

## SMED project on packing line marks start of WCM at Aviko



Aviko produces more than 20 different potato specialities including French fries, pom' duchesse and rösti. The production complex in Steenderen consists of five plants, where approximately 450 employees are responsible for production in five and three-shifts and one day shift. Starting on Monday 2 December 2003, an uninterrupted four-day SMED project was carried out, in Steenderen 5. The team consisted of five workers from the packing line, and their service engineer. The objective of the project was to drastically reduce changeover times.

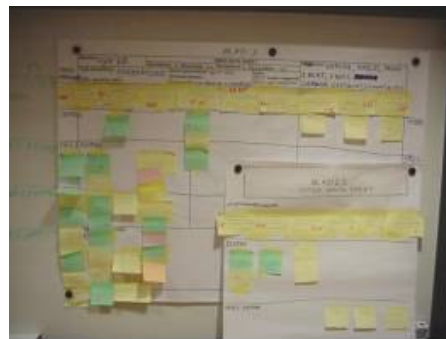
### ***How can we stabilise the variation in required changeover times, and shorten the overall changeover time?***

At Aviko, we work according to a five-shift process. Experience has shown that there is considerable variation in changeover times, between the shifts and the individual employees. As a consequence, production sometimes has to wait for the packing line, as a result of which production time is lost. How can we tackle this problem, and ensure that the improvements, once implemented, are maintained? Blom Consultancy emerged as a partner specialising in training and supervising improvement processes of this kind, on the shop floor. They came up with a way of dealing with our problem, and together with them, we carried out this first project.

### **With a four-day SMED project, we tackled the changeover problem**

Because we wanted to see results quickly, and because the packing line was shut down for four days, and because this was our first project in collaboration with Blom Consultancy, they advised us to start straight away on an uninterrupted four-day SMED project. SMED stands for *Single-Minute Exchange of Die* and is a method for drastically reducing exchange times, without high investments.

We compiled a team consisting of five operators from the packing line (one from each shift) and an engineer. On the first day, the team played the SMED Bustagut game, in which the SMED method was explained and practised. They then started on the video analysis. There were two videos to be analysed, one showing the entire changeover process, and one showing the longest individual changeover activity: the film and filler pipe exchange. The team then set themselves the changeover target.



*SMED video analysis*

To achieve that target, we further elaborated the technical improvement proposals and the organisational solutions, on days two and three. The result was an action plan. The engineer in our team was immediately able to carry out a number of technical improvements, and once we had laid down the new standard order for changeover, a test was carried out to see whether the target could be met. The result was positive, and the trainer provided the team with a cake, by way of celebration.



*Working out ideas in groups*

On the last day, we further elaborated the ideas in small groups, and prepared the presentation, for part of which every member of the team was responsible. The clients were extremely enthusiastic and approved our introduction plan, and they too handed out cream cakes, all-round. Sound agreements were also reached on the management support necessary when introducing the new changeover standard.

## Results

As a result of our project, the changeover time for the foil and filler pipe was shorted from 35 to 12 minutes; a reduction of 67%! The other changeover activities were shorted from 13 to 11 minutes, leading to a total changeover time of 23 minutes. With two people working together, therefore, a complete changeover can be achieved within 12 minutes. In addition, this SMED project over an uninterrupted period of four days resulted in an enthusiastic team with plenty of sound ideas for improvements, that they themselves intend to implement. Communication between the shifts and the management also considerably improved during the four days. In other words, a successful initial project! We now intend to implement other improvement projects, in production.

***“It was above all positive that we were given space to think up and implement improvements for ourselves, that relate to our day-to-day work”***

***“We were initially somewhat sceptical, but at the end of the training we were all highly enthusiastic”***