
LAST®
TECHNOLOGY

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An innovative world on a human scale

Engineering, custom automation and industrial process management. LAST Technology is a global leader in the design and manufacturing of tailor-made washing, disinfection, sterilization, depyrogenation and decontamination process equipment for the pharmaceutical industries.

For over a decade we have been present with our experience, research and know-how in the field of industrial engineering. Our integrated design considers all technological and regulatory aspects as well as the entire product life-cycle, from prototype to product launch and validation.

OUR FOCUS ON

WASHING AND DISINFECTION
Automatic static cleaning and disinfection processes.

DEPYROGENATION
Static hot air depyrogenation processes.

STERILIZATION
Static sterilization processes with chemicals, moist heat and dry heat.

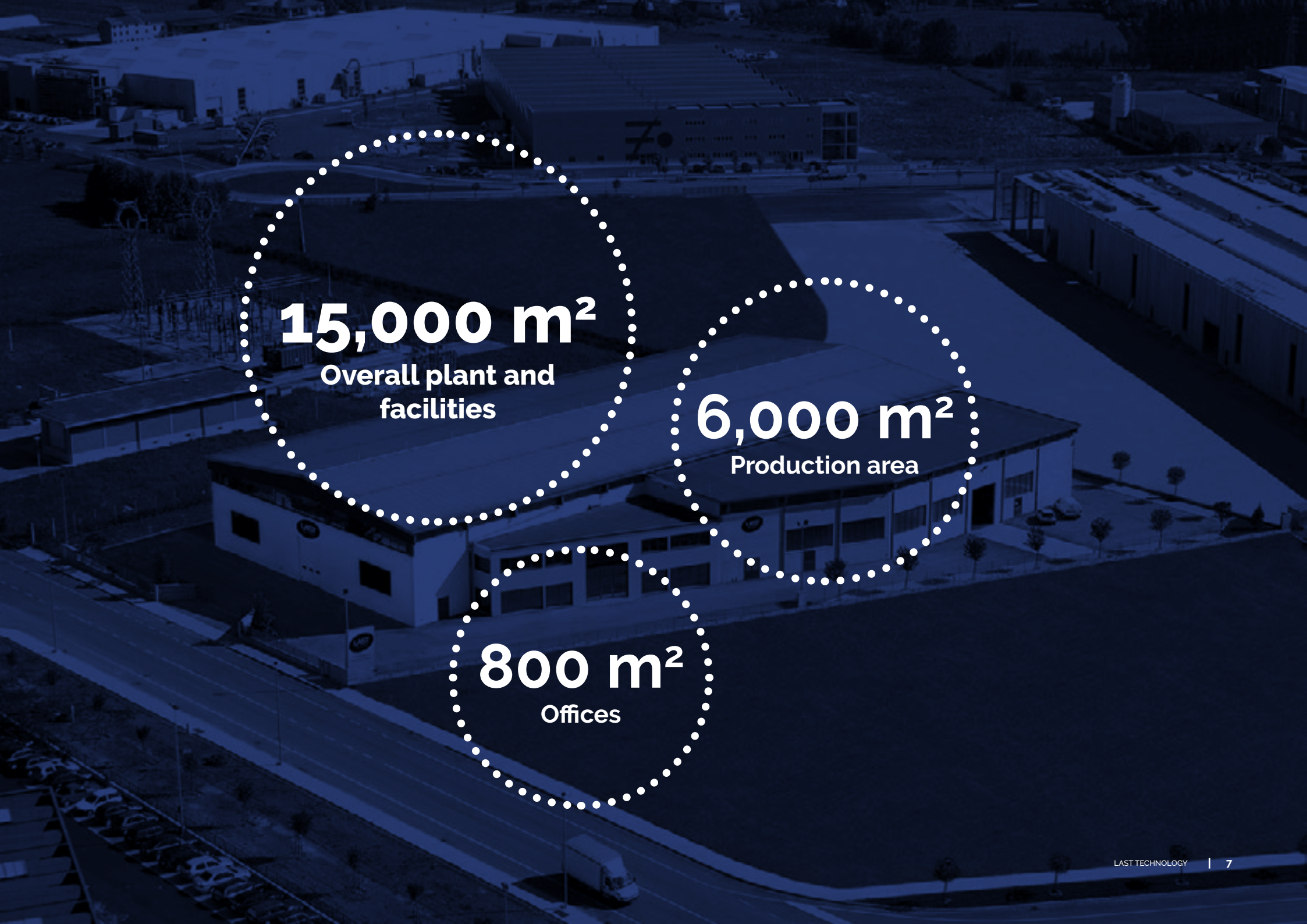
DECONTAMINATION
Static surface bio-decontamination processes.

COMBINED PROCESSES
Combined processes, energy savings, compact dimensions and lower investment costs.

DRYING
Static processes to remove humidity from products.

ABOUT US

LAST Technology is based in Prata di Pordenone, in the Friuli Venezia Giulia region, in north-eastern Italy.
Tradition, experience and competence have always characterized the industrial processes of our land.


15,000 m²
Overall plant and facilities
6,000 m²
Production area
800 m²
Offices

OUR NUMBERS

20+
MLN EURO Revenues

50+
Worldwide markets

50+
Employees

450+
Machines built and supplied worldwide

OUR STRENGTHS

Reliability and innovation are the core strengths of LAST Technology's machines. Their main features are:

Modular design

Choice of commercial components (best-known brands)

Data integrity according to FDA 21 CFR part 11

Lower consumptions

Integration with client MES (Industry 4.0)

Extensive customization of process programs

Reduced overall dimensions

Extensive documentation according to GMP and GAMP5

SUSTAINABILITY FOR LAST

LAST Technology has accompanied its growth strategy over time with the consolidation of a corporate culture inspired by shared principles, commitments and good practices of social responsibility.

Inspired by the SDGs of the United Nations, we have created a strategy based on 6 clusters, in order to also contribute to the creation of a better and more sustainable world for future generations.

Be Green.
Be Smart.

CERTIFICATIONS

In line with the company's strategy, LAST Technology is pleased to announce the achievement of the following certifications:

- Quality Management System Certificate compliant with ISO 9001:2015 standard.
- Occupational Health and Safety Management System Certificate compliant with ISO 45001:2018 standard.
- Energy Management System Certificate compliant with ISO 50001:2018 standard
- Environmental Management System Certificate compliant with ISO 14001:2015 standard.
- EcoVadis Silver Medal for Sustainability.

SILVER | Top 15%
ecovadis
Sustainability Rating
FEB 2025

OUR SERVICES

Feasibility studies

Basic and detailed design (3D modeling)

Design Qualification

In-house machine manufacturing and assembling

Development of a C&Q strategy based on GMP/GLP Risk Analysis (RA)

On-site or remote FAT activities

3D Scanning activities for products at customer's plant

On-going installation, start-up, training (SAT)

IQ&OQ activities

PQ Assistance

Spare parts list

Regular and preventive maintenance

24/7 remote service

Assistance for integration to company's MES

OUR PRODUCTS

LAST Technology has developed a completely new range of process machines which includes:

- Automatic thermo-disinfectors
- Saturated steam autoclaves
- Terminal sterilizers
- Hot air dryers
- Depyrogenation ovens
- Ethylene oxide sterilizers
- Pharmaceutical closure processors
- Bio-decontamination pass-boxes
- Clean Steam Generators

Technologies that best meet all the existing regulatory requirements in international markets.

Once you have placed an order, **we support you every step of the way**.

APPLICATIONS AND DIVISIONS

LAST Technology offers integrated turnkey and customer-oriented solutions with different options for pharmaceutical and biotechnological industries, research and QC laboratories, animal health and cosmetic industries.

PHARMA DIVISION

cGMP process machinery for pharmaceutical and biotechnology manufacturing.
LAST Technology's Pharma division was developed in order to provide the pharmaceutical industry with washing, disinfection, sterilization, depyrogenation, decontamination and drying equipment of the highest quality standards.

LAB DIVISION

cGLP process equipment for research and microbiological laboratories.
LAST Technology's Lab division was developed to provide Life Science R&D and microbiology laboratories with washing, decontamination, disinfection and sterilization equipment of the highest quality standards.

PHARMA DIVISION EQUIPMENT

RSA TYPE

cGMP SATURATED STEAM AUTOCLAVES

The RSA Autoclaves are designed to sterilize with clean saturated steam heat-resistant and moisture-stable materials, such as metal parts, plastic or rubber components, liquids in ventilated (open) or sealed (hermetically) containers, filter cartridges and clothing, etc.

POROUS, NON-POROUS AND LIQUIDS

SATURATED STEAM

121˚C – 134˚C

RSA PREMIUM TYPE

cGMP 3-IN-1 STERILIZERS

The PREMIUM RSA Autoclaves are “combined” equipment as they allow to perform three types of sterilization processes (with clean saturated steam for solid materials, with a mixture of air + steam for liquids in small containers and with overheated water for large containers).

POROUS, NON-POROUS AND LIQUIDS

SATURATED STEAM + MIXED AIR/STEAM + OVERHEATED WATER

60°C – 134°C

ETO TYPE
ETHYLENE OXIDE STERILIZERS

These ethylene oxide sterilizers are designed to sterilize heat-sensitive materials, such as plastic syringes, infusion sets, dialysis filter cartridges, plastic materials and special surgical tools.

POROUS AND NON-POROUS

ETHYLENE OXIDE + NITROGEN

20°C – 50°C

TS-AS TYPE

cGMP TERMINAL STERILIZERS

These sterilizers are fitted with an integrated ventilation system that mixes clean steam and air together, thus creating the sterilization medium. This process method is recommended for complex plastic or glass containers, such as pre-filled syringes or vials in which condensates may form causing issues in the finished product. The system ensures optimum heat distribution throughout the entire sterilization phase (temperature deviation below ± 1°C). These autoclaves also provide an excellent drying process, thanks to the ventilation system that allows the unloaded product to be ready for labelling and packaging.

LIQUIDS

MIXED AIR + STEAM

105°C – 121°C

TS-OW TYPE
cGMP TERMINAL STERILIZERS

These sterilizers are equipped with a high-flow water recirculation system, composed of centrifugal pumps and “double-head multitube” heat exchangers. This allows to use water (WFI or PW) as the medium to transfer heat to warm-up, sterilize and cool-down the load. The system ensures optimum heat distribution throughout the entire sterilization phase (temperature deviation below ± 1°C). This process method allows faster cycles but the treated product comes out still damp. Nevertheless, it remains the preferred method in most cases as it is simple, cost-effective and ensures easy validation.

LIQUIDS

OVERHEATED WATER

105°C – 121°C

TS-ROTO TYPE

cGMP TERMINAL STERILIZERS WITH LOAD-ROTATING SYSTEM

The TS ROTO autoclaves are specifically designed for the terminal sterilization of lipid-nature liquids (products with different specific weights) contained in closed containers such as plastic bags, glass bottles, BFS bottles, syringes, vials, etc. They are built to offer automatic variable pressure compensation based on the measurement of the temperature difference (ΔT) detected by a product probe (RTD) inserted on a “sample” container. This prevents the plastic containers’ deformation, damage and colour change. The load-rotating system prevents the stratification/precipitation of the heavier liquids inside the containers.

LIQUIDS

MIXED AIR + STEAM or OVERHEATED WATER

105°C – 121°C

CPE & CPE-W TYPE

cGMP CLOSURE PROCESSING EQUIPMENT

The CPE and CPE-W (Closure Processing Equipment) are designed to treat pharmaceutical closures, such as rubber stoppers, pistons and seals, plastic parts, aluminium caps, combi-seals. These units will carry out the complete treatment of the parts up to when they are ready to be used (RTU) or ready to be sterilized (RTS). The product can then be unloaded directly into an RTP bag or sterile bag. This process is performed in controlled conditions using Laminar Air Flow (LAF).

POROUS AND NON-POROUS

WATER + DETERGENTS + SILICONE + SATURATED STEAM + AIR

20°C – 121°C

DHS TYPE

cGMP DRY HEAT STERILIZERS

The DHS dry heat sterilizers are designed to sterilize and depyrogenate with hot air in class 100 (ISO 5) empty glass containers, such as bottles, vials and stainless steel parts. By maintaining the dry heat at a temperature of 250-300˚C for a controlled period of time, the microorganisms are inactivated and destroyed.

SOLIDS

AIR

250˚C – 300˚C

UCW TYPE

cGMP WASHING EQUIPMENT FOR GLASSWARES/COMPONENTS

The UCW machines are specifically designed for washing, chemical and/or thermal disinfecting and drying of parts and of instruments such as: glassware, filling machine components, carboys, etc.

SOLIDS AND SEMI-SOLIDS

WATER + DETERGENTS or SOLVENTS + AIR

20°C – 120°C

UCW TYPE

cGMP BIN WASHING EQUIPMENT

The UCW machines are specifically designed for washing, chemical and/or thermal disinfecting and drying of the internal and external surfaces of large containers (IBC).

SOLIDS AND SEMI-SOLIDS

WATER + DETERGENTS or SOLVENTS + AIR

20°C – 120°C

UCW - ACE LINE TYPE

cGMP WASHING AND DISINFECTION EQUIPMENT (COMBINED WATER + SOLVENT)

The UCW ACE machines are specifically designed for washing, chemical and/or thermal disinfecting and drying of surfaces contaminated with medication or active pharmaceutical ingredients (API) using a combination of water and solvent (acetone).

SOLIDS AND SEMI-SOLIDS

WATER + SOLVENT (ACETONE) + AIR

20°C – 30°C

UCW - ONCO LINE TYPE

cGMP WASHING AND DISINFECTION EQUIPMENT WITH ISOLATION SYSTEM

The UCW ONCO machines are specifically designed for washing, chemical and/or thermal disinfecting and drying of surfaces contaminated with oncological medication or highly potent active pharmaceutical ingredients (API). These units are equipped with an isolation system to ensure maximum safety.

SOLIDS AND SEMI-SOLIDS

WATER + DETERGENTS + AIR

20°C – 120°C

DPB TYPE

cGMP BIO-DECONTAMINATION PASS-BOXES

The DPB equipment is designed to decontaminate thermolabile materials, such as plastic syringe trays, electronic components, pre-sterilized material, disinfectants, etc.

SOLIDS AND SEMI-SOLIDS

AIR + HYDROGEN PEROXIDE

20°C – 30°C

CSG TYPE

cGMP CLEAN STEAM GENERATORS

The CSG steam generators are designed to generate clean steam used in sterilization equipment processes. Steam is generated through electric heating elements or industrial steam.

CLEAN SATURATED STEAM

WATER + ELECTRICITY or INDUSTRIAL STEAM

121˚C – 134˚C

TD TYPE
cGMP TRAY DRYERS

The TD tray dryers are designed to dry solid materials, powders and granulates. The drying process is performed using hot air, which is maintained at a temperature between 25˚C and 150˚C for a controlled period of time.

SOLIDS

AIR

25˚C – 150˚C

LAB DIVISION EQUIPMENT

NEBULA TYPE

cGLP STEAM AUTOCLAVES - «BULK» LARGE VOLUME

The NEBULA autoclaves are designed to sterilize heat-resistant and moisture-stable materials even with large volumes.

- POROUS, NON-POROUS AND LIQUIDS
- SATURATED STEAM
- 121˚C – 134˚C

NEBULA TYPE

cGLP STEAM AUTOCLAVES - SMALL VOLUMES

The NEBULA autoclaves are designed to sterilize heat-resistant and moisture-stable materials, such as: metal parts, plastic and rubber components, liquids in ventilated or sealed containers, fabrics etc.

POROUS, NON-POROUS AND LIQUIDS

SATURATED STEAM

121˚C – 134˚C

AQUA TYPE

cGLP GLASSWARE WASHERS

The AQUA washing equipment is specifically designed for washing, chemical and/or thermal disinfecting, decontaminating and drying of materials used in research laboratories, such as: glassware, metal parts, and plastic and rubber components, etc.

SOLIDS AND SEMI-SOLIDS

WATER + DETERGENTS or SOLVENTS + AIR

20°C – 120°C

AQUA TYPE
cGLP CAGE AND CART WASHERS

The AQUA washing equipment is designed for washing, chemical and/or thermal disinfecting, decontaminating and drying of materials used in research laboratories, specifically for cages and carts but also glassware, metal parts, plastic and rubber components, etc.

SOLIDS AND SEMI-SOLIDS

WATER + DETERGENTS or SOLVENTS + AIR

20°C – 120°C

AQUA TYPE
cGLP BIN WASHERS

The AQUA washing equipment is specifically designed for washing, chemical and/or thermal disinfecting, decontaminating and drying of large containers.

SOLIDS AND SEMI-SOLIDS

WATER + DETERGENTS or SOLVENTS + AIR

20°C – 120°C

AFTER - SALES SERVICES

360° AFTER-SALES CONSULTANCY

24/7 ASSISTANCE ON-SITE AND REMOTE SUPPORT

REGULAR & PREVENTIVE MAINTENANCE OF THE MACHINES

GLOBAL PRESENCE

LAST Technology provides global sales and after-sales services, through the support of a qualified network of exclusive agencies and commercial partners.

LAST®
TECHNOLOGY

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