



# SMARTPOWDER-FLEX

- smart robotic flexible ingredients recipes preparation -

## **Designed for Excellence in Precision and Flexibility**

RoboticPowder-Flex – the revolutionary system built to handle complex recipes and provide unparalleled precision in microingredient dosing. Specially designed for the food, chemical, and pharmaceutical industries, this system is perfect for applications involving multiple powders and pellets, offering unmatched flexibility, accuracy, and traceability. RoboticPowder-Flex is fully customizable to meet your production needs while ensuring efficiency and reliability.



# **Key Features:**

Fully Robotic or Cobotic Operation

The system features two robotic units. The cobotic option allows for seamless integration into manual processes, enabling flexible collaboration between human and machine.

SmartPowder-Box Technology

Each ingredient is stored in its own dedicated SmartPowder-Box. This ensures that each component of your recipe is handled separately, eliminating the risk of cross-contamination.



• Independent Dosing tool to avoid cross contamination and optimize the dosing Every SmartPowder-Box comes with its own dosing device, optimized for the product to be

dosed. The robot grabs the dosing tool, scoops a quantity, and dispenses with precision. This targeted dosing ensures outstanding accuracy and consistency, delivering reliable results with every batch.

• Compact Design for Maximum Efficiency

RoboticPowder-Flex is designed to be compact, saving valuable floor space while providing full functionality. Its small footprint allows for easy integration into existing production lines.

High Dust Containment

Maintain a clean and safe working environment. The system is engineered to contain dust and prevent any spillage during the dosing process, ensuring high hygiene standards.

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# Total Traceability

All dosing operations are fully monitored and logged, providing complete traceability for every ingredient and process step. This feature is especially crucial for industries requiring compliance with strict regulatory standards.

#### • Flexible Refilling Options

The SmartPowder containers can be refilled manually or through an automatic process. This flexibility supports continuous production, minimizing downtime for container changes.

# • Seamless Integration with Storage Systems

RoboticPowder-Flex can easily interface with automatic storage systems, allowing for efficient ingredient management and rapid recipe changes.

#### **The Dosing Sequence:**

RoboticPowder-Flex operates using up to two synchronized robots to optimize the dosing process:

#### • Robot 1: Precision Dosing

This robot is responsible for handling the dosing process from each SmartPowder-Box. It picks up the dosing tool from the box, scoops the right amount of powders or pellets, and dispenses it with pinpoint accuracy into the destination container.



## • Robot 2 (optional): SmartPowder-Box Management

The second robot takes care of managing the SmartPowder-boxes. It changes the boxes as per the recipe requirements, ensuring a smooth transition from one ingredient to another without any interruptions or errors.

The robots work in tandem to provide a streamlined process that maximizes productivity while maintaining high accuracy and cleanliness.

# Why Choose RoboticPowder-Flex?

RoboticPowder-Flex stands out as the ideal solution for micro-ingredient dosing in complex recipes. With its advanced robotic technology, modular SmartPowder box system, and focus on accuracy, flexibility, and hygiene, this system is the key to optimizing your production process. Whether you're in food, chemicals, or pharmaceuticals, RoboticPowder-Flex ensures that every batch is perfect and every recipe is consistent.

#### Ready to Boost Your Productivity and Precision?

Contact us today to discover how RoboticPowder-Flex can transform your production line and enhance your ingredient dosing process.

Unlimited flexibility and modularity thanks to multi-patented robotic Smart technology designed by Sacchi.