

DAIRY PROCESSING

4B AUTOMATION | 4B SYSTEMS

Inspired. Passionate.

Food & Beverage Specialists in Process Automation, Equipment & Solutions

012 653 4951
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Dairy Processing Solutions

At 4B Automation & 4B Systems, we deliver reliable dairy processing systems engineered for efficiency, quality, and consistency. We specialise in dairy plant process design, automation and cost-effective performance; enabling manufacturers to reduce waste, streamline production, and meet the highest food safety and quality standards.

Our tailored solutions include:

- **Cheese Processing & Forming:** Systems for curd handling, moulding, and yield optimisation.
- **Ice Cream Production:** Integrated solutions for mixing, homogenisation, freezing, and bag in box packaging.
- **Milk & Cream Processing:** Equipment for pasteurisation, separation, standardisation, and filling.
- **Whey Processing:** Systems for protein recovery, filtration and concentration.
- **Yoghurt & Cultured Milk:** Fermentation, blending, filling, and packaging platforms.

We partner with clients from system design, control integration, installation, commissioning, to long-term support. Let us help you modernise your dairy plant with turnkey, automated, and scalable solutions.



Cheese Processing/ Cheese Forming



Ice Cream Processing



Milk & Cream Processing



Whey Processing



Yoghurt & Cultured Milk Processing

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Dairy Processing Solutions

4B Systems specialises in the design and manufacture of industrial processing equipment for the food and beverage industry, while also supplying world-class Alfa Laval systems and Hommak homogenisers and high shear mixers. Known for our commitment to quality, we deliver reliable, feature-rich solutions that offer long-term value to our clients.

Related systems/Products:

Cheese Block Former:

- **Consistent, high-quality cheese blocks; with accuracy, speed, and reliability.**



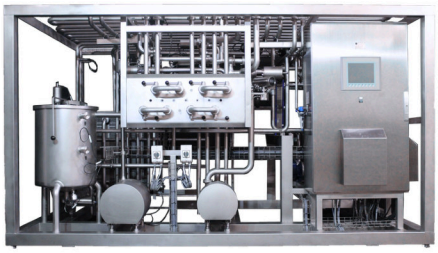
Greek Yoghurt Separators:

- **Maximise yield and deliver consistent texture with low-shear Alfa Laval separators supplied and supported by 4B Automation & 4B Systems.**



Pasteurisers:

- **Ensure safe, consistent, and energy-efficient dairy processing with automated pasteurisation systems from 4B Automation & 4B Systems.**



Separators:

- **Efficient, hygienic separation for consistent, high-quality dairy processing; delivered by 4B Automation & 4B Systems.**



Homogeniser:

- **Achieve superior homogenisation, durability, and efficiency with Hommak; backed by local expertise from 4B Systems.**



Milk Fat Standardiser:

- **Precise milk fat control with accuracy, efficiency, and consistency you can rely on.**



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Related systems/Products:

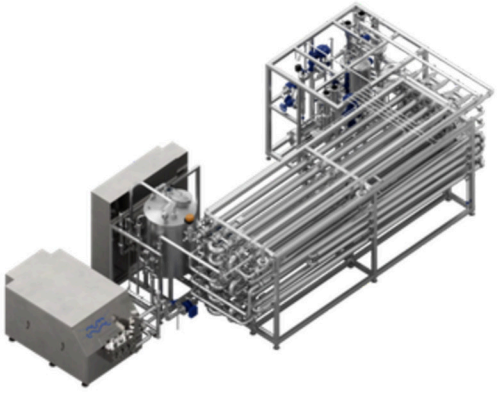
Bactofuge:

- **Efficient removal of bacteria and spores for safer, higher-quality dairy products.**



UHT Milk Steriliser:

- **Ensure safe, consistent, and energy-efficient milk sterilisation; engineered for quality and performance.**



Clean in Place Systems:

- **Our system incorporates software that continuously analyses system data and adjusts cleaning parameters in real-time, optimising cleaning performance and reducing chemical and water usage.**



Cooler:

- **Hygienic, efficient cooling for yoghurt and cultured-milk lines; maintaining flavour, texture, and consistency while reducing energy use.**



Aseptic Tanks:

- **Hold, buffer, and protect product quality with aseptic tanks that maintain a sterile boundary from UHT outlet to filler; engineered for reliability, traceability, and uptime.**



Other systems we specialise in:

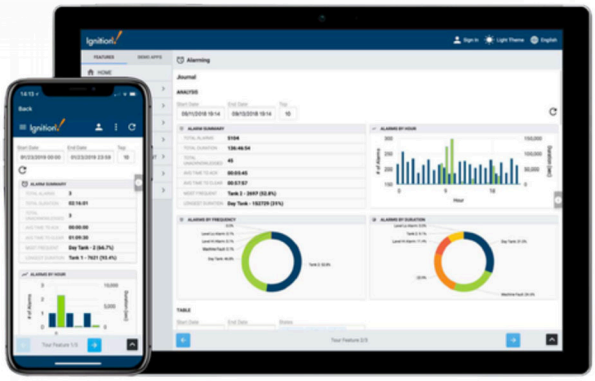
- **Cheese VATS**
- **Cheese Press**
- **Mixing plant**
- **Milk Receiving / Offloading**
- **Inline Blenders**
- **Aging**
- **Reclaim Plant**
- **DAT's**
- **TCT's**
- **Bactofugate Steriliser**
- **Incubation**
- **Flavour Tanks**



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Our Automation Solutions

For all your plant automation and processing needs



- **Ignition SCADA**
- **Data Collection (Historian)**
- **Siemens System Integrators**
- **Electrical Installation**
- **Remote Support Solutions**
- **Panel Building**

4B Automation specialises in industrial automation solutions, utilising Siemens PLCs, HMIs, Ignition SCADA platform, Canary historian and IFM as our standard suite.

We are experienced in a diverse range of PLCs, HMIs, and SCADA platforms and often deploy systems utilising Wonderware InTouch and Wonderware System Platform.

Our comprehensive inventory includes Siemens PLCs, HMIs, and low voltage switchgear such as isolators, circuit breakers, and direct-on-line motor starters.

- **Siemens**
- **Danfoss**
- **Anderson Negele**
- **IFM**
- **Anton Paar**
- **Endress and Hauser**
- **Krohne**
- **Festo**
- **SMC**
- **Helukabel**

In the development of our solutions, user experience is of paramount consideration. Our systems excel in creating meaningful connections.

Operators, technicians, and management derive value from the comprehensive feedback, guidance, and analytical insights our systems provide.

The scalable design of our control system allows for flexibility.





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Automation Services

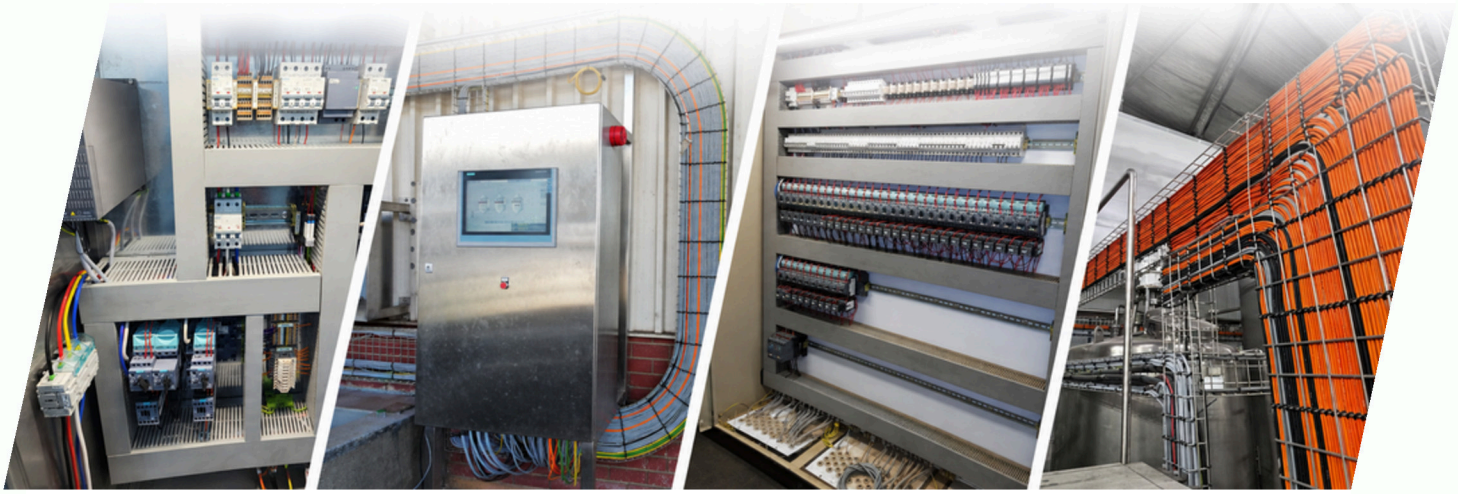
As part of our comprehensive automation solution, we offer the following services:

- **Control system design**
- **Control philosophy**
- **Industrial communication network design**
- **Software standards development**
- **Software development**
- **Implementation**
- **Electrical design**
- **Electrical installation**
- **Instrumentation**
- **Training**
- **Support**

Electrical Installation

An overview of select completed Electrical Installations:

- **Electrical Cable Installation**
- **Instrumentation Cable Installation**
- **Cable Tray Installation**
- **MCC Design and Building**
- **Panel Building**
- **Panel Refurbishment**
- **Panel Design**



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Mechanical Process Installations

4B Systems offers high quality mechanical processing installations, this includes:

- **Process Designs**
- **P&ID's**
- **Solidworks Drawings**
- **Food Grade Welding**
- **Processing System Relocation**
- **Flow Panel Design and Fabrication**



Hommak Homogenisers

4B Systems has its own range of the renowned Hommak homogenisers, high pressure pumps and high shear mixers.

These systems are supported and integrated by 4B and we stock components for our install base. Short lead times are made possible through Hommak, who manufactures parts under one roof. Spare parts are guaranteed to be delivered within two days of request.



- **20l/h up to 20 000l/h**
- **Both aseptic and non-aseptic machines are available.**
- **Delivery time: 6-8 weeks from factory, 1 week delivery option is available.**

Hommak High Shear Mixer

Furthermore 4B Systems offers the Hommak High Shear Mixer:

- **Liquid Capacity (L/H) : 750 - 18000**
- **Powder Capacity (Kg): 150 - 2.500**



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Alfa Laval

4B your Local Alfa Laval Equipment and Integration Specialist

Since 2014, 4B Automation & 4B Systems has been an authorised Alfa Laval distributor, delivering integrated processing solutions using world-class valves, pumps, and heat exchangers; supported by local expertise and ongoing service.Clients benefit from top-tier equipment, full plant integration, and ongoing support.

We also offer an array of Alfa Laval processing equipment and plants, expanding our portfolio to meet diverse industry needs:

ALDOX:

- **Deaerated and carbonated high quality water for breweries and soft drink manufacturers.**



Heat Exchangers:

- **Hygienic, efficient, and energy-optimised heat-exchanger systems.**



Lowal De-alcoholiser:

- **Dealcoholize beer and fermented low-alcohol drink types in the same plant.**
- **From 300 to 1,000 hl/day of dealcoholized beer with <0.5% alcohol by volume.**



Bag-in-box Fillers:

- **Available in aseptic or non-aseptic fillers for 2-20 litre bag in box, 200 litre drum filling or 1000 litre flexitainer filling.**
- **Available in single or dual filling head versions.**



Dealcoholisation Module:

- **Removes alcohol in a single pass.**
- **Up to 100 hl/h for 0.0% and <0.5% beers.**



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One Partner. Every Layer Of Your Plant.