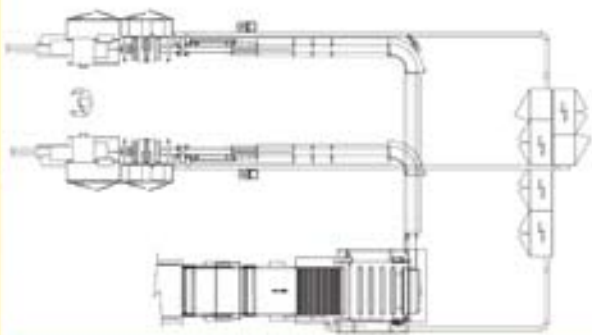
The customer's requirement was to grant a performance of his line higher than 99% by using two high speed flowpack machines. Although a packaging system - meant as wrapping machines integrated by an automatic feeding system - can be very reliable, during the normal work shifts some microstops always occur, due to several reasons and to the different components of the line.

*How to increase the line performance by keeping into account that there will always be those microstops?*

**Input 87,5 Rows/min**



**output 55 Rows/min per each level**



### SOLUTIONS/STRENGTHS

Cavanna supplied a packaging line featuring a vertical FIFO buffer developed by the Technical Department. The dual lane exit from the buffer allows to feed at the same time two packaging units - two Cavanna Zero5 machines - connected to a feeding system comprising an intelligent sequence of conveyor belts, with the function of phasing single products at high speeds, also under recovery conditions.

- The buffer is able to receive and discharge a high number of rows on two levels, in order to continuously feed two packaging units (Input 87,5 rows/min — Output 55 rows/min per each level).
- A special roller conveyor makes the feeding of the rows to the buffer regular, thus avoiding the problem of intermittent income.
- The buffer provides the products storage during line microstops (storage capacity 6 min).
- The buffer is equipped with an advanced software able to return the rows of product to both machines, or to one only, of course without affecting in the whole working logics.
- The electronics featured is by Cavanna.

**storage 6 min**

### RESULTS/BENEFITS

To our customer's full satisfaction, the obtained result was a performance of 99,8%. Due to the optimum co-operation between the two teams Cavanna and Danone engaged in the commissioning, the line was installed and tested able to start production at full capacity in two weeks only: a brilliant result reached despite the line complexity.

**efficiency 99,8%**

- A** Row preparation system
- B** Dynamic buffer FIFO type
- C** Stream infeed
- D** Superimposing device
- E** Zero5 wrapper

