inclusiv® compounding portfolio

# KIRO® Isolator

## VHP Sterilization Robotic Compounding System


GRIFOLS

# KIRO® Isolator Features:

**Material sterilization area**

- Sterilization of the compounding material with vaporized hydrogen peroxide (VHP)

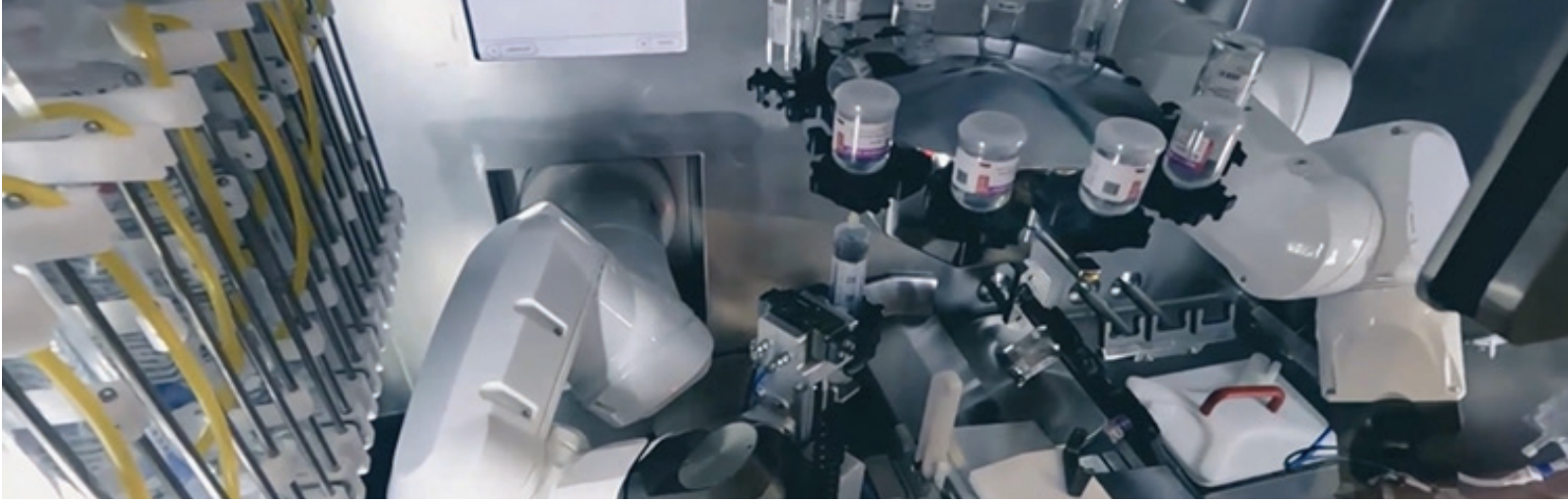
**Pre-and post-processing area**

- User touchscreen interface
- Gravimetric device to double-check weighing
- Barcode reader for product identification
- Two label printers (small and large labels)

**Compounding area**

- Two robotic arms
- 12-position carousel for vials in use (1-100 mL)
- Preparation bay for up to 10 infusion bags
- Syringe holder for up to 8 syringes (1 mL, 3 mL, 10 mL, 20 mL, and 50 mL)
- Syringe capping station for automatic capping
- Holding area for up to 10 partially used vials
- Gravimetric device for in-process weighing
- Two peristaltic pumps for reconstitution of lyophilized drug vials
- Two cameras for syringe and vial identification, respectively
- Barcode reader for the identification of drug vials and final containers

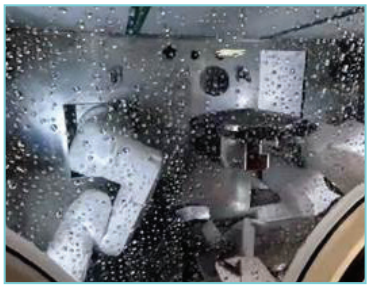
**Achieve a high aseptic processing quality control standards and a high level of staff protection during the production of hazardous compounded sterile preparations.**

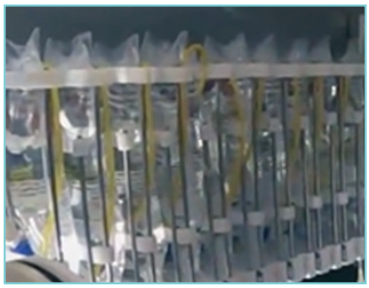


# Solutions Designed to Keep Your Patients Safe

Your most important responsibility is patient safety, but you are also challenged with controlling costs, protecting staff, and maximizing workflow efficiencies while ensuring regulatory compliance of your sterile compounding environment. As a strategic part of **inclusiv**, a comprehensive IV compounding portfolio of integrated technology, software, and service solutions designed to enhance patient safety, **KIRO Isolator** can help protect patients and staff.

**KIRO Isolator** is a robotic system focused on precision, flexibility, reliability, and safety throughout the highly complex process of compounding oncology medications.
**KIRO Isolator** enhances quality by supporting VHP sterilization of loaded materials and aseptic working areas, and isolates operators from hazardous drugs.





## KIRO® Isolator Key Benefits:

### Patient Safety

- Precision scales for gravimetric verification at all stages of the compounding process to control dosing accuracy
- In-process barcode readers and cameras identify drugs, disposables, and final containers to document traceability
- Sterility of preparations enhanced by VHP sterilization of all raw materials and aseptic processing areas

### Staff Protection

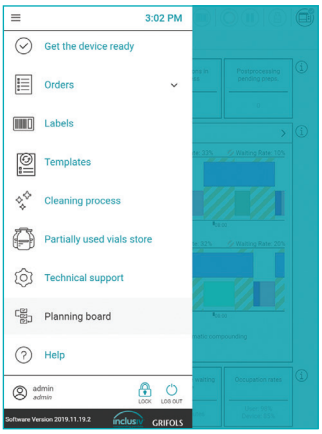
- Self-cleaning process avoids manual cleaning
- Automated compounding and self-cleaning occur in a completely enclosed environment
- Operators are physically protected from exposure to hazardous drugs for all manual tasks
- Integrated system for automatic disposal of hazardous waste into self-contained bags
- Operators are protected from repetitive stress injuries

### Flexibility and Efficiency

- Supports a wide variety of vials and a high number of final containers
- Prepares patient-specific doses and small batches using liquid or lyophilized drugs
- Device and user efficiency increased by allowing identification and labelling of materials by the user, as well as sterilization of raw materials, during automatic compounding
- Workflow optimized by visual planning board
- Configuration options to respond to specific compounding practices, workflows, and clinical needs

## Regulatory Compliance

- Compliance with GMP regulations supported by providing VHP sterilization, isolation of operators from aseptic processing areas and from exposure to hazardous drugs
- Airflow operation and temperature control, and optional continuous particle counter to meet GMP requirements
- Fully serviced during deployment, qualification, and periodic maintenance, including dosing accuracy tests and air flow certifications

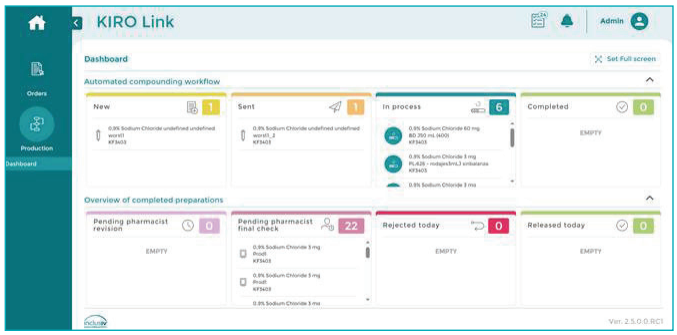



## KIRO Link

Automated Pharmacy Workflow Management using a web-based software application accessible from any workstation, enabling the user to:

- Monitor progress and manage compounding queues
- Visualize automated compounding reports
- Access database and configuration parameters
- Obtain production reports and metrics

Provides connectivity through various interface protocols and messaging standards, including HL7®.




## Technical Information

- **Size (w x d x h):** 2930 mm x 1841 mm x 2300 mm (115" x 72" x 90")
- **Minimum clearance (w x d x h):** 4300 mm x 2540 mm x 2300 mm (169" x 100" x 90")
- **Weight:** 2000 Kg (4409 lb)
- **Required minimum floor load rating:** 250 kg/m$^2$ (551 lb/ft$^2$)
- **Airflow rate:** 150 m$^3$/h for the pre-and post-processing area and 900 m$^3$/h for the automated compounding area. Overall maximum airflow rate; 1350 m$^3$/h
- **Power:** 230 VAC ± 10%, 50 Hz monophasic, 5 kWA



Product registration and availability vary by country.

**For more information, visit grifolsinclusiv.com**

**ABOUT THE PORTFOLIO**

**inclusiv®** is a comprehensive IV compounding portfolio of integrated technology, software, and service solutions designed to support your needs for sterile compounding from the design and building of your sterile compounding environment, to the preparation and verification of your products, through the ongoing management and optimization of your pharmacy operation.

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**Grifols International, S.A.**
Parc empresarial Can Sant Joan, Av. de la Generalitat, 152-158
08174 Sant Cugat del Vallès Barcelona - SPAIN
Tel. +34 935 710 500
hospital.division@grifols.com
www.grifols.com

GNL-KRIT-2500001