

# Company Profile Company Profile



We aspire to become a benchmark in the winemaking industry, recognised for our ability to transform wineries into highly efficient environments.

Our mission is to provide innovative solutions that optimise productivity, enhance wine quality and reduce labour costs, while also minimising reliance on human resources.

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We are committed to supporting our clients at every stage, from the initial consultation to long-term maintenance of systems, offering a comprehensive range of winery solutions supported by an attentive and reliable after-sales service.

INNOVATIVE WINEMAKING SOLUTIONS SINCE 1973



# These are our values **BALANCED AND** MINDFUL SUPPORT We are suppliers, but first and foremost advisors, for our clients. We guide them in their decisionmaking, taking a careful and well-considered approach, ensuring that every choice is informed and geared towards maximum value. **SENSE OF BELONGING** TO THE PROJECT Our bespoke solutions stem from our excellent listening skills and genuine sense of belonging to our clients' projects. Our responsibility, passion and professionalism allow us to combine experience, technology and innovation to create effective, balanced and tailored solutions. RELIABILITY For us, every promise we make to our clients is a commitment. The results guaranteed by our solutions are the outcome of constant dedication and our commitment to providing support from initial testing through to the end of the system's life cycle.



#### WHO WE ARE AND WHAT WE DO

Sordato is an innovative company providing advanced and sustainable technological solutions for the winemaking industry, ensuring efficiency, quality and reliability.

Our aim is to support wineries by providing innovative systems and dedicated support services, **contributing to their success through a continuous focus on excellence** and maximum client satisfaction.

**Specialising in the interconnection of specific winemaking machinery**, we manage every stage of the process, from grape reception to bottling.

We integrate all machinery with the necessary services to optimise performance, ensure reliability and reduce consumption.



#### **PLANNING**

We assess the client's production process or planned expansion, sizing all necessary utilities to ensure seamless operation. We design and provide detailed cost estimates for all process systems, enabling the client to assess the investment as a whole. Thanks to modular solutions tested over the years, we offer automation and service delivery machines that are natively integrated with one another.



#### SYSTEMS AND AUTOMATION

We design and install bespoke systems for the winemaking industry, delivering innovative and customised solutions for every stage of the production process. We handle every detail to ensure efficiency, reliability and the highest quality standards. We offer cutting-edge automation solutions for comprehensive management of the winemaking production cycle, optimising every stage, minimising human intervention, enhancing operational efficiency and reducing error margins.

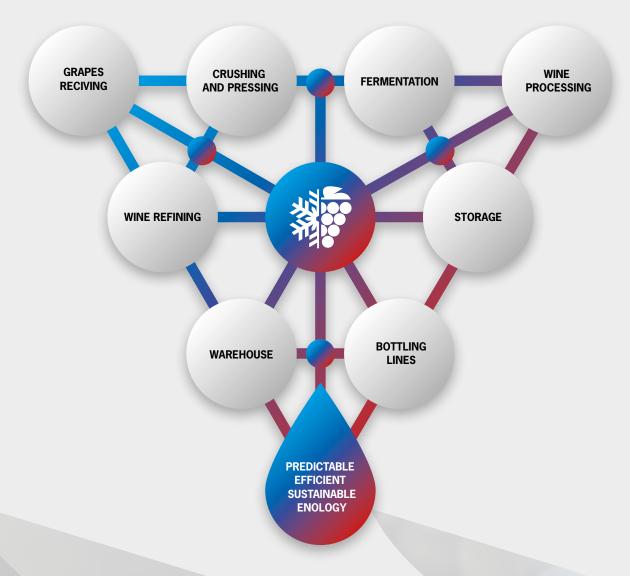


## TECHNICAL SUPPORT AND REMOTE ASSISTANCE

We ensure the promised results with comprehensive after-sales support, extending from final testing through to the entire lifespan of the system, backed by real-time remote management. Our team of highly skilled internal and external technicians is ready to assist at every stage of the production process.



# We specialise in the interconnection of specific winemaking machinery.



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#### PRODUCTION PROCESS



## Reception and sorting of crushed grapes and must

- Automated management of grape and must reception
- Automatic regulation of each machine's operation by simply setting the flow rate of the receiving line
- Automated separation and sorting of crushed grapes and must
- Time savings and reduced risk of contamination, preserving the product's integrity
- Savings on operating costs due to reduced labour requirements thanks to cutting-edge automation
- Lower reliance on human resources, ensuring continuous and reliable production



## Distribution of crushed grapes, must and wines

- . Automatic transfer with efficient product handling
- Control and optimisation of flows to subsequent processes
- Optimised distribution among tanks and systems
- High quality standards maintained throughout all stages of winemaking
- · Improved efficiency and less manual intervention
- Lower labour costs



#### In-line product dosing

- · Precise and controlled in-line dosing
- Intuitive, safe and configurable automation
- Real-time monitoring
- Optimisation of labour costs with less manual intervention

#### **PRODUCTION PROCESS**





## Emptying and cleaning of product transfer lines (PIG)

- Recovery of up to 99% of product
- . Elimination of waste removal costs
- Reduced water consumption thanks to mechanical cleaning
- Optimised investment with a single transfer line for multiple products
- Greater efficiency and reduced reliance on human resources



## Automatic washing of winery systems and machinery (CIP)

- Fully automated process, from initial cleaning to final rinse
- Pre-set washing programs
- Complete hygiene with machinery and piping ready for use, eliminating contamination risks
- Water savings through rinse water recovery
- · Optimised running costs with less human intervention



## **NUTRI GENIUS**

#### **Automatic nutrient dosing**

- Precise dosing of nutrients (liquid or powder, organic or inorganic) for fermentation tanks.
- Full automation of the fermentation process with real-time reporting and monitoring of sugar and alcohol levels
- · Controlled macro-oxygenation for optimal fermentation.
- Enhanced operational safety and reduced risk of accidents.
- Limited manual intervention, reducing errors and labour costs.
- · Quick and easy cleaning.



#### **THERMOREGULATION**



## Chillers, heat humps and multi-purpose thermo-chiller units

- Versatile packaged units for cooling, heating or both simultaneously.
- Wide range of power outputs to meet all operational needs.
- Precise temperature control at every stage of the winemaking process.
- Customisable accessories for specific needs, with options for low temperatures, noise reduction and corrosion resistance.
- Heat recovery for water heating and CO2 emissions reduction.
- Installation according to safety standards and integration with existing systems, ensuring reliability and longevity.



# Smart chillers for cooling only or in heat pump mode

- Compact packaged units for cooling or combined heating/cooling with automatic distribution.
- Automatic flow regulation to maintain a constant pressure.
- Operational flexibility to adapt to various production processes.
- Reliability and durability ensured by high-quality
  materials
- Precise temperature management with optimal performance and a space-saving design.
- Simple installation and maintenance, with workshop testing.



#### **Pumping stations**

- Compact, pre-assembled units, ideal for outdoor installation.
- Automatic modulating distribution of chilled and/or heated fluids.
- Instant flow rate adjustment to maintain a constant pressure.
- Modular and flexible operation for any production process.
- Reliability and low consumption ensured by high-quality materials.
- · Quick and simple installation with workshop testing.

#### **THERMOREGULATION**





## Systems for cold/heat distribution and insulation

- Proper sizing to meet winery operational needs
- · Long-lasting reliability
- High-quality materials for superior corrosion resistance
- Insulation to reduce heat loss and prevent condensation problems
- Insulation finishing with various solutions to suit different functional and aesthetic requirements



#### **Product cooling**

- Rapid and uniform cooling for crushed grapes, musts and wines using wide-bend tube-in-tube, horizontal or vertical multi-tube and plate heat exchangers, all in stainless steel
- Use of nitrogen to facilitate the flow and emptying of exchangers.
- High energy efficiency due to quality materials and insulation.
- Greater control and fluidity in the winemaking process.
- · Reliability and durability, ensuring product quality.



#### **Grape cooling chambers**

- Rapid and uniform grape cooling with high heat exchange.
- · Consistently optimal humidity to preserve grape quality.
- · Integration with other winery cooling systems.
- High-efficiency fans for even cold air distribution.
- . High-quality materials for durability and reliability.
- · Low maintenance and low running costs.

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#### **THERMOREGULATION**



# Monitoring and extraction of CO<sub>2</sub> in wineries

- Systems for continuous monitoring of CO<sub>2</sub> levels during fermentation processes, ensuring a safe working environment and compliance with current regulations
- Operator safety with visual and audible alarms that indicate when the critical CO<sub>2</sub> threshold is reached
- Solutions for the extraction of accumulated CO<sub>2</sub> in the winery or directly from the vents of fermentation tanks
- Automated monitoring and CO<sub>2</sub> extraction integrated with the Wine Controller supervision system



#### **Automation systems**

- Electrical control panels to optimise every stage of the winemaking process, from fermentation to the finished product
- Simplified management with maximum system automation
- · Safe and easily configurable automation
- · Precise control of all operations
- Reduction in process management costs, optimising all stages of work
- · Consistent guarantee of repeatable results



### **WINE CONTROLLER**

#### Supervision and remote management system

- Centralisation, recording, monitoring and real-time
- control of all stages of the production process

  Guaranteed enhanced performance tailored to the various stages of the process
- Simple and intuitive interface with the "Wine Controller" software
- · Improved efficiency and process traceability
- Alarm notifications
- Reduced environmental impact and optimised use of energy resources, employing renewable energy sources such as photovoltaic and solar thermal panels

#### **ROOM CLIMATE CONTROL**





#### Storage and ageing rooms

- Custom solutions for storage and ageing in bottles, tanks or autoclaves.
- Automation for precise temperature and humidity control, with continuous air regulation.
- Uniform air distribution via ducting made from custom materials (painted aluminium, galvanised sheet metal, stainless steel, copper, fabric, insulated panels).
- Optimal and consistent preservation of product quality during ripening.



#### **Bottling rooms**

- Tailored solutions to meet the specific needs of bottling rooms.
- Automation for precise control of temperature and key parameters.
- Continuous air monitoring and management for consistent conditions.
- Optimised air distribution via ducting made from various materials (painted aluminium, galvanised sheet metal, stainless steel, copper, fabric, insulated panels).
- Stable environment to preserve product quality during bottling.



#### Barrel and cask ageing rooms

- Custom solutions for barrel rooms, with automated monitoring and control of key parameters.
- Controlled temperature and humidity year-round, ideal for barrel ageing.
- Precise humidity regulation with steam injection to prevent condensation and mould.
- Uniform air distribution via ducting made from custom materials (painted aluminium, galvanised sheet metal, stainless steel, copper, fabric, insulated panels) to meet both functional and aesthetic needs.
- Optimal preservation of wine quality during barrel ageing.



#### **ROOM CLIMATE CONTROL**



#### Wine shops and tasting rooms

- Custom solutions for a comfortable and high-quality environment.
- Precise control of temperature and humidity for optimal wine preservation and ambient comfort during tasting experiences.
- Aesthetic and functional integration with adaptable solutions to match the style of the space.



### **OXYON by SORDATO®**

- · Continuous air sanitisation system
- Breakdown and elimination of viruses, mould, bacteria, pollen and other chemical and organic contaminants
- Neutralisation of unpleasant odours
- · Enhanced ambient comfort
- Flexible installation with wall-mounted or integrated air distribution system set-ups



## **Dehumidification for processing and storage areas**

- Custom solutions to meet dehumidification needs, maintaining consistent humidity levels in processing and storage areas
- Reduced risk of mould and contamination due to a controlled environment
- Versatile installation, adaptable to various types of spaces, including existing ones, ensuring flexible application

#### **TECHNICAL SERVICES**





#### Compressed air and nitrogen

- Air compressors designed to meet the specific needs of wineries, providing compressed air for all processes
- Nitrogen generators tailored to the operational requirements of wineries, from storage to sparkling wine production and bottling
- Safety and purity of technical gases through advanced filtration systems
- Technical gas distribution via fixed systems throughout the winery to ensure a continuous supply of compressed air and nitrogen.
- Energy savings through systems used to recover heat generated by air compressors



#### Water purification systems

- Automated systems for water purification using ultrafiltration, followed by a reverse osmosis treatment, complete with CIP for washing and sterilisation, with remote management capabilities.
- Softening and mass filtration systems to ensure highquality water.
- Distribution of treated water



#### Water supply stations

- Comprehensive stations complete with storage tanks and pressurisation systems designed to handle peak demand, ensuring correct flow rates and pressures for winery use
- Primary drinking water treatment using mass filtration and resin softening systems, complete with sanitising dosing systems
- · Primary water distribution



#### **TECHNICAL SERVICES**



## Domestic hot water production cylinders

- Insulated storage tanks for domestic hot water, generated using heating elements or other heat sources available in the winery
- Safe domestic water management with periodic antilegionella cycles activated by built-in heating elements
- Hydraulic systems for transporting the hot heat transfer fluid from the production unit to the dedicated cylinder



## Production of high-temperature domestic hot water

- Heat pump unit for heating domestic water to high temperatures, pre-heated in the storage cylinder
- Insulated storage tanks for storing hot water heated to high temperatures
- Hydraulic systems for transporting the hot heat transfer fluid from the production unit to the dedicated cylinder



#### **Fixed pressure washer**

- Fixed pressure washer with versatile operation and high-temperature capability
- Multiple operating modes: possibility of working with cold water, hot water or detergent
- Pressurised fluid distribution systems made with durable materials and secure pressure-sealing systems
- Flexible hoses and lance for use with pressurised fluid, with quick couplings for ease of use

#### **GRAPE DRYING**





#### **Grape drying**

- Bespoke grape drying solutions ensuring optimal temperature and humidity conditions
- Gradual and controlled, non-invasive dehydration
- Operational flexibility with customisable cycles in terms of duration (long, regulated by production specifications, or short, due to over-ripening), weight loss and temperature, tailored to specific production needs or particular winemaking objectives
- Ability to control ambient temperature and humidity during drying, taking advantage of favourable external conditions, when available
- Adaptability to existing spaces with systems designed to operate in pre-existing facilities, while optimising air management and dehumidification



#### Sordato Kinesis™

- Patented Sordato Kinesis<sup>™</sup> technology with active weighing scales, enabling the desired sugar concentration to be reached within a predetermined time frame, optimising the entire production process
- Management of temperature and humidity control based on readings from the weighing system and temperature/humidity probes, to achieve the optimum weight loss target throughout the drying period.



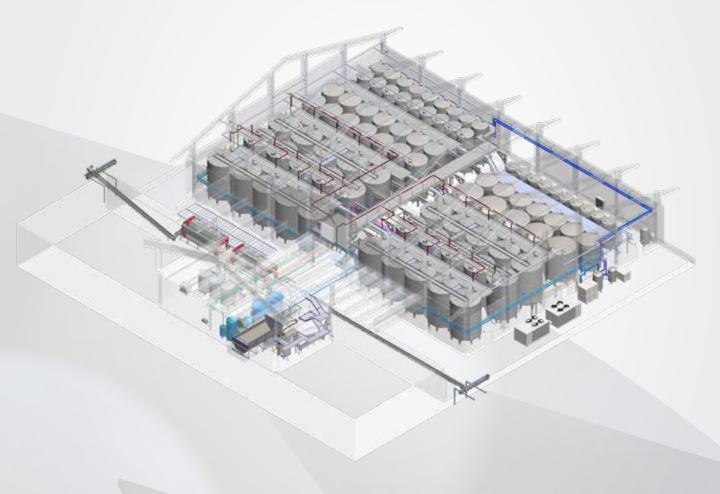
#### Sordato Botrytis Control™

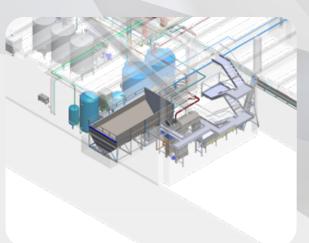
- Patented Sordato Botrytis Control<sup>™</sup> technology allowing for the controlled development of noble rot in larval form within drying rooms
- System ensuring uniform and simultaneous formation of Botrytis cinerea without the use of laboratory spores, respecting the uniqueness of the local terroir
- Possibility of producing distinctive and high-quality wines

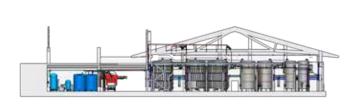


## **SYSTEM DESIGN AND INSTALLATION**

# From design to implementation: technological solutions for efficient and functional wineries







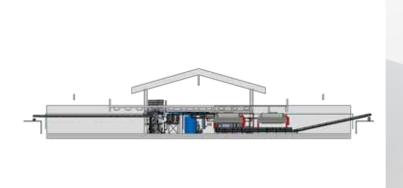
## **TURNKEY**



From your product concept to the construction of the winery used to produce it. Turnkey.

Complete "turnkey" service including design, supply, installation, support and testing. Every stage is managed to ensureefficient and worry-free implementation, making sure each system is ready for use with optimal results









## **UNIVERSITY EXPERIMENTAL SYSTEMS**



#### Micro-vinification systems (UniUd)

Collaboration with the University of Udine for the creation of a micro-vinification system in the new experimental winery for the university's agricultural company, "Antonio Servadei". Named "Uniud Eno Lab", it will support viticulture and oenology research, as well as the educational activities of the Viticulture and Oenology degree courses and the Viticulture, Oenology and Wine Markets master's degree.



#### Micro-drying systems (UniVr)

Collaboration with the University of Verona for the research and development of grape drying technologies. **Development of an experimental micro-drying facility for grapes at San Pietro in Cariano.** 

#### **RENTAL & AFTER-SALES**





#### Rental

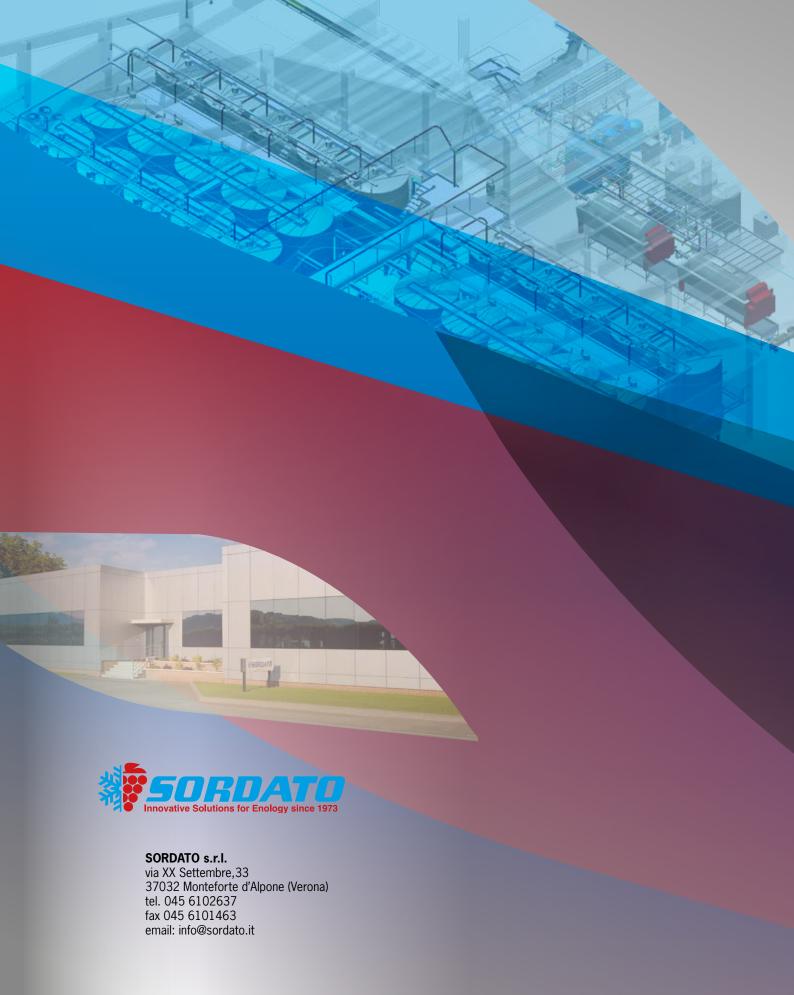
- Short- or long-term rental service for machinery and technological solutions
- Wide range of machines of various power levels ready for use, including: Chillers, Heat Pumps, Pump Units, Dehumidifiers, Heat Exchangers, Air Conditioning Units and other solutions
- Provision of complete solutions for operation and startup
- Option for on-site installation and dismantling of rental equipment
- Prompt delivery of rental machinery in the event of breakdowns or emergencies during critical stages in the winemaking process





#### After-sales assistance

- After-sales technical support is the cornerstone of the company and remains a core value guiding every business decision
- In-house team of refrigeration specialists and technicians, fully trained and up to date, providing prompt and professional problem-solving
- Network of specialised technical collaborators across Italy, operating efficiently and proactively to meet customer needs
- Internal Service/Support department connected in real time with the systems of thousands of clients in Italy and abroad, enabling continuous monitoring and ensuring the high efficiency of systems over time
- Functional testing of each system supplied, to guarantee the client an optimal outcome
- Remote support service for real-time monitoring and remote assistance, reducing costs and downtime
- Scheduled maintenance service to prevent problems and optimise system performance
- Non-routine maintenance service for rapid response in case of emergencies
- In-house warehouse with a wide variety of spare parts



www.sordato.it