

# STERIS Helps Customers Reduce Critical Mistakes with Augmented Reality



STERIS, a global leader in infection prevention technologies, wanted to ensure its customers were properly loading their pharmaceutical grade parts washers. When STERIS discovered that [augmented reality](#) (AR) could be the solution, it reimagined how its equipment is loaded with a new offering—Smart AR Loading Technology. The application guides users through the critical process of loading the washers to help avoid costly and harmful mistakes.

## Safeguarding healthcare and life sciences with trusted disinfection and sterilization

Whether you're scheduled for an upcoming surgery or simply taking over-the-counter medication, the hygiene of pharmaceuticals, instruments, and medical equipment are something you probably take for granted. While rarely considered by consumers, disinfection and sterilization are critical elements of public health and research innovation. It's not hyperbole to say that lives are literally at stake—not to mention the outcomes of research trials, or millions in legal and regulatory exposure. That's why healthcare, life sciences, and clinical research industries invest so heavily in decontamination solutions.

The paramount importance of infection prevention is fundamental to STERIS' brand. With a team numbering over 16,000 globally, STERIS offers a broad portfolio of preventative solutions across life sciences, healthcare products, and applied sterilization technologies.

## What makes STERIS different?

The STERIS Life Science business manufactures and markets engineered washing equipment, formulated cleaners, and service solutions to pharmaceutical companies, and private, public, and academic research facilities. Unlike competitors, STERIS directly offers a full spectrum of products, services, and support. Its customers recognize STERIS as a premium brand, synonymous with quality, precision, and reliability. When customers require the peace of mind that comes with 100% reliable disinfection, they turn to STERIS.

Among its customers, STERIS enjoys an exceptional reputation for its laboratory and pharmaceutical grade washers, which ensure complete washing of equipment. But STERIS' reputation has been built over decades, driven by a dedication to continuously improve the efficacy and reliability of its solutions. It was that dedication that led STERIS to explore new and innovative solutions like AR.

## Identifying the opportunity—Improved operator guidance

To understand why STERIS embraced AR to improve washing reliability, we must recognize its six critical washing parameters:

1. Temperature
2. Action
3. Chemistry
4. Coverage
5. Time
6. Soil

Each of these parameters is equally important, but most of them can be controlled, automated, and measured programmatically with sensors and devices. Accurate coverage requires a person, not a machine, to precisely follow standard operating procedures (SOPs) for loading equipment into washers.

As a premium brand, STERIS works with customers to fabricate specific loading racks based on their unique equipment configurations. They also consult and help produce the documentation that guides technicians on how to properly load and verify equipment into their washers.

Traditionally, STERIS has delivered these SOPs via hard copy or digital PDF instructions. While this was the only historical option, it did pose challenges to both STERIS and its customers. It is difficult to convey and understand the complexity of three-dimensional loading configurations using a series of two-dimensional diagrams.

Having identified the opportunity, STERIS began a broad look across many different digital solutions. After looking at a diverse array of technologies, STERIS embraced **AR** to create **guided operator instructions**.

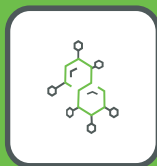
## Six critical washing parameters:



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## Empowering technicians with AR

Augmented reality (AR) is a highly visual, interactive method of presenting relevant digital information in the context of the physical environment. This offers a better way to create and deliver easily consumable work instructions where and when they're needed most, either through mobile devices or AR headsets.

### Steris Smart AR Loading Technology is reimagining SOP guidance for customers

STERIS ultimately selected PTC's Vuforia Studio AR, which offers the power and flexibility needed to create immersive AR experiences that overlay 3D content on physical objects. Using Vuforia Studio as the underlying technology, a premium SOP process for the coverage of their washing machines has been entirely reimagined as Smart AR Loading Technology, a new application for STERIS' customers. Envisioning a broad roll-out, STERIS partnered with ITC, a services partner to rapidly iterate large volumes of custom AR content that are specific to customer washer configurations.

Customers are equipped with a tablet supplied by STERIS that comes with the Smart AR Loading Technology application. The front-line users of the solution now gain an in-context solution that enables users to be visually guided while they are looking at the washer racks (rather than turning away to reference a printed diagram). The solution is 3D-aware, meaning that users can walk around the rack, and 3D models of loadable parts remain accurately locked into place.

"I think AR is an amazing technology," said Olivier Van Houtte, Senior Manager for Product Marketing in the Life Sciences Division of STERIS. "The Smart AR Loading Technology application represents a huge leap forward. It combines much more consistent SOP compliance, while still leveraging existing skill and expertise on the floor."



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*Olivier Van Houtte, Life Sciences Division of STERIS*

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## Measuring success and looking forward

The application is now shipping as a premium offering available to customers. While the early signals are positive, STERIS is looking closely at the indicators of success, including helping customers improve accuracy and avoid costly mistakes, which impacts financials and human safety.

### What's next for STERIS and its customers

STERIS customers will be evaluating how this premium offering can control for one of the few remaining variables in the washing parameters that are critical to ensuring washing. By following the accurate and immersive STERIS AR Smart Loading solution, they should expect to improve overall SOP compliance, which will in turn minimize error, limit the potential risk of contamination and improve the process of loading STERIS washers.

For the public at large, it will mean we can continue to benefit from advances in the life sciences without having to worry about the risks and dangers of contamination.

For STERIS, the roadmap is exciting and leading in several directions. Internally, STERIS is looking at ways it can use the same AR technology. One possible implementation is replacing printed or monitor screen instructions to [train and guide new hires](#) on how to assemble and inspect washers. Next steps for the Smart AR Loading Technology application include providing even more features and functionality, such as the ability to track wash cycles and the specific items placed within them, which creates an even more accurate experience for more thorough auditing. STERIS is also seeing how AR might benefit other areas of its organization in the future, such as [equipping service technicians directly](#), so that they can troubleshoot and maintain customer products more effectively in the field.



## Explore how AR can help your business

AR's immersive approach to empowering people on the job is driving the digital frontier of innovation. From manufacturing and factory operations to service, AR is redefining the impact that people can make on the job, while giving them new, exciting tools that make work more engaging and rewarding.

To learn more about how AR Smart Loading washers are helping STERIS' customers, watch the [STERIS webinar replay](#). To learn more about PTC technology powering this solution, visit the [Vuforia Studio product page](#).

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