

Washing and sterilization systems

Serving the pharma industry worldwide



Exceed expectations

Innovative washing equipment
and customized loading racks

Diversified, steam and ETO
sterilization range

Fully automated closure
processing equipment

Drying and depyrogenation ovens

Automation systems

Steelco
your partner in infection control



Solutions for the pharmaceuticals and biotechnology companies

Located in modern factories near Venice in Italy, Steelco Group is a major global supplier of infection control and contamination prevention for the healthcare, laboratory and pharmaceutical sectors. Steelco's success is demonstrated by its strong growth, becoming the partner of choice for many of the world's leading pharmaceutical companies who appreciate the company's:

Experience and knowledge

- Strong track record of establishing long term global partnerships.
- Integrated in-house operations in more than 52.000 sq.mt. manufacturing sites. Equipment totally manufactured in Italy.
- Fully certified quality systems with knowledge of pharmaceutical manufacturing standards.

Global footprint

- Global HQ in Italy with regional customer support centres in America and Asia.
- Network of factory trained agencies in over 100 countries worldwide with after service capabilities.

Extensive product range

With over 3000 installations worldwide, Steelco offers a wide portfolio including:

- Innovative washing equipment with customized loading racks.
- Diversified sterilization equipment, steam, terminal sterilization and ETO range.
- Innovative fully automated closure processing equipment.
- Drying and depyrogenation ovens.
- Automation systems to maximize productivity and safety.

Flexible solutions

- Ability to meet the most challenging processing needs.
- Only using best proven readily available from the market control systems and components.



Center of washing systems production



Center of sterilizers production

Quality engineering process

Steelco Group's engineering experience encompasses knowledge and understanding to be able to satisfy the most stringent requests from clients.

3D project layouts

Steelco Group offers complete "turnkey" solutions for washing and sterilization processes in the pharmaceutical sector, with the ability to undertake all stages of a project from concept to delivering solutions that exceed customer expectations.

Steelco's extensive experience assists customers to increase process productivity and quality with improved ergonomics whilst limiting costs.





"For the Environmentally conscious"

Quality system certification

We constantly strive to improve on our high standards to enable us to deliver optimal solutions for our partners in the pharma industry.



ISO 9001:2008
Quality management systems

ISO 13485:2012

AEO/C Certification

SAI GLOBAL
ISO 13485:2003
& CMDCAS
CERT-0069883

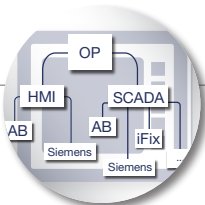
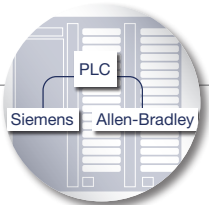
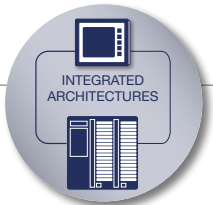
Extensive customer support services

Customer service excellence is Steelco Group's commitment to our clients and a cornerstone of our success with emergency service support if needed available, 24 hours, 7 days a week.



Integrated architecture

Steelco can install new equipment into an existing automation system through the adoption of a simple (HMI) or more sophisticated (SCADA) man-machine interface.



Control system

User friendly control systems developed according to the latest GAMP and design for 21 CFR Part 11 available, sourced from the best available suppliers avoiding customized electronics.

Compliance and guidelines

The planning and the production of our washing, drying systems and sterilization is based on standards and guidelines recognized both worldwide as well as in the final installation country.

Validation documents

User safety, product quality and data integrity are Steelco Group core values. Factory Acceptance Test and Site Acceptance Tests.

DQ (Design Qualification), Installation qualification (IQ), operational qualification (OQ), and performance qualification (PQ) are provided in standard version or customized according to the final scope of supply.





DS PH range

Pharma grade washers

Steelco understands the particular critical cleaning, disinfection and drying requirements of equipment and components used in pharmaceutical production including:

- Glassware
- Filling line components and tools
- Tubing, TC fittings
- Valve and pump bodies, filter housings
- Punches and Dies
- Reactor vessels and diverse equipment
- Bulk containers, tanks and carboys

- ✓ Highest cleaning performance
- ✓ Protection of processed items
- ✓ Low power and water consumption
- ✓ Efficient drying system
- ✓ Repeatable and validatable process
- ✓ Globally available components and technical support
- ✓ Tempered Glass Door



Chamber volume
from 230 litres / 8 cu.ft
to 2.400 litres / 85 cu.ft

Available in different dimensions and configurations

Exceed industry standards

High performance cGMP compliant pharma grade washing systems available as **single or pass-through double door versions** to provide an effective barrier system between different zones.

Easy and safe access is assured using large automated vertical (either up or downward) or horizontal sliding glass doors or hinged door type.

Steelco can provide customised solutions with special drying programs or HPV (hydrogen peroxide vapor) decontamination according to customer needs.



ML Series

Pharma grade parts and glassware washers

Single (or double) hinged chamber door and dual locking mechanism to guarantee clean environments.

Machines are designed for pharmaceutical products such as glassware, pipettes, machine parts, tanks, glass bottles, pill stamps, carboys, tubes, needles, etc....)

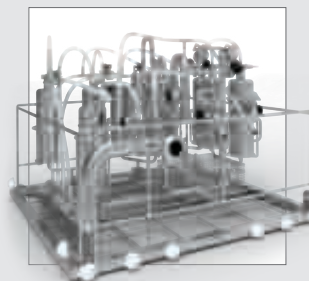
Chamber volume
from 465 litres / 16 cu.ft
to 3800 litres / 134 cu.ft



Pharma carts and trolleys

Standard and customized solutions

Using sophisticated 3D tools, Steelco's engineering department **optimizes cart design in order to reduce process time and water consumption** whilst maximizing process effectiveness.



LC 80 PH Series

Cabinet washing system

LC 80 PH is a versatile system to treat large volume of items such as wash containers, large components, ultracentrifuges, bulk chemicals.

Easily adjustable floor guides for different carts with access to filter.
Spray nozzles on oscillating arms for perfect washing results.
High performance efficiency with steam heater versions available.

- ✓ Easy cart connections
- ✓ Double drying unit with capacity of 1000 m³/hour
- ✓ Lateral rotating washing pipes with nozzles to assure a adequate cleaning of all parts of loaded items
- ✓ Repeatable and validatable
- ✓ Automatic loading and unloading system available upon request

Chamber volume

**from 4.250 litres / 150 cu.ft
to 10.500 litres / 370 cu.ft**

Available in different dimensions
and configurations



LB Series

Bin washer equipment

The LB Series is specifically designed for the cleaning and drying of containers and drums in pharmaceutical validated processes.

- ✓ Continuous moving spray arms
- ✓ 360° constant bin rotation during the cycle
- ✓ Drying unit with 1000 m³/hour capacity

Chamber volume

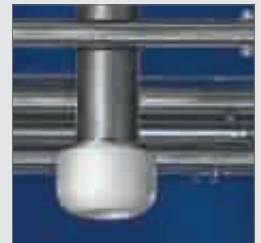
**from 5.000 litres / 177 cu.ft
to 10.000 litres / 353 cu.ft**



Easy cart connection

Machines can be equipped with special cart connections for water injection.

Complete system including carts are tested with all critical process parameters monitored.



LST/LT Series Closure processor

Innovative customized stopper processor solutions for highly cost-effective projects. Process validated with major suppliers of stoppers and multinational pharma companies.

Complete treatment of closure devices such as: rubber stoppers, plastic stoppers, droppers and other similar components.

Chamber volume

**from 40 litres / 1.4 cu.ft
to 480 litres / 17 cu.ft**

Steelco also produces
a "Closure washer" version
without sterilizations (LT series)

Patent pending

Where **continuous sterility** has to be maintained, the LST Series offers **washing, rinsing, siliconizing, sterilizing, drying** and **cooling** all in one solution.

- ✓ Simultaneous processing of different types of stoppers
- ✓ Elimination of excessive accumulation of material during treatment phases
- ✓ Minimized particle generation due to mechanical stress and effective endotoxin reduction
- ✓ Enhanced surface exposure to process fluids
- ✓ Optimized washing process, with effective endotoxin and particle reduction
- ✓ Uniform silicone distribution on individual stoppers and the entire batch
- ✓ Optimization of the cip phase
- ✓ High productivity and efficiency

Compatible with different loading/unloading systems, with the option of interfacing with vaporized hydrogen peroxide isolators.



Automatic unloading into Sartorius Stedim Biotech clean & pre-sterilized Biosafe® Bags through the Biosafe® Biosteam S Port



AV Series Saturated steam sterilizers

Versatile cGMP Steam Sterilizers, available in single or pass-through versions, with hinged (AVL Series) or sliding doors (AVS Series).

Built to a high standard, each unit is tailored to the customer's individual specifications. Cart guides are welded into chamber floor for easy loading.

Components from the market.

Only Stainless Steel material: AISI 316L chamber, door, jacket, piping.
AISI 304: control board and frame.

"Unique" design of door gasket with standard warranty three years without replacement.
PLC with copy of source code.

Open architecture Siemens or Allen Bradley.

Chamber volume

**from 195 litres / 7 cu.ft
to 10.000 litres / 353 cu.ft**



AGS/AGS-E Series

Ethylene Oxide Sterilizer

Low temperature sterilization of heat-sensitive items, according to the EN 1422 Standards. Suitable for plastic and rubber products, perfusion sets, dialysis cartridges and special surgical instruments.

Highest performance and versatility, sterilizing with Ethylene Oxide.

Chamber volume

*from 1000 litres / 35 cu.ft
to 63.000 litres / 2.225 cu.ft*

The AGS/AGS-E series is **engineered for safe and cost efficient cycle, protecting operators.**

Steelco's range of ETO sterilizers use **thermal combustion** for a **complete breakdown of the sterilizing gas.**



Steelco Group follows the ATEX, US, OSHA, NFPA and FDA regulations and complies with ISO 11135, EN 1422.

Terminal Sterilization

AMS Series

Steam Air Mixture sterilizer

ASW Series

Superheated Water sterilizer

Used to sterilize liquids in sealed or heat-sensitive containers such as: **bottles, ampoules, vials, semi-open containers, bags, blister packs, pre-filled syringes, pouches, contact lenses, LPV's, etc,** and also for the **pasteurization** of products like **blood plasma.**

Air-Steam or Superheated Water Process?

Selection depends on the products thermal properties, level of dryness to be reached, utilities available on site and running costs.

Chamber volume

*from 830 litres / 29 cu.ft
to 25.000 litres / 883 cu.ft*

Available in several different chamber sizes and configurations with accessories to tailor each unit to exact requirements with automatic loading & unloading systems.



SD Series

Hot Air drying/sterilization/depyrogenation Oven

Sterilization and depyrogenation of heat resistant materials including **bottles, vials, glass containers, metal trays and production equipment, laboratory glassware and instruments,** materials sensitive to humidity, **thermostable basic pharmaceutical products, chemical compounds** and non aqueous liquid materials such as **oils, glycerines, etc.**

Chamber volume

*from 330 litres / 12 cu.ft
to 10.000 litres / 353 cu.ft*



EG Series

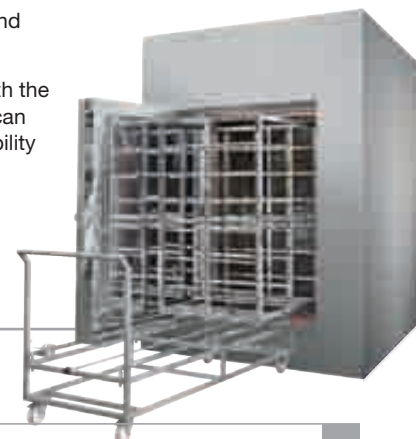
Hot Air Drying Oven

The EG series is used for drying by hot air of materials such as **granulates, pellets, powders** and **porous loads.**

For the treatment of granules with the presence of solvents, the dryer can be equipped to monitor flammability hazard by controlling LEL.

Chamber volume

*from 330 litres / 12 cu.ft
to 10.000 litres / 353 cu.ft*



Sterilization solutions
Serving the pharma industry worldwide



Steelco DS PL range
Industrial challenging application washers



Washers, disinfectors and
automated systems
for animal cages, feeding
bottles and fish tanks

Steam sterilizers VS L series
for pharma and research laboratories



Laboratory glassware
washing systems



Headquarters and
Center of washing systems production

STEELCO S.p.A.

Via Balegante, 27
31039 Riese Pio X (TV) - Italy
Ph. +39 0423 7561 - Fax +39 0423 755528
steelco@steelcospa.com
www.steelcospa.com

Center of sterilizers production

ICOS PHARMA S.p.A.

Via E. Ellero, 15
33080 Cusano di Zoppola (PN) - Italy
Ph. +39 0434 5772911 - Fax +39 0434 5772900
sales@icospharma.com
www.icospharma.com

Branches

STEELCO USA

999 Stinson Way - Unit 307
West Palm Beach, FL 33411 - USA
Ph. +1 561 791 8313
Ph. +1 561 791 8213
steelco-usa@steelcospa.com

STEELCO MEXICO

Calle Guadalupe, 16 - Colonia Pueblo Nuevo,
Delegación La Magdalena Contreras,
10640 CDMX - Mexico
Ph. +52 55 68384445
steelco-mexico@steelcospa.com

STEELCO DENMARK

Lottenborgvej, 24
2800 Kgs. Lyngby - Denmark
Ph. +45 69136040
Ph. +45 69136041
steelco-denmark@steelcospa.com

STEELCO HUNGARY

Temesvár u., 19-21
1116 Budapest - Hungary
Ph. +36 1 371 0257
Ph. +36 1 371 0258
steelco-hungary@steelcospa.com

STEELCO ASIA

6th floor, Suite 16, IOI Business Park
Persiaran Puchong Jaya Selatan - Bandar Puchong Jaya
47100 Puchong, Selangor - Malaysia
Ph. +60 3 8064 4339 (Ext. 112) - Fax: +60 3 8064 4340
steelco-asia@steelcospa.com

STEELCO INDIA

Plot No. 877, Sector 40,
Gurugram - 122001
Haryana - India
Ph./Fax +91 124 437 0397
steelco-india@steelcospa.com

Worldwide agencies available for sales support.

