

Y M É L I A · W I N E E N G I N E E R I N G · S I N C E 2 0 0 7

Wine bottling preparation units

De l'expertise de la filtration et de l'avinage jusqu'à la fin de production : gestion des gaz management, additive dosing, sanitation, lot qualification and security, complete traceability.

Ymélia — who are we?

Founded in 2007 in Montpellier, within the SupAgro incubator, Ymélia is a wine engineering company born from the meeting of two complementary expertises: **agronomy and oenology** on one side, **industrial automation** on the other.

Our teams design, wire, program, manufacture and install our custom units in full. Internal R&D has led to several patents, including **Pervélyss™**, a unique technology for simultaneous dissolved gas management.

+20
years

of expertise

4

patents
incl. Pervélyss™

100%

custom-built
Every project is unique

More than a filtration skid

The term "filtration skid" does not capture what we design. Over twenty years of evolution, our units have integrated all critical operations between the transfer tank and the container: deep expertise in filtration and wine transfer, dissolved gas management, precise additive dosing, full line sanitation, lot qualification and process security, complete traceability.

It is a true **bottling preparation unit**.

EXPERTISE EN FILTRATION

PERVÉLYSS™

FULL LINE SANITATION

DOSING & ADDITIVE TRACEABILITY

DISSOLVED GAS MANAGEMENT

LOT QUALIFICATION & SECURITY

Functions integrated in all our units



Sterilising filtration

Deep expertise in filtration processes for the wine world: code 7 membrane cartridges, lenticular filters or combination depending on initial wine preparation. Alcohol content management, volume recovery, automated purges, integrity tests, nitrogen push at end of production.



Pervélyss™ — gas management

Patented Ymélia technology. Simultaneous adjustment of dissolved CO₂ and O₂ via membrane contactor, in a single operation. Unmatched precision and repeatability. Integrated directly into the skid for functional, spatial and economic gains.



Sanitation — CIP

Full sanitation — wine preparation and bottling line — according to our expertise and clients' quality requirements. Thermal sterilisation in closed circuit, masked time. Energy recovery expertise applicable across the entire installation.



Additive dosing

Precise in-line dosing of additives with dosing security and complete traceability. Gum arabic, SO₂, CMC, MCR and other liquid solutions — dosing after filtration, volumetric control, lot volume totalisation.



Automation

Schneider Electric PLC and electrical cabinet. 15" touchscreen. Variable frequency drives on all pumps. Endress & Hauser sensors, Anton Paar CO₂ sensor. All steps automatically sequenced.



Traceability & supervision

Embedded WEB server developed by Ymélia. Time-stamped process data: sterilisation curves, integrity tests, production data. Lot qualification and security. Accessible by work order or date, locally or via secure VPN.

The Ymélia difference

Our units are not assemblies of standard components. Every project starts with an in-depth working meeting to define the specifications. The 3D design, wiring, programming and on-site installation are carried out **entirely by our teams** in Vailhauquès (Hérault).



100% French manufacturing

Études 3D, câblage, automatisation et montage par nos équipes.

TM

Patented innovation

Pervélyls™: the only technology to manage CO₂ and O₂ simultaneously.



Systematic custom design

Sizing adapted to your throughput, your wines and your line.



Energy efficiency

Closed-circuit CIP, transversal energy recovery across the installation.

Integration with the bottling line

Our units are sized and controlled in direct coordination with the filler or monoblock. The flow rate adapts in real time to the filler's demand.

- ▶ **Bottles + bulk containers in parallel** — 125 l N₂ buffer, isobarometric holding.
- ▶ **BIB + bulk containers in parallel** — constant-pressure filling by nitrogen regulation.
- ▶ **Filler integrated into the sanitation circuit** — unified cleaning in a single cycle.

Isobarometric filling & instant carbonation

Ymélia specialises in isobarometric filling management, particularly in **instant carbonation** via Pervélyls™: precise CO₂ adjustment at the moment of filling, with no product loss and no variation between containers.

Our key strengths



Innovation

Colorimetry, alcohol content measurement, turbidity... We integrate the latest technologies to offer relevant functionalities to our clients.



Hygienic design

Dead zones reduced to a minimum, exclusive aseptic fittings (ISO 2852 clamp). Every component is selected for its sanitary quality.



Ecology

Heat recovery from compressors for hot water, closed-circuit CIP, optimisation of water and energy consumption.

Services & support



Supervision & traceability

Ymélia embedded WEB server. Time-stamped data: sterilisation curves, integrity tests, production by work order. Local or VPN access. ΔP alerts.



Remote maintenance

Secure remote access. On-site-free diagnostics. **1st year included** — €680 excl. VAT/year.



Preventive maintenance

Annual visit: actuators, sensors, pumps, seals, metrology, firmware. Quality report.



Audit & improvement

Annual data review. ΔP, cycle and energy analysis. Optimisation recommendations.

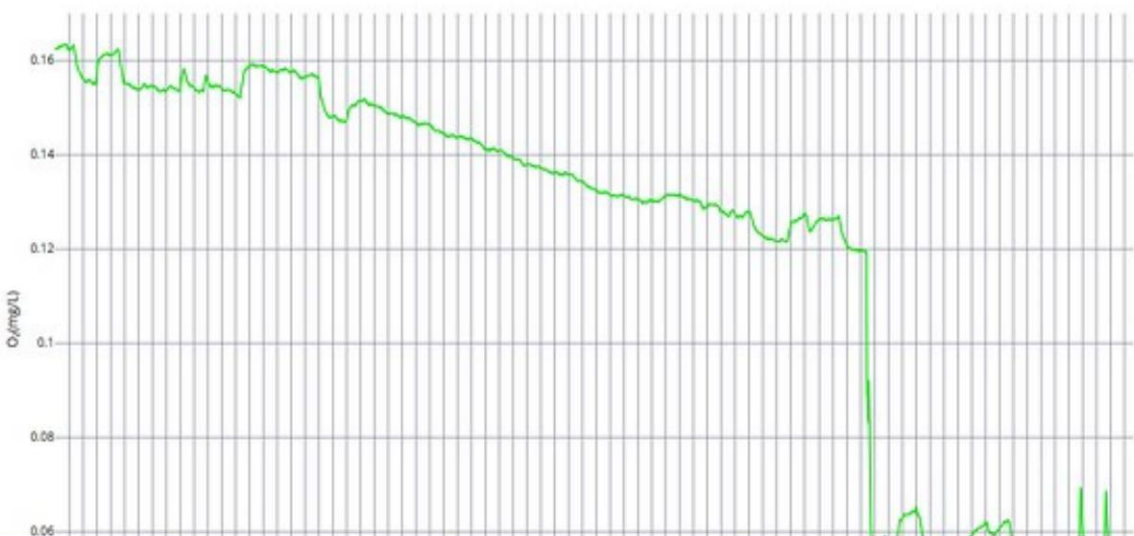
Supervision & traceability — Dissolved O₂ curve during production

History ΔP Stages Filter tests O₂ / CO₂ pH / Redox Turbidity

ymelia · WEB Supervision

01/10/2026 — Local or secure VPN access

Courbe de O₂ en fonction du temps



RANGE
LINÉA

Compact preparation unit

JUSQU'À 12 000 BT/H



The LINÉA is our **compact and fully automated** preparation unit, born from Swiss space constraints: multi-stage filtration, Pervélyls™ and CIP in a minimal-footprint skid. An integrated set of components ensures on-skid CIP: water mixer (regeneration and sterilisation) and dosing of 4 chemicals. Pervélyls™ cleaning is independent.

3étages
en ligne, by-
passables**5×30"**/ housing
code 7
bayonet**TM**Pervélyls™
CO₂ + O₂
integrated**2**dosages
intrants
prévus**NEP**circuit
fermé
temps
masqué

Key features: minimal footprint · tout en un seul skid · cartouches membrane code 7 ou filtres lenticulaires selon préparation initiale · alcohol content management et volume recovery · fast start-up · food-grade and Machinery Directive compliant.

RÉFÉRENCE CLIENT

Jodern Kellerei — Visp, Valais (Switzerland)

Context: Installation of a LINÉA unit on a glass line of **3,000 btl/h**. Alpine Valais wine estate — original testing ground for the LINÉA. Integrated Pervélyls™, 3×30" filtration, on-skid CIP.

3 000 BT/H

3×30"

INTEGRATED PERVELYLS™

ON-SKID CIP

PREMIUM RANGE
NEXUS

3D matrix architecture — market exclusivity

EXCLUSIF



The NEXUS is our **premium preparation unit with unique matrix architecture**. Unlike standard units, its housings are organised in a **three-dimensional matrix**: each housing, at each stage, can be independently selected and cleaned. **No competitor offers this architecture on the market.**

2×2housings
3D matrix
multiplexed**5×30"**/ housing
code 7 bayonet**NEP**individual
per housing
independent**Gestion**of clogging
auto housing switch

Key features: free selection of any housing at any time · automatic switch if clogging detected · individual CIP per housing without production stop · full position feedback on all valves · full process supervision · visually impressive, technically unmatched.

RÉFÉRENCE CLIENT

M. Chapoutier — Tain-l'Hermitage (26)

Context: Installation August 2021, commissioned September 2021. NEXUS unit NEXUS à **8 000 l/h**, 2 stages × 2 multiplexed 5×30" housings, Pervélyls™ 100 (143 m²) integrated, associated CIP, full supervision.

Measured results : O₂ dissous < **0,2 mg/l** · CO₂ adjusted from **0.4 to 1.5 g/l** (atmospheric filling).

8 000 L/H

2×2 CARTERS MULTIPLEXÉS

PERVELYLS™ 100 — 143 M²

FULL AUTOMATIQUE

→ Virtual tour: vr.preparation-du-vin.fr

CLIENT REFERENCE · NEXUS

M. Chapoutier

Tain-l'Hermitage — Rhône Valley · House founded in 1808 · In partnership with Perrier Bottling

8 000 L/H

PERVÉLYS™ 100 — 143 M²

COMMISSIONED SEPT. 2021



Unité NEXUS installée chez M. Chapoutier · Août–Septembre 2021

Installation configuration

Production flow rate	8 000 l/h
Filtration architecture	NEXUS — 2 stages × 2 multiplexed 5×30" housings
Cartridges	Code 7, double seals, bayonet
Pervélyls™	Pervélyls 100 — 143 m² de membrane contacteur
Filling type	Atmospheric · Perrier Bottling monoblock
NEP	Individuelle par carter + circuit unifié tireuse
Housing selection	Free and independent at each stage
Anti-clogging	Automatic switch to backup housing
Automation	Schneider Electric — embedded WEB supervision
Installation	August 2021 · Commissioned September 2021

Measured Pervélyls™ results

< 0,2
mg/l

Dissolved O₂ at outlet

0,4–1,5
g/l CO₂

Adjusted to wine (atm.)

Testimonial — Valentin Bosch, M. Chapoutier

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With now a year of hindsight, we are fully satisfied with the preparation unit proposed by Ymélia. Beyond the quality that is immediately perceptible — visually and over time in terms of performance — the functionalities brought by this tool are very advantageous. First and foremost, the integration of gas management via Pervélyls™ truly changes the way we work. There is also the filtration management itself, whether at the beginning of batches or during clogging episodes. This matrix architecture truly opens up new possibilities.

Valentin Bosch · Technical Manager, M. Chapoutier · Tain-l'Hermitage

→ 360° virtual tour: vr.preparation-du-vin.fr · Video: www.ymelia.com

Your project, our commitment

Every project starts with an in-depth working meeting: specifications, functional analysis, sizing. Our teams handle the complete cycle — 3D design, wiring, programming, on-site installation — and support you over the long term through our maintenance and supervision contracts.

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