



# CLEAN STEAM'S DIRTY LITTLE SECRET

WATER QUALITY EXPERT



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## CLEAN STEAM'S DIRTY LITTLE SECRET

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We had a call recently from the supervisor of a Sterile Processing department. He was asking about getting ready to use Clean Steam for new sterilizers that were going to be installed in his department. He mentioned that he had an RO system, but he was told he needed DI. He was asking for help understanding what to do to get ready for his new sterilizers. This is a great example of the confusion around these three water-related concepts: Steam, RO, and DI.

What is Clean Steam? According to the newly released AAMI ST108 standard, it is steam that is produced from water that meets the purity requirements for injection into the human body. Clean Steam is not required to be used in Sterile Processing departments by ST108. The new standard does have a definition for Process Steam that is defined by certain steam condensate purity requirements. In some instances, a department's Utility Water, the same water coming straight from the process sink faucet, could produce steam that achieves these levels of condensate purity.

So, what was he asking? This gentleman was getting new steam sterilizers that came with integral, stainless-steel boilers. While these sterilizers could receive injectable water, their minimum requirement for water purity is much less stringent. Generally, they require water with resistivity equal to or greater than 1 Mega Ohm. If you have an RO system to produce your Critical Water for final rinse, your Critical Water likely won't quite meet the 1 Mega Ohm requirement.

The good news is, it can be augmented by adding one or more DI tanks after the RO to further clean up the water and achieve this requirement. Steam produced with this water will exceed the Process Steam condensate requirements in AAMI ST108, which is acceptable. You can also continue to use this water for final rinse since it will exceed the minimum purity requirements for Critical Water.

Have more questions for this expert? Contact Jeffrey at [jpaquet@mmicmedical.com](mailto:jpaquet@mmicmedical.com)



*Beyond Clean Water Quality Expert™ Biography:*

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Jeffrey Paquet is the CEO of MMIC Medical Systems and its VERDA Water Quality Systems. Mr. Paquet is an expert in Product Realization and Commercialization that stems from his career that spans nearly 30 yeears in various industries including Healthcare, Automotive, and Aerospace. Jeffrey has a Bachelors of Science in Aerospace Engineering from UCLA with his career focused on design, product development, and manufacturing. His experience in the Aerospace industry has driven his belief that the technology and operational systems employed to monitor processes and provide the ability for rapid response to dynamic situations have direct and valuable application in the healthcare environment.

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