TIKO **INNOV**

INDUSTRIAL ENGINEERING

DESIGNED & MANUFACTURED IN FRANCE

PRODUCTS & SERVICES CATALOGUE

Process comes to life.

Designing, integrating and developing your installations.



CIP · FILTRATION · CARBONATION
PROCESS WATER · THERMAL TREATMENT · INTEGRATION

2027

THE CATALOGUE AT A GLANCE

Start with your needs.

A wine to prepare, a line to clean, water to assess or equipment to upgrade: every project starts with a practical situation. This catalogue offers several ways to find the solution that fits yours.

03 **One company, a shared commitment**
Tiko Innov, from requirements to commissioning.

04 **Your industry, our starting points**
Wine, wineries, breweries, beverages and liquid processing.

05-07 **Cleaning in place**
Automatic EZCIP and manual ECOCIP.

08-10 **Beverage filtration**
Automatic EZF and manual EcoF.

11-13 **Preparing process water**
Automatic EZF_W and manual EcoF_W.

14-15 **Giving your beverage its sparkle**
The EZC automatic carbonator.

16-17 **Managing thermal treatment**
The EZ_FPC range and its integration into the line.

18-26 **Building your project together**
Supporting functions, services, approach and contact.

Products and services catalogue · English edition 2027. Installation photographs and design views.

TIKO INNOV

A machine belongs to an installation.

Before designing a machine, we need to understand what surrounds it: the product flowing through it, the people operating it, the site's working practices and the constraints that shape production.



From the floor to the drawing board

In a winery or production area, a hard-to-reach connection, a poorly positioned cleaning return or a lengthy intervention affects everyday work. These details matter to us from the outset. They shape the project just as much as the flow rate or the volume to be processed.

Skills brought together

A French family business, Tiko Innov designs, manufactures and assembles its installations in Les Arcs, in the Var region. Process engineering, mechanical design, electrical engineering, automation and integration come together around one aim: building equipment that fits your site.

One contact throughout the project

Your contact, selected according to the skills the project requires, coordinates discussions with our different specialists. They keep track of decisions, constraints and tests. You have one point of contact to help move the project forward, from the study through to handover.

INDUSTRIES & APPLICATIONS

Different industries. The same practical approach.

Wine and winery operations are our primary starting point. This understanding of liquid processes also informs our work with breweries, other beverages and the food industry.

01	**Wine, wineries & oenology**	Preparing a batch for bottling, cleaning circuits, organising transfers or modernising an installation: the project is built around the wine, its route through the process and the winery's schedule.
02	**Breweries & fermented beverages**	Production changes, cleaning, filtration and equipment interfaces call for an overall view. We work with your teams to define how the installation needs to operate.
03	**Juices, soft drinks & alcohol-free beverages**	Filtration, thermal treatment, transfer and line integration are defined according to the recipe, its characteristics and the production objectives.
04	**Food & liquid processing**	Equipment needs to fit the site's circuits and operating practices. Cleaning in place, pumping, automation and upgrades to existing equipment can be considered within the same project.
05	**Process water**	Water is defined by more than its condition on arrival: its final use matters just as much. Analysis, volumes, treatment, monitoring and the distribution network form the basis of the study.

Transfer, pumping or automation functions can complement a machine range. We define their scope together.

01 / CLEANING IN PLACE

The next cycle starts here.

Cleaning within the actual circuit.

Between production runs, the same installation takes on a different role. Circuits that carried product must now circulate cleaning solutions. To plan this changeover properly, the protocol, the equipment and the level of control are defined together.



EZCIP · AUTOMATIC / ECOCIP · MANUAL

From a manual unit to an automatic station, the choice starts with the way you work.

CLEANING IN PLACE / AUTOMATIC

EZCIP

A clear framework for every cycle.

A cleaning-in-place station never works in isolation. It serves tanks, pipework, filters and other equipment, each with its own lengths, volumes and returns. EZCIP is designed around this complete system.

Automation organises the planned sequences: circulation, times, temperatures, measurements and transition conditions. The aim is to make operation clear for your teams, within the agreed cleaning scope.



EZCIP250 / INTEGRATION EXAMPLE

Cleaning recipes you control

Cleaning recipes are open: you can create your own sequences from start to finish, without restrictions on recipe creation. We remain available to advise your teams and help develop them. Parameters are defined according to the circuits, products and selected protocol.

A station within its installation

The study covers solution supply and return, utilities, drains and connections. Tanks, pumps and layout are sized for the requirement. Heating can use electrical elements, a heat pump or a steam heat exchanger, depending on the project. End-of-cycle criteria and tests are agreed together.

Define together: circuits to clean, protocol, available utilities, returns and drains.

The configuration and acceptance criteria are specified in the study and quotation.

CLEANING IN PLACE / MANUAL

ECOCIP

Operation stays in your hands.

Some production areas need a cleaning solution operated directly by the user. Manual control can suit the organisation of work, identified circuits or a need for flexibility during interventions.

ECOCIP brings together the functions required for cleaning in place in the configuration studied. The user carries out the operations in accordance with the protocol defined for the installation.



ECOCIP225 / MANUAL CLEANING IN PLACE

Start with everyday operation

Where will the unit connect? How will operators reach the valves? Where should solutions return and drain? These practical questions guide the layout and handling of the equipment. We also discuss how often operations take place and how the team is organised.

Configurations at a glance

ECOCIP225 has two 250-litre tanks and can accommodate up to two 9 kW heating elements, one per tank. ECOCIP250 has two 500-litre tanks and can accommodate up to four 12 kW elements, two per tank. Installed heating capacity is selected to suit the requirement.

Define together: equipment to clean, connections, protocol and operating arrangements.

The stated ratings refer to electric heating elements. Other heating solutions can be studied. Manual operation requires the user to follow the protocol.

02 / BEVERAGE FILTRATION

Let the product express its character.

Filtration is selected for a particular beverage.

Between product entry and packaging, filtration serves a specific purpose. Removing particles, improving clarity or contributing to microbiological control does not always call for the same media or operating arrangements. Defining that purpose is where the study begins.



EZF · AUTOMATIC / EcoF · MANUAL

Product, filter media, flow rate and cleaning are defined as one system.

BEVERAGE FILTRATION / AUTOMATIC

EZF

Think batches. Think continuity.

In a winery or on a beverage line, the filter needs to fit between the equipment feeding it and the equipment downstream. The product, selected media, flow rate and batch changes shape the configuration.

The EZF range allows automatic filtration to be studied in single-line or dual-line configurations. Control functions, connections and cleaning are defined for the installation, with a separate CIP station in the examples shown.



EZF / INSTALLATION VIEW

Two examples for comparison

EZF_6000: a single line, up to 6,000 L/h, with two stages containing five 30-inch cartridges each.
EZF_2x8000: two lines with two stages per line and eight 30-inch cartridges per stage, with a flow rate of 8,000 L/h on the line in production.

Planning the changeovers

The dual-line layout is intended to allow one line to be cleaned while the other filters; the two do not filter simultaneously. A recovery tank can collect product from filter and filler priming, then allow it to be dosed back into the line by a peristaltic pump at the percentage selected on the HMI.

Define together: beverage, filtration objective, media, flow rate, batch changes and cleaning.

Example flow rates must be confirmed for the product, media and operating conditions. Reintroduction of recovered fractions must be assessed for the process.

BEVERAGE FILTRATION / MANUAL

EcoF

Filtration at your working pace.

Preparing a batch, monitoring its passage, changing products and cleaning: filtration is part of a sequence of operations. With manual control, clear connections and access to the operating components are particularly important.

The EcoF range follows this approach. The configuration is defined around the product and filter media, as well as the operator's tasks and the way the site is organised.



MANUAL FILTRATION DETAIL
EcoF_W EXAMPLE / WATER FILTRATION

Start with the filtration objective

Clarification, particle retention or another objective: the requirement must be defined before selecting stages and media. The product's characteristics and flow conditions then help determine the working flow rate and the monitoring needed.

Plan what follows filtration

The next batch is considered from the design stage. Draining, cleaning, replacing filter elements, access and connections to the tank or line are studied with your teams. Instrumentation and operating references are specified for the selected configuration.

Define together: product, batch volumes, objective, media and operator workflow.

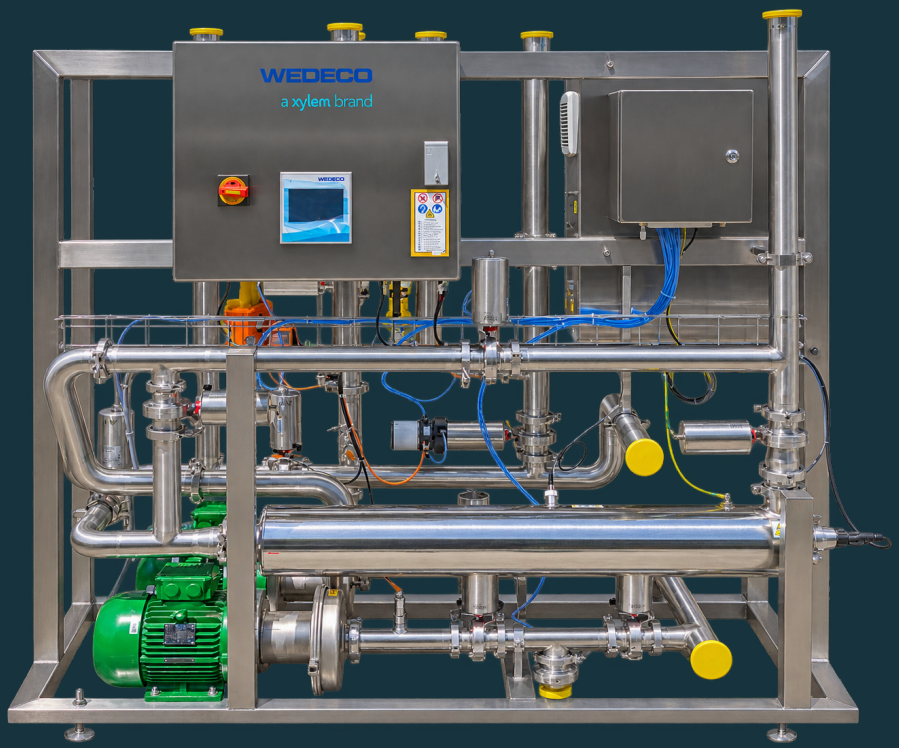
Detailed specifications for the manual configuration are established in the quotation; no single generic flow rate is assigned to the whole range.

03 / PROCESS WATER

The right water starts with the right question.

What will it be used for?

Rinsing water, water used in a recipe and water intended for another process application cannot be assessed from an equipment name alone. Its source, analysis and intended use provide the basis for a suitable solution.



EZF_W · AUTOMATIC / EcoF_W · MANUAL

Understand the available water. Define the water required. Design the path between them.

PROCESS WATER / AUTOMATIC

EZF_W

Connecting analysis with application.

The work begins with information: where does the water come from, what does its analysis show, what volumes are needed and where will they be used? These data give purpose to the treatment stages.

EZF_W brings together automatic process-water treatment and filtration. Stages and control functions are studied for the required water quality and the constraints of your network.



PROCESS WATER / INSTALLATION VIEW

Treatment within the network

Water may be stored, distributed, required by several machines or used during specific operating periods. The study considers flow rates, volumes, points of use, utilities and maintenance access. Interfaces with the existing installation are identified.

Monitoring with a purpose

Measurements, states, alarms and operating conditions are linked to the selected process. If ozone treatment forms part of the configuration, residual ozone monitoring and conditions of use are studied. Monitoring is selected to check the agreed criteria.

Define together: recent analysis, water source, uses, volumes, network and required criteria.

Treatment stages are selected according to analysis and use. Treatment equipment alone does not provide a general guarantee of potability or sterility.

PROCESS WATER / MANUAL

EcoF_W

Treatment with clear operating references.

On a site with manually controlled operations, water preparation raises the same fundamental questions: understand the incoming water, define its use and set the criteria to monitor.

With EcoF_W, the treatment and filtration configuration is studied for this way of working. The operator remains in control of the planned operations, with access, connections and operating references defined for the installation.



EcoF_W / PRESSURE GAUGES & FILTER HOUSINGS

Select the stages that matter

Treatment stages follow from the water analysis and its intended use. We examine the volumes to prepare, flow rates, available resources and distribution points. Additional equipment only has value when it fulfils an identified function.

Make room for maintenance

Daily operation and maintenance are planned together: access, consumable replacement, parameter checks, draining and restarting. The configuration specifies the operations expected and the conditions under which the treated water may be used.

Define together: water analysis, final use, proposed stages and maintenance arrangements.

The process, monitoring and limits of use are specified for each project. No universal quality level is associated with the range name.

04 / BEVERAGE CARBONATION

Sparkle has its own signature.

Defining the role of gas in the beverage.

A beverage's character is also shaped by its effervescence. To achieve the desired sparkle, the product, its temperature, pressure and target gas content must be considered together. Carbonation deserves the same care as every other stage of the process.



EZC3000 / DESIGN VIEW

EZC · AUTOMATIC CARBONATOR

From product supply to the filler, plan the conditions for carbonation.

BEVERAGE CARBONATION / AUTOMATIC

EZC

Your beverage. Your sparkle.

Wine or another beverage to be carbonated needs a solution suited to the product and its line. The EZC range incorporates automatically controlled carbon dioxide injection, with a configuration studied for the application.

The EZC3000 example is sized for a throughput of 3,000 L/h. It provides a reference for presenting the machine, without setting a general limit on Tiko Innov's offering. The required flow rate is defined at the start of the project.



EZC3000 / DESIGN VIEW

Define the desired result

Target gas content, incoming product temperature and available pressure guide the settings and instrumentation. In-line measurement, gas-content regulation and control functions are specified during the study according to requirements.

Find its place in the line

Product and gas connections, filler supply and cleaning are defined with the installation. The EZC3000 drawing shows a length of 1,200 mm, width of 980 mm and height of 1,976.7 mm. Maintenance clearances and connections must be allowed for in addition.

Define together: beverage, flow rate, temperature, pressure, target gas content and line interfaces.

EZC is a standalone carbonation module, distinct from EZ_FPC. The latter's thermal equipment and buffer tank are not automatically included with EZC3000.

05 / THERMAL TREATMENT & INTEGRATION

A controlled stage.
A coherent line.

Connecting product, temperature and time.

Heat, hold, cool: three verbs describe a sequence that requires careful design. The product and selected thermal protocol guide the study, while upstream and downstream equipment determine how it fits into production.



EZ_FPC / DESIGN VIEW

EZ_FPC · FLASH PASTEURISATION

A thermal profile cannot be selected independently of the beverage.

THERMAL TREATMENT / FLASH PASTEURISATION

EZ_FPC

The thermal profile meets the line.

A beverage, a flow rate, a holding time and a temperature: flash pasteurisation is defined from these data and the selected protocol. The EZ_FPC range is built to order, with capacity adapted to the project.

The EZ_FPC 4000 configuration illustrates a machine handling up to 4,000 L/h. This figure describes that example; it is not a capacity limit for the range or for Tiko Innov.



EZ_FPC / DESIGN VIEW

Organise the thermal sequence

In the example shown, the heat exchanger recovers part of the treated product's heat to preheat the incoming product. A regulated hot-water loop, supplied by a steam heat exchanger, provides heating. Holding is sized for the selected flow rate and profile, before final cooling with glycol water.

Prepare the interfaces

Product supply, discharge to the line, utilities and start-up or shutdown conditions are examined together. Carbonation and its regulation can be integrated into the configuration. A buffer tank is available as an option according to production arrangements.

Define together: product, time-temperature profile, flow rate, utilities and line operation.

The thermal protocol, tests and acceptance criteria are agreed for the product. The machine name does not provide a guarantee of shelf life.

SUPPORTING FUNCTIONS

Between the machines, the process continues.

A good installation also depends on its connections: a transfer, a pump setpoint, an exchange of information or access for an intervention. These functions complement the project; they are not separate machine ranges in this catalogue.

Transfer & pump

Connect tanks, supply equipment or organise a CIP return: flow rate, pressure, temperature and fluid properties guide pump selection and control. Mobile or fixed installation is defined according to use.



MOBILE PUMP / DESIGN VIEW

Automate & make operation clear

Sequences, parameters, measurements, alarms and the operator interface need to describe the same operation. We work with Schneider Electric or Siemens PLCs and define the exchanges required with existing equipment.



OPERATOR INTERFACE / PROCESS CONTROL

Integrate & develop

Connections, space requirements, access, maintenance and compatibility with the line are examined together. An upgrade may concern a subassembly or a function: its scope is defined before work begins.

COMBINE MACHINES, CENTRALISE CONTROL

A 17-inch HMI for a single machine; 27 inches for a combined system such as EZCIP + EZF. Centralised control can save up to €15,000 depending on configuration, compared with two separate control systems. The amount is specified in the quotation.

Ubiquity remote access is provided as standard on automatic EZ-range machines. Remote assistance requires site authorisation and an available connection.

OUR SERVICES

One contact.
Skills brought together.

Continuity in communication is part of how we work. Your contact follows the project and brings in the skills required. The services below address the different stages and needs of your installation.

01

Study & advice

Review the intended operation, question the available data and identify points to check. We help turn an intention into requirements that can be used for design.

02

Design & manufacture

Connect the process, mechanical design, materials, access and layout, then manufacture and assemble the agreed configuration.

03

Electrical engineering & automation

Define control functions, exchanges with the installation, parameters and operator-interface references in line with the process.

04

Installation & handover

Prepare connections, organise the agreed tests and support teams during commissioning and familiarisation with the equipment.

05

Maintenance & optimisation

Maintain the equipment, investigate the cause of a fault and study useful adjustments in light of actual operating conditions.

06

Retrofit & modernisation

Develop existing equipment after reviewing compatibility: controls, a subassembly or a function, within a defined scope.

The quotation specifies included services, options, exclusions and the allocation of responsibilities.

OUR APPROACH

Moving forward together. Step by step.

An installation is built through a series of decisions. Making them explicit helps preserve the purpose of the project, from the first discussion to on-site tests.

01	**Understand**	We discuss the product, circuits, volumes, uses and site constraints. Drawings, photographs and conversations with teams help describe the real situation.
02	**Define the scope**	Confirmed data are distinguished from assumptions. Points to check, interfaces and responsibilities are identified before the solution is finalised.
03	**Design**	Process engineering, mechanical design, electrical engineering and automation work together. Layout and access are considered alongside the machine's required functions.
04	**Manufacture & assemble**	The agreed configuration takes shape in our workshop. Planned checks and tests accompany this stage, according to the scope of supply.
05	**Commission**	Connections, agreed tests and handover allow the system to be assessed against the intended operation and selected acceptance criteria.
06	**Support what comes next**	Maintenance, adjustments and modernisation are considered in relation to the installation and its use. We remain your point of contact for studying its development.

SCOPE & INTERFACES

Clear boundaries make better projects.

A line often brings together several machines, several parties and a history of changes. Clarifying who supplies, connects, controls and checks each function helps delivery and prepares the way for testing.

The machine

Which equipment and subassemblies are included? Which functions are required? Accessories, instruments and options are identified in the configuration.

Product & fluids

Where do the circuits begin and end? Inlets, outlets, cleaning, draining and batch changes are described along with their connections.

Utilities

Electricity, water, heating, cooling and other required resources are checked against site availability and connection points.

Control & communication

Measurements, states, alarms, setpoints and communication with neighbouring equipment are defined so each system has the information it needs.

Layout & access

Delivery, passage through doors, connection, operation and maintenance must remain possible. Access constraints are discussed from the study stage.

Services & documentation

Installation, testing, training, documentation, maintenance and responsibilities are specified. Any work by third parties is identified.

This catalogue opens the discussion. The study and quotation describe the selected configuration and define the scope of supply.

PREPARING YOUR PROJECT

Start with what you already know.

You do not need a finished specification to get started. A description of the installation and the result you want can open the first discussion. We will then clarify the missing information.

01	**Product & objective**	Which liquid is involved? What would you like to improve, add or replace? A practical difficulty or a planned change is often a good starting point.
02	**Circuits & volumes**	Tanks, filters, filler, pipework: identify the equipment involved, batch volumes, known flow rates and operating periods.
03	**The site & its resources**	Available utilities, the proposed location, dimensions, access and shutdown opportunities help us prepare a solution that can actually be installed.
04	**The way you work**	Manual or automatic control, batch changes, cleaning, maintenance and exchanges with other equipment: describe the operating arrangements you want.

USEFUL DOCUMENTS, IF AVAILABLE

If available, include a drawing, a few photographs, a cleaning protocol, a water analysis or interface information. Also specify the tests and performance criteria you have in mind.

A useful first conversation is better than a perfect brief that never arrives.

IN YOUR PRODUCTION AREA

Start with a situation. Build a response.

The situations below are examples of needs to study, rather than performance promises or customer project references. They show how several functions can come together within one project.

At the winery

A batch needs preparing for bottling. Filtration is considered alongside the supply tank, filler, product-priming volumes and cleaning. The winery's schedule helps determine the line's operating arrangements.

At the brewery

A production change calls for a review of the circuits. The requirement may combine cleaning, filtration, pumping and control interfaces, taking account of production changeovers and equipment being retained.

On a juice or soft-drink line

The product and selected thermal profile guide the treatment study. Any filtration, product supply, cooling and packaging stages are examined alongside the available resources.

In liquid processing

A transfer, cleaning or control function needs to evolve. We start with existing equipment to define the scope of the modification and the tests to carry out.

Around process water

A new use emerges or the available quality needs better characterisation. Water analysis and the criteria for the final use guide treatment stages and monitoring.

CHOOSE YOUR STARTING POINT

Eight ranges. Your starting point.

A range name helps you find your way. The configuration is then defined according to the product, circuits, utilities and required level of control.

RANGE	APPLICATION / CONTROL	PAGE
EZCIP	**Cleaning in place** Automatic	06
ECOCIP	**Cleaning in place** Manual	07
EZF	**Beverage filtration** Automatic	09
EcoF	**Beverage filtration** Manual	10
EZF_W	**Process water** Automatic	12
EcoF_W	**Process water** Manual	13
EZC	**Beverage carbonation** Automatic	15
EZ_FPC	**Flash pasteurisation** Project-specific	17

Transfer, pumping, automation and integration can complement these ranges. For a requirement spanning several functions, see supporting functions on page 18 and services on page 19.

MAKING AN INFORMED DECISION

A clear proposal. Defined conditions.

A well-described project makes it easier to compare choices and prepare delivery. We specify commercial and technical conditions in the quotation documents so everyone knows the basis for moving forward.

A priced configuration

The quotation covers the agreed product, circuits, utilities, layout, control functions and services. Options are distinguished from the base supply.

Appropriate documentation

Conformity documents, material certificates and requirements for contact with product or water are specified according to the configuration and requirements applicable to the project.

A schedule to confirm

The lead time is confirmed in the quotation, taking account of required data, approvals, procurement and site availability for installation.

Warranty & support

The warranty is one year, under the contractual conditions specifying its start date, scope and exclusions. Remote assistance, where provided, requires authorised access and an available connection.

This catalogue presents an approach and examples. Performance, utilities, limits of use and acceptance criteria are confirmed for the configuration ordered.

TIKO **INNOV**

INDUSTRIAL ENGINEERING

LET'S DISCUSS YOUR INSTALLATION

Your next project starts with a conversation.

A product, a circuit, a difficulty or an idea for change. Tell us what is happening in your production area and what you would like to improve. We will take the time to ask the right questions.

+33 (0)4 94 99 83 79

societe@tikoinnov.com

www.tikoinnov.fr/en/

1125 chemin de la Chabotte
83460 Les Arcs · France

Design, manufacture & assembly
Les Arcs · Var · France

Tiko Innov · SAS · Share capital €1,000
SIREN 908 861 172 · SIRET 908 861 172 00025
VAT FR52 908 861 172 · RCS Draguignan