

OAL

— PALLETISING SOLUTIONS · 2026

AUTOMATION THAT DELIVERS.
COMMITMENT THAT LASTS.

Automate palletising without redesigning your factory.

Fenceless and caged systems designed to fit your space,
not the other way round.

ROBOTICS

END OF LINE

COMPLIANCE



SECTION 01 – YOUR AUTOMATION JOURNEY

Most food factories don't have space for automation.

So palletising stays manual. Traditional palletising assumes you have space. Large guarded cells. Fixed layouts. Construction work. For most food factories, that simply isn't reality. The line is in. The hall is full. The footprint isn't there.

Most integrators design palletising around the robot. OAL designs it around your factory. That's why many food manufacturers start their automation journey here. Palletising is often where labour pressure, ergonomic risk and throughput constraints meet first. Once the system is running, the same engineering team can extend automation upstream into case packing and high care automation.

- ▶ Start with palletising – the entry point for most factories.
- ▶ Designed for chilled, ambient and high-care environments.
- ▶ A foundation for integrating automation across the factory.
- ▶ Fenceless or caged layouts to suit your line, space and speed.
- ▶ One day install after FAT and training at OAL in Peterborough.

5x

up to 5x smaller footprint than traditional guarded cells.

2,000+

UK food production lines running OAL automation and quality systems.

12–24_{mo}

Typical payback on fenceless cells through labour saving and throughput.

SECTION 02 – IN 30 SECONDS

Palletising, simplified.

What you need to know before you turn the page. Built for general managers, operations directors and site managers who want clarity, not a spec sheet.

THE PROBLEM

Most factories want to automate palletising.

They don't have the space, the time, or the confidence to do it safely – and the wrong choice locks them in for a decade.

THE OAL SOLUTION

We design palletising around your factory, not the other way round.

- Fits into existing lines – retrofit-ready by design.
- One day install, after FAT and training in Peterborough.
- Built, tested and signed off before it leaves our factory.

CHOOSE YOUR APPROACH

OPTION A · COMPACT

Fenceless palletising

Best for tight spaces and retrofit lines.

- No safety fencing required*
- Up to 5x smaller footprint
- Up to 3x faster than cobots
- Operators work alongside the robot

OPTION B · THROUGHPUT

Caged palletising

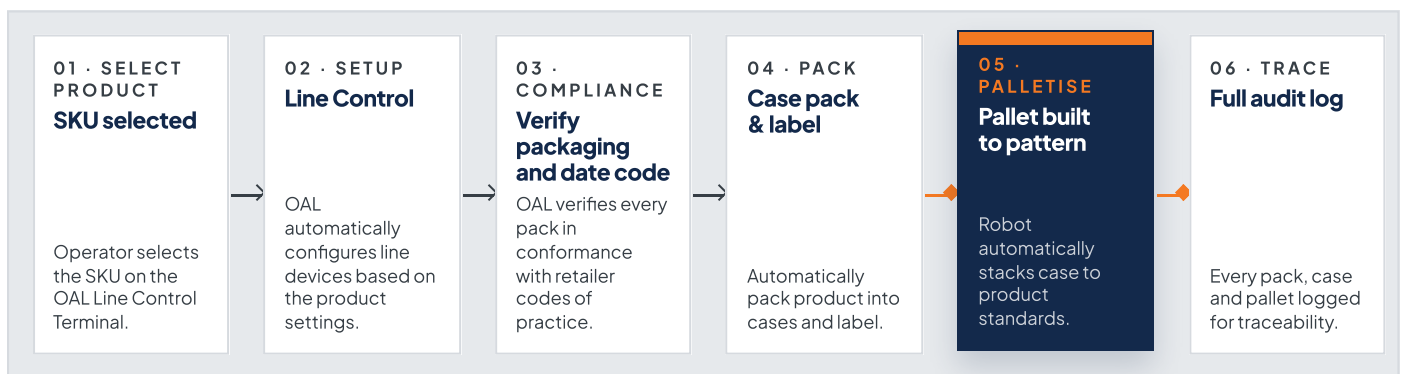
Best for high-throughput environments.

- Full robot speed and payload
- Designed for 24/7 production
- Proven in high-volume packing halls
- Fully enclosed for maximum performance

WHAT YOU GET

- | | | | |
|--|---|--|---|
| 01 One operator back
redeployed per shift. | 02 Consistent quality
repeatable patterns, every run. | 03 Stable throughput
no hand-stack bottleneck. | 04 Less labour risk
fewer roles to fill or cover. |
|--|---|--|---|

HOW IT WORKS – END-TO-END



5x
SMALLER
FOOTPRINT

3x
FASTER THAN
COBOTS

1 DAY
ON-SITE INSTALL

<24 MO
TYPICAL PAYBACK

PROVEN DELIVERY

FAT-tested with your product. One supplier, full system. SLA-backed support.

Get a clear recommendation for your line.

30-minute review or send us your layout – we'll tell you honestly which approach fits.

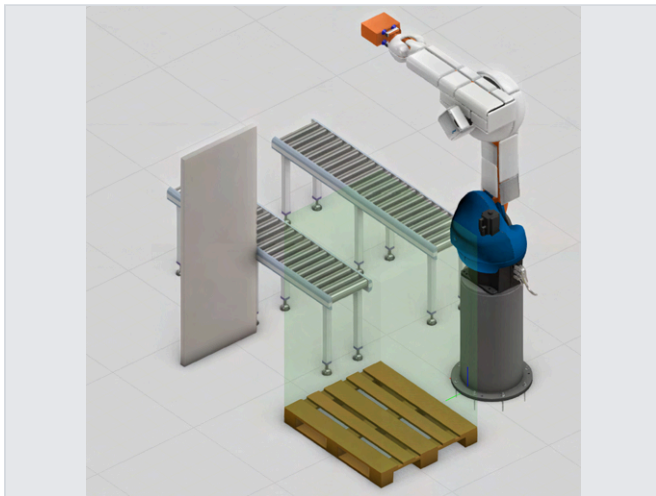
[Book a 30-min review →](#)

[Send your layout →](#)

SECTION 04 – BUILT TO DE-RISK

Honest about fit. Accountable for delivery.

Every cell is modelled, built and signed off in Peterborough before it ships. Here is how OAL de-risks the project from first sketch to first pallet off the line.



- 01 CAD simulation.** Your line, your pack format, modelled and cycle-tested before a single bolt is cut.



- 02 FAT & training in Peterborough.** The cell runs your real product — and your operators are trained on it — before it leaves OAL.

HOW OAL DE-RISKS YOUR PROJECT

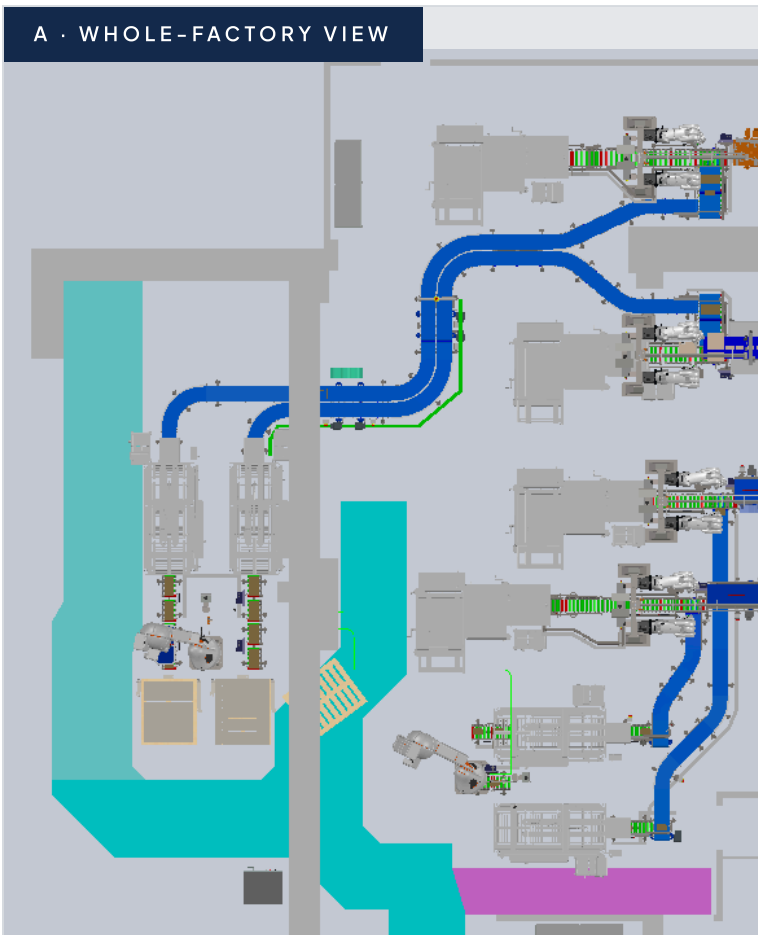
Five commitments, signed off before site.

- 01 FAT & training in Peterborough.** Factory acceptance tested with your real cases, crates and pack format — and your operators trained on the cell — before it leaves OAL Peterborough.
- 02 Same-day install.** Pre-built, pre-tested, pre-wired — installed and commissioned on your line in a single day.
- 03 One supplier.** Robot, vision, integration and aftercare from a single accountable team. No finger-pointing across vendors.
- 04 SLA-backed support.** Managed service options with response-time SLAs and remote diagnostics built in.
- 05 The OAL Way.** A proven delivery process refined across 2,000+ production lines in UK food manufacturing.

SECTION 05 – LAYOUTS

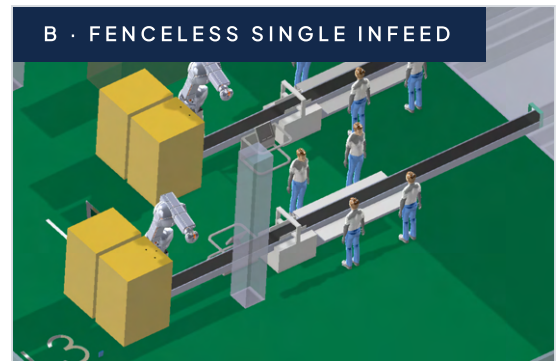
One pack format, many cell designs.

Fenceless or caged, every palletising cell is shaped by your line speed, pack format, floor space and pallet pattern.



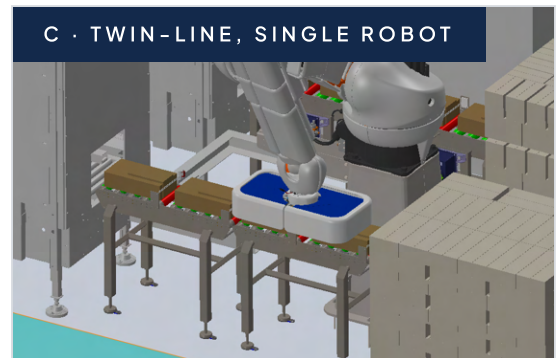
Integrated end-of-line across multiple production lines

Several packing lines converging into shared palletising and dispatch. Used when palletising is part of a wider factory-automation roadmap.



Compact fenceless cell with single infeed conveyor

Fenceless robot servicing a single line in a tight footprint — ideal for retrofit into an existing packing hall.



Two production lines sharing one robot

A cost-effective way to palletise two slower lines from a single cell, with independent pallet drop points.

01 · START

Define the line.

Pack format, rate and pallet pattern. OAL confirms what is realistic before any layout work.

02 · SPACE

Survey the floor.

On-site 3D scan and CAD overlay. OAL sees what will fit, and what won't, before you commit.

03 · CHOOSE

Fenceless or caged.

OAL recommends the cell type, robot reach and guarding strategy for your throughput.

04 · INTEGRATE

Plan the next step.

Palletising becomes the foundation for case packing, vision and compliance upstream.

Fenceless.

Automation without barriers.

SAFE BY DESIGN

Built for tight spaces.

OAL fenceless palletising uses safety technologies to remove the need for traditional guarding in most applications. Operators can share the workspace, step in to clear a pallet, and step back out. The robot slows and stops as required.

The result is a palletiser that fits where a guarded cell simply cannot, while still running well above cobot speeds. Payback is typically under twelve months through reduced labour dependency and more consistent pallet quality.

5× smaller

Footprint vs a traditional guarded cell — retrofits into tight spaces.

3 × faster

Throughput vs a typical cobot, without compromising safety compliance.

PLe

Certified to ISO 13849 performance level e for functional safety.

<12 months

Typical payback through labour saving and consistent throughput.

How it earns its place.

01 Compact footprint

Up to 5× smaller than traditional robot cells; fits into tight spaces without costly layout redesign.

02 Safe by design

Certified to the highest safety standards, enabling confident human-robot collaboration.

03 Real throughput

Up to 3× faster than cobots, designed for production-line pace, not demo speed.

04 Retrofit-ready

Engineered to drop into existing lines — minimal civil works, no line redesign, often installed during a planned shutdown.

BEST FOR

Tight packhouses, retrofit onto existing lines, and sites where operators need to step in and out of the cell frequently.

Caged.

Throughput without compromise

PEAK CYCLE RATES

Proven for high-volume, high-tempo packing halls.

For sites where throughput is the deciding factor, a fully guarded cell lets the robot run at its maximum specified speed and payload. It's a proven architecture used across beverage, ambient and case packing. It's the right answer when cycle time, not floor space, is the constraint.

OAL supplies caged cells with stainless-steel frames, washdown-rated components and full integration into your upstream conveyors, pallet magazines and stretch-wrappers. OAL builds and pre-tests at Peterborough, then installs and commissions on site in a single day.

Peak

Full robot speed and payload — no safety-imposed slowdowns.

24/7

Designed for continuous running on production shifts with SLA-backed support.

FAT

Factory acceptance testing at OAL before the cell ever leaves Peterborough.

2–3 days

Typical on-site install and commissioning window after FAT sign-off.

How it earns its place.

01 Unrestricted speed

Full safety enclosure removes human-adjacency limits — the robot runs at its rated maximum.

02 Higher payloads

Suits heavy cases, shrink-wrapped trays and multi-pick end-effectors where cobots fall short.

03 Proven architecture

Decades of deployment across UK food and beverage, with a parts and service supply chain to match.

04 Integrated end-of-line

Pallet magazines, stretch-wrappers, labellers and conveyors all integrated into one handover.

BEST FOR

New-build lines, high-throughput packing halls and ambient environments where floor space allows a traditional cell layout.

SECTION 07 – SOFTWARE & SIGHT

Configured by you. Controlled by the system.

A pallet pattern in minutes, not days. Vision that checks every case before it lands. The same OAL platform that already runs verification on 2,000+ UK lines.

EASY-BUILDER SOFTWARE

Upload your pallet layout. The system configures itself.

Drop in a CAD or PDF of your pallet pattern and OAL's configurator translates it directly to robot motion, gripper logic and pallet-magazine cues. No PLC programming. No engineer call-out for a new SKU.



INTEGRATED VISION

2D for case label verification. 3D for pallet position.

Every case is checked for label, orientation and damage before it's placed. Every pallet is located in 3D so the robot adapts to drift, slip and uneven loads — no fixed jigs, no manual re-centring.

2D VISION

Case CONFORMITY

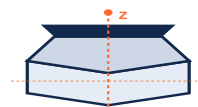
Label present · orientation · seal & damage check.



3D VISION

Pallet POSITION

XYZ + rotation tracked in real-time. Robot adapts on the fly.



ENGINEERING & INSTALL STANDARDS

SafeContractor approved. Built and signed off in Peterborough before it ships.

OAL holds an in-house mechanical, electrical and controls team — every cell is FAT-tested as a complete system before it leaves the factory. On-site work follows our own audited safe-system-of-work, accredited by Alcumus SafeContractor and re-certified annually.



SECTION 08 – FROM COMPLIANCE TO CONTROL

Palletising shouldn't sit on its own. Yours doesn't have to.



ALREADY ON 2,000+ UK PRODUCTION LINES

Most food manufacturers already have packaging verification in place. That is where OAL starts.

OAL integrates palletising with your existing compliance systems, retailer code of practice and production data. The robot doesn't run separately from the rest of your end-of-line. It runs as part of it.

Every run controlled. Every output traceable. Not just a robot. A connected end-of-line system.

Compliance and robotics, **aligned.**

ONE-CLICK SET-UP

Select your product. The system sets:

PRINT & VERIFY	Auto rules
PACK CONFIG	Auto pattern
PALLET PATTERN	Auto select
ROBOT BEHAVIOUR	Auto profile

APPROVED



OAL's compliance system is approved for GS1 Digital Link — ready for Tesco QR codes.

TRUSTED BY UK RETAILERS · THE BENCHMARK FOR COMPLIANCE



Sainsbury's

M&S



Waitrose



BOOTH'S

SECTION 09 – WHAT IT DELIVERS

One operator per shift back. Year after year.

The robot typically removes one manual operator per shift. For a two-shift operation, that is two roles you no longer have to fill, cover or worry about.

- ▶ Reduced labour dependency.
- ▶ Elimination of repetitive lifting.
- ▶ Consistent pallet quality.
- ▶ Stable throughput.

"I would say that the relationship with OAL has been good to excellent. We've had a lot to learn about automation and robotics, and OAL has been supportive every step of the way."

BEN WISSOCQ · REGIONAL OPERATIONS DIRECTOR, AGRANA FRUIT

EXAMPLE ROI

5-day, 2-shift operation

Operators removed (per shift)	1
Shifts	2
Operator hours saved per day	16
Loaded rate per hour	£18
Operating weeks per year	52
Annual saving	£74,880

Typical payback: **under 12–24 months.**

TRUSTED ACROSS UK FOOD MANUFACTURING

2,000+ production lines

DELIVERED, INTEGRATED AND SUPPORTED BY OAL.

ROBOTICS



COMPLIANCE



24/7 SUPPORT

Market-leading 1-hour response.

Robotic palletising only earns its keep when it keeps running. From our base in Peterborough, OAL provides 24/7 support with a guaranteed 1-hour response and a UK-wide rapid-response service that gets an engineer to most sites the same day.

<p>1 hr</p> <p>RESPONSE TIME</p> <p>Market-leading SLA — a real engineer, not a ticket queue.</p>	<p>3 hr</p> <p>ON-SITE UK</p> <p>Peterborough base puts most UK factories within reach the same day.</p>	<p>24/7</p> <p>COVERAGE</p> <p>Round-the-clock cover for production lines that never stop.</p>	<p>★★★★★</p> <p>“</p> <p>The team at OAL are easy to work with. The 24/7 support is quick, friendly, and efficient. Crucially we've been able to customise the system to meet our unique requirements. By introducing cutting-edge artificial intelligence technology, we've futureproofed our packhouse.</p> <hr/> <p>Fran McNally WORLDWIDE FRUIT</p>
<ul style="list-style-type: none"> <p>■ Rapid-response service</p> <p>UK-wide engineer dispatch with managed-service SLAs.</p> <p>■ Remote diagnostics</p> <p>Most issues resolved on the first call before anyone travels.</p> <p>■ Spares held in stock</p> <p>Critical parts kept in Peterborough for next-day fit.</p> <p>■ Operator training</p> <p>Refresher and shift-handover training included on contract.</p> 			

Q.01 What is a palletising robot?

A palletising robot automatically stacks cases, boxes or crates onto pallets at the end of a production line. OAL systems are designed for food factories where hygiene, safety and space are critical.

Q.02 Do I need safety fencing?

No. The OAL Fenceless system uses safety-rated dual channel pressure sensors inside the hull to detect pressure changes when touched. Additional safe monitoring by laser scanners for dynamic speed correction.

Q.03 Can it handle open boxes or crates?

Yes. Each palletiser can be fitted with grippers or vacuum tooling to handle open-top or variable packaging types.

Q.04 How long does installation take?

Most systems are installed in a single day, following pre-tested factory acceptance testing at OAL.

OAL

— GET A PALLETISING
RECOMMENDATION

Get a palletising recommendation

Book a 30-minute
automation review



AUTOMATION THAT DELIVERS.
COMMITMENT THAT LASTS.

CALL
+44 1733 394 700

EMAIL
sales@oalgroup.com

VISIT
A1 Parkway,
Peterborough
PE2 6YN, United
Kingdom

ONLINE
oalgroup.com/palletising