

FRONTMATEC

INNOVATIVE FOOD
PROCESSING SOFTWARE FOR
INCREASING PROFITS





AUTOMATION FOR LOWERING COSTS AND INCREASING PROFITS

Production and distribution companies in the food industry have unique and comprehensive management needs that cannot be solved in a standard ERP solution or through a traditional automation solution.

Frontmatec has developed the MES system GO, which meets those needs. GO is an integrated and flexible system which provides you with an intelligent production control software suite that enables you to monitor and manage the complete production value chain, from the reception of live animals to the dispatch of the finished product.

GO provides real-time monitoring and control of all critical key performance indicators (KPIs) related to every stage of production, including yield, throughput and efficiency, giveaway, loss of sales, stock levels, movements, traceability and profitability.

Based on an agile framework design that provides maximum flexibility for processors of all scales and sizes, ranging from small and medium-sized enterprises

to plant-wide systems, our solutions can share data with accounting or ERP systems for order processing and inventory management, as well as with customers, suppliers and product managers.

Integrated and flexible

Frontmatec GOSystems is an integrated and flexible system that supports a wide range of Frontmatec processing equipment and systems to provide the most integrated processing solutions available and open fresh opportunities in production management.

A real-time solution developed using latest technology from Microsoft, our suite runs on a Microsoft SQL server database.



1

SLAUGHTER LINE

Control of the animal reception process is vital throughout the meat industry, to reduce loss and achieve full control over raw material and how it is processed.

On reception into the system, supplies are checked for quality and identified according to certain criteria, on which decisions are based at later stages of processing. Information such as animal ID, fat thickness, age, breed, PH value and so on comes from various system devices such as our Frontmatec grading equipment.

VALUE FOR YOU

- Full animal traceability (e.g. origin farm, country, slaughterhouse or/and individual animal)
- Instantaneous reports on, input by yield group, grade and breed
- Applies simple data collection methods to ensure fast reception of animals
- Monitors supplies for product quality and supply accuracy
- Monitors and controls the reception process

2

CUTTING AND DEBONING

Effectiveness in this area is decisive for profit and loss in the production floor. GO provides state of the art planning, inventory and sales information necessary to determine the required primal parts for cutting and deboning as precisely as possible.

The solution further provides permanent target actual comparisons directly to the operator's specific performance assessment.

VALUE FOR YOU

- Produce on what primal parts as required
- Elimination of high cost inventory items
- Provides accurate operator feedback, directly related to profitability

3

ORDER MANAGEMENT AND PLANNING

Production planners at modern day food processors are under more pressure than ever to meet crucial delivery times.

GO order management and planning software allows the planner to use a sale forecast accurately to ensure that raw materials are consumed as effectively as possible in accordance with current order status and current production capability.

VALUE FOR YOU

- Assists the production planning time frame
- Enables order specific packing and labelling
- Suited towards order-controlled processing lines
- Assists in minimizing stock levels by matching animal characteristics to customer requirements more efficiently

4

PERFORMANCE MONITORING

In a meat plant, KPIs such as efficiency, quality and yield are vital to your business. Implementing GO provides processors with accurate and reliable data to help improve performance and make decisions.

Performance data is collected at predefined control points – e.g. at every operator station – where individual operator performance is monitored on indicators such as yield and throughput. GO dashboards provides meat processors with a full view of their KPIs in real time.

VALUE FOR YOU

- Collects reliable and accurate production data
- Provides real-time access to KPI information
- Provides is a decision-making tool

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FOOD SATETY AND TRACEABILITY

Meat producers can benefit financially from GO which is designed to ensure food safety and quality

Traceability is at the forefront of food safety. GO makes it possible to trace every product directly back to its source, implementing our system places meat processors in a position to act quickly and minimize potential recalls.

The GO traceability engine is built into every process step based on individual animal or batches for all production processes.

VALUE FOR YOU

- Collects reliable and accurate production data
- Provides real-time access to KPI information
- Minimizes the risk in the event of incidents

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LABEL MANAGEMENT

Accurate, easy-to-read, and scientifically valid nutrition and health information on food labels is an essential component of a comprehensive public health strategy to help consumers improve their diets and reduce their risk of diet-related diseases.

Improved food labeling with GO can provide consumers with easy-to-read nutrition and ingredient information that they can use to reduce their risk in food safety.

VALUE FOR YOU

- Powerful, fast and easy to use
- Simplified labelling process
- Improved & quicker label designs
- Meets varying label design and language
- Control of centralized printer management
- Quality: Making sure the customers get the expected quality, securing yield

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OUTBOUND LOGISTICS

Meat processing factories today can be complex operational environments where critical decisions must be made fast and accurately. After all, on time customer deliveries could be at stake. Ensuring timely delivery is vital to customers, so it is crucial to have the right tools and equipment in place to manage all logistical challenges.

GO outbound logistics provides capabilities that are scalable and reliable, covering all processes from reception to proof of delivery.

VALUE FOR YOU

- Supports the need to meet demanding delivery requirement to the retail industry
- Supports, advanced packing, weigh price labelling, warehouse management, order picking palletizing and dispatch processes

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INTEGRATION TO OTHER SYSTEMS

GO offers standard data interfaces for all your production data collected. Seamless non-stop integration with other systems safeguards operational continuity within the factory.

At the same time, it ensures that ERP and planning systems can upload and work with data from GOSystems.

VALUE FOR YOU

- Single point of master data maintenance
- Continuous monitoring of customer orders
- Minimize complexity by using specialized systems for specific tasks
- Improve response times
- Connect multiple sites
- Improved customer service

WHY SHOULD YOU CHOOSE GO?

Digitizing processes saves time and money

With digitization, meat processors can reduce costs and increase quality. For example, scanning in picking reduces error rates and returns while it increases order fulfillment rates. Utilizing tolerance checks in batching for specific meat production can result in better quality and fewer rejects.

Reduce giveaway in cutting and deboning

IT-aided online monitoring with permanent targetactual comparisons directly at the primal cutting line is a field-proven method. The central control instrument is exact weighing at cutting entry (AGOL,) and exit with accurate allocation of staff.

On the one hand, it facilitates control of the cutting yields, thus providing a documented basis for renegotiations with the vendor, for example if the lean meat content does not meet the requirements.

On the other hand, the entry enables employee-specific performance assessment which has an impact on the

determination of bonuses and thus on the payment of the operators or butchers on the line.

Industrial image processing

Time and again, practice has shown that manual activities are not only inefficient and costly, but also exposed to hygiene risks. In this context, industrial image processing solutions have several advantages.

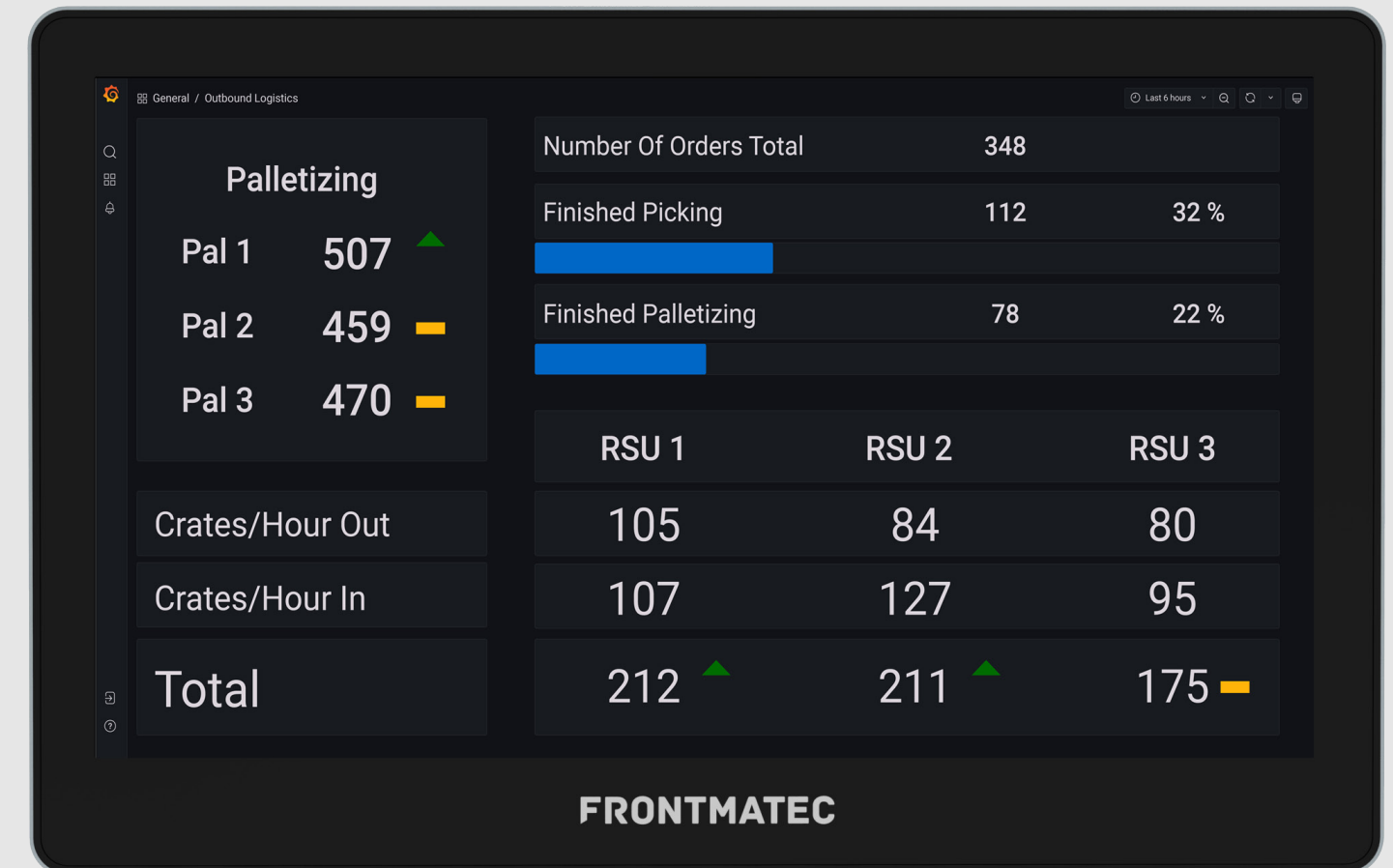
For example, take grading systems such as the Frontmatec BCC-3 which is based on advanced multi-view stereo imaging and grades in conformation and fat cover classes.

Currently, the image analysis is expanded to provide yield predictors of beef primals and detailed information about commercial cuts.



Better recipes for more profit

In the meat industry, costs for material use account for 60 percent of sales revenues and are thus particularly high. Raw material prices are expected to continue to rise. Therefore, it is necessary to optimize recipes to achieve higher margins. Using GO software, producers can accomplish these tasks automatically.





WHY SHOULD YOU CHOOSE GO?

Secure batches for better margins

Even though today's products are safer than ever before, traceability is still one of the most critical issues in the international meat industry.

The ultimate objectives are food safety and consumer protection. Investments in IT-aided traceability systems are based on economic calculus, even though monetary benefits are difficult to quantify. The value of IT-controlled traceability systems is a huge wakeup call in the case of incidents, because they are capable of quickly identifying the affected batches and systematically eliminating the products from the supply chain. This reduces the macroeconomic damage of a recall to a minimum.

Automation for low costs in internal logistics

For meat processors, investments in GOSystems automated logistics systems usually pay off quickly. GOSystems controlled automation solutions substantially contribute to reducing throughput and lead times, increasing delivery readiness and cutting costs.

Prepare for the future

During past years, the procurement of IT solutions for food

processing has been steadily growing. Main drivers for this development are digitization of the food industry.

The strong growth of Frontmatec offerings does not come as a surprise, because of the increasing virtualization of production and business processes and their shift to more user-friendly platforms to enable more transparency and higher performance. Frontmatec achieve this by always remaining up to date with the latest Microsoft release platform.

Frontmatec's GOSystems food processing software is developed completely with the food industry in mind and its agile architecture is ready for the future of the industry and implementation of future trends such as Industry 4.0, IoT (Internet of Things) and Big Data.

The following are the most successful areas of improvement as a result of effective project implementation:

- 70% improvement of levels of service automation
- 72% reduced costs
- 73% improved business performance

FRONTMATEC

Frontmatec Control Systems covers the group's solutions within MES, industrial IT, SCADA and automation solutions.

Frontmatec develops the world's leading tailor-made solutions for automation in food industry, other hygiene-sensitive industries and the supply industry. Our story stretches back to 1931, which today makes us market leader with over 20 offices on worldwide and thousands of plants sold globally.

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