

Fats & Proteins Industry

Omnia Technologies Group

Corporate Introduction



Omnia Technologies: numbers

Global leader in designing and manufacturing innovative and sustainable solutions in the food, beverage and pharma world.



30+ Productive Units



24 Commercial & Service Offices



+2.500 People



80% Export



+400 R&D and Engineers



~700 M€ Turnover



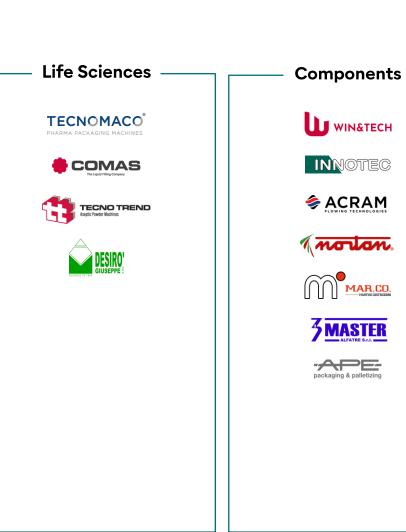


Omnia Technologies: divisions & brands



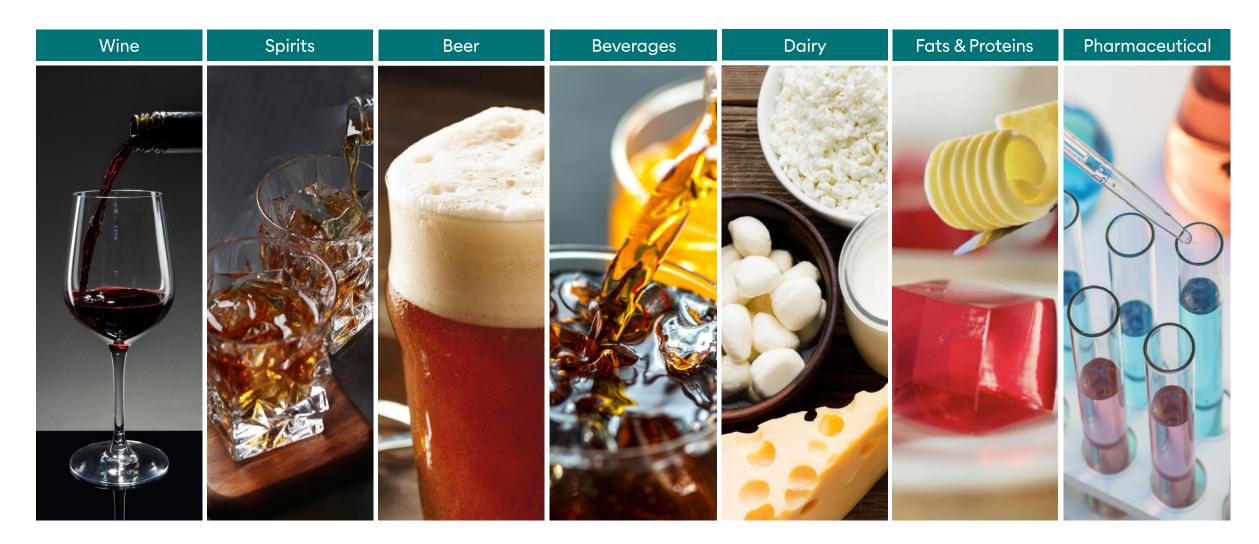








Omnia Technologies: end-markets





Group Overview

Omnia Technologies is a Group that combines the **expertise of the top specialists** in automation technologies for the food, beverage and pharma.

The team of specialists in integrated technologies: from process to final packaging. A single partner providing the customers **turnkey solutions** and sustainable **automation lines**.

Leader in the design and manufacturing of machinery for the wine, spirits, beer, beverages, dairy, fats & proteins industries - today also developing solutions for the pharmaceutical and medical sectors.

Our Group has more than 30 productive units, 24 direct sales & service offices worldwide and a team of about 400 engineers engaged in **R&D** and **innovation** activities.





Our buy-and-build story thus far

DELLA TOFFOLA **Acquisition of: Acquisition of: Acquisition of:** COMAS 🧲 bertolaso Investindustrial packaging & palletizing parmeare Strategic initiatives of developing group strategy, supporting new Labelling and packaging (Ape)





- Automatic orientation machines (Alfatre)
- Pharma machine for assembly aluminum (Giuseppe Desirò)

Acquisition of:



- Labelling and filling (ACMI Labelling, ACMI Blowing & Filling)
- Bottling and packaging (ACMI)

Acquisition of:

TECNOMACO

Pharmaceutical packaging machines (Tecnomaco)

Sep-2020

Sep-2021



Dec-2021

Bottling (Bertolaso)



Filtration machines (Permeare)









Feb-2024



Sep-2024

Oct-2024

Dec-2024

Acquisition of:

end-markets expansion and M&A



Distillation systems

Acquisition of:



Complete systems for processing Grana and hard cheeses (Progema)

Acquisition of:





OMEGA

- Processing equipment (TMCI Padovan)
- Technical support (Omega)
- Micro-filtration equipment (Innotec)

Acquisition of:



Microfiltration technologies (Win&Tech)

Acquisition of:



- Champaane pressina solutions (Coquard)
- Oenological machines (Cadalpe)
- Capsulators and caging machines (Nortan)

Acquisition of:



Filtration plants (Acram)

Synergy Levers



Combine and enhance after sales offering through Omnia's global reach



Cross-selling throughout Omnia's global 25,000 installed base



Share Omnia manufacturina capabilities, footprint and IP across divisions



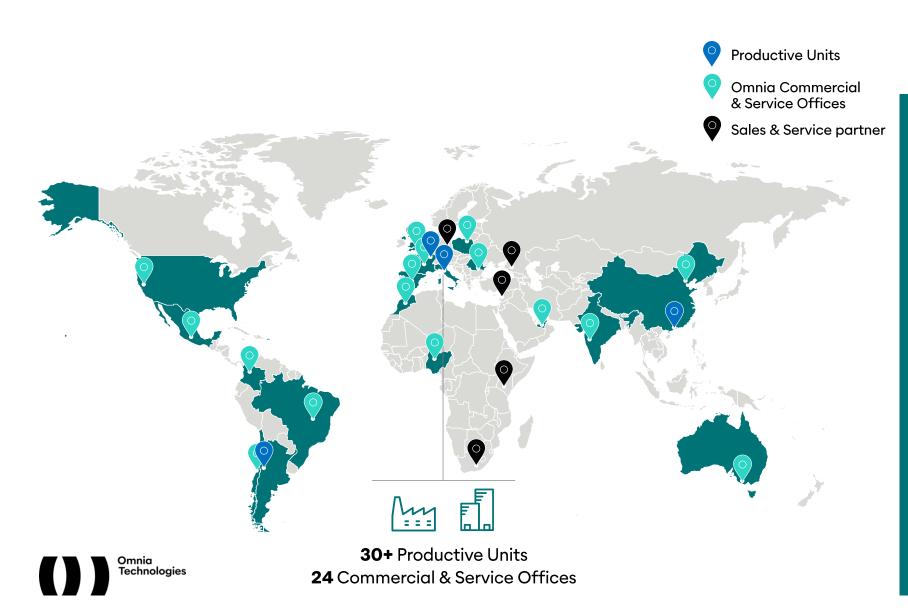
Merge procurement and sourcing to booster supply chain resiliency



Optimize engineering and allocation of resources

> to ensure production efficiency

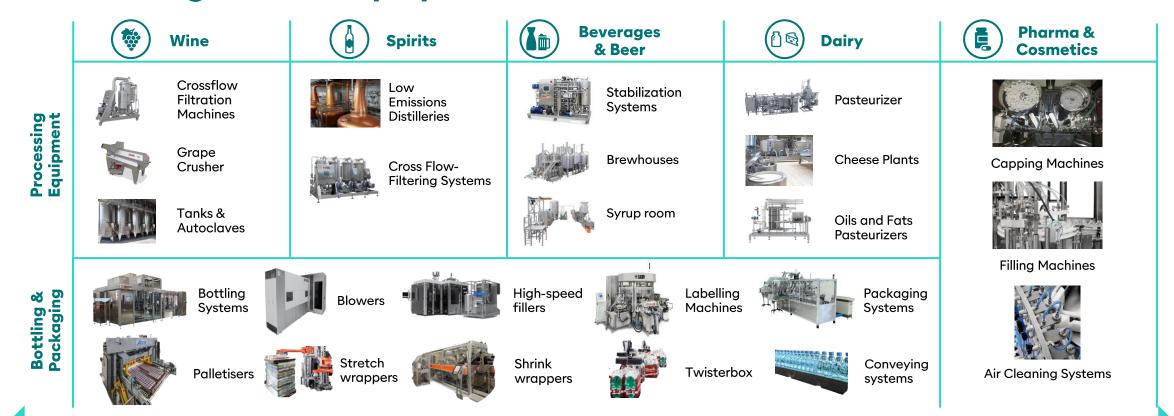
A global company, with a strong commercial and after-sales presence...



Omnia Technologies has an established presence in all continents.

- Customer proximity is enforced by a team and a consolidated network of local partners
- Integrated engineering processes and tools common to all business platforms
- Remote support on clients through IoT diagnostic devices

... and an integrated value proposition







40+ Distinct Product Families

5-10y Typical Lifecycle

30,000 Installed Base

€700k+ Typical Order Size



Provider of **Turnkey Solutions**



Customization + Standardization



Potential



Market-Leading **Innovations**





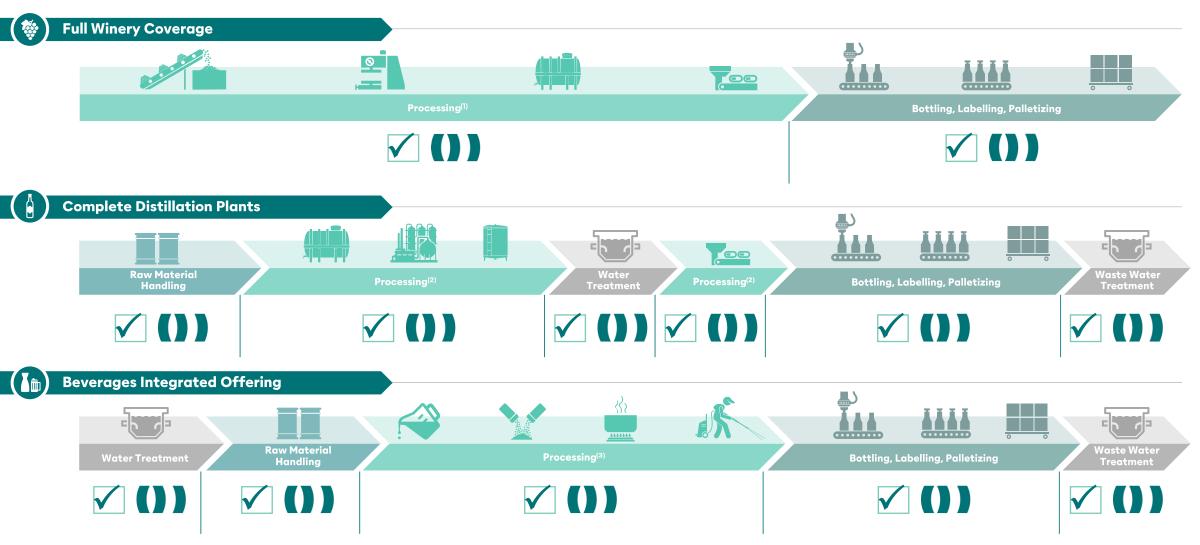


Cross-Selling



Made in Italy Technology

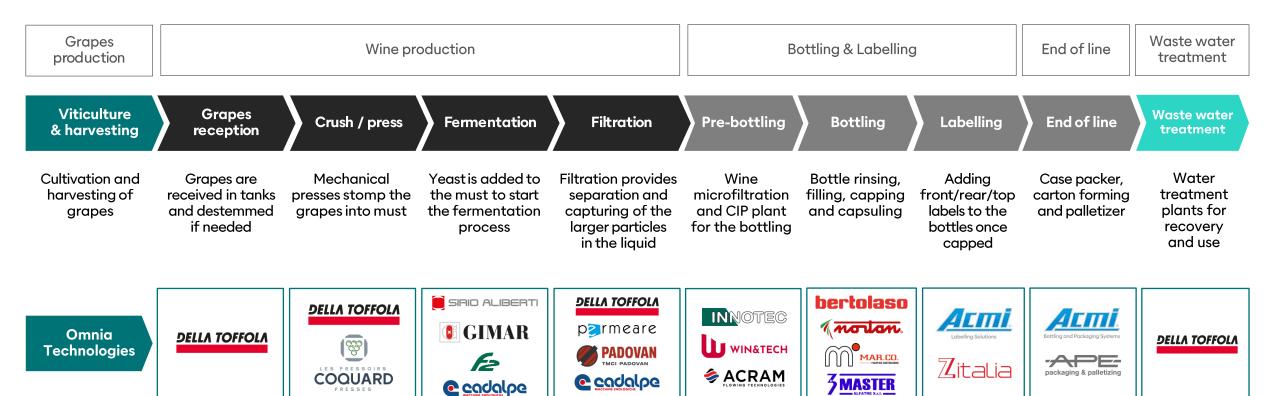
Our leadership across value chains





⁽²⁾ Fermentation of sugars into alcohol, distillation process, stainless tanks and barrique for aging, blending/refrigeration/filtration; (3) Dosage and ingredient mixing, heat treatment and pasteurization, plant washing / sanitizing.

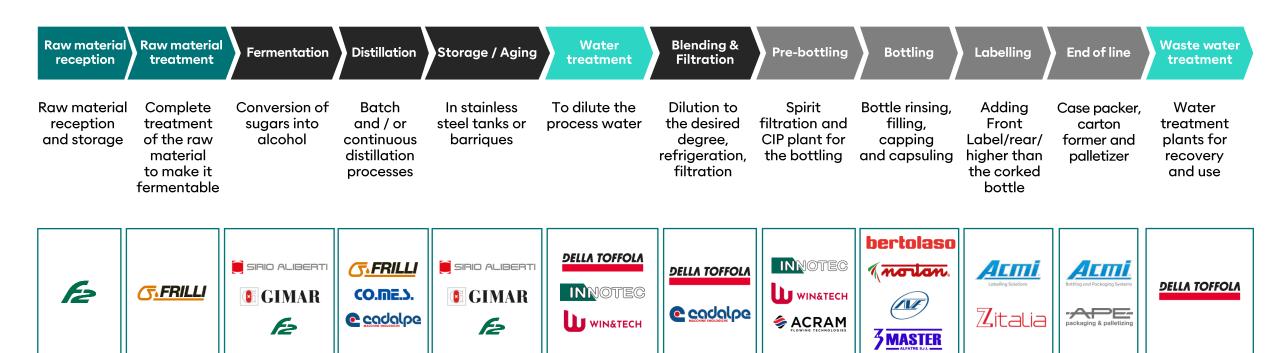
We provide the full winery...



The Group has developed an integrated offer throughout all the wine production process from grapes receptions to palletizing.



...and complete distillation plants





Same concept applies to: juices and beverage

Raw material **Raw material** Mixing of **Finished drink** Water **Waste water Pasteurization** Labelling End of line Pre-bottling Bottling reception ingredients preparation treatment treatment treatment Water Storage of Dosage Mixing of Product Bottle rinsing, Adding Front Case packer, Water Powder Heat treatment preparation to granular dissolving of recipe ingredients for conferring filtration and Label/rear/ filling and carton former treatment specifications microbiological emptying ingredients CIP plant for higher than the and palletizer plants for sugar capping of liquid corked bottle and various stability the bottling recovery





ingredients



ingredient drums















Acmi





and use





Beer processing systems

Beer production

Bottling & Labelling

End of line

Waste water treatment

Malt handling

Brewhouse

Fermentation & maturation tanks

Pasteurization & Carbonation

Pre-bottling

Bottling

Labelling

End of line

Waste water treatment

Malt transportation and milling Beer production

Stockage of beer for fermentation and maturation

Filtration allows obtaining brilliant beer, beer and yeast recovery

Filtration &

clarification

Heat treatment prolongs and ensures the stability of the product to extend its shelf life Beer filtration and CIP plant for the bottling Bottle rinsing, filling and capping Adding front/rear/top labels to the bottles once capped Case packer, carton forming and palletizer Water treatment plants for recovery and use























Our Values

01.

Technology

Innovation

With a team of more than 400 highly experienced engineers, we design and develop the most advanced automation technologies focusing on reliability and sustainability.



02.

Sustainability

Respect

We are committed to sustainability - we respect our people and our environment, and we value the heritage of the local communities where we operate which we aim to develop and preserve.



03.

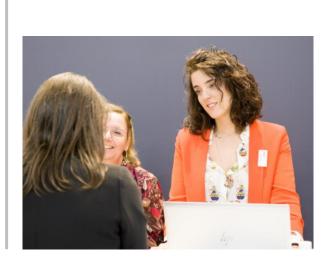
Service

Accessibility

We are committed to deliver and support our customers with a team of engineers mobilized worldwide.







Our ESG plan

Vision and goals

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.

Download Sustainability Report 23



Corporate



Becoming an Industry benchmark for ethics and Integrity



Promote a culture of transparency and involvement toward all stakeholders



Become the trusted advisor in the reference market



Adopt a risk management approach



Obtain B-CORP certification

People



Implementing a safety culture based on the zero-accident mindset



Creating a work environment oriented towards people's well-being



Create an organization based on the values of Gender equity & Diversity



Invest in the personal and professional growth of all employees



Become active players in the territory



Become a highly attractive company to new talents

Impacts reduction



Aspiring Group Net Zero Emission by 2030



Building a green and circular energy model



Develop a circular materials management model



Minimise water consumption



Implement an Environmental Management System



Make working environments ecofriendly

Innovation



Orient all development product to generate benefits of sustainability



Offer our customers a complete and innovative service with integrated and smart products



Revisiting product offerings in key of servitization

Innovating through sustainability

Latest innovations

Dehalcolization machine



Technology description

Low temperature de-alcoholization unit with water recycling

Low Emissions Distillery



Low Emissions Distillery, using MVR⁽¹⁾ for complete green and sustainable production

Smart corking



Smart corking, allowing single cap monitoring and predictive maintenance

Sustainable Product Innovation Track Record

Ceramic ultrafiltration system	
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Ceramic membrane for beverage filtering

30-40% >50% Reduction of filter cartridge usage

Water

reduction saving Waste decrease

Energy

>40%

30%

Smart automatic pressing system



System to separate water from contaminants to re-use it multiple times in washing cycles 75% Minimize usage of chemical products for cleaning the system

Labeller/ de-labeller for returnable bottles



Plastic wrapped labels without any glue between the label and bottles 30%
Use of labelling technology to allow full recycling of bottle
Minimize use of glue and soda

Overview of R&D Function

~400

R&D Engineers

240

Active Patents

10%

R&D Spend as a % of Revenue



Note: (1) MVR: Mechanical Vapor Recompression, converting energy demand from natural gas to electrical power. (2) Excluding recent acquisitions (SACMI Beverage and ACMI).

(3) New Product Introduction.

(4) New Product Development

Fats & Proteins Industry



Chemtech

TMCI Padovan acquired Chemtech International in 1985. Originally founded in London in 1945, Chemtech brings over 70 years of expertise in the **Oils & Fats** sector.

Today, Chemtech continues to provide advanced equipment and systems to the margarine, bakery sector, gelatine, and chocolate industries.

The Division has built a strong international reputation for delivering high-quality equipment and continually evolving process solutions.

Its dedication to research and development is exemplified by a large, state-of-the-art pilot plant facility located in Italy.





Processes





COCOA BUTTER





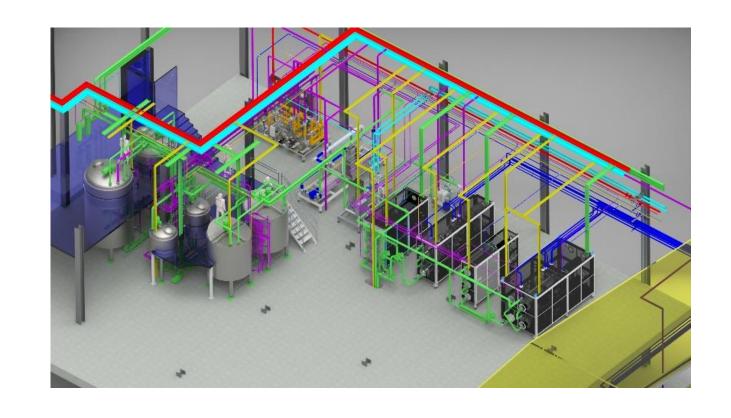


System and Components

Chemtech supplies complete systems with following main components:

- Process tanks
- Continuous remelt systems
- Powder addition systems
- Pasteurizers
- High pressure product pumps
- Scraped surface heat exchanger
- Pin worker units
- Cleaning in place units (CIP)
- Bag in box fillers
- Packing machines:Discontinuous

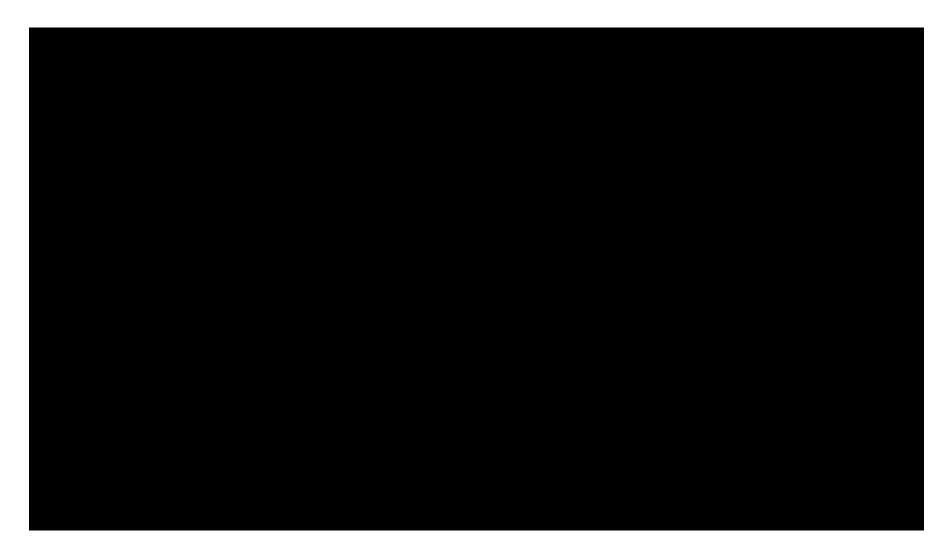
 - continuous
- Software for automation and for IIOT (Industrial Internet of Things)







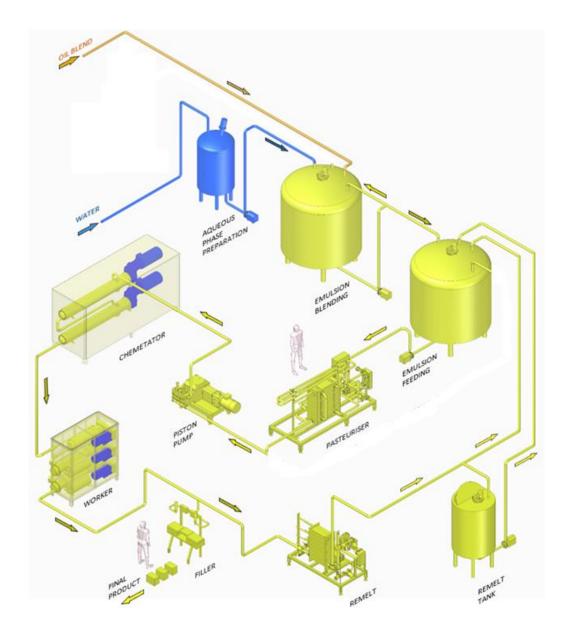
System and Components







Flowchart of a Margarine Line







Process Tanks & Continuous Remelt Systems

Complete range of process tanks for emulsifier dilution, aqueous phase preparation, product rework, block melting and emulsion preparation.



Continuous remelting of products returned from margarine and shortening production systems.







Margarine, butter and spread pasteurizers







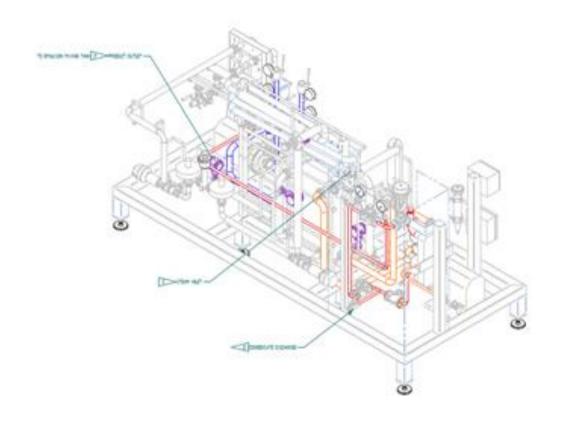
Duplex Filter

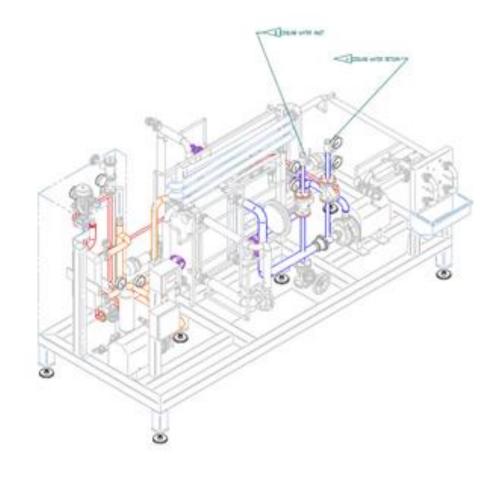






Anti-contamination System









High Pressure Product Pumps

A range of high-pressure pumps for shortenings and margarine emulsions at rates of 100 to 20.000 kg/hour at pressures up to 150 bar.







Chemetator

Chemtator is a scraped surface heat exchanger designed for the production and crystallisation of margarines and shortenings.

From pilot plant scale through to manufacturing line of 20.000 kg/hour and with product pressure rating up to 120 bar, these exchangers are the most modern available in today's marketplace.

The systems are unique in that they are fully enclosed in hygienic cabinets making them extremely quiet, very clean as well as easy to maintain.







Pin Worker Units

Pin worker units are used for plasticising margarines and shortenings between or after cooling on the Chemetator scraped surface heat exchangers.

Their design, capacity and size are all matched to the production capacities of the Chemetator units.

Sizes available range from 35 litres to 200 litres per cylinder and the units are mounted on the same style and the Chemetators keeping sound levels extremely low as well as ensuring ease of maintenance.







Chempac

Simple machine for filling buckets or bag-in-box cartons from 5 up to 40 kg, suitable for margarine, butter, cocoa butter and other edible fats.

It is produced in both manual and semi-automatic versions, up to two simultaneous filling lines.

The handling of the containers takes place through roller conveyors entirely in stainless steel which guarantee a high level of hygiene and cleanliness.

The machine is complete with an electrical panel installed on board and an HMI that allows you to view and modify all the filling parameters.







Cleaning in Place - Cip Unit

Available in different configurations.







Software for automation and for IIOT

How it works





The machines collect process parameters (flow rate, pressions, temperatures,...), events (start/stop cycle, CIP, ...) warnings and alarms, and send them trough protocol MQTT to **Amazon Web Services**.





CHEMETATOR UNIT





Raw data processing received via MQTT in registrations on the DB Server.





The production managers can access the production data of the respective machines via **APP** on Smartphone or PC. Graphs and tables with production and consumption data. Machine status display. Maintenance management.



Part of the operating data is sent to Chemtech, where it is processed to obtain information on process optimization and preventive maintenance.

The results of the processing return to the machines.

WORKER UNIT







Pilot Plant Systems

For production and testing of the full range of products including margarines, butter, shortenings, spreads, pastry margarines, ghee and bakery fats/creams. 1 to 10 t/h.







Cocoa Butter Deodorisers

The Chemtech Deodoriser is characterised by a specially designed system that provides for deodorisation of the Cocoa Butter with a minimum time/temperature history.

The following features are unique to our systems:

- Lowest thermal damage of butter during deodorisation;
- Compact layout in under 10 meters of height;
- All stainless-steel construction;
- Hygienic, food grade installation;
- Fully pre-fabricated in factory in Italy prior to shipment;
- Lowest overall projects cost, highest butter quality.







Chemetator - Oscillating or Fixed

Oscillating, fixed, single or double head – heat exchangers for the gelatin industry to transfer noodles to the dryer belt in the most hygienic way.









D.E. Filter Victoria

- Victoria filters are available with surfaces from 5 to 80 m²;
- The unit is built on a fixed base with a compact configuration, which means small space required in the factory;
- Filtration is performed only with filter aids, no need of filter pads (carton or sheets) so low running costs;
- Filtration flowrate is between 500 1000 l/h m², so a fast filtration process;
- The process is carried out with minimal operator intervention, reducing the chance of human error and allowing a high-quality and standardized filtration process;
- Filtration cake discharge is fast thanks to compressed air usage and is done in closed pipes, maintaining clean the surrounding area;
- CIP operations require minimal operator intervention, with no time loss and minimizing the chance of mistakes and possible cleaning failures;
- CIP operations do not need the opening of the filter.







Plate & Sheet Filter - Master

Master filters are available in the following models:

- Masterinox 40 x 40 "heavy duty" version, with framework apt to hold from 41 to 101 plates
- Masterinox 60 x 60 with framework apt to hold from 71 to 201 plates
- Masterinox 100x100 with framework and no. of plates on demand



- Filtering process by passing liquid through plates and sheet filter elements
- Plates in stainless steel AISI 304 or AISI 316, Noryl or Mafil:
 - with two inlets
 - two drainage eyelets
 - placed into a pack according to type of filtration
- Sheet filter elements placed between plates.
- Coming from feed eyelets, liquid is forced, by feeding pressure, through sheet filter elements where the coarsest particles are retained. Then filtrate flows through drainage eyelets to the outlet pipe.
- Manual screw closing system for the smallest models or electrical hydraulic closing unit for the biggest models.





Thank you

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