Omnia Technologies

Enabling Evolution

Wine technologies

WHO WE ARE

Leading Group in the design, manufacture and services of machinery for the wine, spirits, beer, beverage, dairy, fats and proteins industries, it is also developing solutions for the pharmaceutical and medical sectors.
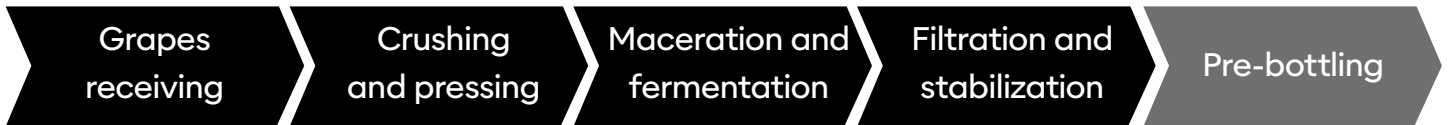
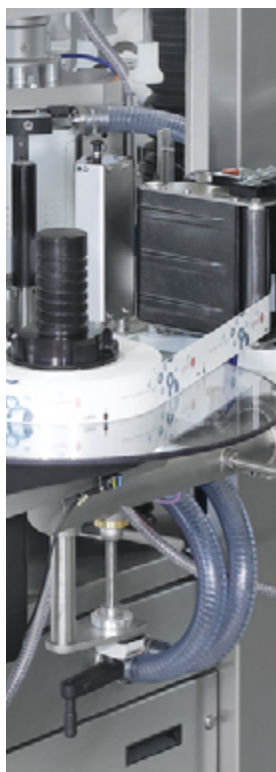## WHAT WE DO

We provide to our customers:

1. **End-to-end integrated solutions**, from process to final packaging. We are a single partner providing customers turnkey solutions and sustainable automation lines.

2. **Tailor-made solutions**, with a high degree of machinery customization, designed around a set of industrialized based modules.

3. **Technical Support**, we are committed to support our customers through 180 people dedicated to the service team, located all over the world.

From **processing** to final **packaging**

Processing	Pre-bottling

Grapes receiving	Crushing and pressing	Maceration and fermentation	Filtration and stabilization	Pre-bottling

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DELLA TOFFOLA · SIRIO ALIBERTI · GIMAR · F2 · parmeare · PADOVAN TMCI PADOVAN · INNOTEC · WIN&TECH

The Group has developed an **integrated offering** for the entire winemaking process, from reception to packaging.

Bottling	Packaging	Waste water treatment

Bottling	Labelling	Packaging	Palletizing	Waste water treatment

bertolaso · MAR.CO. · Zitalia · omb	APE packaging & palletizing	DELLA TOFFOLA

![Omnia Technologies logo]

THE GROUP'S PRESENCE IN THE WORLD

Headquarters: Treviso, Italy

- ◉ Productive Units
- ◉ Commercial & Service Offices
- ◉ Sales & Service partner

A global company with a strong sales and after-sales presence. Close to those who produce, anywhere in the world.

THE GROUP'S NUMBERS

28	10	90
PRODUCTIVE UNITS	COMMERCIAL & SERVICE OFFICES	COUNTRIES
30.000	+200	+1.400
INSTALLATIONS	R&D & ENGINEERS	PEOPLE

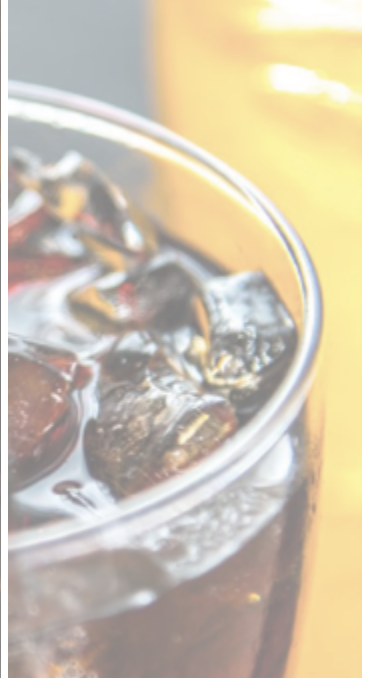# THE GROUP'S APPLICATIONS

Wine

Spirits

Beer

Beverages

Plant based beverages

Dairy

Fats, gelatines, cocoa butter

Pharmaceutical

TOWARDS THE FUTURE

Our vision and values to enable evolution

Our Vision

We want to be a leader in technologies for the food, beverage and pharma, inspired by the great Italian tradition as well as by our innovative vocation for sustainability, always serving our customers, our people and our communities.

Our Values

01. Technology
Innovation

With more than 200 engineers and technical specialists, we design and develop the most advanced and sustainable automation technologies.

02. Sustainability
Respect

Our purpose is to integrate sustainability into every aspect, contributing to the achievement of the global goals of the 2030 Agenda. The strategic plan is based on 4 basic pillars - Corporate, People, Impact Reduction, and Innovation - that expand into 20 macro goals, currently implemented by 90 initiatives.

03. Service
Accessibility

We are committed to providing and supporting our customers with 180 people in the service team mobilized around the world.

We are committed to being active promoters of a sustainable growth model, starting by valuing people, territory and the communities of which we are a part, and promoting the development of our partners and clients.

Scan the qrcode, discover our
Sustainability Report 2022.

70
PATENTS

20
ESG MACRO TARGETS

180
PEOPLE IN THE SERVICE TEAM

01.
Digitalization of the winery

All Omnia solutions can be integrated with the new software
for complete management of production flows: from receiving
to packaging under the terms of Industry 4.0 and 5.0

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02.
Some of our sustainable products

Active Innovation Strategy with ~200 Engineering and Research FTEs

In production

New ceramic membrane for beverage filtering

Low room temperature **de-alcoholization unit** with vegetative water recovery

System to reuse water multiple times in washing cycles

Carbon Neutral distillery, which uses MVR (Mechanical Vapor Recompression) for completely green and sustainable production

Plastic wrapped labels without any glue between the label and the bottles

Smart corking, allowing single cap monitoring and predictive maintenance

30+%
reduction of **energy consumption**

75%
of **water savings**

target of **100% energy from renewable sources** by 2030

achieve **zero waste** by 2030

03.
Our Service offer

- **Technical Support**

We are committed to supporting our customers with 180 people in the service team mobilized around the world.

- **Spare parts**

We offer a wide range of original spare parts and a team dedicated to repair services.
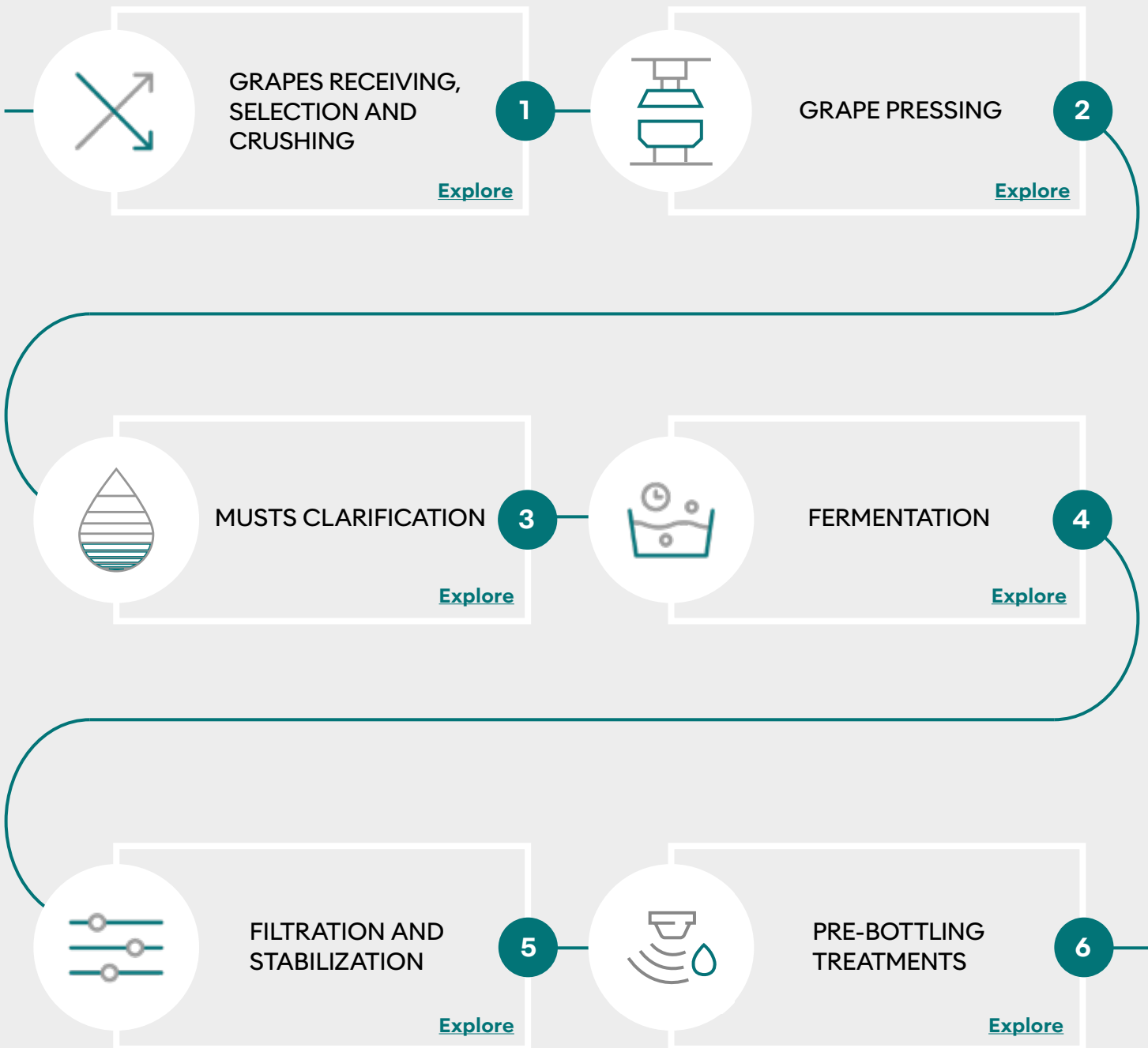
- **Machinery upgrade**

We know that technological progress is constantly evolving, and we want our customers to benefit from it.
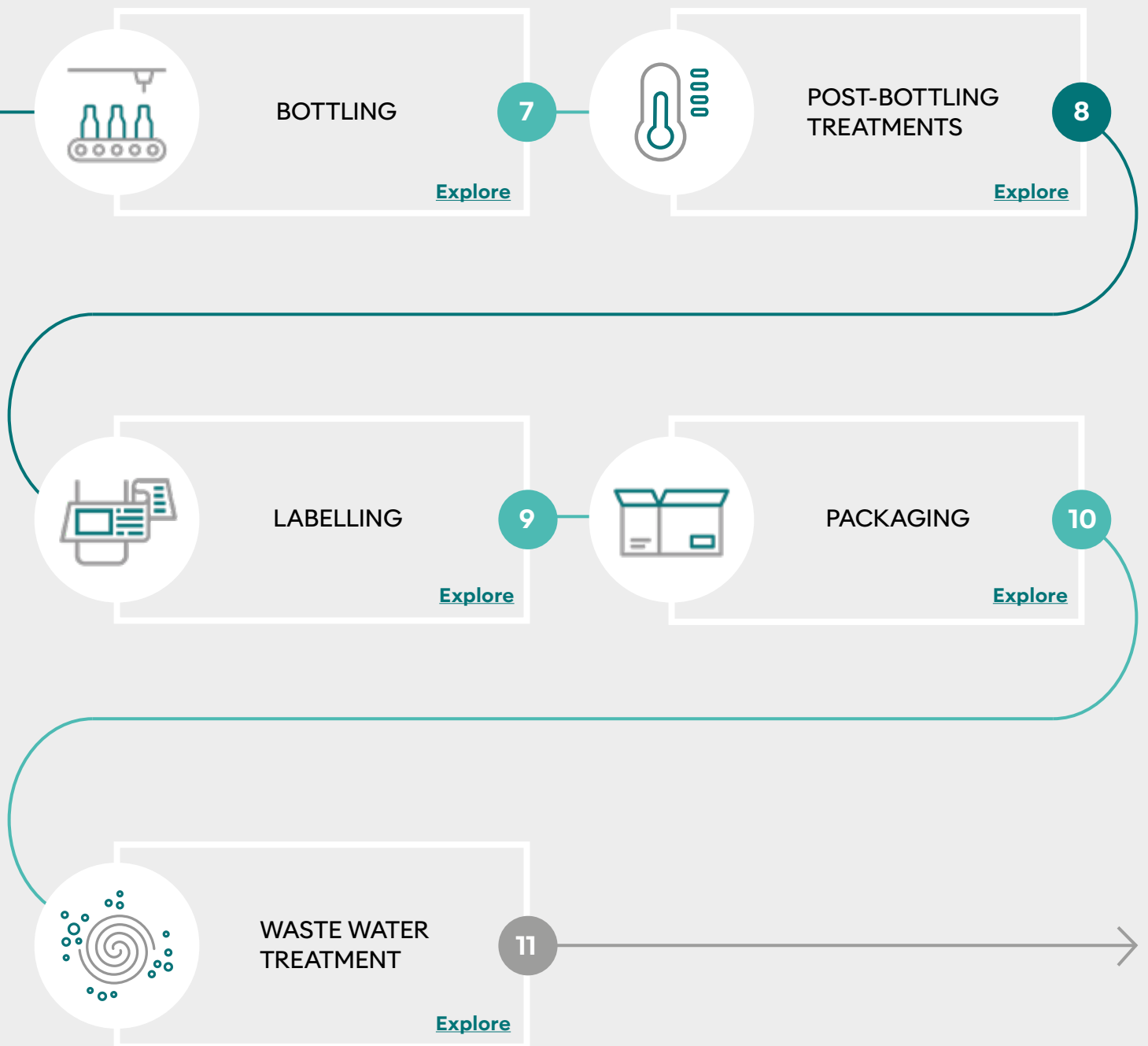
- **Training**

We believe that knowledge is the key to success, which is why we offer tailored technical training courses.

Wine production

GRAPES RECEIVING, SELECTION AND CRUSHING **1**

Explore

GRAPE PRESSING **2**

Explore

MUSTS CLARIFICATION **3**

Explore

FERMENTATION **4**

Explore

FILTRATION AND STABILIZATION **5**

Explore

PRE-BOTTLING TREATMENTS **6**

Explore

BOTTLING

7

Explore

POST-BOTTLING TREATMENTS

8

Explore

LABELLING

9

Explore

PACKAGING

10

Explore

WASTE WATER TREATMENT

11

Explore

1 GRAPES RECEIVING, SELECTION AND CRUSHING

DELLA TOFFOLA

- **Unloading, sorting, destemming-crushing** and by-product management
- Complete systems
- **Manuals** or **automatic**

▶ **Range: from 5 ton 130 ton/h**

→ **Explore the full range of products**

2 GRAPE PRESSING

DELLA TOFFOLA

- Quality
- Oxidation reduction
- Time cycles reduction up to 50%
- High speed and loading capacity
- Continuous and discontinous operations
- **Standard presses, open and closed**
- **Inert press**
- **Ampelos, smart press** and fully automatic
- **Continuous pressing center**

Optionals:

- **Weight cells**
- **Colorimeter** for grape juice selection
- **Conductivity meter** for washing solutions

▶ **Range: from 1.2 to 70 m³ volume**

→ **Explore the full range of products**

3 MUST CLARIFICATION

- **Batch or discountinous flotation units**
- **Continuous flotation units**
- Fully automatic and controlled by PLC

▶ **Range: from 5 to 60 ton/h**

→ **Explore the full range of products**

4 FERMENTATION, REFINING AND STORAGE OF WINES AND SPARKLING WINES

- Complete plants for **vinification, fermentation** and **storage control** of: must, wine and crushed
- **Autoclaves for sprakling wines in stainless steel** or **carbon** steel
- Tanks are made in our productive units or on-site

Optionals:

- Automatic temperature control and pump-over

▶ **Range: from 1 to 2.500 m³**

→ **Explore the full range of products**

4 THERMOVINIFICATION

- High **heat** and **tannin extraction**
- High **energy recovery**
- Low lees production (3-5% v/v)
- Cycles 24/7
- Process is fully automatic

▶ **Range: from 5 to 60 ton/h**

→ **Explore the full range of products**

5 AUTOMATIC TEMPERATURE CONTROL

- Complete plants
- **Fermentation temperature control** and batch tartaric stabilization
- **Thermostatic system with PLC**

▶ **Range: from low to milions of kcal/h**

→ **Explore the full range of products**

5 TRADITIONAL FILTRATION

DELLA TOFFOLA   **PADOVAN** TMCI PADOVAN

- Medium and high solids **vacuum filtration**
- **Pressure** (flooding) for liquids with low solid content
- **Sheet filtration**, brilliant or sterilizing

▶ **Range: from 1 to 100 ton/h**

→ **Explore the full range of products**

5 CROSSFLOW AND ORTHOGONAL FILTRATION

DELLA TOFFOLA   **PADOVAN** TMCI PADOVAN   **parmeare**

- Filtration of must, wines and sparkling wines with **filters having ceramic membranes, hollow fiber and organic spiral**
- Sediment filtration with **ceramic filters tubular static or rotary discs**
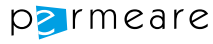- Wines and sparkiling wines filtration with **orthogonal organic membrane systems**

▶ **Range: from 1 to 100 ton/h**

→ **Explore the full range of products**

5

ULTRAFILTRATION, NANOFILTRATION, OSMOSYS
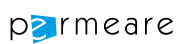
PADOVAN
TMCI PADOVAN

parmeare

- **Ultrafiltration** automatic, manual, semi-automatic or fully automatic plants
- **Nanofiltration**
- **Reverse osmosys**

▶ **Range: from 50 l/h to 60 ton/h**

→ **Explore the full range of products**

5

CONTINUOS TARTARIC STABILIZATION

PADOVAN
TMCI PADOVAN

parmeare

- **Automatic** low-temperature systems, operating with glycol or direct gas evaporation
- Coupled with **hydrocyclones** and **orthogonal micro-filters** for separation of tartrates
- Suitable for still or pressure-tested sparkling wines
- **Ion exhange resin systems** for ambient temperature stabilization

Optionals:

- **PED tested**
- **Blending**

▶ **Range: from 1 to 60 ton/h**

→ **Explore the full range of products**

6 DEALCOHOLIZATION

PADOVAN TMCI PADOVAN   **parmeare**

- Partial and complete dealcoholization systems
- Two-stages automatic process: nanofiltration unit combined with stripping column
- Achievement of an alcoholic content up to **<0.5% alc total**
- Extreme respect of **aromas**
- Total absence of cooked flavors
- High quality **alcohol recovery** 70-80% alc
- **Complete recovery of vegetation water** (Libero Wine)
- Process obtained at ambient temperature

▶ **Range: from 10 to 80 ton/day**

→ **Explore the full range of products**

6 CONCENTRATRION AND DESULPHURATION

PADOVAN TMCI PADOVAN

- **Forced circulation, falling film or scraped surface evaporation** plants
- Desulphurizer with low consumption of energy and water
- **Mechanical steam recompression** for their reduction
- Reduced holding time ad high temperature
- Total condensate recovery

Optionals:

- Aroma recovery.
- TRV (thermal vapor recompresser): thermodynamic steam/vapor compressor.

▶ **Range: from 1 to 60 ton/h**

→ **Explore the full range of products**

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6 DEAERATION, MIXING AND CARBONATION

PADOVAN
TMCI PADOVAN

- Plate heat exhanger for cooling
- **Static mixers combined** with porous candels sintered stainless steel
- **Monoblock configurations** for wine based beverages
- **CO_2 gassing**:
  - Magnetic and massic flowmeters
  - Carbonation and holding
  - Digital signals BUS & NET

Optionals:

- Refractometric degree control
- In-line O_2 and CO_2 concentration
- Vacuum deaeration or double vacuum deaeration or with selective membranes

▶ **Range: from 1 to 60 ton/h**

→ **Explore the full range of products**

6 DISTILLATION

FRILLI

- Customized approach
- **Sustainability / Carbon neutrality**
- Design / Engineering
- Production and supply
- **Revamping**
- Assembling, commissioning and training

▶ **Range: from 1 to 2.000 hl/day**

→ **Explore the full range of products**

6 SANIFICATION

PADOVAN
TMCI PADOVAN

- **Manual, sami-automatic** or **fully automatic CIP**
- With or without PLC
- **From 1 to 5 tanks**
- Steam or electrical heating

Optionals:

- Conductivity meter
- Peroxide dosing
- Simultaneous operation with double or triple feeding line

▶ **Range: from 1 to 60 ton/h**

→ **Explore the full range of products**

6 PRE-BOTTLING TREATMENT

INNOTEC   **WIN&TECH**

- **Microfiltration, ultrafiltration**
- Automatic plants
- **Tailor-made layout**: single line, double line alternate 24/7
- Full recovery of starts and oenological dosages
- Sustainable systems with reduced environmental impact
- Closed-loos washing

▶ **Range: from 2.000 to 60.000 bph**

→ **Explore the full range of products**

7 BOTTLING

bertolaso

- Solutions for still and sparkling wine
- Different types of glass, cans and PET
- **Stand-alone** machines or **integrated monoblocks**
- **Gravity filling, light pressure or isobaric**

▶ **Range: from 1.000 to 60.000 bph**

→ **Explore the full range of products**

8 PASTEURIZATION

PADOVAN
TMCI PADOVAN

- **Tunnel pasteurizer, cooler, warmer**
  - APUCS: automatic pasteurization units control
  - WMS: water management system for total reduction of water consumption
- **Flash pasteurizers**
  - APUCS
  - High thermal recovery
  - Low need of services (water, air, steam)
  - Removable top coverings
  - Inclined basins
  - High strenght belt conveyor
  - Recording valves, exchangers, circulation pumps and geared motors
  - High energy efficiency
  - PLC integrated with SCADA and Teleservice

▶ **Range: from 1.000 to 120.000 bph**

→ **Explore the full range of products**

9 **LABELLING**

Zitalia **omb**

- **Automatic labellers**
- **Cold-glue or self-adhesive**
- High efficiency
- 24/7
- Low maintenance costs

Optionals:

- **Comby** or **Modular** version
- Multiple labelling systems on same carousel
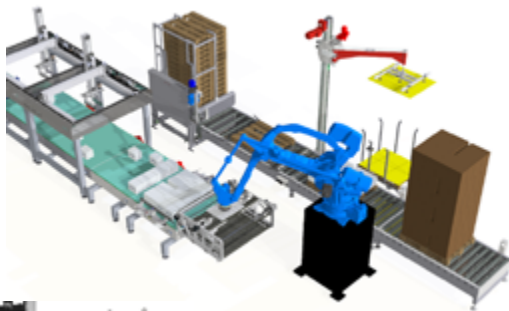
▶ **Range: from 500 to 60.000 bph**

→ **Explore the full range of products**

10 **PACKAGING**

APE
packaging & palletizing

- **Monoblock** machines
- **Secondary packaging, depalletizers and palletizers**
- **Modular or robotic** solutions
- Various bottle formats
- Solutions for lying bottles, cluster, baskets, bag in box
- **Decraters** and **casepackers** for glass return

▶ **Range: up to 24.000 bph**

→ **Explore the full range of products**

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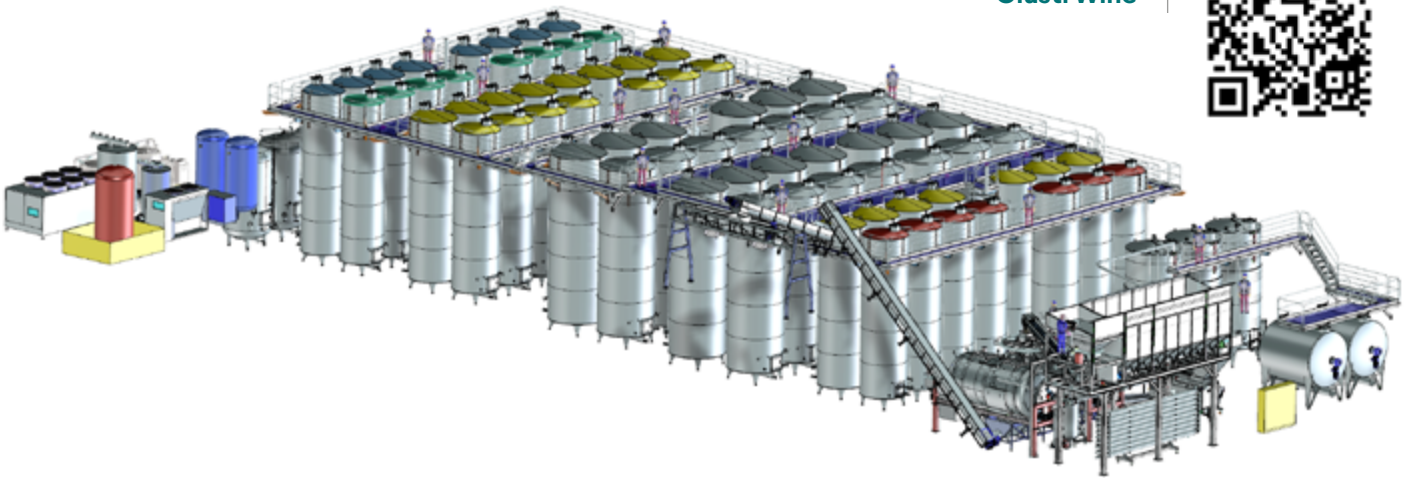**11** **WASTE WATER TREATMENT**

DELLA TOFFOLA

- Disinfection (Chlorine / Ozone)
- Sand / Charcoal filtration
- Resin softening
- Chemical / physical treatments
- Aerobic biological treatments
- Anaerobic biological treatments
- Sludge dewatering

▶ **Range: up to 500 m³/day / 50.000 lth**

⊙ **Explore the full range of products**
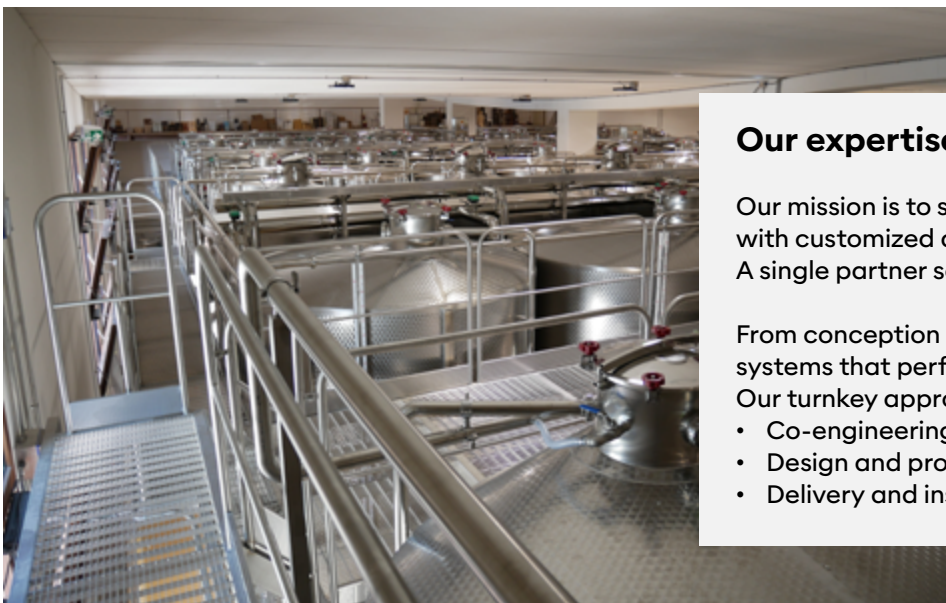
**Video winery
Giusti Wine**

Our complete tailor-made and turnkey installations

From grape receiving to packaging stages

Video cantina Soave
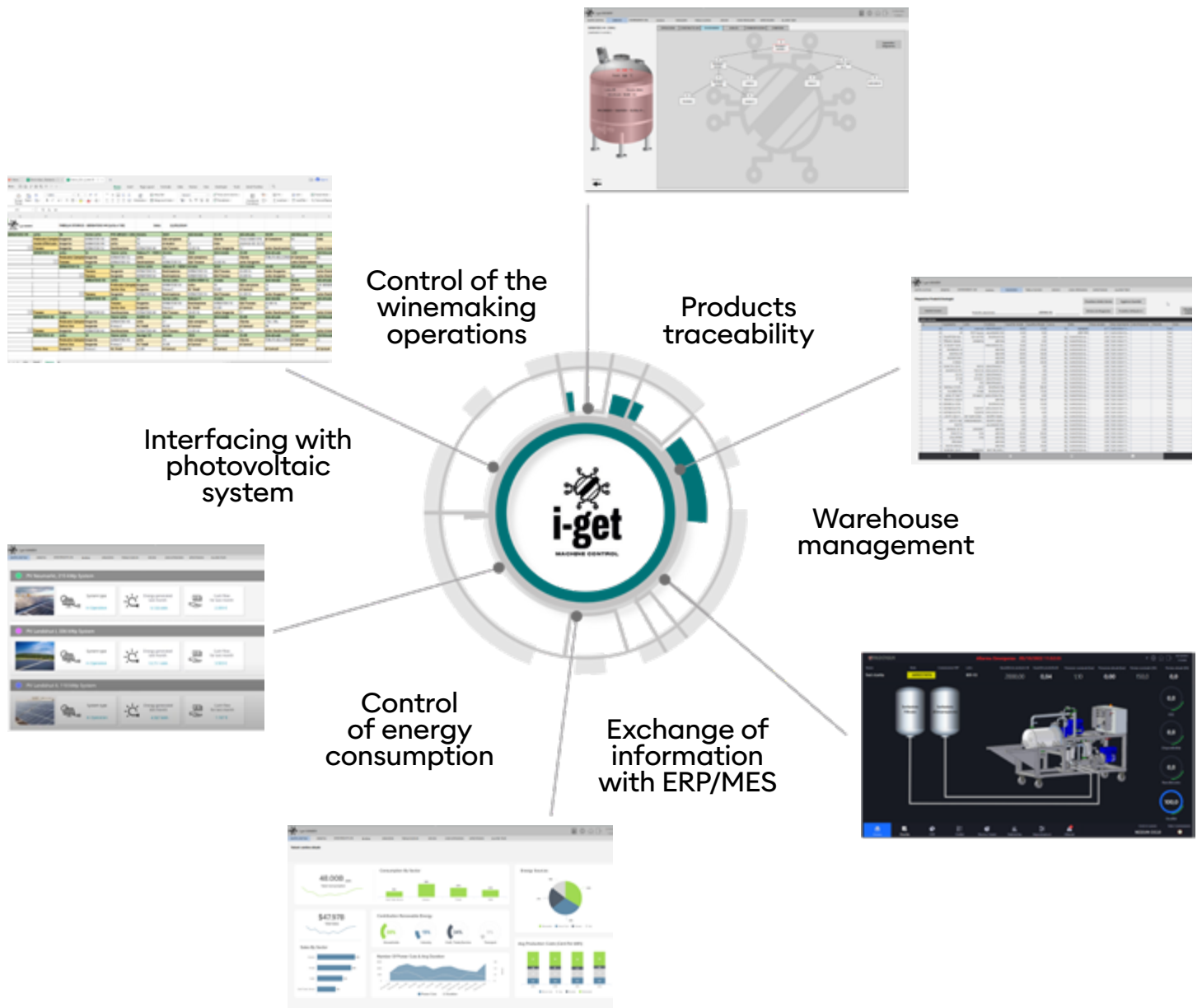

Our expertise in engineering

Our mission is to support our clients in their growth with customized and sustainable solutions.
A single partner serving the customer.

From conception to execution, we design complete systems that perfectly integrate into your operations.
Our turnkey approach:
• Co-engineering
• Design and production
• Delivery and installation

Our winery automation and digitalization system

- Innovative software for real-time process simplification and efficiency
- Predictive management of maintenance operations
- Customized implementation on specific needs of the customer

Control of the winemaking operations

Products traceability

Interfacing with photovoltaic system

i-get
MACHINE CONTROL

Warehouse management

Control of energy consumption

Exchange of information with ERP/MES