11 million drinks, 90,000 customers, 21 brands: in Belgium as elsewhere, everyday life without Coca-Cola is unthinkable. At the Coca-Cola European Partners Belgium plant in Wilrijk, five production lines produce some 4,000 pallets of soft drinks a day. To make certain everything runs safely and smoothly, the machines were recently fitted with a centrally managed RFID access control system from Siemens.

“The site in Wilrijk came about as a merger of 3 plants,” says Electrical & Automation Engineer Dirk Lembrechts, who has worked at Coca-Cola for 28 years. “Here we mainly produce PET bottles ranging in size from 0.25 to 2 liters for the Belgian market. Besides this, there is also one production line that is used for the iconic glass Coca-Cola bottles.”

System using drop-shaped RFID tags
All production machines at Coca-Cola European Partners Belgium are fitted with access control ensuring that only authorized persons can operate the machines or change specific parameters. “Until recently we used a system featuring a variety of drop-shaped RFID tags,” says Dirk Lembrechts. “Each tag had a different color and granted different access rights and authorizations.” But that system had a number of drawbacks.

Flexible access rights
Dirk Lembrechts’ team turned to preferred supplier Breemes to implement a new access control system. As a regular electrical engineering partner of Coca-Cola European Partners Belgium, this local integrator had already provided the industrial automation in Wilrijk. “The new solution had to be better than the old one in all respects: user-friendliness, flexibility and safety,” says Joren Marteaux, technical commercial representative at Breemes. “What’s more, it had to integrate seamlessly with the current industrial automation. Because Coca-Cola European Partners Belgium runs on SIMATIC PCS 7, we quickly got in touch with Siemens. Their SIMATIC RF1000 solution met all our expectations.”
First of all, SIMATIC RF1000 eliminates the tags: employees simply use their existing ID card, which reduces the risk of loss and misuse and cuts costs. Lost ID cards can be deactivated immediately. What’s more, the system runs on a central database and access as well as management rights can be assigned at individual level. At the same time, it is now much easier to assign access rights to new colleagues.

**Safety and traceability**

But there’s more. Besides access rights, SIMATIC RF1000 also offers a high level of traceability in the form of the ‘Audit Trail’. “A record is kept of every login to a machine,” explains Dirk Lembrechts. “That lets us see who changed particular parameters, so if there is a problem, we can resolve it quickly and get production back on track. Bear in mind that the aim isn’t to admonish people, but to troubleshoot problems as quickly as possible and get production back on track.”

One effect of the Audit Trail is a reduction in the number of incidents. Dirk Lembrechts: “We’ve been using the system for two years now. In that time, we’ve noticed that colleagues are a lot more aware of their individual responsibility. Which in turn means that few interventions are necessary.”

“Since we’ve been using SIMATIC RF1000, the number of incidents and interventions has fallen appreciably.”

Dirk Lembrechts, Electrical & Automation Engineer, Coca-Cola European Partners Belgium

**Ease of use**

The operators themselves are the ones to talk to about how easy the SIMATIC RF1000 system is to use. “It’s now much simpler to log in”, says Dirk Lembrechts. “The RFID reader is incorporated into the machines’ Comfort Panel. Someone working at the machine can just leave their card in it the whole of that time. In the control rooms the system can even be installed under the desk, in which case all you need do is to place your ID card on top of the desk to log in and start working.”

**Leap forwards**

SIMATIC RF1000 has now been integrated into most machines in Wilrijk, including palletizers, wrappers and handle applicators. And Syrup Room operation – the heart of production – has been linked up to the system. Dirk Lembrechts: “We have around 60 active licenses split between engineers and operators. They all agree that this system is a huge leap forward when it comes to safety, reliability and ease of use.”

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In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens’ products and solutions constitute one element of such a concept. For additional information on industrial security measures that may be implemented, please visit https://www.siemens.com/industrialsecurity

Published by Siemens AG

Digital Industries
Process Automation
Östliche Rheinbrückenstr. 50
76187 Karlsruhe, Germany

PDF Reference
PDF 0421 2 En
Produced in Germany © Siemens 2021

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