

Janez Twin

# The Future of Pharmaceutical Automation

# The new frontier of chemotherapy automation

# About Us



Solipharma is a 100% Italian company providing cuttingedge technological solutions to revolutionize the world of automated compounding in chemotherapy.

Leveraging advanced technical and computer expertise, Solipharma has developed an innovative and highly automated product to transform the hospital pharmacy into a safer and more efficient environment.

#### **OUR MISSION:**

Guiding you towards a hospital pharmacy that is **fast**, **efficient**, and **safe**, a fusion of expertise and cutting-edge automation.



# Compounding

Compounding is the preparation of a medication in precise dosages tailored to meet the specific needs of an individual patient.

Currently, the compounding of chemotherapy is carried out manually by specialized technicians and hospital pharmacists.

Preparations take place under biohazard hoods with vertical airflow, adhering to strict regulations aimed at minimizing risks to the health of hospital staff and patients.

The residual risks associated with manual preparation remain exceptionally high, stemming from both the toxicity of the manipulated drugs and the potential for errors in the drug preparation process. Ensuring a safe environment and guaranteeing the traceability of preparations, the well-known advantages of utilizing an automated system come to the forefront.

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### Transitioning to an automated pharmacy ensures:

• Significantly reduced risk of operator exposure to carcinogenic substances, minimizing burnout from repetitive work and alleviating potential health issues, particularly those related to joint injuries.

• Heightened patient safety through guaranteed sterility, a minimized risk of crosscontamination, and improved precision in the administered doses.

• Comprehensive traceability of each prescription's preparation phases, eliminating human errors in dosage, labeling, and data transcription.

• Streamlined workflow planning and increased productivity, resulting in reduced waiting times for patients in the hospital.



#### EFFICIENT

Ensuring heightened efficiency to handle morning workload peaks effectively, Janez Twin offers substantial support to the hospital pharmacy. It concurrently prepares multiple formulations, leveraging the parallel work of two robotic arms and multiple functional groups to achieve a productivity rate of **40 doses per hour**.





#### **AUTONOMOUS**

A system born to serve the pharmacy, enhancing organizational efficiency and enabling hospital technicians to focus on valuable tasks. The system's autonomy, achieved through **pre-loading of materials** and the option to unload finished products in bulk, is further emphasized by remote control via colored LED lights.

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#### FLEXIBLE

JANEZ TWIN autonomously compounds preparations through a versatile process, optimizing productivity. The system **ensures full adaptability of the workflow** to your requirements and does not rely on specific consumables.

#### SAFE

Multiple checks on dosages and products, using highly precise instruments, and the complete traceability of all operations guarantee accurate and secure compounds. By employing **closed commercial systems for preparations**, the use of needles is excluded, significantly reducing the risks of contamination from chemotherapy aerosols and dripping.



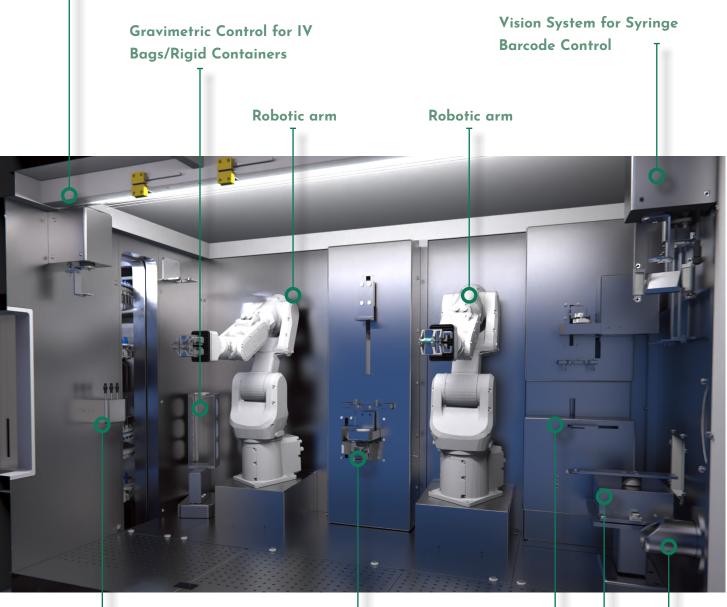




rigid containers

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#### Vision System for Drug/Diluent Control



Infusion System

**Dosing System** Accuracy O.1mm Sanitization System Atomized Hydrogen Peroxide

**Peristaltic pumps** For managing the overfilling of diluents

> **Gravimetric Control for Drugs/Syringes** Resolution 0,01 mg



#### **Partial Drug Shelf**

Storage for partially used drugs during automated preparation

#### Small-Size Diluent Shelf

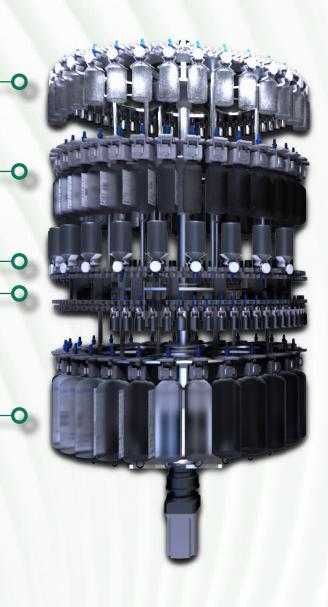
34 slots for diluents in IV bag/rigid container format up to 125 ml

#### 2 Drug Shelves

132 slots for drug vials with a maximum height of 100 mm each

#### Large-Size Diluent Shelf

28 slots for diluents in IV bag/rigid container/elastomeric pump format up to 1L



Janez Twin revolutionizes the concept of storage by creating a dedicated space for **pre-loading** materials that is completely separate from the compounding area.

This unique feature is made possible by the separation between the material loading phase and the receipt of the specific prescription, allowing for the maximum expression of the robotic system's autonomy.





Operational autonomy accompanied by an intuitive integrated light system for remote system monitoring.



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- **O White light:** Correct operational status
- O Orange light: Shortterm operator recall alert on-board. Does not interrupt machine operation.
- **O Red light:** Disruption of functional operation. Always associated with a monitor alert.



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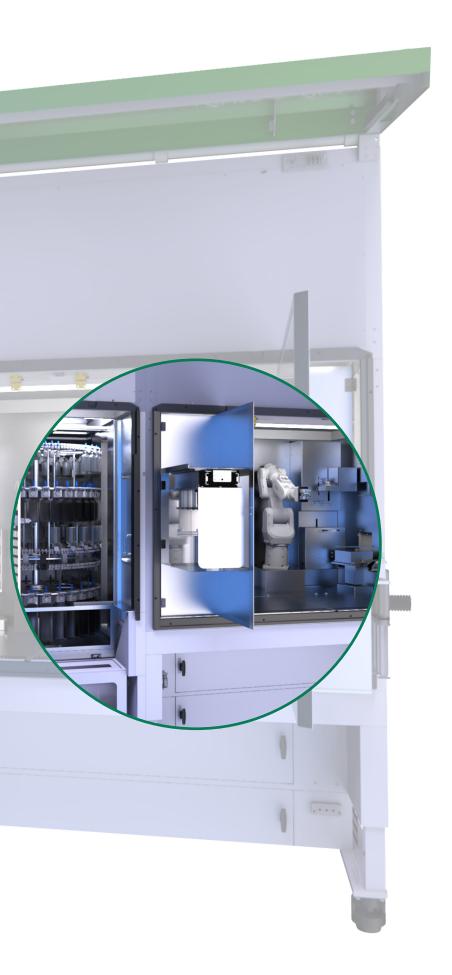
### Automated doors and manually openable hatches

to ensure complete and convenient **accessibility** 

to the machine's interiors.

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Cleaning operations are complemented by an **integrated sanitization system** with atomized hydrogen peroxide.



#### The three work phases are independent and non-sequential

### **Intuitive Material Loading**

- Guided loading through a simple and intuitive interface
- Automated opening of the loading hatch
- Laminar flow loading with complete traceability of inserted materials
- The process is independent and does not interrupt the ongoing preparation activity

### **Automated Preparation**

- The two robotic arms perform independent and simultaneous actions, interacting with surrounding functional groups to maximize system productivity
- Simultaneous management of productions with different final containers and drugs
- Multiple high-precision optical and gravimetric checks are performed for each preparation
- The robotic arm employs various agitation modes for powdered drugs

## Product Unloading and Validation

The finished preparations are placed by the robots in dedicated warehouses and can be collectively retrieved by the operator without interrupting ongoing production.

The technician performs the final validation of the preparations using the external reader and monitor interface, ensuring complete traceability of all preparation stages and final production control.







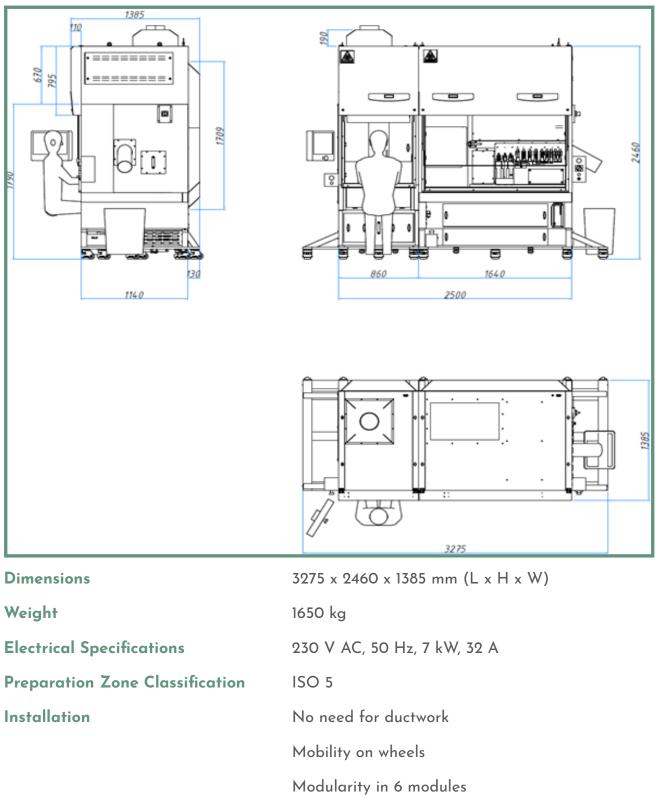






# **Technical Features**

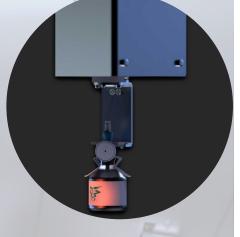
The support base is to be considered an additional optional module





Explore the future of pharmaceutical automation with Janez Twin: a professional and reliable solution.

We are ready to collaborate with you to optimize your pharmacy with efficiency and safety.



For further information and to embark on this journey of innovation, contact us today.

# Let's Innovate Together!

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The success of your pharmacy is our commitment







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