

THE BAKERY OPERATIONS GUIDE

Less waste. More control. Every bake.

The Connected Bakery

From supplier approval to customer delivery.



QUALITY

TRACEABILITY

PERFORMANCE

INSIDE THE GUIDE

Your whole bakery. One connected story.

Choose the part that matters today. Follow the handovers when you are ready.



01 / Flow

Supplier to batch

02 / Control

Quality, assets, people

03 / Connect

Customers and decisions

04 / Apply

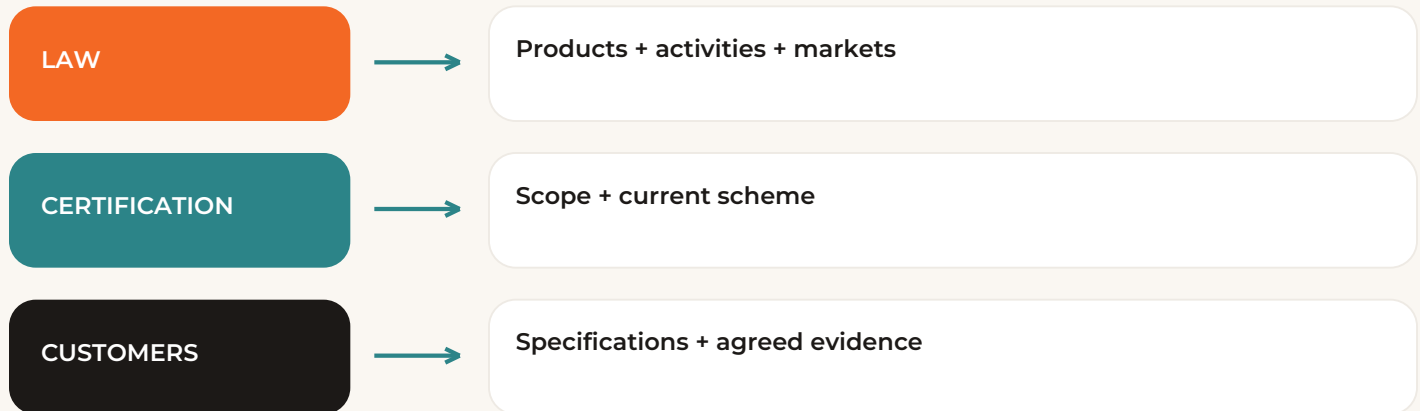
Markets and working tools

Illustrative bakery, not a customer facility. Visual examples show control concepts, not V5 screenshots.

OPERATIONS / 01

Build the right controls.

Start with the product, the process and the market. Then agree what evidence you need.



Describe the scope

Record sites, products, intended use, consumer groups, ambient/chilled/frozen distribution and export destinations. Include outsourced storage, transport and co-manufacturing.

Manage change

Review the register when a recipe, process, label, customer market or supplier changes. A new chilled filling may change the risk assessment even when the baked base stays the same.

Set defensible controls

Assess biological, chemical, physical and allergen hazards. Determine where control is needed, define justified limits and specify monitoring, ownership and action on failure.

WHERE V5 FITS

Controlled records and role-based access support your governance. The food business remains responsible for deciding which obligations apply and demonstrating compliance.

OPERATIONS / 02

A better batch starts with the supplier.

Approve the source. Plan the purchase. Make change visible before it reaches your bakery.

1

01 Identify

Producer/site
Material specification

2

02 Assess

Hazards + assurance
Change commitments

3

03 Decide

Approval + conditions
Review date

Assess risk before approval

Consider the ingredient's hazards, origin, history, authenticity and intended use. Set evidence and verification expectations proportionate to the risk and applicable rules.

Review performance

Use receipt failures, complaints, overdue evidence and corrective actions to trigger reassessment. Document emergency approvals with time limits and safeguards instead of silently bypassing the process.

Control substitutions

Route supplier, ingredient and pack changes to the right reviewers. Recheck allergens, recipe behaviour, labels, claims and customer acceptance before use.

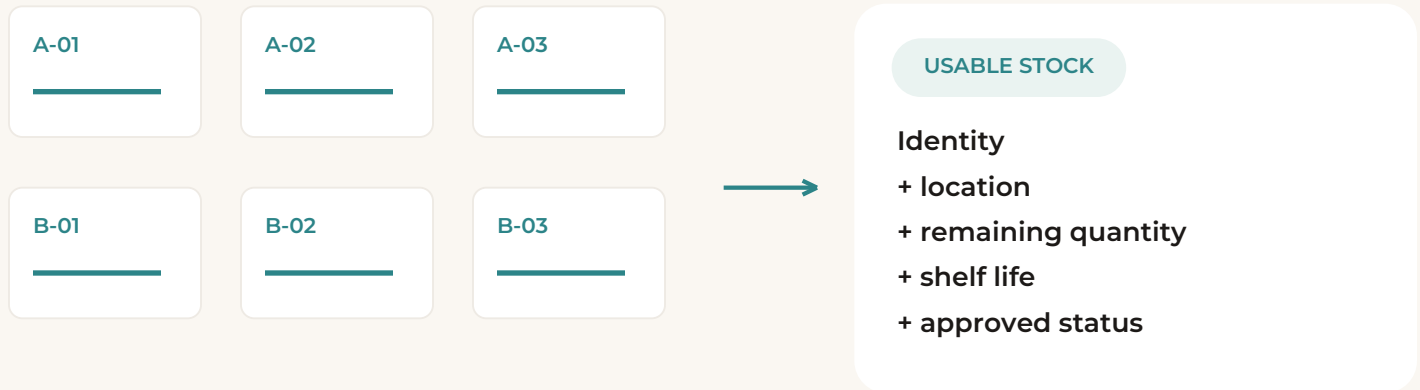
WHERE V5 FITS

V5 supports supplier qualification alongside quality and purchasing records. Define your risk criteria, review frequencies and approval workflow during implementation.

OPERATIONS / 03

Know what you can use.

Stock has a quantity, a location and a status. Your production plan needs all three.



Identify the delivery

Match the purchase order, material, supplier and lot. Capture quantity and unit of measure; inspect condition, seal integrity and temperature where relevant.

Control the disposition

Separate accepted, quarantined and rejected stock physically and in records. Define who can release it, what happens to partial deliveries and how a rejected lot is returned or destroyed.

Respect storage conditions

Define ambient, chilled and frozen requirements, segregation and location rules. Review excursions against a documented disposition process rather than simply resetting the alarm.

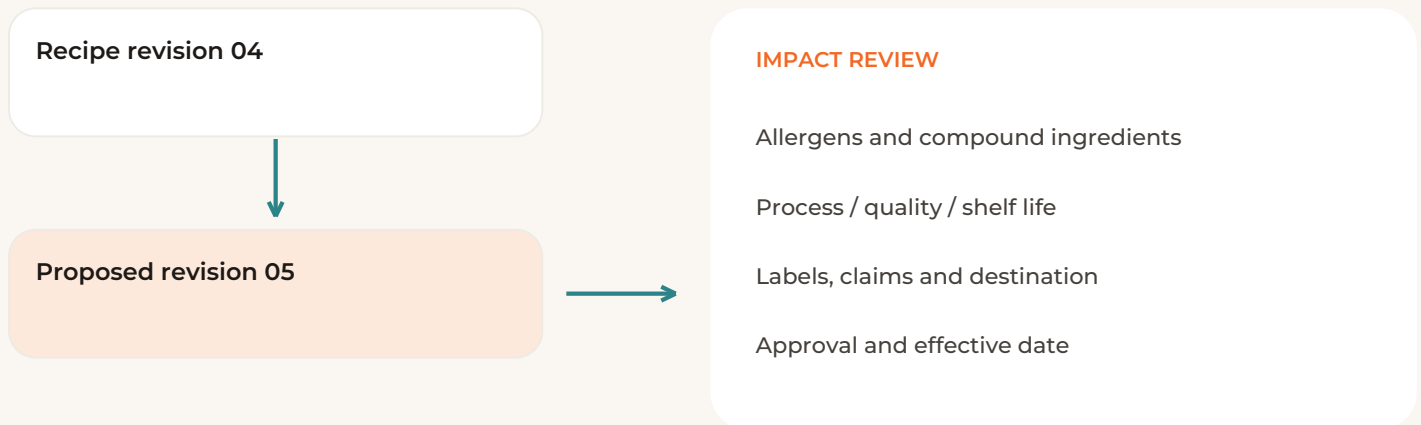
WHERE V5 FITS

V5 supports receiving and lot records, with quality decisions alongside operations. Configure status transitions and the checks required before material becomes available.

OPERATIONS / 04

Protect the recipe.

A controlled revision connects the ingredient decision to the product you actually make.



Control the master

Define ingredients, units, batch sizes, process stages, expected yield and acceptance criteria. Keep trials separate from released production instructions.

Review the consequences

Assess changes to source, ingredient, inclusion rate, scale or process. Revisit allergens, nutrition, claims, shelf life and customer approvals as appropriate.

Make the revision traceable

Record effective dates, review and approval. Ensure production and packaging use the intended version and retain the revision associated with each completed batch.

WHERE V5 FITS

V5 maintains formulas, work orders and production instructions. Your team supplies the technical decisions and approves the recipe and its market-specific information.

OPERATIONS / 05

Allergens travel with the material.

Keep identity through storage, weighing, changeover, rework and packing.

Before

Identify + segregate

**Changeover**

Clean + verify

**After**

Match product + label



Rework keeps its allergen identity through every branch.

Maintain the source information

Review ingredient and compound-ingredient declarations. Assess supplier changes and keep an allergen matrix by material, recipe and intended market.

Design the physical controls

Address storage, utensils, dust, people and material flows. Define sequencing and cleaning controls, with evidence that the chosen approach is effective.

Verify at changeover and packing

Check rework eligibility and line clearance. Confirm the product matches the approved label. Assess precautionary statements using a documented risk process, not as a default substitute for controls.

WHERE V5 FITS

Link recipe, production, quality and document records in the agreed workflow. Regulatory label wording and allergen decisions still need qualified market-specific review.

OPERATIONS / 06

Same recipe. Same weight. Every bake.

Guide the work and keep the actual inputs, results and exceptions with the batch.

Prepare the job

Check material availability, approved recipe, qualified people and equipment readiness. Plan realistic capacity, proofing, baking, cooling and cleaning windows.

Guide the execution

Identify and weigh ingredients, confirm additions and record actual values. Define stage checks for mixing, proofing, baking, cooling, filling and packing as applicable.

Review the departure

Record why a quantity, sequence or process value differs. Keep affected material controlled until the designated person decides its disposition. Complete the batch record with actual output and losses.



WEIGH

MAKE

REVIEW

Actual inputs. Recorded steps. A batch history your team can explain.

WHERE V5 FITS

V5 supports dispensing, production stages, review and batch reporting. Scale and other device connections depend on supported hardware and configuration.

OPERATIONS / 07

Different products. Different hazards.

A dry biscuit and a chilled custard pastry need different evidence.



Raw material

Flour / eggs / contaminants



Process

Validated control where required



Post-bake

Exposure / fillings / storage

Before and during processing

Assess pathogens associated with raw flour and eggs, relevant ingredient contaminants such as mycotoxins, and foreign material. Validate the control where your hazard analysis requires it.

After the bake

Consider exposure during cooling, slicing, filling and packing. Chilled fillings and ready-to-eat products need appropriate hygiene, storage and shelf-life decisions.

Assess chemical and physical risks

Review cleaning chemicals, lubricant contact, sieves and inspection devices. Consider acrylamide requirements where applicable, without compromising the validated food safety process.

WHERE V5 FITS

Quality, laboratory and batch records can organise supporting evidence. Software does not select safe process limits or validate a kill step for your product.

OPERATIONS / 08

Make line readiness visible.

Cleaning, verification and return to use are decisions with evidence behind them.

RELEASE THE LINE

- ☐ Method completed
- ☐ Verification accepted
- ☐ Equipment reassembled
- ☐ Named authorisation

**A clean
appearance
is only one part
of readiness.**

Readiness is a handover.

Specify the method

Define what is cleaned, by whom, with which approved method and at what frequency. Address disassembly, chemicals, contact conditions, tools and safe reassembly.

Verify readiness

Use appropriate pre-operational inspection and verification. Where your risk assessment calls for environmental sampling, define sites, methods, trends and action on results.

Look beyond the line

Include pests, water, waste, condensation, drains and people/material flows. Investigate recurring failures and reassess the method when equipment or products change.

WHERE V5 FITS

V5 includes sanitation records within its equipment/operations scope. Agree the checks, laboratory links, responsibilities and escalation needed by your site.

OPERATIONS / 09

Quality before release.

A passing result is useful. A complete, reviewed record makes the decision defensible.



01 / Checks

Approved methods, samples and acceptance criteria.

02 / Review

Results, exceptions and required evidence together.

03 / Decision

Named release or hold. Missing evidence stays visible.

Build the control plan

Choose relevant checks: weight, dimensions, appearance, texture, moisture, water activity, microbiology or shelf life. Set justified methods, frequencies and acceptance criteria.

Keep results in context

Identify the sample, lot, method, instrument and analyst. Address suspect or out-of-specification results through an investigation, not repeated testing until a pass appears.

Control release

Define what must be reviewed and who may release. Keep incomplete or failed batches on hold; document concessions only where legally and technically appropriate.

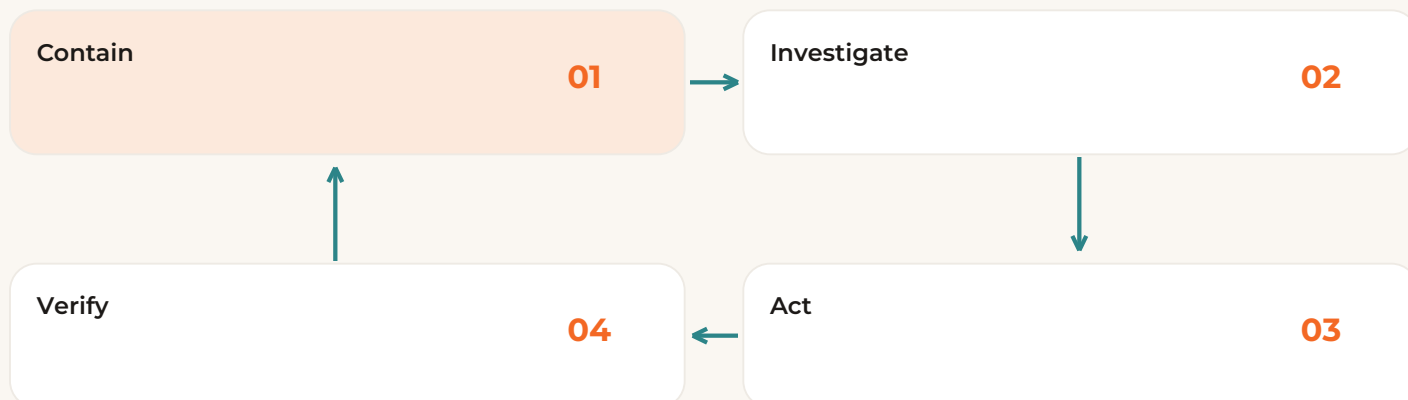
WHERE V5 FITS

V5 supports quality review and laboratory samples, methods, results and CoA inputs. Approved methods, configuration and qualified review remain essential.

OPERATIONS / 10

Close the loop on CAPA.

Contain today's problem. Change what makes it recur.



Contain and assess

Identify affected lots, equipment, orders and customers. Apply holds and escalation promptly. Distinguish immediate correction from the wider investigation.

Investigate with evidence

Review process, material, equipment and human factors. Test the proposed cause; "operator error" is rarely a sufficient explanation of how the system allowed the failure.

Verify effectiveness

Assign actions, owners and due dates. Decide how success will be measured and when it will be checked. Reopen or escalate when the evidence does not support closure.

WHERE V5 FITS

V5 supports deviations, corrective actions and quality review. Configure the investigation, approvals and links to affected operational records to match your procedures.

OPERATIONS / 11

Look after the line.

Mixers, ovens, scales and conveyors connect maintenance to quality and delivery.



Build the asset history

Identify equipment, critical components and instruments. Record location, ownership, manuals, relevant spares and the food-safety impact of failure.

Plan and record the work

Set preventive maintenance and calibration based on risk, use and evidence. Track work performed, findings, overdue tasks and contractor activity.

Return safely to service

After maintenance, check cleaning, reassembly, foreign-material control and required function tests. An out-of-tolerance instrument needs an assessment of potentially affected earlier results.

WHERE V5 FITS

V5 includes equipment records, maintenance, calibration-due tracking, PM schedules, downtime reasons and OEE. Automated measurements require supported connections.

OPERATIONS / 12

See where the losses are.

Separate downtime, speed loss and rejected product. Then choose the next improvement.



83.8%

$$OEE = 0.90 \times 0.95 \times 0.98$$

Illustrative calculation, not a customer result.

Improve the loss. Protect the product.

Agree the denominator

Define planned production time, excluded time and the ideal rate for each product. Record downtime reasons and distinguish line constraints from local machine events.

Separate the losses

Track scrap, rework, giveaway and process loss. Baking moisture loss is not automatically avoidable waste; compare actual yield against the approved product/process expectation.

Make improvement measurable

Choose a loss, an owner and an intervention. Review the trend together with quality, service and labour effects so a faster line does not conceal another cost.

WHERE V5 FITS

V5 provides equipment performance/OEE and operational reporting. Data quality, event capture and agreed definitions determine how useful the measures are.

OPERATIONS / 13

Right product. Right pack.

The artwork, allergen declaration, lot and destination must agree.

SEEDED LOAF

Lot B-0412 / Artwork 07



Illustrative label fragment

- Product identity
- Approved artwork
- Allergen declaration
- Lot / date / market

Approve the information

Review ingredients, allergens, nutrition, net quantity, date/storage instructions and claims against the destination's rules. Include language and customer-specific requirements.

Control pack materials

Approve food-contact suitability for intended use. Identify artwork revisions and segregate obsolete stock. Review the effect of packaging changes on protection and shelf life.

Verify the run

Clear the line, match product and artwork, and check lot/date coding and print legibility. Account for label changes and keep evidence from the actual packing run.

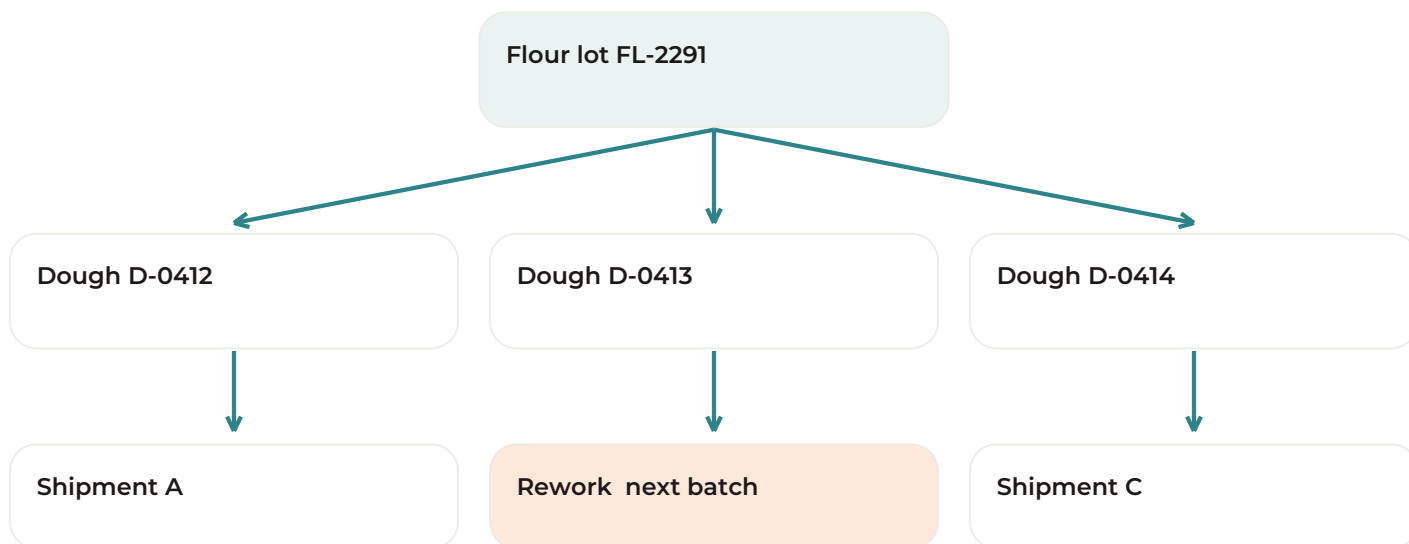
WHERE V5 FITS

The V5 reference describes label design/printing and recipe-linked label information. Confirm printer, artwork and market-format behaviour with your own approved examples.

OPERATIONS / 14

Follow every branch.

Lot tracing needs to survive splits, blends, rework, returns and partial shipments.



Traceability is tested by splits, blends, rework, partial dispatch and returns. A searchable lot number is useful only when the records preserve those relationships and the quantities can be explained.

Keep the genealogy

Connect supplier lots to receipt, consumption, intermediate batches, finished lots and shipments. Preserve repacking and rework identity rather than creating anonymous material.

Practice the response

Use a realistic mock scenario. Identify affected stock and customers, assign communication responsibilities and test the ability to retrieve relevant records promptly.

Reconcile and improve

Account for stock, dispatches, samples, waste and process losses using a consistent basis. Investigate gaps; review retrieval, notification and response effectiveness against applicable requirements.

WHERE V5 FITS

V5 supports lot records, manufacturing and fulfilment information. Demonstrate the complete trace scenario and exports you need. FSMA 204 applicability is product/activity-specific.

OPERATIONS / 15

Make the right way easy.

Current instructions and competent people are part of the operating system.

01**Revise**

Approved instruction

02**Train**

Affected roles

03**Confirm**

Demonstrated competence

Define competence by task

Identify who may receive, weigh, verify, maintain, test and release. Include agency staff and contractors. Check understanding in language and formats people can use.

Control the instructions

Assign document owners, revisions and effective dates. Remove obsolete instructions from points of use and assess retraining when the process changes.

Support the culture

Give supervisors time and authority to resolve concerns. Review recurring workarounds and near misses as signals that the process needs improvement.

WHERE V5 FITS

V5 includes personnel qualification, controlled documents and role-based access. Agree competency records and the operator actions that should be restricted in your configuration.

OPERATIONS / 16

Show the evidence.

Bring the event, the decision and the history together for review.

What happened?	Batch + test + event
Who decided?	Role + signature + time
What changed?	Revision + audit history

Audit the real operation	Plan internal and supplier reviews around risk and requirements. Sample records across shifts and follow issues through to actions and verified closure.
Assess deliberate threats	Treat economically motivated adulteration and intentional harm as distinct assessments. Review vulnerabilities, access, supply-chain changes and mitigation responsibilities as applicable.
Review with management	Bring trends, complaints, overdue actions, changes and resource needs together. Record decisions and follow-up so recurring problems lead to a change in priorities.

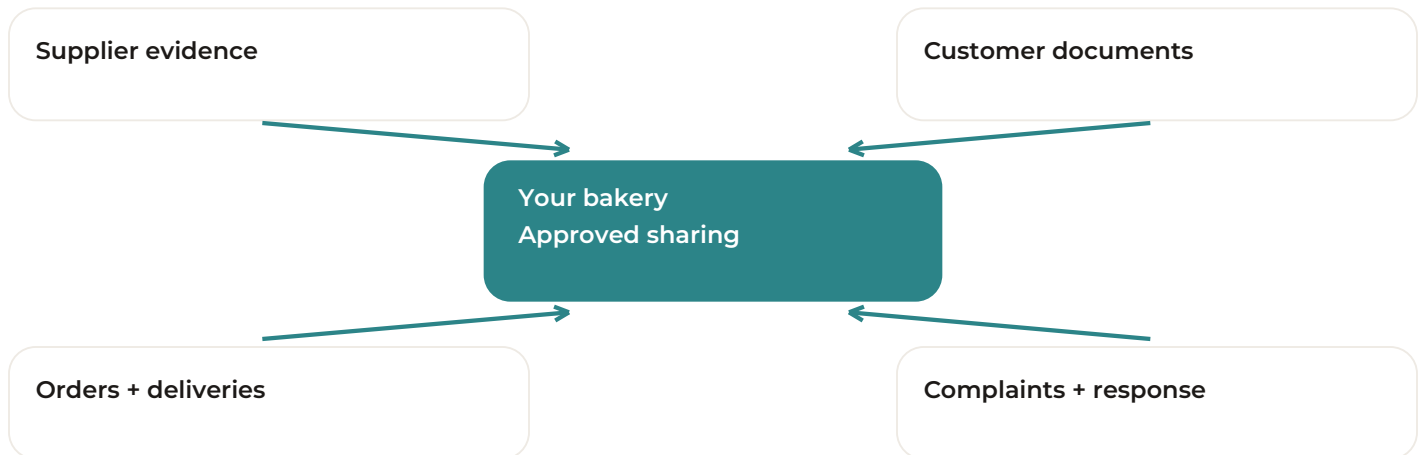
WHERE V5 FITS

Controlled documents, audit history, quality actions and reporting can support review. Scheme certification is awarded through the relevant certification process, not by software.

OPERATIONS / 17

Connect to the customer.

From order and dispatch to approved documents, complaints and controlled portal access.



Deliver the commitment

Review the customer specification, destination, shelf life and loading conditions. Pick eligible product and keep each shipment connected to its lots.

Share with control

Define which approved documents and shipment details customers may see. Test permissions, versions and revocation. Connect complaints and returns to the batch and response record.

Portal scope and permissions: ask to see the actual supplier and customer screens for your plan.

WHERE V5 FITS

V5 supports customer/commercial records and lists customer and supplier portal offerings. Confirm exact portal screens, document publication and submission workflows for your plan; do not assume every exchange is automated.

OPERATIONS / 18

Rules check. AI explains. People decide.

Use automation to support clear, accountable human decisions.

01

Rules check

Configured tolerances
Identity and status

02

AI explains

Context and suggestions
Evidence to review

03

People decide

Approve, release, sign
Accountable decisions

Protect the record

Define identities, access, audit history, retention and backup responsibilities. Test recovery and export; specify what happens during network or device outages.

Control the connections

Agree system-of-record ownership for ERP, scales, printers and other devices. Test units, duplicates, timestamps, failed messages and reconciliation before go-live.

Review AI assistance

Set permitted uses, provider/data controls and human approval points. Review suggested text and decisions against source records. Keep safety limits, release and regulatory judgments under authorised control.

WHERE V5 FITS

V5 Assistant helps find records, navigate and review suggested next actions within role/workspace boundaries. AI demand/yield forecasting and process/scale anomaly detection are marked coming soon in the reviewed reference.

OPERATIONS / 19

Start where value is visible.

Warehouse, quality, production or equipment: begin with the problem your team can measure.

Start

One problem / one line

Prove

Real batch + exceptions

Expand

Measured, agreed value

Define the first outcome

Choose fewer inventory surprises, clearer quality release, better batch execution or improved equipment visibility. Establish a baseline and a named business owner.

Prove the difficult scenarios

Demonstrate a hold, recipe change, partial receipt, rework trace and failed integration. Include operators and quality reviewers, not only the buying team.

Roll out deliberately

Clean master data, configure roles, train people and test the workflow. Plan support, fallback, acceptance and review. Add the next area when the foundation is dependable.

WHERE V5 FITS

Explore V5 across warehouse, manufacturing, quality, laboratory, assets, planning and commercial workflows. Availability depends on plan, permissions, configuration and connected providers.

GLOBAL COMPLIANCE

The market changes. The control stays connected.

Use a dated applicability register for every product and destination.

FDA

United States

Assess registration, CGMP and preventive controls, supply-chain duties and importing. FSMA 204 depends on covered foods, activities and exemptions; it is not universal for bakeries. Check current deadlines with FDA.

Sources [11,12,18]

EU + national authorities

European Union

Review hygiene/HACCP, traceability, food information, allergens, claims, languages and relevant microbiological or contaminant requirements. Keep destination-market approval with each product.

Sources [13,16,19]

GB + Northern Ireland

United Kingdom

Distinguish the relevant domestic frameworks and competent authorities. General prepacked manufacturing, PPDS and non-prepacked food are different categories. Assess Northern Ireland separately.

Sources [14,16]

GLOBAL COMPLIANCE

Know the local framework.

Shared principles do not mean identical laws.

01 Canada

CFIA / provinces

Licensing, preventive controls, written plans and traceability have different scope tests. Assess importing, exporting and interprovincial activities, relevant exceptions, bilingual labels, allergens and consumer protection. [15,26]

02 Australia

FSANZ / state and territory

Review the applicable shared Food Standards Code, plus Australian Chapter 3 food safety requirements and local implementation. Confirm business registration, verification, labels, allergens and claims. [17,24]

03 New Zealand

MPI / local authority

Use the Food Act risk-based measure appropriate to the operation, such as a food control plan or national programme. Shared Code requirements do not make Australian-only Chapter 3 apply to a New Zealand site. [17,27]

For other export markets, record the competent authority, importer, ingredient permissions, label language, certificates and customer approvals before supply.

ASSURANCE

Law. Certification. Customer commitment.

Keep these three layers distinct in your bakery's compliance register.

BRCGS Food Safety

Confirm the applicable issue, position statements, scope, audit programme and customer acceptance. The earlier source review referenced Issue 9. [20]

SQF

Confirm the correct food sector code, audit edition and transition. Edition 10 is published; the reviewed SQFI guidance said audits would not begin before 2 January 2027 and depended on benchmarking progress. [21]

FSSC 22000

Check scheme version, transition, sector prerequisites, additional requirements and certification scope with the scheme owner and certification body. [22]

IFS Food

Confirm the current standard, doctrine, product/process scope and assessment requirements. [23]

MAKE THE SCOPE EXPLICIT

Build a clause-level gap review from the current scheme documents. Confirm editions and transitions before audit. Software supports evidence and workflow; certification and compliance depend on your operation.

WORKSHEET 01

Find the next improvement.

Mark E = evidenced, P = partial, G = gap, N/A = not applicable.

CONTROL AREA	E	P	G	N/A
Supplier approval and change evidence	☐	☐	☐	☐
Usable stock: identity, location, shelf life, status	☐	☐	☐	☐
Recipe revision, actual weights and exceptions	☐	☐	☐	☐
Allergen, sanitation and packing checks	☐	☐	☐	☐
Quality review and authorised release	☐	☐	☐	☐
Assets, PM, calibration and return to use	☐	☐	☐	☐
OEE, yield, waste and rework definitions	☐	☐	☐	☐
Trace exercise, branches and mass balance	☐	☐	☐	☐
Customer documents, portal access and complaints	☐	☐	☐	☐
Training, integrations and human review of AI	☐	☐	☐	☐

PRIORITY / OWNER / DUE DATE

WORKSHEET 02

Approve with evidence.

Supplier / producer site / material family: _____

Identity

Actual producer, broker, site, approved material and intended use.

Risk basis

Hazards, origin, authenticity, history and verification rationale.

Technical evidence

Specification, allergens, CoA/testing and packaging information.

Assurance

Audit/certification scope, verification and unresolved issues.

Agreement

Changes, receipt criteria, contacts and escalation.

Decision + review

Approval status, conditions, named reviewer, expiry and reapproval triggers.

Decision owner / date: _____

WORKSHEET 03

Before the change reaches the line.

Change reference / product / proposed effective date: _____

1

Define

Current and proposed supplier, ingredient, recipe and artwork revisions.

2

Assess

Allergens, cross-contact, process behaviour, quality and shelf life.

3

Plan

Handling, sequence, cleaning, verification and rework eligibility.

4

Review

Labels, nutrition, claims, languages and destination markets.

5

Approve

Customer/technical decisions, evidence and remaining packaging stock.

6

Implement

Update instructions, train affected roles and verify first execution.

WORKSHEET 04

Follow one lot. Explain every branch.

Lot / issue / team / start time: _____

01 Trace back

Supplier, receipt, ingredients, checks and material release.

02 Trace forward

Batches, splits, rework, repacking and finished lots.

03 Locate

On-site stock, transfers, customers, shipments and returns.

04 Reconcile

Account for received/produced, remaining, used/shipped, samples and losses.

05 Respond + improve

Hold/recall decisions, required notifications, retrieval time, gaps and owners.

Use a consistent quantity/unit basis. Set exercise targets from the applicable legal, scheme and customer requirements; there is no one universal recall deadline or mass-balance tolerance.

WORKSHEET 05

Ask to see it work.

Record demonstrated evidence, required configuration, plan and any gap.

WMS

Receive part of a lot, hold it and exclude it from usable stock.

Recipes + execution

Revise a recipe, weigh actual inputs and resolve an exception.

Quality + CAPA

Hold a batch, investigate, release and check effectiveness.

Documents + people

Revise an instruction and demonstrate competence.

Assets + OEE

Show overdue PM, calibration impact and performance source events.

Trace + dispatch

Follow rework into shipments and reconcile quantities.

Portals

Show the real supplier/customer view, permissions and revisions.

Integration + AI

Demonstrate failure recovery, access control and human review.

Bring your own recipe, supplier lot, quality exception and customer requirement. Judge the workflow on evidence from your application.

SOURCES AND SCOPE

Keep the evidence close.

Official sources behind the guide. Click a source to open its publisher.

- 01 [FAO / Codex / GHP and HACCP Toolbox; foundation and scope](#)
- 02 [FAO / Facilities and equipment design](#)
- 03 [FAO / Training and competence](#)
- 04 [FAO / Maintenance, cleaning, disinfection and pest control](#)
- 05 [FAO / Control of operation](#)
- 06 [FAO / Product information and consumer awareness](#)
- 07 [FAO / Transportation](#)
- 08 [FAO / HACCP: conducting a hazard analysis](#)
- 09 [FAO / HACCP: validation and verification](#)
- 10 [FAO / HACCP: documentation and record keeping](#)
- 11 [US FDA / Preventive Controls for Human Food](#)
- 12 [US FDA / Food Traceability List and rule applicability](#)
- 13 [European Commission / Food hygiene legislation](#)
- 14 [European Union / Food information to consumers: Regulation 1169/2011](#)

SOURCES AND SCOPE

Use current requirements.

Official sources behind the guide. Click a source to open its publisher.

- 15 [CFIA](#) / Preventive controls and plans; linked regulatory guidance
- 16 [UK FSA](#) / Allergen guidance for food businesses
- 17 [FSANZ](#) / Allergen labelling; Food Standards Code resources
- 18 [US FDA](#) / Handling flour safely
- 19 [UK FSA](#) / Acrylamide legislation and business guidance
- 20 [BRCGS](#) / Food Safety Standard and current programme information
- 21 [SQFI](#) / Edition 10 FAQ and transition information
- 22 [FSSC](#) / FSSC 22000 scheme and scheme documents
- 23 [IFS](#) / IFS Food standard
- 24 [New Zealand MPI](#) / Food Act 2014 and risk-based measures
- 25 [V5 Ultimate](#) / Production product reference, editorial review 27 September 2026
- 26 [CFIA](#) / Traceability requirements
- 27 [FSANZ](#) / Food traceability and Australian food safety requirements

Scope: practical evaluation prompts and market orientation, not a complete clause-by-clause assessment. Requirements depend on products, activities and markets. The original source review was completed 29 September 2026; confirm current law and scheme transitions before applying them.

V5 capability statements retain the production reference reviewed 27 September 2026. Plan availability, connections and portal views require confirmation for your application. Forecasting and process/scale anomaly detection were identified as planned. Photography and the bakery illustration are AI-generated; other diagrams and all example values are illustrative, not customer results or software screenshots.

What would better visibility change for your bakery?

Less waste. Tighter traceability.

Right-first-time products. Evidence ready.

ASK V5

"We make [product] in [market]. Our biggest challenge is [issue]. Which workflows should we evaluate first?"

Start with warehouse, quality, production or equipment. Connect the next workflow when the value is clear.

Explore V5 for your bakery