# AUTOMATED BATCH SOLUTIONS

Bakery, Pastry & Snacking Industries





#### **AUTOMATED BATCH SOLUTIONS**

Designed with high productivity in mind, VMI's automated mixing systems can meet the most demanding requirements for process automation and modularity.

- Recipe versatility: fork, spiral, continuous or planetary mixers can be integrated into an automated system.
- Productivity: up to 8 tons of dough per hour of consistent, fully automated 24/7 production.
- Customizable and scalable: From simple manual setups to semi or fully automated systems, with options for number and type of stations, throughput, processes, transfer technologies, ancillary systems, and options at different production scales.

## **EASE OF USE** AND TRACEABILITY

- Recipe programming with simultaneous management of up to 3 lines and 3 recipes
- Traceability, consumption monitoring, faults report, support for troubleshooting
- Real-time reporting and analytics- Compatible with IoT-enabled Business Intelligence Octopus Solutions



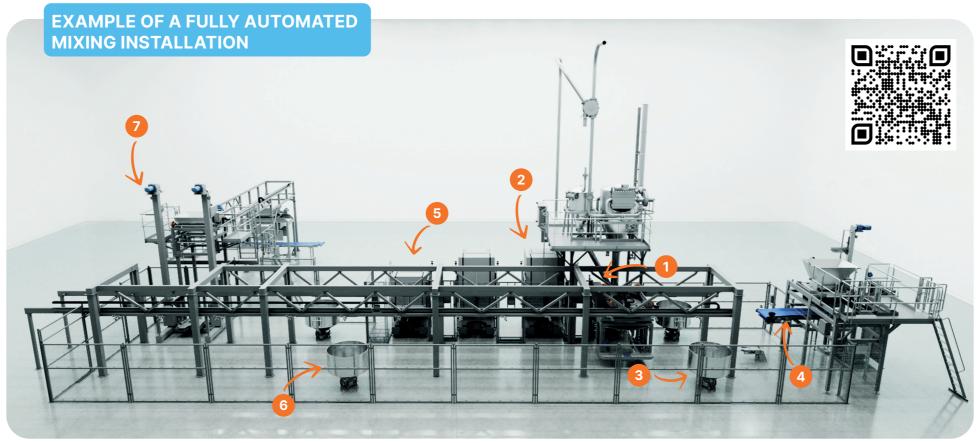
HMI - Example of 2 production lines

#### **WIDE RANGE OF RECIPES**











# **HIGH LEVEL OF CUSTOMIZATION POSSIBLE**

- 1. Automated ingredient dosing
- 2. Pre-mixing
- 3. Autolysis
- 4. Scrap dough integration
- 5. Kneading
- 6. Resting Degassing
- 7. Dough transfer

# **PERFORMANCE AND EFFICIENCY**

Automated system options:

- Suspended shuttle(s):
  - 1 or 2 independent
  - Easy cleaning
- Ground-based shuttle(s):
  - 1 or 2 independent, or 1 double
  - High throughput



Suspended shuttle



Ground-based shuttle & vertical storage

## **MODULARITY AND SCALABILITY**

- Dough recovery tray limiting product loss
- Mobile hopper with access platform
- Bowl elevator
- Dough conveyor
- Cleaning station (CIP)



Vertical dough conveyor



Cleaning station

# **AGV (Automated Guided Vehicle)**

#### A smart technology to automate production

Our AGV system is designed to increase operational **efficiency** and **productivity**, **overcome challenges** related to skilled **labor shortages**, and ensure f**ull process traceability** throughout the production line.





# Maximum flexibility for your evolving needs

Automate existing manual systems or new setups.

Ideal for facilities with space constraints or challenging environments.



#### **Safety and ergonomics**

Reduce physical strain by minimizing manual handling.

Safe operation alongside workers and other equipment.



#### **Seamless scalability**

Need to increase throughput? Easily adapt to changing production layouts without disrupting your current workflow or requiring major infrastructure changes. AGVs grow with your business.



#### **Full traceability**

Ensures full flow traceability throughout the process.

Every movement is recorded, enabling real-time monitoring and better quality control.









