

## Automated Cheese Weighing System for Dairygold Legal-for-Trade Solution with SysTec IT6000E Weighing Indicator and Software



Dairygold, Ireland's second-largest dairy processor, relies on an automated weighing solution to optimize the weighing, labeling, and traceability of its cheese products. SysTec's partner [DEM Machines Ltd.](#) has implemented a W&M approved catchweighing system to capture the individual weight of each cheese pack. In combination with a PC software, the system also includes a control function to push out products that fall outside of tolerance limits. The in-line weighing solution features a **SysTec IT6000E weighing indicator** with the SysTec application software *CHECK E*. It ensures precise, legally compliant weight measurements and guarantees seamless traceability across all packaging levels.

### Key Facts

- Automated cheese weighing, labeling, and traceability system
- Legal-for-trade weight verification
- Real-time tolerance monitoring
- Automatic rejection of non-conforming products
- Throughput: 24 packs per minute

### Products

- SysTec IT6000E weighing indicator with control function
- W&M approved SysTec application software *CHECK E*
- Proven DEM weighing system, including assembly and service

### Benefits

- High-precision dynamic weighing ensures reliable results while reducing product giveaway
- Automated quality control guarantees that only compliant products proceed further in the process
- Flexible system integration enables seamless connection to existing production and labelling lines
- Full process transparency through detailed weight data and production monitoring
- Robust industrial design ensures long-term reliability, minimal downtime and low maintenance costs

## The End Customer: Dairygold

Dairygold is a leading Irish dairy co-operative headquartered in Mitchelstown, County Cork. As Ireland's second-largest dairy processor, the company processes approximately 1.4–1.43 billion litres of milk annually, supplied by 2,900 farmer members.

With around 1,300 employees, Dairygold operates across international markets, producing a wide range of dairy ingredients, cheese and nutritional products for customers worldwide.



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## The Initial Situation

Before the introduction of the automated system, manual weighing and labelling processes limited efficiency and introduced potential sources of error. Inconsistent weight checks, manual label application and limited traceability made it difficult to ensure compliance with regulatory requirements and customer expectations.

To address these challenges, Dairygold required a reliable and fully integrated solution that would improve process efficiency, reduce product waste and ensure consistent product quality.

## The Weighing Solution

At the core of the solution is the SysTec IT6000E weighing indicator with *CHECK E* software, designed for dynamic control scale applications. The system captures weight data quickly and precisely, ensuring reliable results even at continuous high-speed operation.

Each cheese pack is weighed in-motion automatically with real-time tolerance monitoring. All weight data is recorded, providing full traceability and supporting quality assurance and audit requirements.

Products are classified into defined tolerance zones, enabling precise differentiation between compliant and non-compliant items. This allows targeted rejection during the weighing process while minimizing unnecessary product giveaway.



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Following weighing, the system performs fully automated labelling. A product label with weight, product ID and barcode information is printed and applied to each pack. The label is then verified to ensure readability and correctness, eliminating labelling errors and ensuring consistent product identification.

Integrated quality control ensures that non-conforming products are automatically rejected. This includes packs outside weight limits, unstable measurements or defective labels. Rejected items are diverted to an offline lane for rework.

The system also supports downstream packaging and palletization. Box labels, pallet labels and pallet manifests are generated automatically, ensuring complete traceability from individual products through to pallet level.

The production facility processes cheese packs at a throughput of up to 24 packs per minute.

SysTec weighing electronics feature a robust industrial design that ensures reliable operation in demanding food production environments with minimal maintenance requirements.

The solution demonstrates how SysTec's weighing indicators and software enable food producers to combine accuracy, efficiency and traceability in demanding production environments, delivering measurable improvements in both operational performance and product quality.

### At a Glance: SysTec IT6000E Weighing Indicator

- High ease of use: simple multilingual operator prompting, bright 5.7" TFT color display with wide viewing angle and large-character weight display, numeric keyboard
- W&M approved use as a non-automatic and automatic weighing instrument is possible (approved in the EU, USA, Canada, etc.)
- Universal use: numerous standard application programs available
- Customizable: free programmability
- Robust: stainless steel housing (ingress protection IP69K)
- Ex-area: for hazardous areas SysTec offers the version IT6000E Ex2/22
- Various designs: wall-mount / desk-top version as well as panel-mount version
- Interface options for PC networks and printers, as well as fieldbus connection via Modbus TCP
- High operational security: data storage power-fail safe, password protection, battery-backed real-time clock, remote diagnostics possible via Internet





## Further information on the project service providers



### **SysTec Systemtechnik und Industrieautomation GmbH**

Since 1994, SysTec has been developing and manufacturing W&M-approved industrial weighing indicators and filling controllers for both static and dynamic scales.

More than 225,000 installations are in successful operation worldwide. SysTec's innovative weighing electronics deliver reliable performance in a wide range of applications, including filling systems for liquids and bulk materials, shipping and receiving scales, belt weighers, vehicle scales, checkweighers, piece-counting scales, mobile weighing systems, and a variety of customer-specific solutions.

Alongside its standard products, SysTec provides customized hardware and software solutions. Comprehensive technical support completes the company's service offering.

The production and development site for SysTec weighing indicators and software solutions is in Germany. The company is located in Bergheim-Glessen, near Cologne. The production of the weighing terminals and software is subject to international OIML standards.

Discover more:

[www.systemecnet.com](http://www.systemecnet.com)



### **DEM Machines Ltd.**

DEM is a globally recognised industrial weighing technology company, founded in 1985, specialising in productivity-enhancing hardware and software solutions for manufacturing and packaging operations.

DEM are an ISO 9001:2015 quality assured company that offers innovative weighing, labelling and data capture factory floor solutions that provide control from the arrival of the raw material to dispatch of the packed product.

Increased productivity and profitability are central to the DEM product delivery with a full return on investment typically achieved within twelve months from installation.

DEM's engineer's design, build, install and support all DEM's hardware, industrial weighing scales and software applications, ensuring these are truly fit-for-purpose and easily integrated with existing factory operations and higher-level business systems.

In addition, DEM also services, repairs, calibrates and hires all types of industrial weighing scales and labelling systems.

Discover more:

[www.demmachines.com](http://www.demmachines.com)