

FOCUS ON ECOLOGICAL CARBON FOOTPRINT

Au2mate has a great focus on delivering energy optimised solutions to our customers. Through streamlining and optimisation of all aspects in the control systems in the production plants it is possible to obtain considerable savings, minimise waste and energy consumption to secure a more sustainable production.

CLIMATE FRIENDLY SOLUTIONS

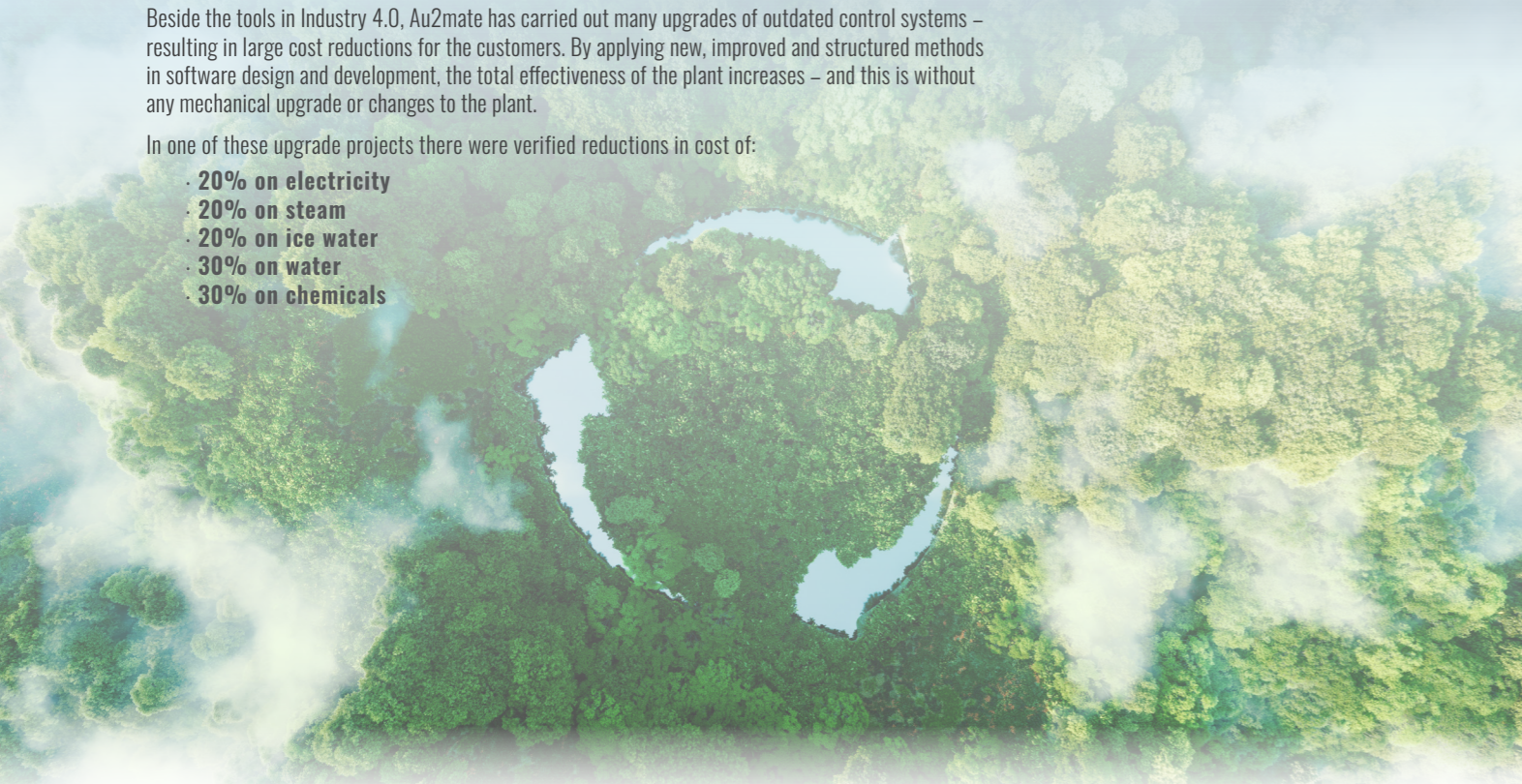
Our solutions are based upon the latest Industry 4.0 technologies to ensure the most effective utilisation of the process equipment. Elements in these technologies will secure e.g.:

- Total traceability on materials and products
- OEE numbers for trimming and optimising the processes
- Data analysis for optimisation and troubleshooting in complex processes
- Full reporting and documentation on material and energy consumption
- Optimisation on product specific tolerances by new and improved technologies for in-line measurement and analysis

Beside the tools in Industry 4.0, Au2mate has carried out many upgrades of outdated control systems – resulting in large cost reductions for the customers. By applying new, improved and structured methods in software design and development, the total effectiveness of the plant increases – and this is without any mechanical upgrade or changes to the plant.

In one of these upgrade projects there were verified reductions in cost of:

- 20% on electricity
- 20% on steam
- 20% on ice water
- 30% on water
- 30% on chemicals



AU2MATE YOUR GLOBAL PARTNER IN PROCESS AUTOMATION AND DIGITALIZATION

Au2mate develops and delivers complete automation solutions with special focus on process optimisation and minimising waste, energy consumption and carbon footprints. Our solution designs emphasise a high level of user-friendliness, operational reliability and optimal use of Industry 4.0 technologies to safeguard your investment. We offer training programmes for both operating and technical staff at our training centre, Au2mate Academy, and competent support via our 24/7 Hotline. Au2mate – your partner and provider of quality solutions and guarantor of optimal performance of your process system.

We are certified at the following strategic partners:



4 QUICK FACTS ABOUT AU2MATE A/S:

- Founded in Denmark in 2001. Today an international company with offices in several countries
- Growth company – delivers high value for our customers through better, cheaper and faster premium quality automation and digitalization solutions
- Project oriented – has delivered more than 3000 projects: PLC, SCADA, MES and ERP integration for process plants worldwide
- Supplies solutions based on open standard platforms and internationally recognised methods for software development and project management



PROCES KNOW-HOW

Having completed more than 3000 projects, Au2mate has accumulated expert knowledge on the processes in the sectors we serve. Aside from the automation part, our team of engineers and experts is a strong partner in the design and clarification phase connected to processes such as:

- Pasteurisation
- Evaporation
- Spray drying
- Filtration plants
- CIP and cleaning plants
- Tank and mixer control systems
- Fermentation processes
- Cheesemaking plants and processes
- Cooling and ventilation systems
- Boiler/Heating plants
- Handling service installations
- Meat and animal feed plants
- Pharmaceutical plants

AUTOMATION SOLUTIONS

On typical projects - and based on interviews with the end user technologists and operators - we develop design documents (high level and detailed) based on ISA S88 and S95 standards.

Software is developed based on approved design and by use of Au2mate's standard software framework and methodologies. Prior to the implementation phase at the end user a thorough FAT test with participation of the customer and end user key personnel is conducted at our office. Au2mate delivers customised total solutions for controlling entire factories as well as solutions for individual processing sections. Our solutions are developed to handle both greenfield projects as well as complicated automation platform upgrades in full production scenarios.

Our solutions cover all processes from the reception of raw materials to packaging. We have profound experience in upgrading automation systems during operation.

Our systems are based on platforms from leading suppliers of PLC/SCADA systems and designed specifically to comply with individual customer requirements and needs.

Our comprehensive software library contains ready-made structured software modules which are version-controlled, fully tested, and guaranteed functional.

INDUSTRIAL IT

Au2mate's industrial IT/MES solutions ensure complete integration from ERP to the shop floor. We have completed a great number of tasks for customers at home and abroad with focus on e.g.:

- Executing process orders
- Production planning
- Material and product definitions (recipes)
- Full traceability for materials and products
- OEE solutions
- Batch reporting
- Data analysis for plant optimisation
- AI tool for optimization and forecast

As part of Industry 4.0, Au2mate has also developed a versatile toolbox to support digitalisation of the process industry. Our product range includes among other:

- Manufacturing Management System – MES system
- OEE Module
- Document Module
- MASStermate standardization unit
- Separator Upgrade

PROJECT MANAGEMENT

Au2mate's experienced project managers secure that all projects are specified, developed and implemented in close cooperation with the customer / end user.

It is vital to us – and the customer – that the project can be completed within the time and price frameworks agreed. Thus, we consider documentation, dialogue and mutual trust to be essential values.

We apply a well-proven method featuring five well-defined phases which, step by step, takes customers and ourselves through the complex task of setting up a system for the process industry.

HARDWARE

Au2mate supplies total automation solutions. This often includes supplying server equipment, circuit breaker panels, frequency converters, installation materials as well as the entire electrical installation.

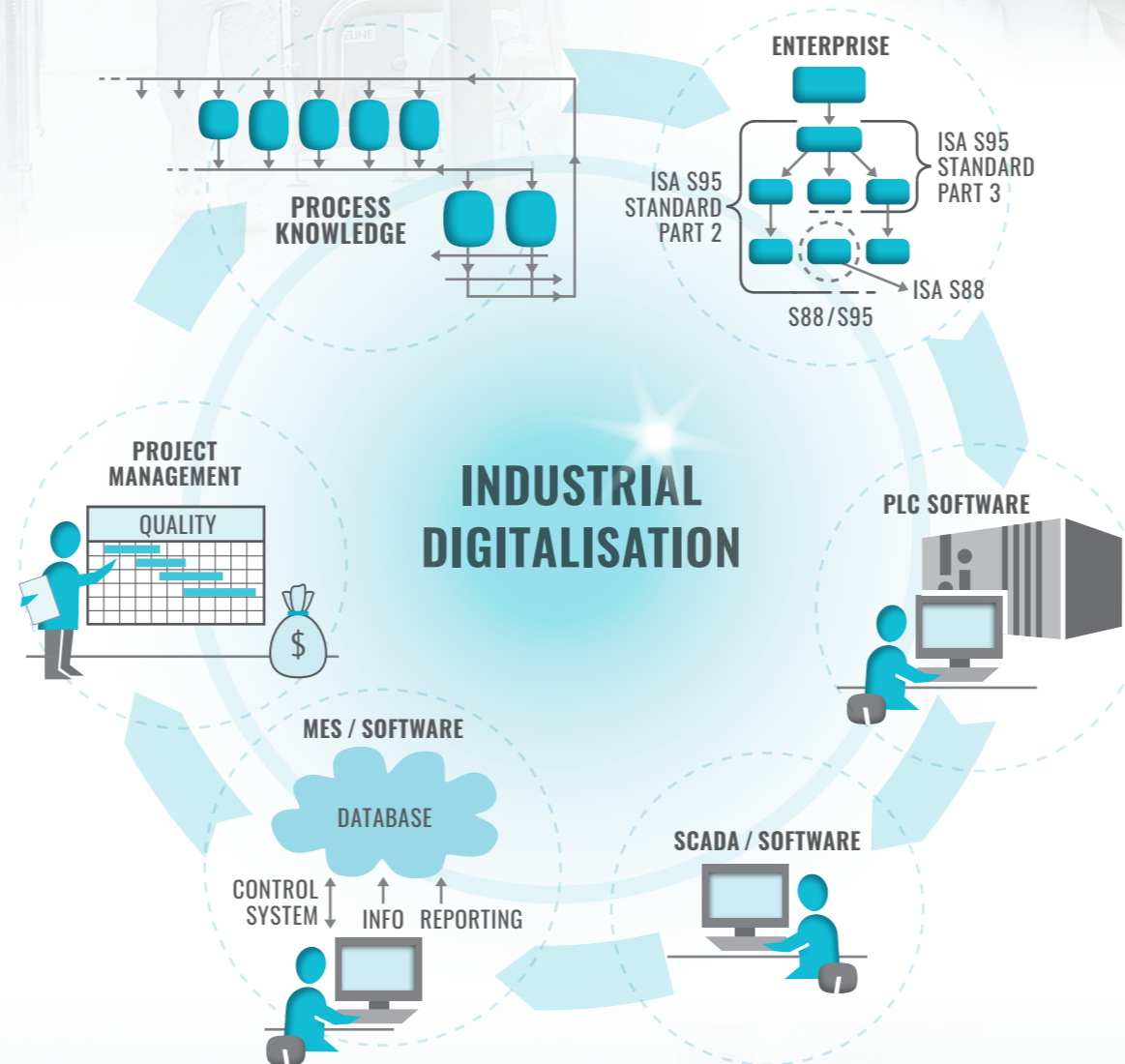
Our engineers have detailed knowledge of the Machinery Directive and standards concerning panel design and safety regulations relative to installation, construction and approval of control systems.

I/O TEST & COMMISSIONING

Commissioning control systems and plants is integrated in our total solution package.

Au2mate is very experienced in commissioning processes worldwide and plays a natural part in the planning and implementation of the process from I/O tests, as well as dry and wet tests, to the first phase of commercial production.

Education and training in the system for operators and technicians form a natural part of any project, partly on site and partly in our training centre, Au2mate Academy.



Au2mate ACADEMY

Au2mate Academy is a knowledge centre for dairy automation that offers education and training of managers, operators and technicians in the dairy industry.

The training comprises among other: automation concepts, instrumentation, PLC, SCADA and MES; structured according to recognised industrial standards and best practice - including S88 and S95.

Additionally, training and education in Au2mate Academy is an integrated part of the project plan in larger assignments and projects.

24/7 SERVICE

Au2mate offers a complete service package to the systems that Au2mate has developed and delivered in cooperation with our customers.

A strong team of competent 24/7 engineers as first movers combined with full support from the entire Au2mate team ensures the highest and most efficient up-time on customer process plants.