Successful Case Studies





EN.1.2.2

PROCESSES

Sterilization Washing Chemical bio-decontamination Contamination control

SPECIAL APPLICATIONS

Dense-phase fluids plants

Rotating sterilizers Pharmaceutical closures processing

COMPONENTS

Pressure vessels Doors Piping Process controller <u>Wireless</u> sensors

ACCESSORIES

Un/loading conveyors Customized racks

FOWS Washer-Sterilizers

The Challenge

Design and deliver a complete cost-effective solution for washing and sterilizing animal cages with full backup of all process equipment.

Use the equipment process chambers as chemical decontamination pass-through.

Project requirements:

Washing and sterilization of:

- 3.000 animal cages (metabolic
- and green line) of different sizes and relevant accessories per week
- Cage lids and grids, once/twice per month
- Animal food packages, as needed
- Sawdust packages, as needed
- Feeders, as needed
- Chemical decontamination of:

- Various heat-sensitive instruments and items

Max cycle time: 100 min



The Customer

Mario Negri Institute for pharmacological research is a not-forprofit biomedical research organization structured on four research centers in Italy (Milan, Bergamo, Ranica and Chieti), a foundation in the US and employs about 1.000 personnel, mostly researchers.

The main fields of activity are the battle

against cancer, nervous and mental illnesses, cardiovascular and renal diseases, rare diseases and the toxic effects of environmental contaminants, mother and child health. Mario Negri Institute and Fedegari have been collaborating for decades and in 2007 Fedegari has been awarded the contract for supplying two FOWS washersterilizers for the new research facility in Bergamo.

Successful Case Studies

CONTACT US:

Italy

Fedegari Autoclavi SpA SS 235 km 8 27100 Albuzzano (PV) T +39 0382 434111 F +39 0382 434150 E fedegari@fedegari.com

Germany

Fedegari GmbH Lehrer-Götz-Weg, 11 81825 Munich T +49 89 42044920 F +49 89 42044918 E info@de.fedegari.com

Singapore

Fedegari Asia Pte. Ltd. 8, Boon Lay Way #03-16 - Tradehub 21 609964 Singapore T +65 6 3164761 F +65 6 8967365 E info@fedegariasia.com

Switzerland

Fedegari (SUISSE) SA Via alla Gerra, 11 6930 Bedano T +41 91 9352090 F +41 91 9352099 E info@fedegarisuisse.ch

USA

Fedegari Technologies, Inc. 1228 Bethlehem Pike 18960 Sellersville (PA) T +1 215 4530400 F +1 215 4530406 E info@fedegariusa.com

The Solution

Installation of two FOWS washersterilizers side-by-side capable of washing, sterilizing and drying various types of animal cages in one single process.

The machines are equipped with different rotating and static spray nozzles located on the sterilization chamber walls as well as on the racks, so as to cover all load surfaces.



No manual operation is needed to

connect the rack to any water feeding system; a simple maintenance-free autocoupling ensures the water flow through the rack. The same device also allows to feed steam through all the nozzles for improving cleaning performances in a way no traditional washer can do.



Cycle duration is approximately 100 min, considering 20 min for the wash/rinse phase and 20 min for sterilization.

Water consumption for this application is approximately 250 l each process. Like a typical steam sterilizer, drying is performed with vacuum after sterilization, thus avoiding the use of HEPA filters.

Decontamination Process

Due to the specific requirements, both machines are equipped with a vaporized H_2O_2 generator for decontaminating those heat-sensitive items that need to be transferred inside the animal holding room.

With this solution it has been further reduced the number of machines installed and the relevant acquisition and operating costs.

