

Portable Steam Generators - Electric



Deluxe



Standard

APPLICATION

The SWASH™ Portable Steam Generators were developed by ARS Enterprises. They are manufactured exclusively for ARS by Electro-Steam Generator Corporation specifically for the food and beverage industry. They deliver dry, saturated steam at pressures ranging from 10psi to 85psi.

PERFORMANCE

Dry, saturated steam, generated by an electric steam generator, contains no boiler additives and provides a clean and effective way of delivering heat to surfaces it contacts. In contrast to hot water, which gives up its heat by absorption (an inherently slow process), steam delivers heat through the very rapid process of condensation. With sufficient time and temperature, and the moisture derived from the condensation process, heat destroys the proteins which form the cells of the microbes and can result in sterilization of the surfaces in contact with the steam or, in the case of porous materials, the material itself.

The heat required to cause a volume of water to be converted into steam at the same temperature is called the latent heat of vaporization. When steam comes in contact with surfaces of a lesser temperature, it virtually instantly condenses and all the latent heat is absorbed into the material it touches. As a result, a surface can be heated far more efficiently with 212°steam than with 212°water. The pressurized chamber of an electric steam generator efficiently produces steam and delivers significantly greater amounts of heat than can be achieved with hot water heaters in far less time and with significantly less water consumption.

FEATURES AND BENEFITS

- **Dry, saturated steam in 10 to 15 minutes delivers heat with 98% efficiency** - no loss of energy up the flue as with fossil fuel boilers.
- **Sanitary steam outlet port with ball valve** - for easy hook-up to equipment and accessories.
- **All electric with no open flame, no fumes, no combustible fuel and no fuel storage** - resulting in safe operation and lower insurance rates than with fuel fired boilers.
- **Construction complies with ASME (American Society of Mechanical Engineers) Boiler and Pressure Vessel Code, Section 1, Part PMB, for safety assurance** - a National Board number is stamped on each pressure vessel documenting the individual inspection of each unit by an authorized insurance company Boiler Inspector.
- **UL and CSA approved** - for electrical safety.
- **Fully portable** - gets the steam where you need it without long, hot steam lines which lose heat energy and reduce efficiency.
- **Adjustable pressure setting** - A pressure gauge displays operating pressure. Manual reset pressure switch for safety.
- **304 stainless steel cabinet** - isolates and insulates tank. Piping easily accessible for service.



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FEATURES AND BENEFITS

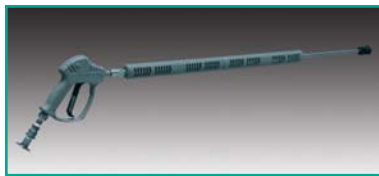
- **No boiler chemicals required** - with use of tap water, unit generates steam with very low mineral content and qualifies as culinary grade steam as opposed to plant steam from a fuel fired boiler.
- **Low water cutoff** - prevents damage to the unit in the event of loss of water supply.
- **Feedwater pump on all units** - overcomes the internal pressure for high pressure applications. Accepts up to 190°F water in for improved efficiency.
- **Available in 5kw to 30kw sizes in 5kw increments and 40kw** - units are specified for 208v, 230v-240v or 460v-480v three phase power. Single phase available on request. 40kw, 460V, 3-phase only.

ADDITIONAL FEATURES AND BENEFITS - DELUXE

- **Enclosed in a 304 brushed stainless steel cabinet** - keeps nearly all piping safely out of reach. The cabinet is attractive and easy to clean. Built-in wand and gun holders, cord and hose brackets.
- **Ergonomic design with large diameter rear wheels** - easy to maneuver in tight spaces.
- **Two convenient, user-selectable and adjustable pressure settings** - for high and low pressure applications. A panel-mounted pressure gauge displays operating pressure.
- **Dual overpressure switches** - illuminated, panel mounted manual reset for assurance of safety.
- **Easy access circuit breakers** - protect heating elements from damage.

AVAILABLE ACCESSORIES

- **Bordeaux Style Barrel Wand** - to effectively distribute steam and prevent over pressurization.
- **Steam Gun** - for general purpose steam sanitization of hard surfaces and floor drains.
- **Steam Hose** - rated for 100 psi and 345°F. Fitted with custom, sanitary Boss clamp adapters for added safety.
- **Steam-In-Place (SIP) Assembly** - to steam sterilize process piping.
- **Automatic Steam Controller** - timer and valves to sanitize equipment overnight.



ABOUT SWASH SANITIZING EQUIPMENT

SWASH Sanitizing Equipment is an operating division of ARS Enterprises. ARS was established in 1971 to provide sterilizing and washing equipment and field maintenance and repair services to food and beverage firms, hospitals, laboratories and pharmaceutical or medical device manufacturers. Our equipment and service have earned us an outstanding reputation among our customers who have come to rely on ARS.

Our philosophy is to provide dependable equipment incorporating high quality components. The ARS team is dedicated to the highest standards of workmanship. Our pride rests on your satisfaction with the products and service we provide. We believe that with ARS you can achieve many years of reliable performance and an overall low cost of ownership.