

## Providing Sterilisation & Laboratory Services for the World's Most Innovative Healthcare Companies.

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## Medistri's Application Areas for Steam Sterilisation - Medistri

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Steam sterilisation is a highly effective and reliable method of decontamination. By exposing products to saturated steam at high temperatures—typically between 121°C and 134°C—steam sterilisation ensures the elimination of harmful microorganisms. The process involves three critical phases: pre-conditioning, exposure, and post-conditioning, with exposure times ranging from 3 to 15 minutes, depending on the specific product requirements.

For optimal results, it is essential that steam thoroughly covers all surfaces of the product. At Medistri, our autoclaves are equipped with built-in meters to monitor temperature and pressure conditions throughout the process. To further ensure effectiveness, biological indicators and colour indicators are used to assess the autoclave's performance.

Steam sterilisation is particularly beneficial for products that can withstand high heat and moisture, making it an ideal solution for sterilising durable medical devices, pharmaceutical products, and materials. Here's how it works in practice for various types of products across different application areas.

**Metallic Surgical Instruments:** High temperatures and pressure make steam sterilisation an ideal solution for metallic surgical instruments. Medistri ensures thorough sterilisation while maintaining the integrity of the instruments, preparing them for safe use in surgical environments.

**Ceramic-based Products:** Ceramic products, known for their heat resistance, are well-suited for steam sterilisation. Our process ensures sterility without altering their structure or performance, making them safe for medical and pharmaceutical use.

**Glass-based Products:** Steam sterilisation is highly effective for glass containers, such as bottles and vials. Medistri guarantees complete sterilisation of glass surfaces, ensuring safety and sterility for medical and pharmaceutical applications.

**Liquids and Gels in Open or Closed Containers:** Liquids and gels, whether in open or closed containers, can be effectively

sterilised using steam. Our steam sterilisation process ensures that these substances remain free from contaminants without compromising their quality.

**Filled Syringes:** Pre-filled syringes present a unique challenge for sterilisation, but steam sterilisation ensures both the liquid contents and the syringe itself remain sterile and intact, ready for safe and precise medical administration.

**Pharmaceutical Vials:** For pharmaceutical vials containing heat-tolerant substances, steam sterilisation provides a reliable and efficient sterilisation method. Medistri ensures that the vials remain sterile without affecting the contents.


**Porous Fabrics:** Porous fabrics, such as surgical drapes and gowns, benefit from steam sterilisation. The process guarantees deep penetration of steam, ensuring that all layers are sterilised for safe use in medical procedures.

Our steam sterilisation processes are compliant with ISO 17665, the international standard that specifies the development, validation, and routine control of steam sterilisation for medical devices. This includes procedures such as:

- Saturated steam exhaust systems.
- Air/steam mixtures.
- Water vaporisation and immersion methods.

Medistri's team prepares the validation protocol, performs the required sterilisation cycles, and carries out all necessary tests to provide a comprehensive final report.

At Medistri, we customise each sterilisation process to meet the specific needs of our clients. Whether you need sterilisation for metallic instruments, pharmaceutical products, or porous fabrics, we ensure that our steam sterilisation services deliver sterility without compromising product quality.

 To learn more about Medistri's Application Areas for Steam Sterilisation, visit on our website [here](#) or directly contact our team at [contact@medistri.swiss](mailto:contact@medistri.swiss).

- The Medistri Team

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