

PLASMA BIONICS

HOW DOES AIR PLASMA STERILIZATION™ COMPARE TO VAPORIZED HYDROGEN PEROXIDE AND ETHYLENE OXIDE?

Air Plasma Sterilization™, vaporized hydrogen peroxide (VHP), and ethylene oxide (ETO) are all low temperature sterilization methods that can be used for terminal sterilization of complex heat and chemical sensitive instruments that house sensitive electronics and optics. All three methods can also be used for surface sterilization of standard medical grade metal hand instruments. The major differences lie in the sterilizer ease of use, ease of installation, necessity of chemical consumables, operating costs, and sterilization cycle time. Air Plasma Sterilization™ is unmatched in terms of user safety, versatility, and ease of use.

	Air Plasma Sterilization™	Vaporized Hydrogen Peroxide	Ethylene Oxide
Sterilant Form	gas	vapor	gas
Low Temperature	yes	yes	yes
Installation Costs	no	no	yes
Exterior Ventilation	no	no	yes
Chemical Consumables	no	yes	yes
Consumable Shelf Life	no	yes	yes
Operating Pressure	atmospheric	vacuum	vacuum
Cost per Cycle	\$4 - \$5	\$5+	\$18+
Sterilization Cycle Time	4 hours	30 min – 1 hour	12-24 hours

USER SAFETY

Patient and user safety are of utmost concern when sterilizing instruments. Unlike VHP and ETO sterilizers, the Air Plasma Sterilization™ process requires no additional chemicals. The process uses just air and electricity, produces efficient sterilant gases, and then converts them back into air. No byproducts are produced, making the process very environmentally friendly.

VERSATILITY

With no chemical consumables, no expiration dates, no vacuum, and no requirements to modify a facility to add exhaust vents, the Air Plasma Sterilization™ process is exceptionally versatile. It can be used anywhere air and electricity are available to sterilize a wide variety of instruments.

EASE OF USE

An Air Plasma Sterilizer is very easy and simple to use. Just load your instruments and press start. Plasma sheets only need to be replaced after 10 sterilization cycles, not every cycle like the liquid or gas cartridges for VHP and ETO.