



# AUTOMATION & INDUSTRIAL IT WORLDWIDE

- Control of complete dairy plants
- MES and ERP integration, OEE
- Upgrading and optimizing
- Professional consultancy
- Training and education, Au2mate Academy
- Standard solutions
- Installation and commissioning
- Service and maintenance

## Au2mates's know-how covers every dairy process

Au2mate's know-how covers every dairy process from raw material reception to packaging including high valueadded processes, OEE and MES solutions.

Please refer to our web page for further contact information in Denmark, Norway, Sweden, England and Dubai.



**Au2mate**

PROCESS AUTOMATION PARTNER

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## QUICK FACTS ABOUT AU2MATE

- Au2mate was founded in Denmark in 2001.
- 100 employees at offices in Denmark, Norway, Sweden, UK and Dubai, holding more than 600 man years of experience in dairy automation.
- Project-oriented, has delivered more than 1600 projects, PLC, SCADA, MES and ERP integration to dairies worldwide.



ment at eight filling and packaging lines and various supporting processes. The solution includes an advanced barcode scanner solution for pallet identification as well as data tracking and handling.

#### Full SAP integration

Almarai required a fully automated control and IT solution for the new production plant with SAP integration, OEE measurement and full traceability.

The following success criteria and focus points were identified in connection with MES solution for the filling and packaging area:

- SAP integration (receiving released orders from SAP and giving production response back to SAP regarding filled/packed material/amounts and locations).
- OEE package for monitoring and improvement of line performance.
- Plant/line performance reporting.
- Track & trace of products.

The goal for the project was to reduce line waste and downtime while improving performance, availability and quality. This was to be demonstrated by a 5% improvement of the line OEE.

#### Implementation of the MES project

The contract was signed in June 2016, commissioning started in February 2017

and full production planned for April 2017 and go-live with EWM system in August 2017. The project was generally executed according to Au2mate QA-manual complying with leading international standards and methodologies including development of test sheets for quality assurance. The plant is complex both in terms of processes and applied automation technology and at the same time the performance requirements are set very high; this includes user friendliness, process optimisation and plant uptime.

The plant automation solution is based upon the latest proven technologies and equipment from leading manufacturers, ensuring the investment and future development of the plant.

#### Training of staff

The software solution is designed according to S88/S95 which forms a robust platform supporting superior management of the dairy including a fully integrated manufacturing order execution.

The solution designed and implemented at the Almarai factory is embedding the joint Au2mate expertise and good automation practice gained from conducting major MES projects for more than 15 years.

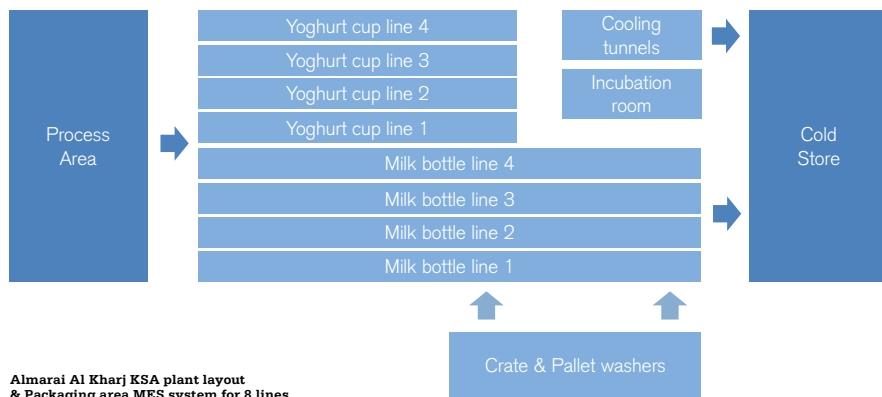
Training of the Almarai staff was done

in dedicated training sessions as well as in parallel with the project execution, in order to develop the skills required to operate, run and execute maintenance of the plant independently of external support. ■

#### 4 quick facts about Au2mate A/S

- Founded in 2001.
- 100 employees at offices in Silkeborg, Dubai, England, Norway and Sweden, holding more than 600 man years of experience in dairy automation.
- Project-oriented, has delivered more than 1800 projects; PLC, SCADA, MES and ERP integration to dairies throughout the world, including Nordic countries, Europe, Middle East and Africa, America and Asia.
- Supply solutions based on open standard platforms and internationally recognised methods for software development and project management.

For further information – see [www.au2mate.com](http://www.au2mate.com) or contact us at +45 8720 5050



Almarai Al Kharj KSA plant layout & Packaging area MES system for 8 lines

# Mapping Skills Needs and Supply in the Dairy Sector



How to close the skills gaps between the education suppliers and the demanders of the European dairy sector? This question is a major concern among dairy stakeholders in Europe. For this reason, AEDIL which is a network of European stakeholders, designed a project to find answers to the question. The project runs over three years and is presently initiating its second year.

By Isabel Sande Frandsen

The European dairy sector is rapidly changing towards more concentrated and specialized production, and the global demands for dairy products are growing. This situation is matched with an education supply that is not fully geared to provide the skills needed by the labour market, which displays a strong and growing need for comprehensive knowledge on 'skills demands' and 'skills supply' within the European dairy sector. Only with this knowledge it will be possible to generate recommendations for educational institutions to match the needs of the industry.

#### Researching demands for dairy skills

At present the project is in the research phase where dairy plants and educational institutions across 13 European

countries are interviewed based on a comprehensive questionnaire. The questions aim to bring light on how the dairies experience the feasibility of recruiting qualified employees, which skills they require for the future and which trends they see in dairy demands. During the research a special focus will be on digital and green skills.

Once the research is concluded a group of highly qualified people with analytical skills will analyze the data and create models which will help to clearly depict gaps and shortages in the sector. The findings then will be used to generate recommendations for the dairy sector to ensure a competitive European dairy sector where the industry and education sector collaborate to meet changing demands and trends. ■

#### Early finding from the Research

- Some countries within the EU lack facilities to train professional dairy employees. These countries have simply run out of qualified professional dairy operators, technicians and leaders.
- There is a need to invest in training facilities and update pilot dairy equipment including those connected to green and digital outputs.
- New learning is required in addition to good dairy skills (Science, Process, Quality and packaging)- automation, continuous improvement, cost of production, fault finding, team leading, Route Cause Analysis, and quality systems.



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