SEFA – Laboratory Grade Washers

Standards Development Committee

Committee Co-Chairs

Josh Camp Miele

Kelly Williams Labconco

Laboratory Grade Washer Standards Update

- Kickoff Meeting Recap
- Purpose Review
- Scope Review
- Definitions Review
- Standards Outline Development

Kickoff Meeting Recap

July 12, 2023 - 11:00 AM EST

Committee Attendees:

Gopi Thakker Avantor Leslie Ashor HOK

Kurt Rindoks Kewaunee Scientific Brian Richard Kirksey Architecture

Brian Johnson LABCONCO

Dave Edwards The S/L/A/M Collaborative
Jeff Talka The S/L/A/M Collaborative

- The committee will need to address the system as a whole.
 - Including water supply, detergents, operating temperature, programs
- Utility connections included electrical requirements, feed water quality, venting, and discharge water management
- The Committee's initial focus for the standard will be on "Lab Grade Washers" and "Medical Grade Washers."

Purpose

 The purpose of these Recommended Practices is to provide architects, engineers, planners, specifiers, manufacturers, and end users with the Industry Standard Practices. These Recommended Practices cover the design, construction, installation, testing, maintenance, and safe use of Laboratory Grade Washers used in the cleaning of laboratory glassware, plasticware and other lab instruments.

Scope

- These Recommended Practices provide a comprehensive single source of knowledge pertaining to laboratory grade washers. Since the laboratory washers are integral to the Laboratory Plumbing and Electrical System, these practices will address the entire system as it relates to the laboratory washer.
- A Laboratory Washing System includes the Supply Electrical and Feed Water; Detergents/Chemicals, the Laboratory washer, and discharge water pathway.

Definition

- A Laboratory Grade Washer is a machine that is specialized to automatically clean the glassware, plasticware and other utensils that are used in various Research & Testing Laboratories. A Laboratory Grade Washer is designed with the flexibility to accommodate a wide variety of uniquely shaped labware, utilizes specific cleaning agents and is combined with supporting accessories to create a complete system that laboratories depend on for residue-free labware. Good laboratory technique demands physically and chemically clean labware.
- Essential components in a Laboratory Grade Washer include a stainless-steel liner, powerful & efficient circulation pumps for water dispersion through direct injectors and/or spray arms, a robust heater to generate steam and heat water to temperatures up to 93°C and the capability to perform pure water rinses ensuring thorough cleanliness of the labware. It is important for the washer racks to accommodate a wide variety of inserts that properly position specific types of labware. Laboratory Grade Washer controls offer flexible programming, with a wide variety of programs that can be adjusted according to cleaning needs of multiple applications.
- Essential supporting components to the Laboratory Grade Washer system include water softeners, water purification systems for pure water rinses, drain water cooling kits, and detergents formulated for laboratory cleaning. Although the washer does the physical cleaning of the labware, these components directly affect the quality level of the wash.