

Ezi-Dock Systems Limited

**UV-C Disinfection for Pharma/Bio-Pharma
Manufacturing Processes**

By Steve McAleavy - Director

**EPIC Online Technology Meeting on Surface Disinfection and Antibacterial Surfaces
(in cooperation with IUVA)**





Established 2003

Specialist Manufacturers of Process Equipment & Consumables for Pharma/Bio-Pharma & Chemical Companies



- **Cleanroom Manufacturing**
- **Injection Moulding**
- **CNC Machining**
- **In-House Design & Prototyping**

236+ Clients
40 countries/recorded regions



87% of production
shipped internationally

Ezi-Dock Manufactures an Award Winning **High Containment System** which ensures the safe transfer of Toxic or Hazardous materials into a manufacturing process. i.e. Blenders/Mixers/Dryer/Tablet Presses

- Cleanroom Manufactured, but **Non-Sterile**
- 2 Part System with Active Half + Passive Half (connected to bag)

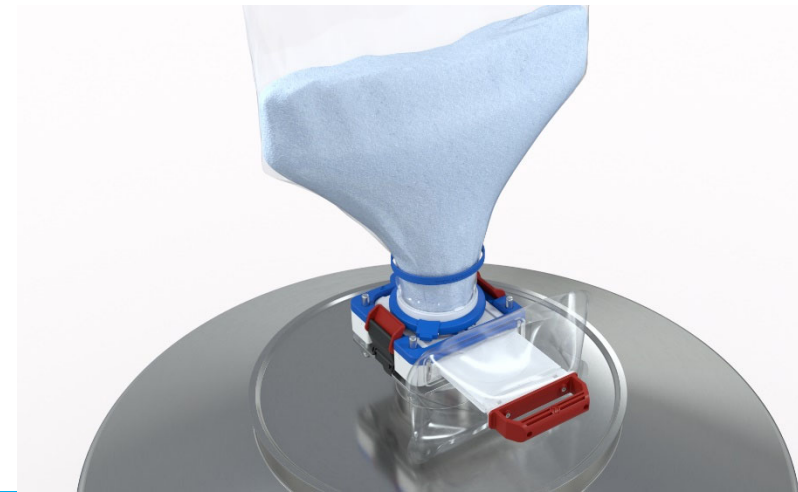


CSV Active



CSV Passive
with Chargebag

Active/Passive Connected
For Safe Transfer



Pharma / Bio-Pharma Markets

Pharmaceutical manufacturing is a Global Business with a huge supply chain including:-

- Process Equipment
- Raw Materials
- Packaging
- Logistics

HPAPI (Highly Potent Active Ingredients)

\$17 Billion (2018)
Normally Non-Sterile

\$26 Billion (2026)
Predicted



Aseptic Processing in Pharma/Bio Pharma

\$56 Trillion (2018)

\$124 Trillion (2027)
Predicted



Traditional Methods of Disinfection



Vaporised Hydrogen Peroxide (VHP) is used in many Life Science Applications and is ideal for the decontamination of large areas i.e. production/work areas.

The downside is the processing time

This technology has been adopted for product transfer, but is not popular.

It is expensive to install, maintain and operate.

Very slow.





by Crystal IS

Over 20 Years
Experience

Created a High Containment Transfer System With **15 UV-C** LED's from Crystal IS

"Klaran WD's 260 nm to 270 nm wavelength range for disinfection assures that products built with Klaran LEDs require less total UVC power to achieve product performance certification than UV LEDs with peak wavelengths greater than 270 nm or mercury lamps at 254 nm"

2 Stage Cleaning Process to achieve an Aseptic transfer

Much faster than VHP Process

Safe and repeatable

Replaceable LED module

