Omnia Technologies

Enabling Evolution

BROCHURE

Dairy technologies



WHO WE ARE

A leading platform for the processing automation and bottling technologies for the wine, spirits, beer, beverage, dairy, food, and pharma industries.

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 the dedicated Service team, located all over the word.





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

The Group has developed an **integrated offering** for the entire production process of dairy products, from receiving to packaging.

Milk receiving	Storage station / operations	Pasteurization line	Sterilization line	Milk transformation
Milk receiving systems to ensure quality control and optimal processing from the very first step	Advanced storage solutions with high grade of automation for the milk handling	Advanced processing line to ensure milk safety and quality by eliminating harmful bacteria and spores while retaining its essential properties	U.H.T. Aseptic processing line to extend shelf life while maintaining the milk's natural taste and properties	Cutting-edge processing technologies to enable the creation of a wide range of high quality dairy by-products

Blowing & filling	Labelling	Secondary packaging	Palletising / stretch wrapping	Waste water treatment
A full range of high-performance blowers, fillers and integrated systems	Roll-fed, self-adhesive, cold glue, and hot-melt high-speed labellers	A comprehensive range of packaging machines to meet every need	High-efficiency palletisers and ultra-high-speed pallet stretch wrappers	Water treatment plants for recovery and use














THE GROUP'S PRESENCE IN THE WORLD



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

Headquarters: Treviso, Italy

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

THE GROUP'S NUMBERS

30+
PRODUCTIVE UNITS

24
COMMERCIAL & SERVICE OFFICES

90
COUNTRIES

30.000
INSTALLATIONS

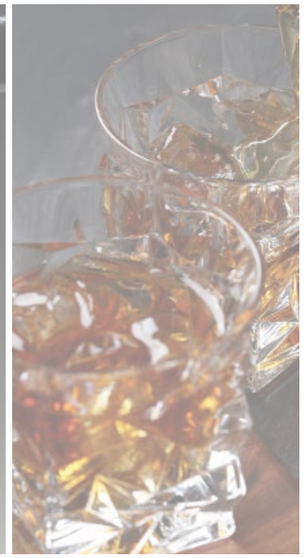
+400
R&D & ENGINEERS

+2.500
PEOPLE

THE GROUP'S APPLICATIONS



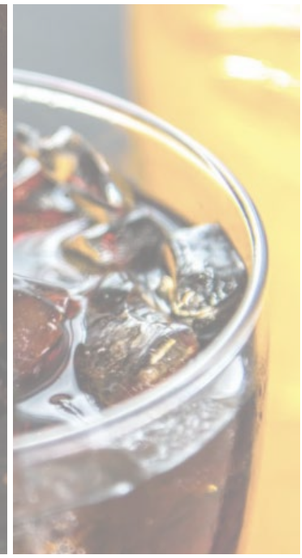
Wine



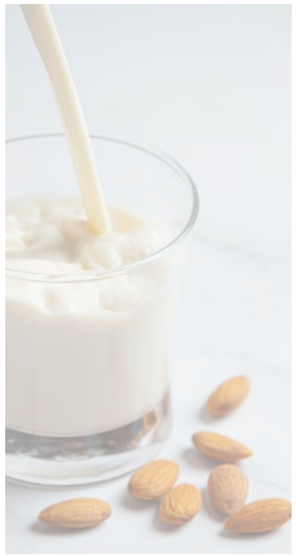
Spirits



Beer



Beverages



Plant based beverages



Fats, gelatines, cocoa butter



Dairy



Pharmaceutical

TOWARDS THE FUTURE

Our vision and values to enable evolution

Our Vision

Inspired by our Italian heritage and our vocation for sustainability, we serve as technology leaders in the food, beverage and pharma industry, always at service of our customers, people and communities.

Our Values

01. **Technology**
Innovation

With more than 400 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, Impacts 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 420 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 2023.

70
PATENTS

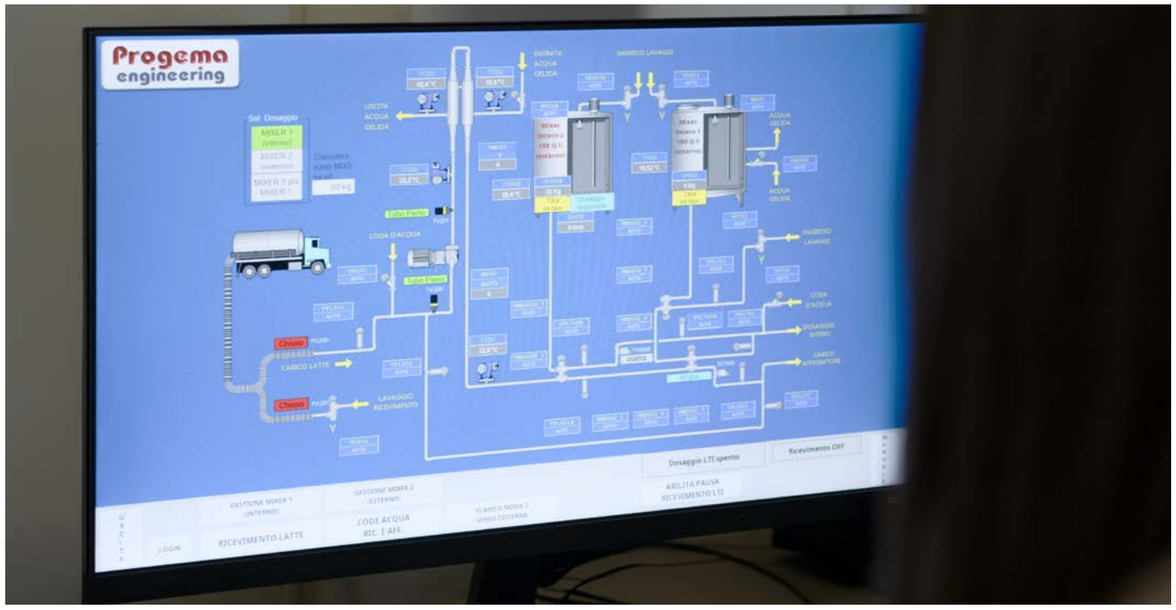
20
ESG MACRO TARGETS

420
PEOPLE IN THE SERVICE TEAM

01.
Digitalization of the plant

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





02.
Some of our sustainable products

In production



New ceramic membrane for beverage filtering

Low room temperature **dealcolation unit** with vegetative water recovery

Active Innovation Strategy with ~400 Engineering and Research FTEs



System to reuse water multiple times in washing cycles

Low Emissions 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 420 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.





Dairy production



MILK RECEIVING / RECOMBINATION / RECONSTITUTION

Explore



COMPLETE PASTEURIZATION LINE

Explore



BLOWING

Explore



FILLING

Explore



ASEPTIC STERILIZATION

Explore



CHEESE / FERMENTED PRODUCT PRODUCTION

Explore



LABELLING

Explore



SECONDARY PACKAGING

Explore



MEMBRANE FILTRATION

Explore



C.I.P. UNIT

Explore



PALLETISING

Explore



WASTE WATER TREATMENT

Explore

MEASUREMENT AND SAMPLING SYSTEM ON TRUCK





iAM COLLECT

- Milk loading: Achieved via centrifugal, impeller, or vacuum pumps with a flow rate from 24 to 75 m^3/h
- Traceability: Guarantees full data recording, with real-time monitoring during milk collection (GPRS) or downloading to a central server via Wi-Fi upon truck arrival
- Certification: iAM COLLECT systems comply with MID 2014/32/EU regulatory requirements
- Data printing: Customizable single or multiple paper receipts for customer needs
- Sanitization: Entire system can be sanitized with any CIP/SIP, built with materials resistant to acid and alkaline solutions
- Sampling: iAM SAMPLE takes representative samples of milk from each supplier and the entire truck tank, with optional automatic bottle drive and sample refrigeration on board

Explore the full range of products

MILK RECEIVING / MILK RECOMBINATION RECONSTITUTION





RECEIVING & MEASUREMENT

Milk receiving and unloading system
- Unloading of tanker trucks, filtration, degassing, cooling, measurement, sampling, traceability
- Cleaning of raw milk through a raw milk clarifier to reduce bacterial load and somatic cells
- Handling of powdered milk and other ingredients, weighing, filtration, mixing, protein hydration through thermal treatment

iAM SAMPLE is the milk sampler that can be stand alone or integrated in the iAM WELCOME measuring system. The sampler can be manual or fully automatic, in the latter case all samples can be kept refrigerated by covering the sampler with a special box.

Explore the full range of products

COMPLETE PASTEURIZATION LINE



PASTEURIZATION

- Automatic pasteurization plant with different thermal cycles and temperature holding times for various products: pasteurized milk, ESL milk, milk for cheesemaking, milk for fermented products, creams, and other pre-heat treatment processes
- Automatic cream skimming separator for milk and cream standardization
- Automatic standardizer for precise fat standardization in milk and cream
- Bacteria-removing separator (Bactofuge) for the removal of spores and bacteria to enhance milk quality and increase product shelf life
- Degaser/Deodorizer for the extraction of oxygen and removal of unpleasant odors in the raw milk
- High-pressure homogenizer for proper emulsification of fat globules to ensure greater stability and consistency of the packaged product

Explore the full range of products

ASEPTIC STERILIZATION



ASEPTIC STERILIZATION

- Automatic UHT aseptic sterilization plant with high-temperature cycles and temperature holding times for various products: UHT long-life milk, ESL milk, long-life flavoured milk, long-life creams, plant-based beverages, and mixed production of milk and fruit juices
- Degaser/Deodorizer for the extraction of oxygen and removal of unpleasant odors
- Inline injection system for animal or vegetable fats for product standardization
- High-pressure homogenizer for proper emulsification of fat globules or fibres for long-term stability and consistency of the aseptic product
- Aseptic storage and processing tank

Explore the full range of products

CHEESE / FERMENTED PRODUCT PRODUCTION



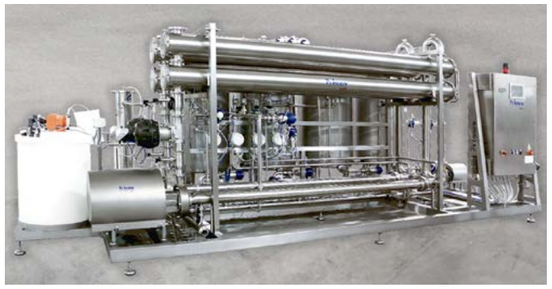


CHEESE PRODUCTION

- Complete plants for ricotta production
- Complete plants for Grana Padano and Parmigiano Reggiano DOP production
- Brining plants
- Complete plants for whey treatment
- Engineering for cheesemaking plants
- Multi-purpose cheese vats of various types for cheese production
- Cheesemaking plants automation

Explore the full range of products

MEMBRANE FILTRATION UNITS FOR MILK





MILK FILTRATION

- Reverse Osmosis / Nanofiltration for milk concentration
- Ultrafiltration for (MPC) Milk Protein Concentration to increase the yield of the yogurt production
- Microfiltration for casein and whey protein separation to increase the yield cheese production
- Microfiltration for E.S.L. milk production

Explore the full range of products

MEMBRANE FILTRATION UNITS FOR WHEY, CHEESE AND BRINE



WHEY, CHEESE & BRINE FILTRATION

- Reverse Osmosis / Nanofiltration for (WPC) Whey Protein Concentration & (WPI) Whey Protein Isolate to obtain a higher protein content product
- RO and/or NF for Lactose recovery
- Other membranes processing to obtain other derivates (Health and Functional Beverages)
- Ultrafiltration for Quark Preparation, Cottage Cheese (from fermented milk), Feta Cheese, other soft cheese
- Purification / regeneration of cheese brine

Explore the full range of products

BY-PRODUCT & FERMENTED PRODUCTION





BY-PRODUCT PRODUCTION

- Automatic plants for yogurt and other fermented
- Cream processing plant and butter production
- Complete plants for the production of pasta filata (Mozzarella and Cheese analogues)

Explore the full range of products

C.I.P. UNIT





CIP

Equipment for the sanification of the plant:
- Automatic CIP units with multiple distribution lines
- Centralized CIP room with detergent distribution systems
- iAM CLEAN: Cip system for truck, compatible with installed equipment

Explore the full range of products

BLOWING



BLOWERS

- High performance, flexible formats, hygiene and safety, low running and maintenance costs
- Up to 3 litres
- 3 to 12 litres
- R-PET compatible
- Double cavity
- Easy changeover
- Accessibility

Explore the full range of products

THERMOFORMING, FILLING, SEALING & DECORATING





FFS - FORM FILL & SEAL

The safe, high performance, flexible solution for thermoforming, filling, sealing and decorating beverage, food and dairy containers.

FLEXIBLE SOLUTION
- Customisation for different products and containers
- Suitable for all commercially available plastic resins

HIGH PERFORMANCE
- Wide productivity range from 6,000 to 100,000 containers per hour
- Film plastic saving through Clamp & Pull system

RELIABILITY AND CONFIGURABILITY
- Excellent configurability (fast changeover/ double reel, hygienic and/or aseptic configuration
- Low maintenance in all phases and flexibility

Explore the full range of products

FILLING



EFS FILLERS

- The highly hygienic characteristics of the filling process, the diagnostic, the accuracy and the reliability of the control system make the AVE Electronic Filling System an ideal solution to handle sensitive products
- HYGENE – No contact between the filling valves and the container avoiding any cross contamination
- ACCURACY – High accuracy based on magnetic flowmeters
- VERSATILITY – Suitable to handle products with different characteristics and viscosities
- QUICKNESS – Easy and quick bottle/volume/ product change over
- ULTRA CLEAN MACHINE designed to handle ESL products

Explore the full range of products

FILLING



BLOWERS-FILLERS-CAPPERS

- Up to 3 litres for still products
- For still products
- Reduced footprint
- R-PET compatible
- Double cavity
- Continuous cap supply
- Electronic capper
- Multiple packaging
- All settings via HMI
- Integrated solution (blowing-filling-capping)

Explore the full range of products

LABELLING



LABELLERS

- Wide range of medium and high speed labellers.
- Roll-fed, cold glue, self adhesive, hot melt
- For cylindrical and shaped containers (glass and plastic)
- Camera vision system
- Zero backlash
- Settings set-up via HMI
- Full servo driven bottle plates
- Integrated coders
- Flexibility
- Ergonomic design

Explore the full range of products

SECONDARY PACKAGING



SHRINKWRAPPERS

- High speed shrinkwrappers
- Single, double, triple lane
- Film only, film + pad, film + tray, tray only
- Up to 120 packs per min for each lane
- New oven 4.0: low energy consumption & better quality of the packs
- Automatic film changeover
- No lubrication
- Suitable for recycled film

MULTIFUNCTION ROBOTS & CARTONING MACHINES

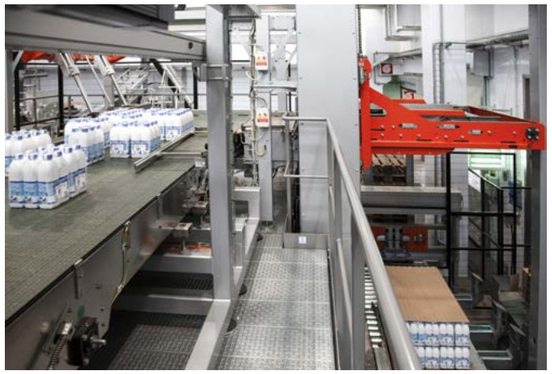
- Cartoning robots
- Craters and decraters
- Pal & crating robots (in one machine)
- Depal & decrating robots (in one machine)
- Automatic gripping head changeover system

HANDLE APPLICATORS

- Single, double, triple lane
- Models: pneumatic, mechanic, electronic
- Up to 100 packs/min/lane
- Electronic spacing system
- Can manage multiple type of handles
- Quick format changeover

Explore the full range of products

PALLETISING



PALLETISERS

- High level, low level, robotic (high/low)
- Opening platform
- Models: bomb-bay door, “rake”, tulips, magnetic, vacuum, perimetric pads
- Twisterbox system
- Low tco and maintenance
- Modularity and customization

DEPALLETISERS

- High level, low level, robotic (high/low)
- Models: “rake”, tulips, magnetic, vacuum, perimetric pads
- Product stability
- Containing cabin
- Selective warehousing of raw material
- Low tco and maintenance
- Modularity and customization

Explore the full range of products

PALLET WRAPPING



PALLET STRETCHWRAPPERS

- Models: fixed pallet, rotating pallet, rotating pallet (low speed), rotating pallet (kraft paper)
- Up to 160 pallet/hr
- >400% prestretching value
- 500mm/750mm/1.000mm film height
- External welding unit
- Automatic reel changeover
- Roping system
- Anti-dust system (top cover)
- Waterproof system
- Kraft paper application – “go green” solutions

Explore the full range of products

CONVEYING SYSTEMS



CONVEYING SYSTEM

- For pet bottles, glass bottles, cans, jars, carton boxes, plastic crates, shrink packs, clusters & multipacks, kegs, pallets, and more
- Conveyors
- Accumulation tables
- Aligners
- Bottle/pack elevators/lowerators
- Pallet elevators

Explore the full range of products

WASTE WATER TREATMENT



WASTE WATER TREATMENT

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

Explore the full range of products



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