

Ahold Coffee Company

ACC selects Ampla to improve overall equipment effectiveness on all production lines



The Ahold Coffee Company (ACC) is part of Royal Ahold NV, one of the largest food retailer companies in the world, employing 247,000 people globally and achieving revenues of over 41 billion euros in 2005. The company is the largest private label coffee roaster in the Netherlands and is a market leader in the production of private label coffee pods that produce real coffee easier and more efficiently than conventional vending machines.

THE CHALLENGE

ACC has world class operations, with continuous improvement as one of its main objectives. The company's "Sensor to Boardroom" initiative is a strategy to integrate and bring transparency to all ACC production activities.

With a goal of decreasing the amount and duration of line stoppages without making operational or equipment changes, ACC decided to implement an MES system.

In addition to getting real-time data on key performance indicators (KPI) ACC also needed a solution that would easily integrate with its ERP system.

THE SOLUTION

ACC selected Ampla, Citect's MES solution, for its modular architecture that provides optimum flexibility and scalability. This allows the MES system to be set up in many different ways, with customers creating their own KPIs for just about anything.

Citect and Citect Partner Burgot-Epsia implemented the Ampla project which consisted of the Planner, Downtime, Production and Metrics modules. The modules were seamlessly connected via B2MML (Business to Manufacturing Mark-up Language), to the FlexProcess ERP system. Moreover, Ampla supports an ISA-95 compliant equipment hierarchy tree. This is the key object on which Level 3 manufacturing operations management activities are applied and from which information flows. This

THE CHALLENGE

To improve overall equipment effectiveness (OEE) without any operational or equipment changes to the production lines. In addition, the MES solution had to easily integrate with the existing ERP system.

THE SOLUTION

Ampla, Citect's MES solution, was selected due to its modular architecture. Using B2MML, a World Batch Forum standard that facilitates communication between such systems as ERP and MES, the Ampla modules listed below were easily connected to the ERP system:

- Planner
- Downtime
- Production
- Maintenance

THE BENEFITS

In a very short time, ACC has already seen significant improvement in OEE. In addition to gaining greater visibility of production and causes creating unplanned downtime, Ampla has helped ACC improve preventative maintenance scheduling by providing real-time information to continually improve its processes.

Case Study

Citect
Real-time Intelligence

"We're very pleased with the Ampla solution. It is providing us with important data that will enable us to continuously improve our planning and production processes. The solution provided by Citect and Burgot-Epsia was the obvious choice for us: providing a complete and open platform that meets all our current and future requirements."

Jeroen de Jager, Operations Manager,
Ahold Coffee Company



appropriately structured hierarchy facilitates integration with ERP and EAM systems as well as lower level systems.

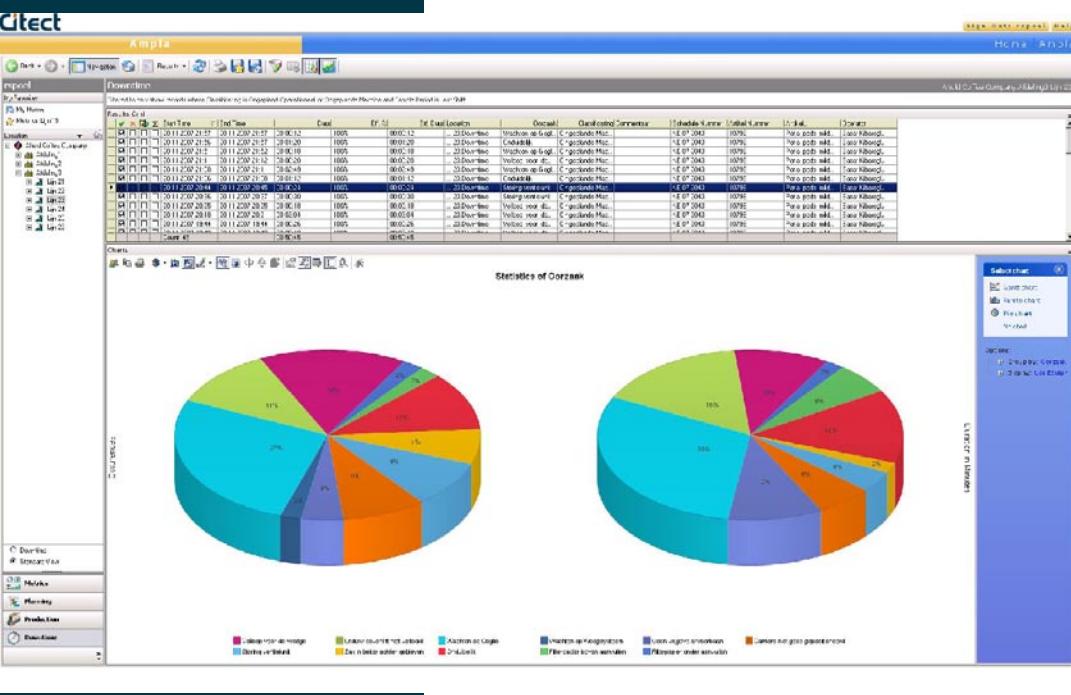
The Ampla Planner module allows local

visualization and optimization of process orders; while the Ampla Downtime, Production, and Metrics modules aggregate information from the plant systems and present it in real-time intelligence through user-friendly dashboards. As a result, managers for Planning, Production, Quality, IT, Technical, Financial and Maintenance can now drill down into the key inhibitors to production, quality, and labor utilization and take action to improve efficiencies.

BENEFITS

Planning staff can now see actual production against the plan and optimize schedules accordingly. Production staff benefit from greater visibility of production and the causes of downtime.

OEE is a key indicator at ACC, and the company has already seen significant improvements in this KPI



Significant Improvements in OEE with Ampla

on selected lines since Ampla was installed. Operations staff became more performance oriented immediately after the Ampla system was implemented, which resulted in a decrease in the number and duration of line stoppages. Consequently, OEE improved right away without having to make any operational or equipment changes.

Operations Manager Jeroen de Jager also sees benefits in a number of other key areas after implementing Ampla. He can now objectively identify the most readily achievable goals (the “low hanging fruit”) that should receive the highest priority to manage the resources for eliminating waste and stoppages more efficiently. The few major issues are being addressed first and improvement teams are being formed to identify and remedy other performance issues.

An additional Ampla benefit has been very effective commercial meetings with sales staff. Now, Mr de Jager can provide evidence of the relative profitability of the various products the company produces. Some products are

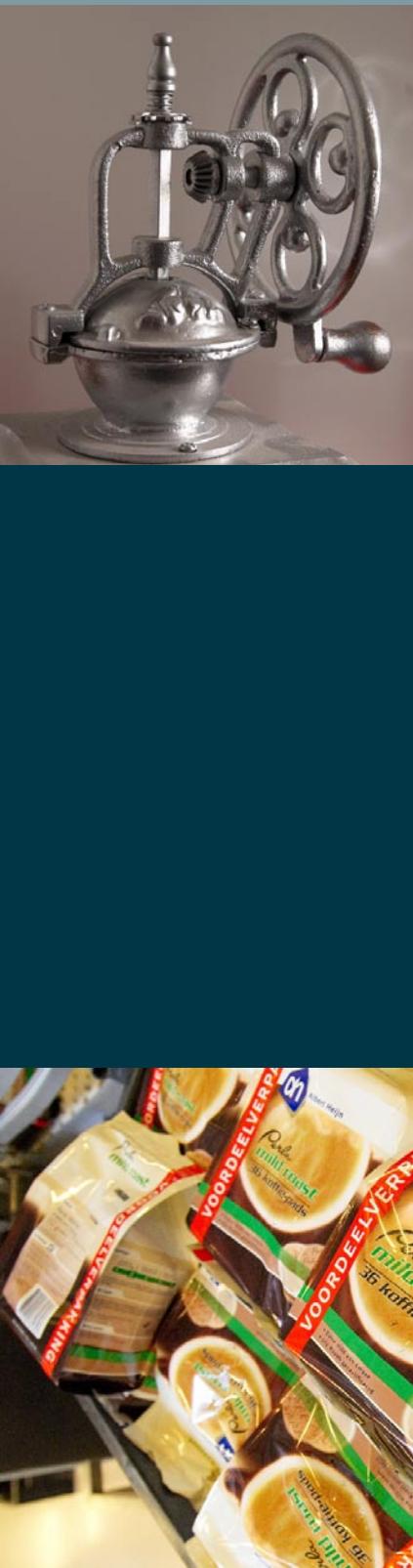
relatively inefficient to produce and carry higher labor and downtime costs due to factors such as packaging. By identifying these poorer performers, ACC has more insight into actual production costs.

Improved Preventative Maintenance

The ability of the Ampla system to provide focus for improvements right across ACC's operations also extends to the company's maintenance operations. The ability to drill down and obtain real-time intelligence through easy-to-understand dashboards has helped maintenance staff to confirm that preventative maintenance, in line with packaging equipment vendors' recommendations, does actually increase the overall equipment availability and therefore is worth scheduling. As a result, ACC has instituted a stricter preventative maintenance schedule.

Furthermore, the number of maintenance staff required to service the lines is now more visible as the system records the amount of time maintenance staff spends on the line. It also indicates the amount of time operators are





"waiting on maintenance" staff to arrive.

A log of the activities the maintenance staff performs on the line is also stored in the system. This provides transparency across succeeding maintenance personnel who may be called to rectify faults on the same machine during different shifts. It enables one engineer to see at a glance whether the fault is a new one or the same one that occurred previously and the measures taken to remedy it.

This data is then fed back into the preventative maintenance program to provide effective input into OEE improvement.

Probably the most significant benefit achieved from the Ampla system is that ACC believes the return on investment (ROI) for the project is very near – less than 12 months of actual operation.

