The GS System
Isolator Glove Support Device

Manufactured by:
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System Description

The GS System is a glove support system that accurately positions the glove and sleeve assembly of the barrier isolator system during the Vapor Hydrogen Peroxide decontamination process.

The GS System positions the glove and the sleeve in such a way as to prevent any contact with adjacent surfaces and places the glove well into the isolator air stream.

The GS System addresses those isolator installations where the space available in front of the gloveport is limited by machinery or devices. A stainless steel ring that is part of the glove support shapes the sleeve to form a cone around the glove and cuff. The resulting geometry minimizes the intrusion of the glove into the isolator chamber while allowing total surface coverage by the VHP gas.

The cuff is positioned concentrically to the sleeve and the glove is supported by a "hand" that features articulated fingers; these fingers are spread to separate the glove during gassing.
Features

• Positive lock of the GS structure onto the gloveport's internal diameter. Removal requires a deliberate action by the operator.

• Stainless steel ring, attached to the GS structure that precisely positions the sleeve concentric to the cuff/glove.

• Cuff ring attached on centering shaft that positions the cuff in the center of the assembly.

• "Hand" with articulated fingers that positions and spreads the fingers of the glove during gassing (optional).

• Extension shaft that fully extends the glove/sleeve, applicable to those installations where clearances to internal machinery is not an issue (optional).

• Wrist joint, for those applications requiring minimal intrusion into the isolator volume (optional).
Specification

- Type of gloveport/sleeve/cuff and glove: customized to the application.
- Installation distances: adjustable and set to the application.
- GS structure: machined PVC plastic.
- Sleeve supporting ring: 304 stainless steel.
- Cuff support: machined PVC plastic.
- Glove support: machined PVC plastic.
- Centering shaft: 304 stainless steel tubing
- Extension shaft: 304 stainless steel tubing.
- Intrusion into isolator - straight glove: 320mm
- Intrusion into isolator - folded glove: 230mm
Applications and Advantages

• The GS System permits precise placement of the glove/sleeve assembly without their full extension into the isolator.

• The GS System limits the intrusion distance of the glove into the isolator, relevant in those installations with limited clear space inside the isolator chamber.

• An optional jointed “wrist” permits bending the “hand” after its introduction into the glove. Applicable to those isolator applications where the proximity of internal components is extreme.

• Articulated “hand” permits spreading the fingers of the glove after support installation and prior to gassing.
GS System - Hardware without glove/sleeve assembly
GS System - Viewed from isolator side
Isolator internal view - Shown at minimum straight extension
Sleeve geometry - as seen from outside the isolator
Viewed through the gloveport
“Bent wrist” set up for absolute minimum intrusion into isolator
Fully extended application