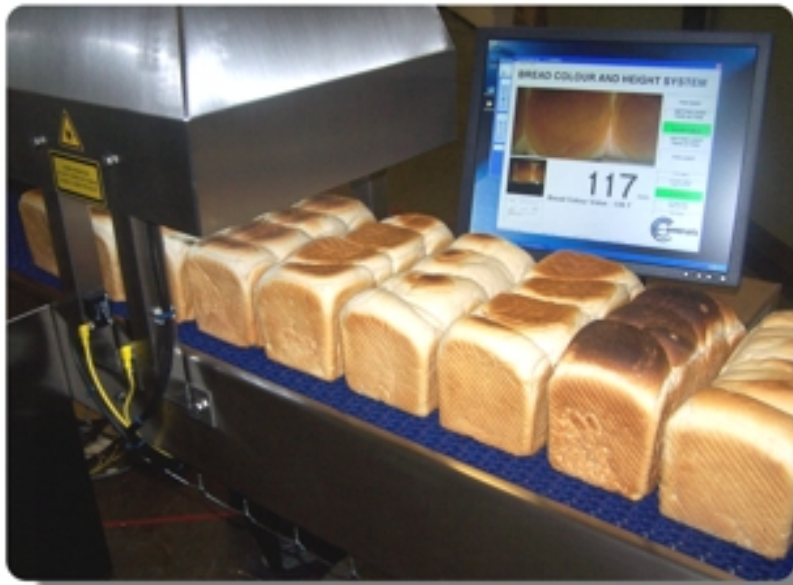




optimise productivity • minimise waste • ensuring quality



Optimising Productivity

As good as trained operators are, they get bored and suffer fatigue. It is hard for human eyesight to judge small changes in size, shape and colour.

Despite rigorous discipline, human sampling is always subject to bias.

Our fully automated inspection systems look at every product made not just a few samples every so often.

While metal detectors and checkweighers provide a final check of products before they leave your plant, other methods are needed for upstream processes ahead of proofing and baking.

Minimising Waste • Ensuring Quality

Real-time analysis and alarms alert operators to changes long before the differences would be visible to the human eye.

C F Controls systems allow one operator to run multiple lines, spreading out the labour cost over more output.

Conformance to specification can be spread across shifts, reducing variation and offering a non-judgmental way to remedy problems.

Our on-line analysis systems capture images, process, analyse and interpret them for real-time feedback. These systems are used to reject improperly shaped or damaged product, monitor bake colour, texture, coverage and height.

Giving your operators the right information allows them to run their lines more efficiently, minimising waste and ensuring product quality.



Online Quality Control Systems

Muffins • Crumpets • Pizza Bases • Bread • Buns
Bagels • Croissants • Biscuits • Cakes

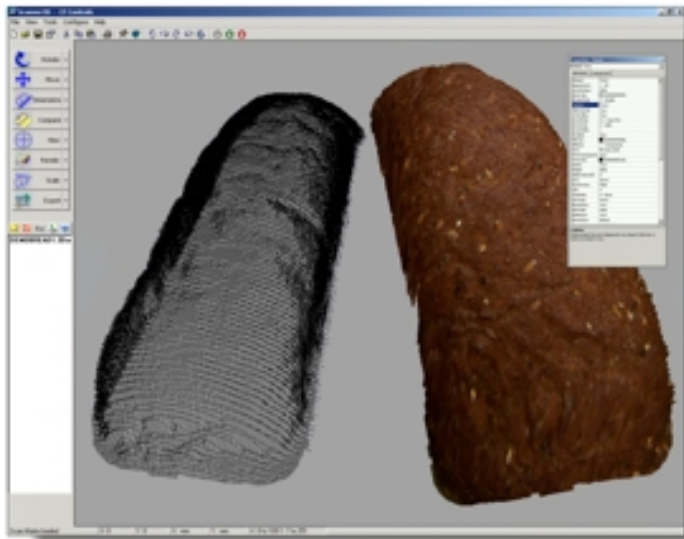


Bake3D™ The Product Scanning System.

Bake3D™ is the revolutionary new system designed with the Global Market in mind for the analysis of product quality and consistency encompassing high level technologies from across our range.

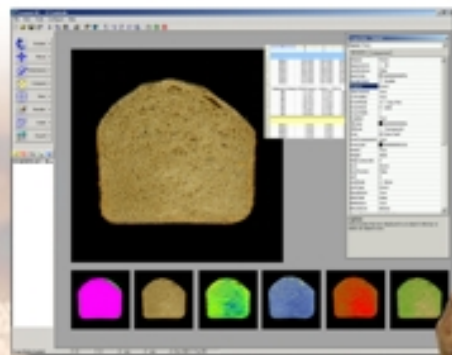
Once your products weight, height, length, width and volume have been recorded the Bake3D™ system will begin to analyse the shape, colour and texture to create a virtual model.

The system helps identify problems in production processes including panning, proofing, baking and also performs complete slice analysis including cell size, quantity, alignment and circulation.



Fully compatible with Microsoft Windows®, product information and report statistics can be exported to a number of formats including Excel™.

All the information is embedded into one single file so that every virtual model can be traced back to the exact unit, time and date where it was created. This file can be instantly e-mailed to customers for evaluation and shared within companies that have more than one site ensuring that all product produced conforms to the same exacting standards wherever in the country it was produced.



Bake3D™



Bread • Crumpets • Muffins • Pizza Bases • Buns
Bagels • Biscuits • Croissants • Cakes



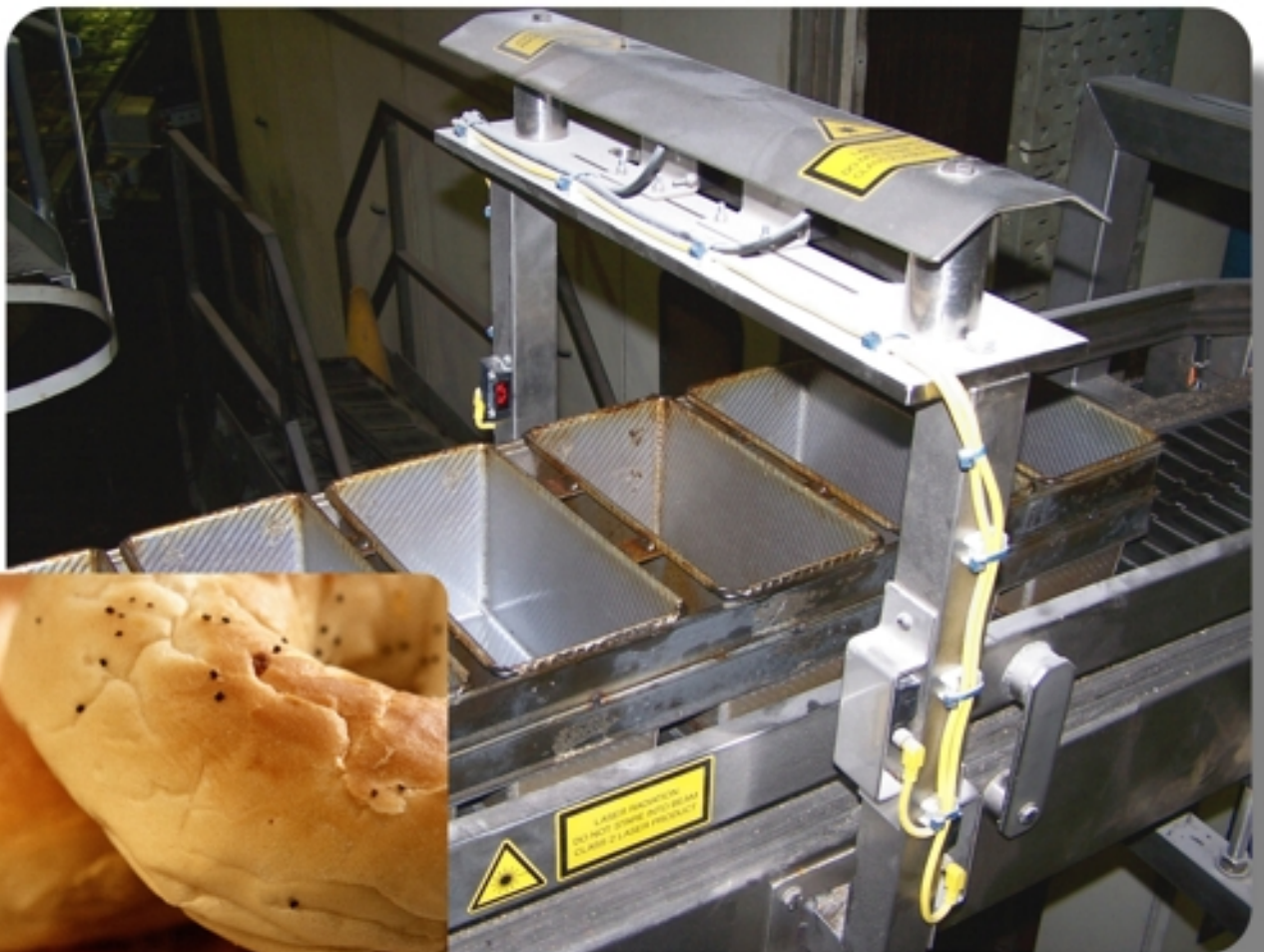
Double Dough Detection Systems.

Unlike conventional methods of detecting excess dough in baking tins, the patented C F Controls Double Dough Detection System is unaffected by poor panning, changes in colour, texture or four piece / single piece product.

Our systems can simply 'bolt on' to existing lines, or be fully integrated into the plant with reject mechanisms and product holding / reloading conveyors.

Incorporating data logging via operator interfaces, these systems record product produced, empty tins, double dough and calculate waste.

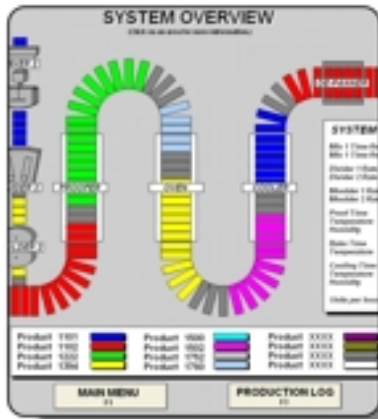
- Decrease potential danger to downstream equipment (ovens and proofers).
- Dramatically reduce the amount of waste dough entering the system.
- Prevents debris deposits in tins and on lids.
- Highlights problems in production by recording and displaying historical data.
- Reduce the number of staff required to monitor production lines.



Carbonised Dough / Foreign Body Detection

Bread • Crumpets • Muffins • Pizza Bases • Buns
Bagels • Biscuits • Croissants • Cakes

Product Tracking



PLC Programming



Bake3D™



Foreign Body



Leak Detection



Double Dough



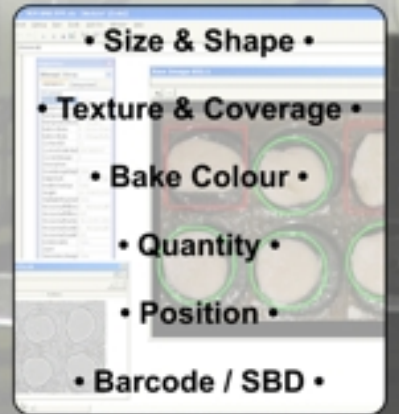
Motion Control

- Stacker / Destacker •
- Crane / Hoist •
- Flow Wrapper •
- Indexing •
- Positioning •
- Pick 'n' Place •

System Upgrades



Image Analysis



- **Systems Integration**
- **Barcode & OCR**
- **Vision Systems**
- **PLC & HMI**
- **SCADA**
- **Quality Control**
- **Troubleshooting**





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