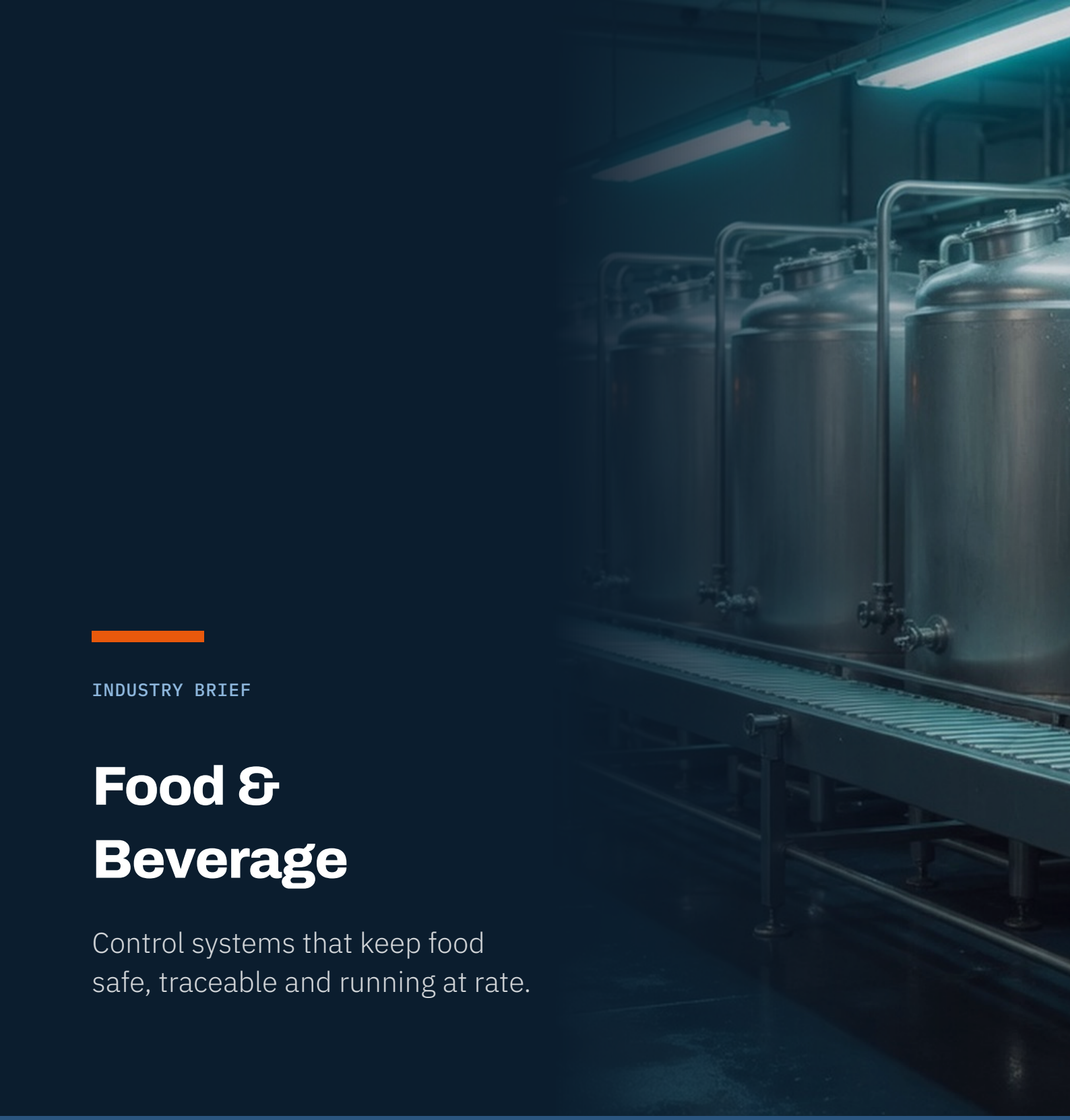




INDUSTRY BRIEF

Food & Beverage

Control systems that keep food
safe, traceable and running at rate.



Control system engineering, integration and analytics since 1997
ISO 9001 certified • Cyber Essentials • CHAS • Constructionline • SafeContractor

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YOUR PRIORITIES

What matters most

Food and drink manufacturers work on tight margins and tighter schedules, under the eye of retailers, auditors and regulators. Their control systems have to hold every critical step within limits, change products quickly without waste, keep lines hygienic and prove, lot by lot, what went into each product and where it went.

Food safety you can prove

Cooking temperatures and other critical control points have to stay within limits on every batch, with alarms that act early and records your auditors and customers will accept.

Traceability and recall

If a lot is ever questioned, you need to trace it back to its ingredients and forward to your customers quickly, from records that are complete and consistent.

Throughput and changeovers

Lines must run at rate, change product with little downtime or waste, and load the right recipe first time, so a product change never becomes a quality incident.

Hygiene and cleaning

Plant is cleaned often and thoroughly. Panels and devices have to survive washdown, and cleaning cycles need to be controlled, verified and recorded like any other process step.

WHAT WE WORK ON

Systems we engineer

- Ingredient handling, weighing and mixing
- Extrusion, ovens, cooking and cooling
- Coating, sieving and conveying
- Packaging and end-of-line machinery
- Recipe management and SCADA
- MES batch tracking and reporting

PROJECT EXPERIENCE

Dry pet food production

Matrix delivered the software, electrical and SCADA system for a dry pet food facility: pre-conditioning, extrusion, ovens, drum coating, cooling, weighing, sieving and packaging, with SCADA recipe handling, maintenance reporting and MES part tracking that gives every batch a paper trail.

What this means on your project

Production time is precious, so we plan work around your shutdowns and cleaning windows, and prove recipes and sequences against a simulation of the line before anything reaches site. Batch records and reports are designed with your quality team, so the data your audits need is there from day one.

STANDARDS

The standards that shape your project

Customers ask us first about standards. These are the ones we meet most often in this sector, and what they mean in practice.

Standard	What it covers	How we work with it
BRCGS Global Standard Food Safety	The food safety certification standard that many retailers and brand owners require of their suppliers.	Process control, alarms and records designed around the requirements your site is audited against.
HACCP, ISO 22000 and FSSC 22000	Food safety management built on hazard analysis and critical control points, following the Codex principles.	Critical control points monitored, alarmed and recorded, with the evidence your audits ask for.
Regulation (EC) No 178/2002, Article 18	General food law traceability: knowing your suppliers one step back and your customers one step forward.	Batch and lot tracking that links each product to its ingredients and to where it went.
EHEDG guidelines	Hygienic design of food processing equipment and installations, so that they can be cleaned effectively.	Panels, instruments and cabling specified and placed with cleaning in mind; cleaning cycles controlled and recorded.
ISA-88 (IEC 61512) batch control	Models and terms for batch control: recipes, procedures and the equipment that runs them.	Recipes kept separate from equipment logic, so a new product means a new recipe, not new code.
BS EN ISO 13849-1	Safety-related parts of machine control systems, rated by performance level (PL).	Safety functions designed to the performance level your risk assessment requires, then validated and documented.

The standards listed are those most often relevant to control-system work in this sector. Which apply to your project, and how, is agreed with you at specification stage.

The evidence you receive at handover

✓ Functional design specification	✓ I/O list and cause-and-effect	✓ Alarm list and HMI interface
✓ FAT and SAT records	✓ As-built drawings and source code	✓ Method statements for common faults

ABOUT MATRIX

Standards-led, fully documented control systems that you own and can support.

Matrix International (UK) Ltd has designed, built and supported industrial control systems since 1997. We take projects from specification and electrical design, through PLC, DCS and SCADA software, to installation, commissioning and long-term support, and we build the analysis software that shows how a plant is really performing. We are ISO 9001 certified and hold Cyber Essentials, CHAS, Constructionline and SafeContractor accreditation.

Siemens TIA Portal, S7 and PCS 7 • Rockwell • ABB • Schneider • Mitsubishi • Beckhoff • Emerson DeltaV • Honeywell • GE • WinCC, Ignition, AVEVA (Wonderware), FactoryTalk, iFIX and Citect SCADA

HOW WE DELIVER

From specification to long-term support

01 Specify

Requirements, applicable standards and risks agreed with you up front, itemised into a clear plan.

02 Design

Electrical and control design, PLC/DCS and SCADA software, to your standards and ours.

03 Test

Logic proven against a simulated plant, then factory acceptance testing before anything reaches site.

04 Commission

Installation, commissioning and site acceptance testing, planned around your operation.

05 Hand over

Full documentation, method statements for common faults, and training for your team.

06 Support

Maintenance, upgrades and analysis for the life of the system, with 24/7 cover under a support agreement.

WHY MATRIX

Why customers choose us

Standards first

An ISO 9001 certified quality system, designing to the standards your sector demands, plus any you specify.

You own the system

Clear structure, open interfaces and complete documentation, so you can support it yourself or with any vendor.

Tested before site

Control code is version-controlled and tested against a simulated plant before factory and site acceptance.

Multi-vendor

Siemens, Rockwell, ABB, Schneider, Mitsubishi, Beckhoff, Emerson, Honeywell and GE platforms.

In it for the long term

For us a project is not finished until the control system is decommissioned. 24/7 support is available under a support agreement.

OUR PROMISE

Standards-led, fully documented control systems that you own and can support.

Talk to us about your project

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