



De Lama

Building a Legacy of Stronger, Smarter Industrial Sterilisation

DE LAMA
Process & Sterilization Solutions since 1949

HyPerPure®
Deep Vacuum Zero Air Hydrogen Peroxide

FDA added VHP
Vaporized Hydrogen Peroxide
in Class A Sterilization
Methods - January 2024

**THE GREENEST
STERILIZER IN THE
WORLD**

**Save 100% water
Save 70% energy
Fast process**

Guido Rovera,
Director of Sales and Marketing

Marco Bianchi,
Marketing, Sales and
Communication Manager

Seventy-five years ago, De Lama pioneered Italy's first industrial steriliser, setting a legacy of engineering excellence that continues to define the global sterilisation landscape.

When Franco De Lama founded the company, he saw a future where sterilisation technology would be indispensable to pharmaceutical and biotech industries. That vision led to the development of a compact saturated steam steriliser, a breakthrough that made high-grade sterilisation accessible to laboratories and emerging pharmaceutical firms.

Over the decades, the company has continuously expanded its portfolio, introducing advanced sterilisation technologies—including dry heat, air steam water, superheated water, and ethylene oxide (EtO) sterilisation—each designed to meet regulatory requirements while solving industry pain points.

But innovation is only part of the story. De Lama stands out for its deep engagement with clients. “Our niche in pharmaceutical production has allowed us to build an unrivalled expertise in sterilisation—not just by refining technology, but by listening to our customers,” says Guido Rovera, director of Sales and Marketing. “We understand their challenges firsthand and engineer solutions that make a measurable difference. Our history is our foundation, but our focus is always on what’s next.”

That customer-first approach led to one of De Lama's pinnacle innovations—HyPerPure®, a sterilisation technology that overcomes the limitations of traditional methods.

When a pharmaceutical client needed to sterilise a heat-sensitive syringe containing blood derivatives, conventional methods weren't an option. Heat would degrade the

product, while EtO posed toxicity risks, regulatory burdens and environmental concerns. De Lama responded with HyPerPure®, which achieves a log 12 reduction, matching the sterility assurance levels of saturated steam sterilisation but without the drawbacks.

The impact is undeniable. HyPerPure® ensured uncompromised sterility for even the most heat-sensitive products while cutting energy consumption by 70 percent compared to saturated steam sterilisation. It completely eliminates water waste, reducing environmental impact and operational costs. And by drastically lowering CO₂ emissions, it helped the client meet sustainability targets without compromising on performance.

As corporations worldwide—from global enterprises to mid-sized and small businesses—accelerate their pursuit of net-zero CO₂ targets, sustainability has become a decisive factor in equipment selection. “Our technology directly impacts their choices, favouring solutions that align with their sustainability goals,” says Marco Bianchi, marketing, sales and communication manager at De Lama.



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A major regulatory milestone reinforcing this shift came in January last year when the U.S., FDA officially recognised hydrogen peroxide vapour as a Category A sterilant medium for the medical device industry. This validation highlights the growing importance of hydrogen peroxide-based sterilisation, positioning De Lama's HyPerPure technology for significant expansion in the medical device sector.

But De Lama's innovation goes beyond catering to only regulatory shifts. It actively rethinks sterilisation processes to solve industry pain points, and Magnetodoor® is a prime example of this engineering mindset. Designed to connect sterilisation equipment to isolators seamlessly, Magnetodoor eliminates the inefficiencies and contamination risks associated with traditional doors. Pharmaceutical manufacturers used to face a tough challenge when sterilising and depyrogenation empty steel bins in autoclaves—transferring them into an isolator with aseptic powder filling. Traditional swinging doors ate up valuable cleanroom space



and sliding doors brought contamination risks from plastic components and gear motors—unacceptable risk for Class A cleanrooms. Featuring a magnetic translation mechanism, Magnetodoor® creates a particle-free, direct link with isolators using a concealed magnet enclosed in a large pipe. The result is a perfectly sterile transition that keeps thermal diffusion in check.

But why stop at rethinking doors when the entire sterilisation workflow could be revolutionised? De Lama took things further by fully integrating washing, decontamination and sterilisation into a single, enclosed chamber. Instead of treating each step as an isolated function, a continuous workflow made sure the components moved through the entire sterilisation process without ever leaving the sterile environment. As the revised Annex 1 reinforces the need to minimise human intervention in aseptic production, De Lama's fully enclosed, contamination-free workflow is quickly becoming the new industry standard.

These advancements prove that the oldest industrial sterilisation manufacturer doesn't just preserve its legacy—it builds on it. Four key pillars drive its continuous innovation—compliance, safety, sustainability and efficiency. The next era of sterilisation is already unfolding; are you ready to lead it with De Lama? **Ph**